

APPENDIX D-3

MODEL OUTPUT RESULTS

FOR THE

***PERMIT 17332 BYPASS FLOW REQUIREMENTS ALTERNATIVE COMPARED TO THE
EXISTING CONDITION***

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APPENDIX D-3. — PERMIT 17332 BYPASS FLOW REQUIREMENTS ALTERNATIVE COMPARED TO THE EXISTING CONDITION

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Year	Runoff Year Type	Existing Condition			P-17332 BFR Alt		
		Max Storage (AF)	Max Storage Date	Min Storage (2,935 AF) Prior to <u>Sep 15</u> Date	Max Storage (AF)	Max Storage Date	Min Storage (2,935 AF) Prior to <u>Sep 15</u> Date
1988	D	3,260	May 31	Sep 14	2,966	Jul 4	Jul 12 ^[a]
1989	N	3,260	May 31	Sep 14	3,148	Jul 4	Aug 4 ^[a]
1990	D	3,260	Jun 30	—	2,873	Jul 4	^[b]
1991	N	3,260	Jul 2	—	3,006	Jul 4	Jul 25
1992	N	3,260	May 31	—	3,093	Jul 5	Aug 6
1993	W	3,260	Jun 11	—	3,260	Jun 30	—
1994	D	3,260	May 12	—	3,260	Jun 6	—
1995	W	3,260	May 13	—	3,260	Jun 19	—
1996	N	3,260	Apr 1	—	3,260	Apr 1	—
1997	N	3,260	May 10	—	3,260	Apr 3	—
1998	N	3,260	Jun 3	—	3,260	Apr 25	—
1999	N	3,260	April 15	—	3,260	Apr 20	—
2000	N	3,260	May 9	—	3,260	Apr 22	—
2001	N	3,260	May 12	—	3,260	May 16	Jul 31
2002	N	3,260	May 21	—	3,260	Jun 23	—
2003	N	3,260	May 30	—	3,260	Jun 30	—
2004	N	3,260	May 13	—	3,260	May 18	Aug 9
2005	W	3,260	May 27	—	3,260	Jun 13	—
2006	W	3,260	May 5	—	3,260	Apr 4	—
2007	D	3,260	May 20	—	3,260	Apr 11	—

^[a] Model output shows that Lake Mary storage during 1988 is below 2,935 AF after July 12.
^[b] Model output shows that Lake Mary storage during 1990 is always below 2,935 AF.
• July 5 = 2,870 AF
• September 14 = 2,661 AF

Monthly Averages of Daily District Diversions (AF) to the Lake Mary WTP by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative

Runoff Year	Runoff Year Type	Lake Mary WTP Diversions (AF) under the P-17332 BFR Alt												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	0.0	0.0	0.0	117.0	134.4	73.8	2.4	27.6	4.1	23.6	4.7	82.0	469.6
1989	N	0.0	0.0	0.0	186.9	222.2	151.1	51.5	50.4	0.4	37.8	36.8	40.7	777.8
1990	D	0.0	0.0	0.0	82.2	94.3	72.2	0.0	3.3	0.0	0.0	0.0	38.1	290.0
1991	N	0.0	0.0	0.0	155.1	137.4	109.7	51.7	29.1	21.9	10.3	23.2	0.1	538.4
1992	N	0.0	0.0	0.0	131.2	156.5	83.7	10.3	32.6	19.0	16.8	16.4	28.9	495.6
1993	W	0.5	73.4	115.9	309.8	309.8	260.2	155.7	137.4	142.2	140.8	137.3	154.6	1,937.5
1994	D	12.4	11.8	199.3	84.5	47.4	40.6	106.5	105.1	76.2	89.6	80.7	87.2	941.4
1995	W	91.4	115.6	162.7	230.0	208.5	189.2	197.6	132.7	137.4	146.8	150.3	164.5	1,926.8
1996	N	159.4	177.3	208.5	230.1	204.9	158.7	144.5	133.9	137.8	157.7	148.2	163.1	2,024.1
1997	N	133.9	236.9	228.9	224.5	227.7	186.6	167.6	141.8	148.0	162.4	147.6	157.5	2,163.5
1998	N	152.1	148.2	183.5	225.3	232.5	191.6	164.4	125.8	156.3	147.6	150.2	157.7	2,035.1
1999	N	144.0	174.5	213.6	229.9	210.8	187.2	143.2	118.4	129.7	112.3	140.4	147.4	1,951.6
2000	N	145.4	184.5	199.1	205.1	207.5	196.4	161.5	126.7	138.7	114.6	95.2	118.0	1,892.7
2001	N	111.5	185.5	213.1	184.3	12.1	57.7	83.7	43.4	89.9	82.1	54.0	9.9	1,127.1
2002	N	22.6	144.3	192.1	258.3	65.1	96.3	39.3	72.0	114.4	95.8	53.6	26.6	1,180.4
2003	N	13.9	71.2	84.0	240.7	208.2	158.9	107.7	108.3	89.8	102.9	71.0	103.9	1,360.5
2004	N	143.0	210.1	238.1	229.7	63.1	101.5	87.9	110.4	43.3	52.6	32.4	5.0	1,317.1
2005	W	5.1	61.0	256.0	258.6	272.3	264.0	191.7	129.3	139.7	173.4	122.9	103.0	1,977.0
2006	W	147.2	147.8	260.2	270.9	284.5	220.5	136.8	122.5	164.8	181.2	159.7	122.1	2,218.2
2007	D	140.5	191.3	136.2	43.6	9.6	4.4	58.9	42.9	18.1	69.3	37.4	42.0	794.1
Average		71.1	106.7	144.6	194.9	165.4	140.2	103.1	89.7	88.6	95.9	83.1	87.6	1,370.9

