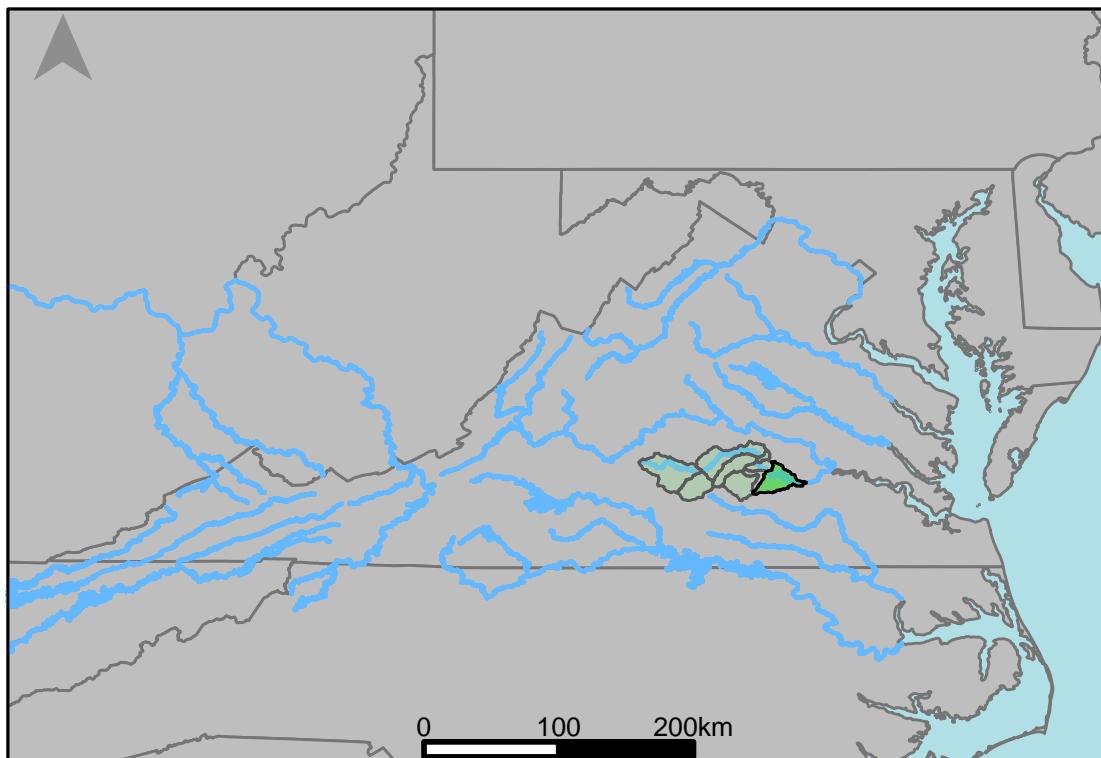


River Segment: JA5_7480_0001 - Scenario :
CFBASE30Y20180615 : VaHydro Run 122 (Incorrect
Base) vs. VAHydro Run 120 (Fixed Base)



The average daily discharge change between scenario 1 and scenario 2 for the 20 year timespan was 15719.2%, with 100% 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	7.99	125	1464.46
Feb. Low Flow	6.33	203	3106.95
Mar. Low Flow	6.04	473	7731.13
Apr. Low Flow	7.77	697	8870.4
May Low Flow	5.79	817	14010.54
Jun. Low Flow	7.55	806	10575.5
Jul. Low Flow	7.97	596	7378.04
Aug. Low Flow	7.03	430	6016.64
Sep. Low Flow	4.32	245	5571.3
Oct. Low Flow	5.51	145	2531.58
Nov. Low Flow	7.18	135	1780.22
Dec. Low Flow	9.05	109	1104.42

Table 2: Monthly Average Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Overall Mean Flow	7.08	1120	15719.21
Jan. Mean Flow	8.02	1600	19850.12
Feb. Mean Flow	5.74	1770	30736.24
Mar. Mean Flow	7.57	2100	27641.08
Apr. Mean Flow	8.88	1660	18593.69
May Mean Flow	7.2	1140	15733.33
Jun. Mean Flow	4.93	648	13044.02
Jul. Mean Flow	5.87	415	6969.85
Aug. Mean Flow	7.19	377	5143.39
Sep. Mean Flow	9.07	709	7716.98
Oct. Mean Flow	8	608	7500
Nov. Mean Flow	6.35	982	15364.57
Dec. Mean Flow	6.05	1410	23205.79