Monthly Averages of Daily District Diversions (AF) to the Lake Mary WTP by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Existing Condition

Runoff Year	Runoff Year Type	Lake Mary WTP Diversions (AF) under the Existing Cond												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	11.1	34.3	221.9	274.7	188.3	108.7	139.6	64.2	98.8	102.6	72.4	79.4	1,395.8
1989	N	92.9	153.1	291.4	227.8	208.5	136.5	134.5	75.3	108.8	147.2	142.3	34.6	1,752.9
1990	D	0.0	0.0	1.2	233.4	165.5	228.6	122.0	28.8	56.5	41.4	3.0	24.3	904.7
1991	N	0.0	0.0	7.1	261.5	235.8	118.7	51.7	29.1	48.1	61.0	113.2	99.9	1,026.0
1992	N	0.2	85.7	159.5	75.8	77.0	32.3	10.3	32.6	19.0	16.8	45.9	61.2	616.3
1993	W	27.0	128.7	215.5	270.1	291.9	158.1	155.7	137.4	142.2	140.8	137.3	154.6	1,959.3
1994	D	83.0	79.8	177.1	152.3	100.5	44.7	106.5	105.1	76.2	89.6	80.7	87.2	1,182.6
1995	W	91.4	115.6	162.7	230.0	208.5	189.2	197.6	132.7	137.4	146.8	150.3	164.5	1,926.8
1996	N	159.4	177.3	208.5	230.1	204.9	158.7	144.5	133.9	137.8	157.7	148.2	163.1	2,024.1
1997	N	133.9	236.9	228.9	224.5	227.7	186.6	167.6	141.8	148.0	162.4	147.6	157.5	2,163.5
1998	N	152.1	148.2	187.2	229.6	236.7	193.5	164.4	125.8	156.3	147.6	150.2	157.7	2,049.2
1999	N	144.0	174.5	213.6	229.9	210.8	187.2	143.2	118.4	129.7	112.3	140.4	147.4	1,951.6
2000	N	145.4	184.5	199.1	205.1	207.5	196.4	161.5	126.7	138.7	114.6	95.2	118.0	1,892.7
2001	N	111.5	185.5	213.1	187.2	102.7	57.7	83.7	43.4	89.9	82.1	54.0	9.9	1,220.7
2002	N	35.9	196.0	222.7	249.3	170.4	78.3	39.3	72.0	114.4	95.8	53.6	26.6	1,354.3
2003	N	49.6	137.3	148.0	172.6	141.2	128.1	107.7	108.3	89.8	102.9	71.0	103.9	1,360.4
2004	N	143.0	210.1	238.1	229.7	156.6	108.3	87.9	110.4	43.3	52.6	32.4	5.0	1,417.4
2005	W	5.1	61.0	256.0	258.6	272.3	264.0	191.7	129.3	139.7	173.4	122.9	103.0	1,977.0
2006	W	147.2	147.8	260.2	270.9	284.5	220.5	136.8	122.5	164.8	181.2	159.7	122.1	2,218.2
2007	D	140.5	191.3	136.2	43.6	9.6	4.4	58.9	42.9	18.1	69.3	37.4	42.0	794.1
Average		83.7	132.4	187.4	212.8	185.1	140.0	120.3	94.0	102.9	109.9	97.9	93.1	1,559.4