Table 3: Monthly High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Jan. High Flow	8.52	919	10686.38
Feb. High Flow	6.99	953	13533.76
Mar. High Flow	6.33	2110	33233.33
Apr. High Flow	8.03	2970	36886.3
May High Flow	5.8	2800	48175.86
Jun. High Flow	8.02	3710	46159.35
Jul. High Flow	8.91	3110	34804.6
Aug. High Flow	7.2	1580	21844.44
Sep. High Flow	4.95	712	14283.84
Oct. High Flow	5.88	448	7519.05
Nov. High Flow	7.64	548	7072.77
Dec. High Flow	9.38	422	4398.93

Table 4: Period Low Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Min. 1 Day Min	4.32	19.9	360.65
Med. 1 Day Min	4.32	80.6	1765.74
Min. 3 Day Min	4.74	20.8	338.82
Med. 3 Day Min	4.74	87.6	1748.1
Min. 7 Day Min	4.86	22.1	354.73
Med. 7 Day Min	4.86	97.5	1906.17
Min. 30 Day Min	4.93	25.6	419.27
Med. 30 Day Min	4.93	123	2394.93
Min. 90 Day Min	5.98	61.5	928.43
Med. 90 Day Min	5.98	233	3796.32
7Q10	4.87	44.4	811.7
Year of 90-Day Min. Flow	1985	2002	0.86
Drought Year Mean	7.08	207	2823.73
Mean Baseflow	6.85	604	8717.52

Table 5: Period High Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
Max. 1 Day Max	9.38	20100	214185.71
Med. 1 Day Max	9.38	8230	87639.87
Max. 3 Day Max	9.16	18600	202956.77
Med. 3 Day Max	9.16	7590	82760.26
Max. 7 Day Max	9.1	15400	169130.77
Med. 7 Day Max	9.1	5700	62537.36
Max. 30 Day Max	9.07	7480	82369.68
Med. 30 Day Max	9.07	2930	32204.3
Max. 90 Day Max	7.88	5580	70712.18
Med. 90 Day Max	7.88	1970	24900

Table 6: Non-Exceedance Flows

	VAHydro Scen. 1	VAHydro Scen. 2	Pct. Difference
1% Non-Exceedance	4.95	56.3	1037.37
5% Non-Exceedance	4.95	94.2	1803.03
50% Non-Exceedance	7.2	635	8719.44
95% Non-Exceedance	9.05	3800	41888.95
99% Non-Exceedance	9.05	8250	91060.22
Sept. 10% Non-Exceedance	9.05	92.4	920.99

Fig. 1: Hydrograph

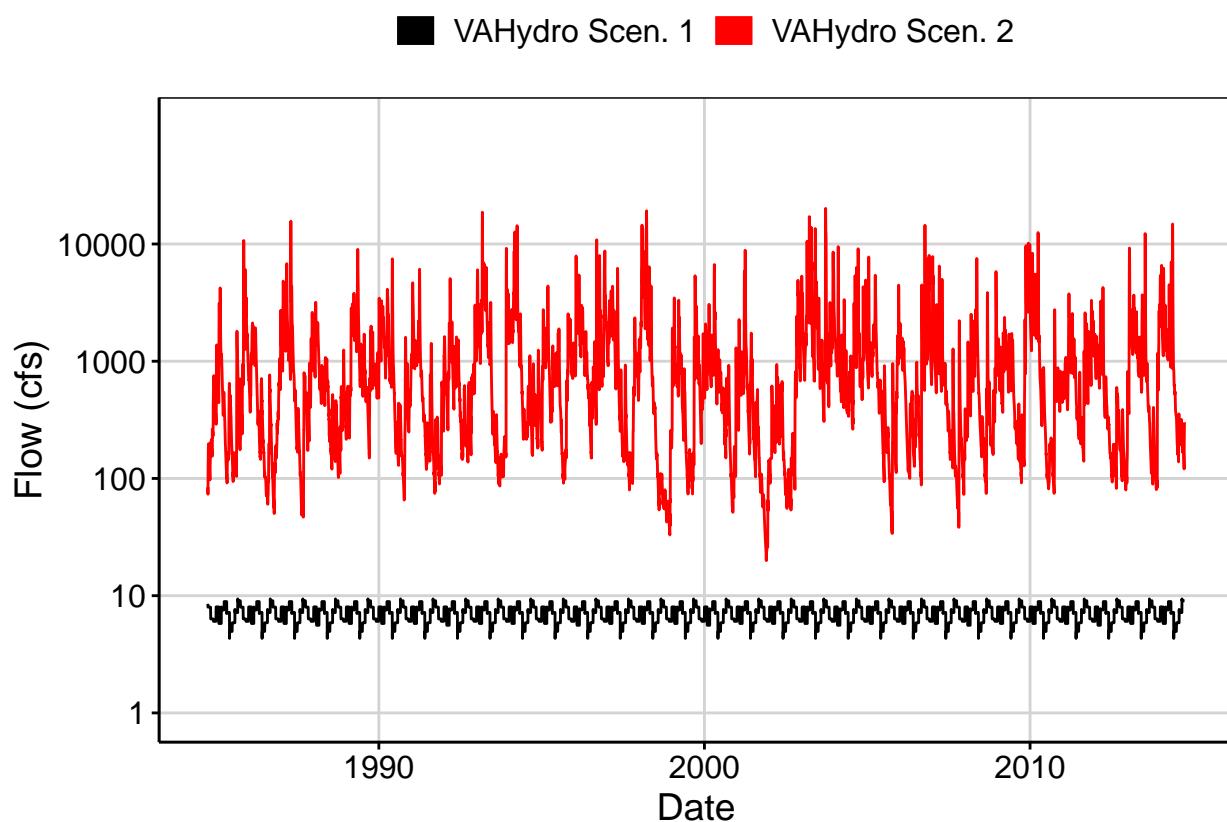


Fig. 2: Zoomed Hydrograph

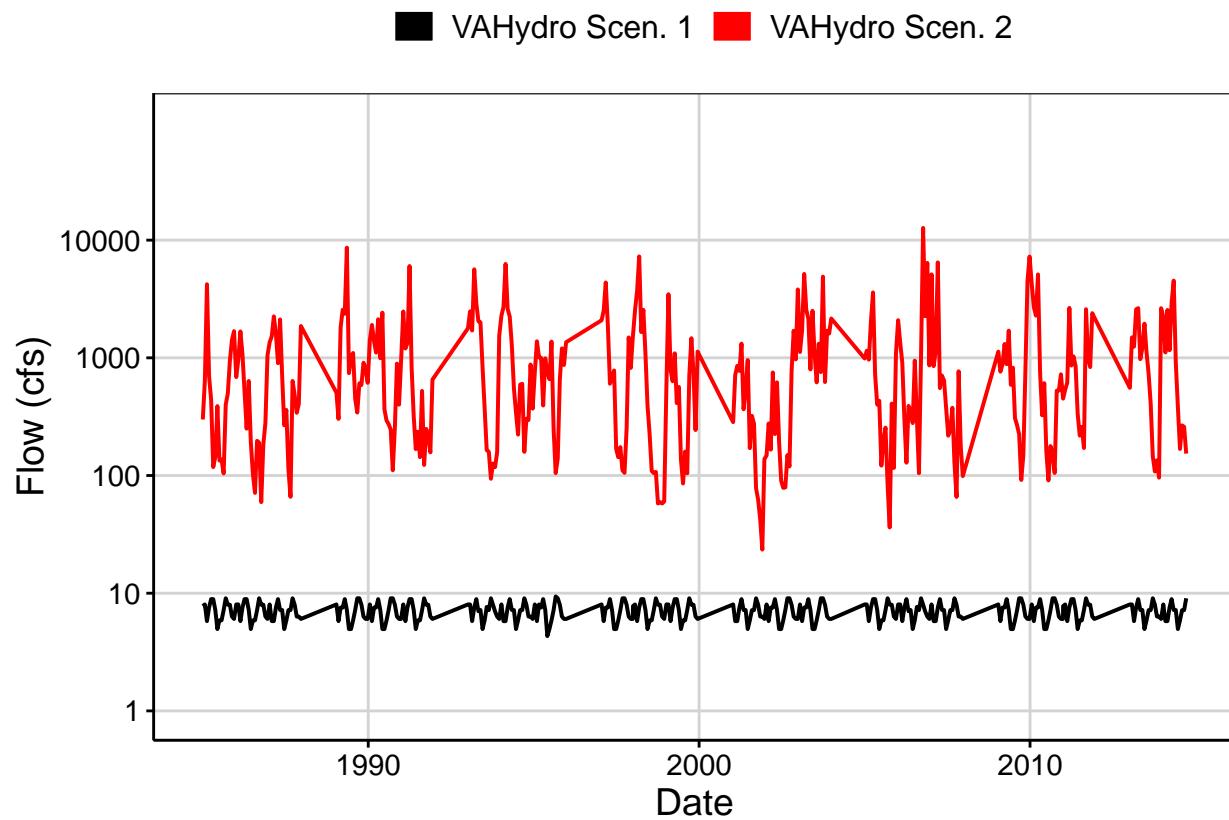