Differences in Monthly Averages of Daily District Diversions (AF) to the Lake Mary WTP by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative Relative to the Existing Condition. Positive Values Indicate that the Permit 17332 Bypass Flow Requirements Alternative District Diversion Values are Higher than the Existing Condition Values

Runoff Year	Runoff Year Type	Difference in Lake Mary WTP Diversions (AF) (P-17332 BFR Alt - Existing Cond)												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	-11.1	-34.3	-221.9	-157.7	-53.9	-34.9	-137.1	-36.6	-94.7	-79.0	-67.7	2.7	-926.3
1989	N	-92.9	-153.1	-291.4	-40.9	13.7	14.7	-83.1	-24.9	-108.4	-109.4	-105.5	6.1	-975.1
1990	D	0.0	0.0	-1.2	-151.2	-71.2	-156.4	-122.0	-25.5	-56.5	-41.4	-3.0	13.8	-614.6
1991	N	0.0	0.0	-7.1	-106.4	-98.3	-8.9	0.0	0.0	-26.2	-50.7	-90.0	-99.8	-487.6
1992	N	-0.2	-85.7	-159.5	55.5	79.5	51.5	0.0	0.0	0.0	0.0	-29.5	-32.3	-120.8
1993	W	-26.5	-55.3	-99.7	39.8	17.9	102.0	0.0	0.0	0.0	0.0	0.0	0.0	-21.7
1994	D	-70.5	-68.0	22.3	-67.8	-53.1	-4.1	0.0	0.0	0.0	0.0	0.0	0.0	-241.2
1995	W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1996	N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1997	N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1998	N	0.0	0.0	-3.7	-4.2	-4.2	-1.9	0.0	0.0	0.0	0.0	0.0	0.0	-14.1
1999	N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	N	0.0	0.0	0.0	-3.0	-90.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-93.6
2002	N	-13.3	-51.7	-30.6	9.0	-105.3	18.0	0.0	0.0	0.0	0.0	0.0	0.0	-173.9
2003	N	-35.7	-66.1	-64.0	68.1	66.9	30.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
2004	N	0.0	0.0	0.0	0.0	-93.5	-6.8	0.0	0.0	0.0	0.0	0.0	0.0	-100.3
2005	W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2006	W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2007	D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average		-12.5	-25.7	-42.8	-17.9	-19.6	0.2	-17.1	-4.4	-14.3	-14.0	-14.8	-5.5	-188.5

Monthly Averages of Daily Flows (cfs) at the OMR Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative

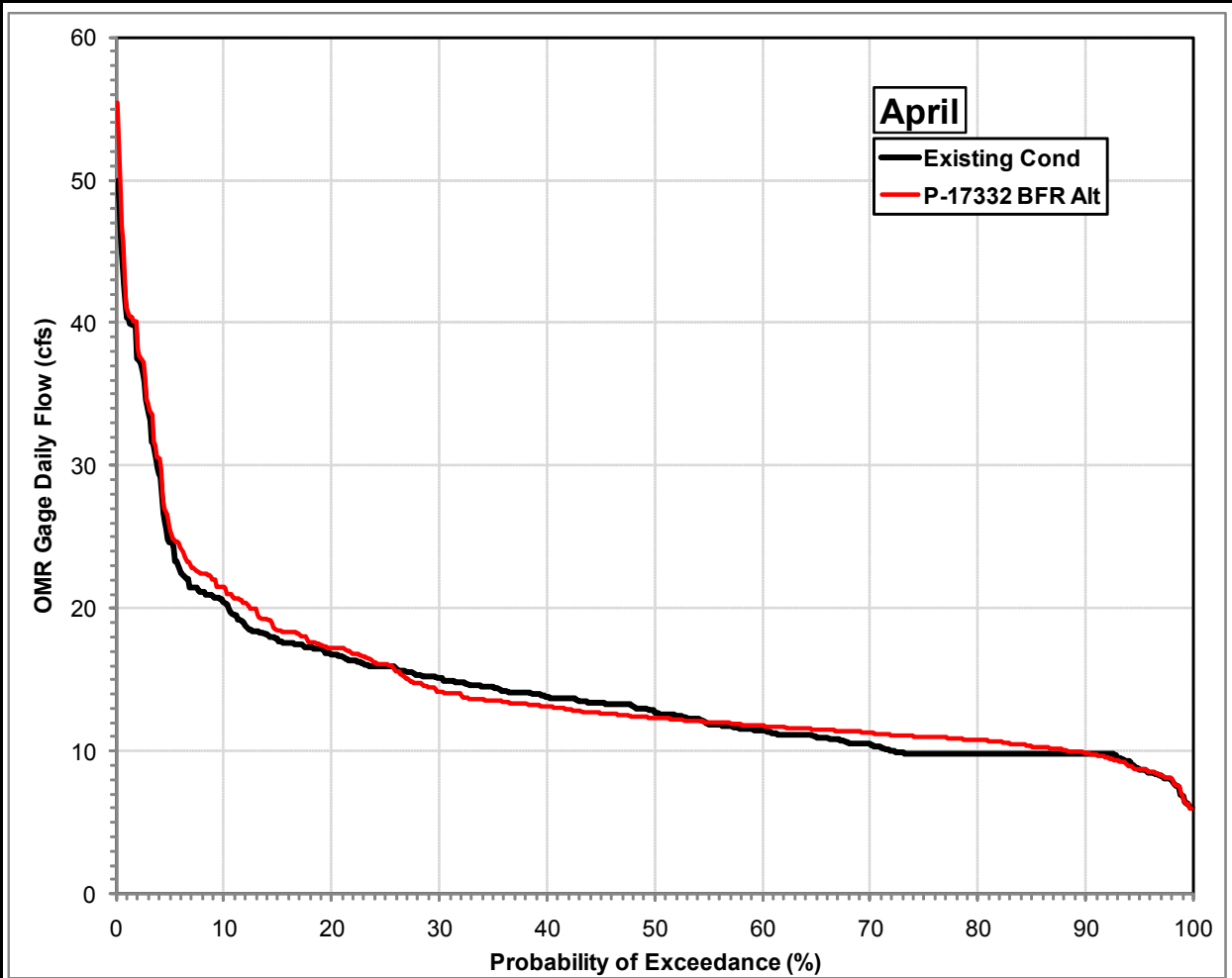
Runoff Year	Runoff Year Type	Average OMR Gage Daily Flow (cfs) under the P-17332 BFR Alt												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	11.8	29.7	32.1	15.3	7.6	6.4	5.4	7.5	7.0	6.8	6.2	8.9	12.1
1989	N	16.6	30.6	34.0	14.2	8.2	8.6	6.9	8.1	6.6	6.4	6.7	6.8	12.8
1990	D	11.9	21.4	26.9	12.5	8.1	7.5	5.6	6.5	5.3	5.2	6.0	7.5	10.4
1991	N	8.8	21.5	53.4	22.1	10.3	7.2	6.3	7.6	6.3	5.7	6.0	6.4	13.4
1992	N	12.9	28.6	18.9	11.1	7.1	5.8	5.3	6.4	5.5	8.2	6.5	7.6	10.4
1993	W	11.8	53.8	89.6	58.8	18.6	9.9	7.7	7.4	8.1	6.4	7.4	7.5	24.0
1994	D	14.1	33.3	37.4	12.2	7.3	7.4	6.9	8.5	7.4	10.1	7.4	12.3	13.7
1995	W	14.4	43.6	127.4	151.8	56.7	23.0	12.4	9.4	13.4	13.1	15.7	12.8	41.3
1996	N	25.0	89.2	102.6	46.0	18.8	11.0	8.8	14.9	14.3	30.1	11.9	13.5	32.3
1997	N	26.3	77.3	75.2	29.2	14.7	12.0	6.8	7.8	9.6	10.0	11.5	11.7	24.4
1998	N	13.1	25.9	102.3	130.9	44.4	24.2	11.5	12.2	9.5	8.8	9.4	9.1	33.6
1999	N	12.6	52.6	83.5	32.9	14.2	8.9	7.4	8.3	7.6	8.6	9.4	9.3	21.3
2000	N	14.8	63.8	62.5	21.3	11.6	6.7	7.3	8.2	7.4	7.1	7.3	9.2	19.0
2001	N	12.7	63.6	34.0	15.3	8.1	6.1	6.5	7.7	9.1	6.9	6.7	8.1	15.5
2002	N	15.9	33.5	50.1	18.3	8.4	5.8	6.2	10.2	7.9	6.6	6.1	7.0	14.7
2003	N	11.1	43.6	75.6	22.7	9.7	6.7	5.3	6.5	8.2	6.2	7.0	9.7	17.7
2004	N	13.0	39.1	40.6	16.3	8.0	6.6	8.0	7.5	6.9	8.9	7.3	8.6	14.2
2005	W	11.4	74.2	113.7	78.2	21.3	9.8	8.3	7.7	13.0	10.6	8.0	9.9	30.6
2006	W	17.9	99.0	156.6	77.5	19.4	12.5	11.9	9.4	8.3	5.9	6.8	9.1	36.3
2007	D	12.6	32.8	26.3	10.0	5.8	5.5	6.3	6.6	7.4	8.0	6.4	7.4	11.3
Average		14.4	47.9	67.1	39.8	15.4	9.6	7.5	8.4	8.4	9.0	8.0	9.1	20.4