Fig. 3: Flow Exceedance

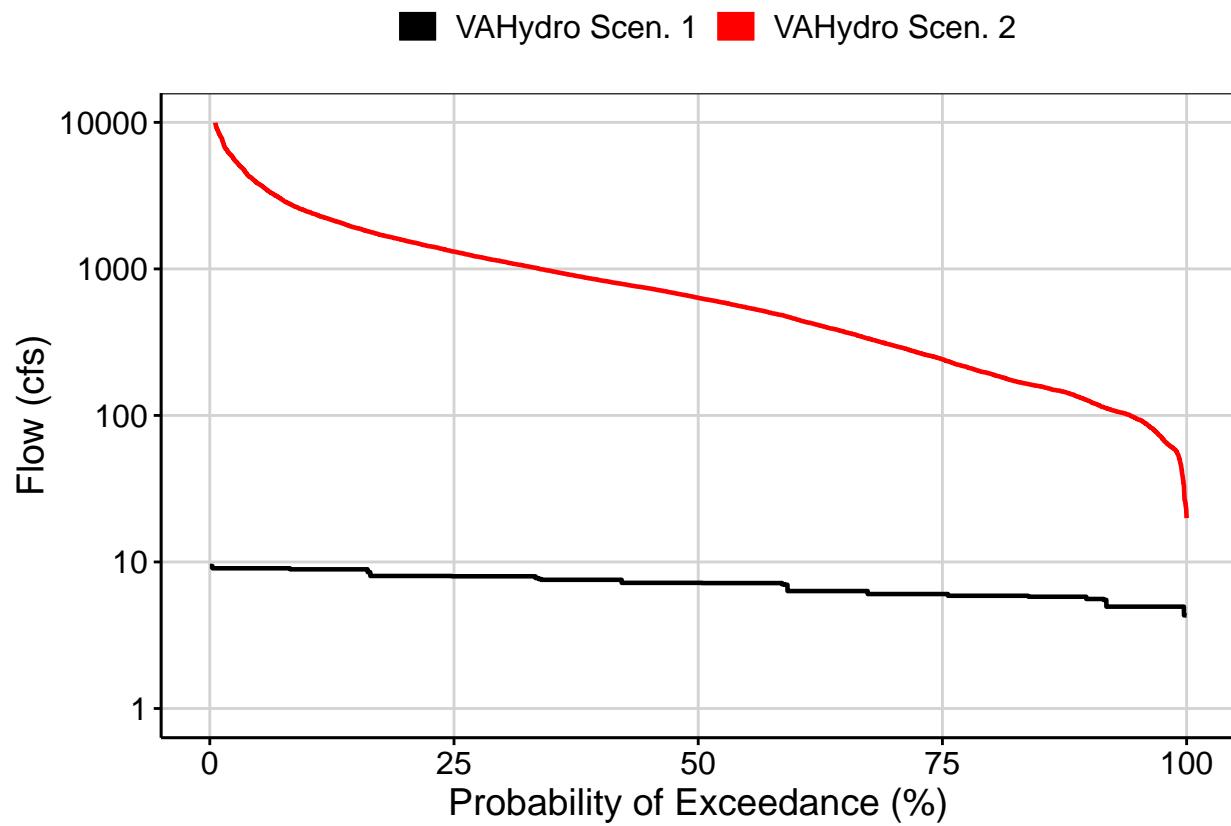


Fig. 4: Baseflow

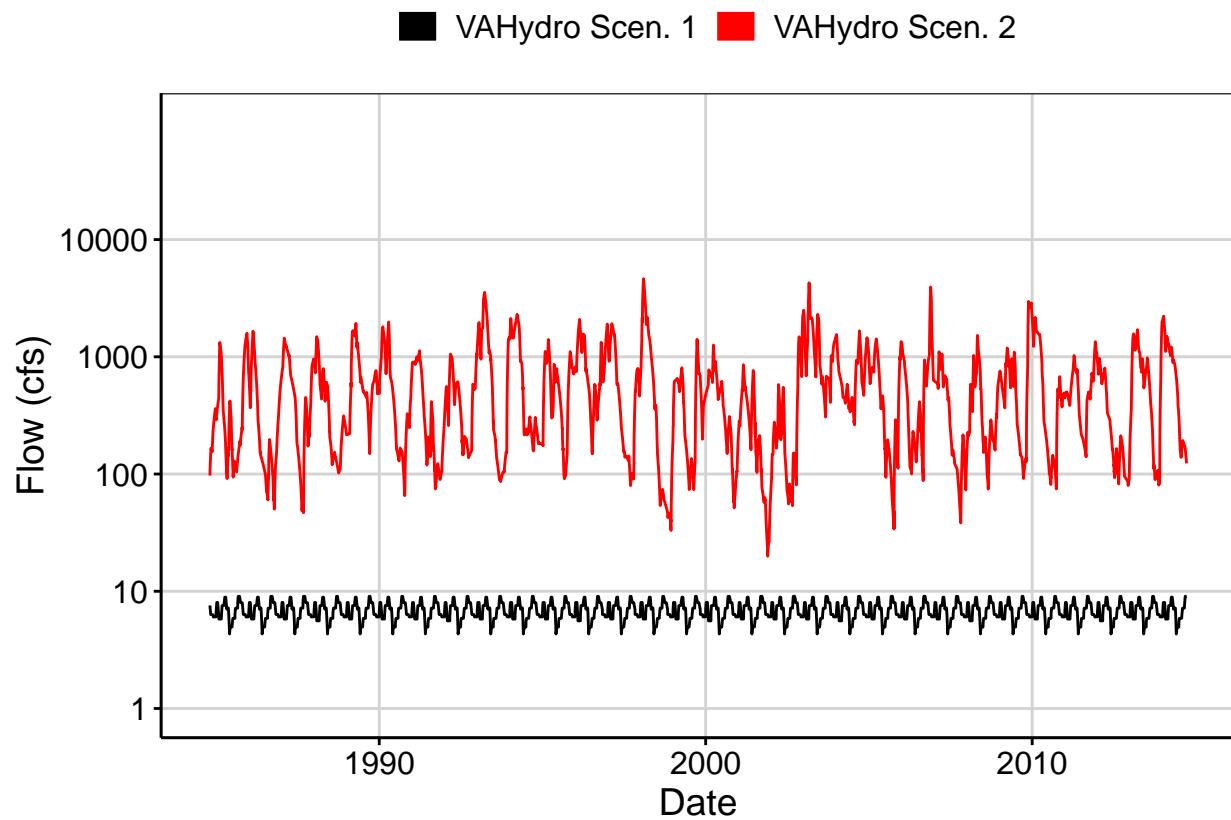


Fig. 5: Combined Baseflow

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

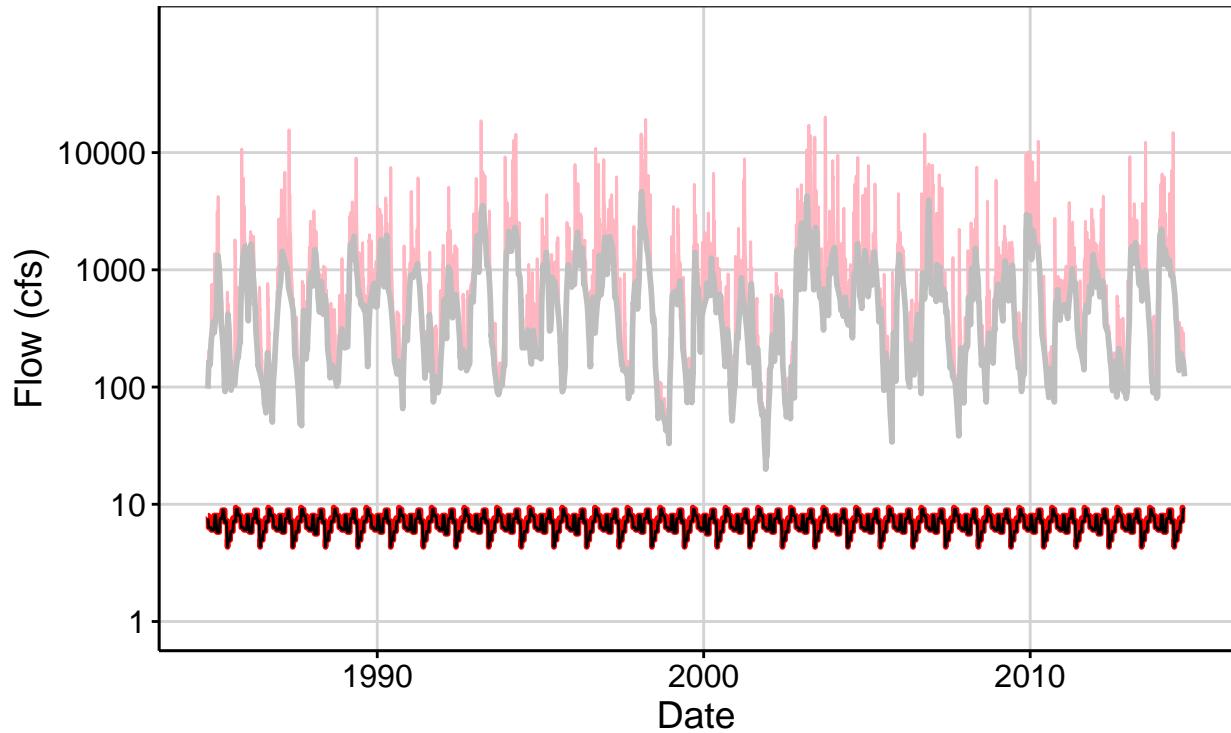


Fig. 6: Largest Difference Segment

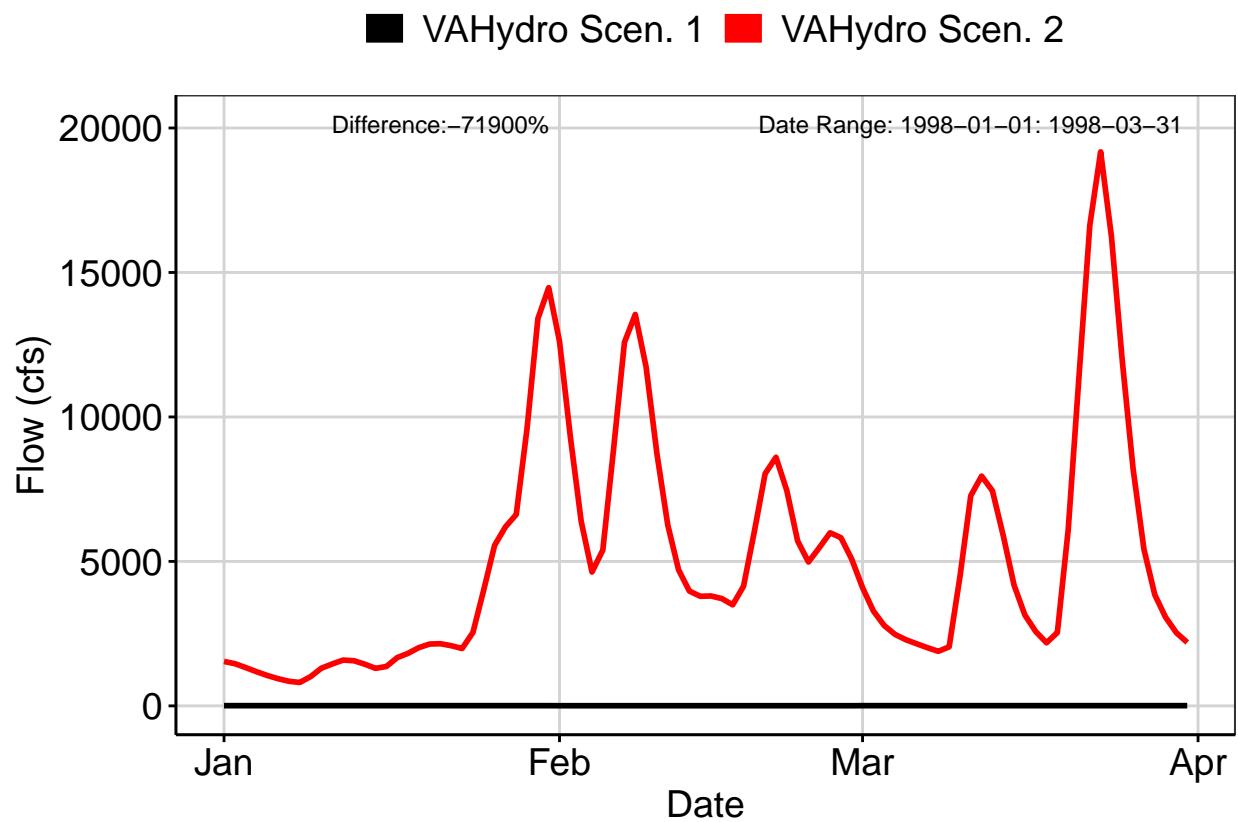


Fig. 7: Second Largest Difference Segment

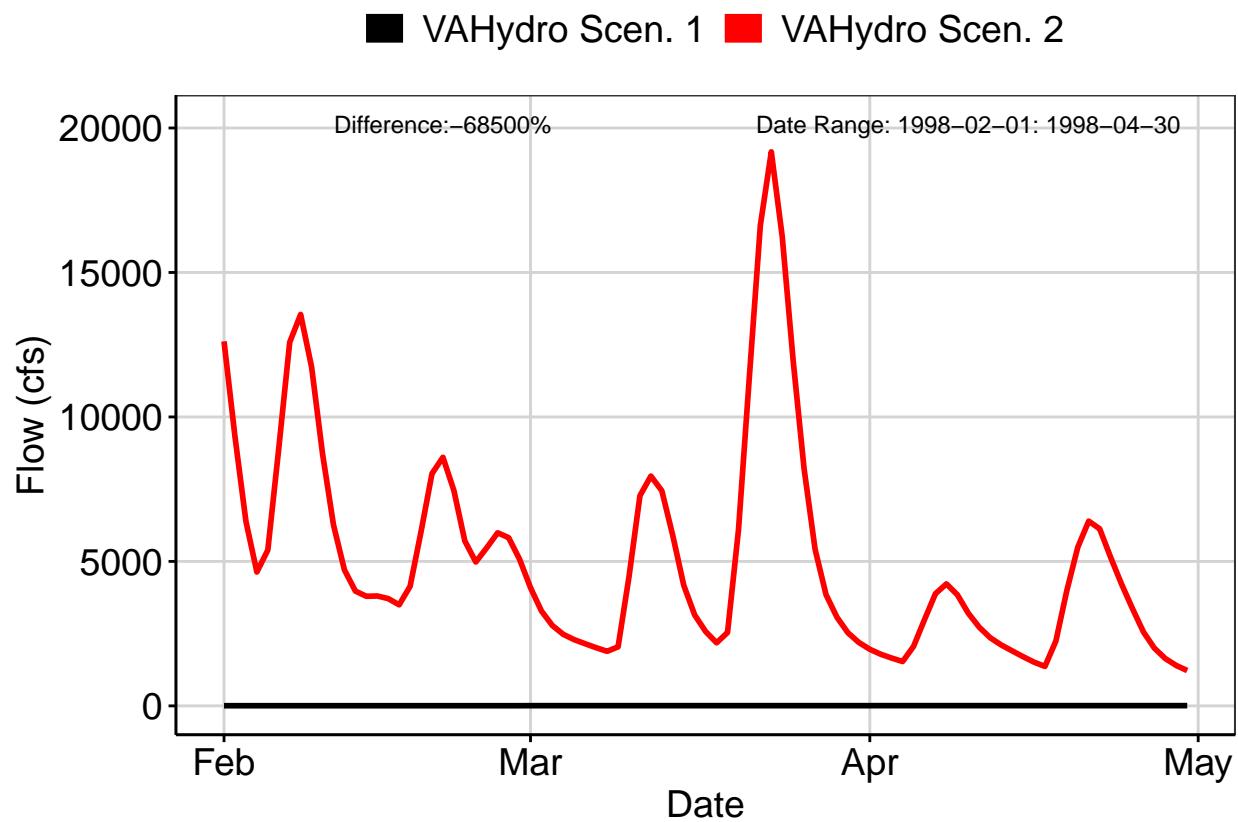


Fig. 8: Third Largest Difference Segment

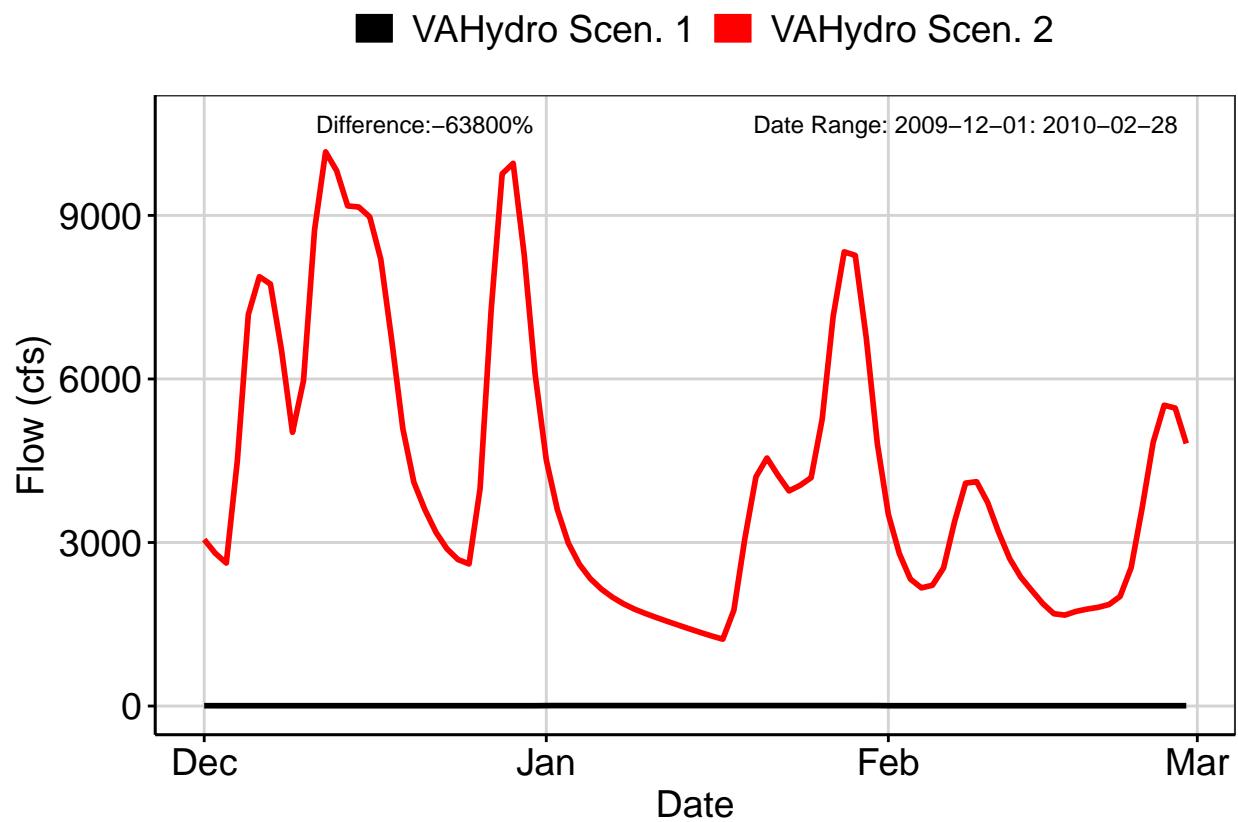


Fig. 9A: Residuals Plot

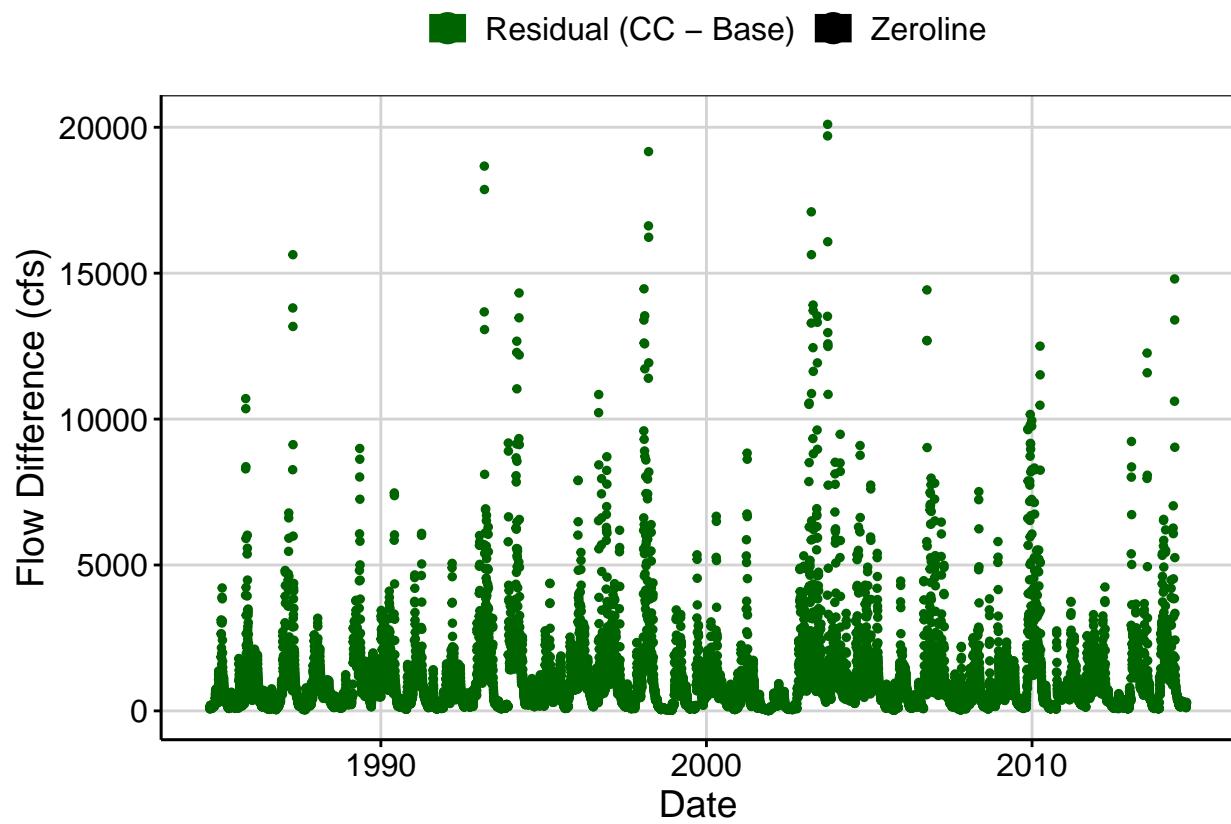


Fig. 9B: Area Weighted Residuals Plot