Monthly Averages of Daily Flows (cfs) at the OMR Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Existing Condition

Runoff Year	Runoff Year Type	Average OMR Gage Daily Flow (cfs) under the Existing Cond												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	10.9	24.4	27.6	11.6	6.9	5.5	5.1	7.2	5.9	6.5	5.9	9.0	10.5
1989	N	12.9	26.9	28.4	10.7	7.1	7.0	6.4	7.7	6.0	6.3	6.1	6.9	11.0
1990	D	10.1	18.3	23.4	9.7	7.2	6.0	5.3	6.3	5.3	5.2	5.9	7.7	9.2
1991	N	8.4	16.2	53.3	19.8	8.8	6.9	6.1	7.6	6.0	5.7	5.7	6.4	12.5
1992	N	9.6	26.7	17.4	10.9	6.6	5.6	5.3	6.3	5.4	8.0	6.2	7.7	9.7
1993	W	10.4	53.0	91.3	57.5	17.6	9.8	7.5	7.4	7.8	6.7	7.5	7.8	23.8
1994	D	12.0	33.9	35.8	10.4	7.0	6.2	6.4	7.6	7.1	10.1	7.3	12.4	13.0
1995	W	15.9	44.6	129.6	151.0	55.9	22.2	11.8	9.4	13.4	13.1	15.7	12.8	41.4
1996	N	25.0	88.4	101.4	44.9	17.6	10.0	8.8	14.9	14.3	30.1	11.9	13.5	31.8
1997	N	25.9	76.8	73.8	28.1	13.6	11.2	7.0	7.8	9.6	10.0	11.5	11.7	24.0
1998	N	13.3	25.7	102.0	130.1	43.4	23.3	11.0	12.2	9.5	8.8	9.4	9.2	33.3
1999	N	12.6	52.6	83.5	31.4	13.5	9.3	7.6	8.3	6.4	8.4	9.4	9.3	21.0
2000	N	16.2	63.5	61.8	18.3	10.6	7.1	7.3	7.6	7.2	7.1	7.3	9.3	18.6
2001	N	13.5	64.0	30.9	12.3	7.1	5.6	6.0	7.5	9.0	6.8	6.7	8.1	14.9
2002	N	16.3	32.8	50.0	14.7	7.3	5.9	5.8	10.1	7.2	6.6	6.1	7.3	14.2
2003	N	11.3	41.4	77.0	20.6	8.9	6.7	5.5	6.3	7.9	6.5	7.0	9.9	17.4
2004	N	14.8	38.7	38.3	12.7	7.2	6.0	8.0	7.3	6.6	8.9	7.3	8.6	13.7
2005	W	13.4	74.7	114.4	76.8	20.3	8.9	7.6	7.7	13.0	10.5	8.0	9.9	30.6
2006	W	17.9	98.9	156.2	76.6	18.8	11.5	10.8	9.4	8.2	6.8	6.9	9.2	36.0
2007	D	12.9	30.7	23.2	9.1	5.7	5.7	6.0	6.3	7.2	8.2	6.5	7.5	10.8
Average		14.2	46.6	66.0	37.9	14.5	9.0	7.3	8.2	8.1	9.0	7.9	9.2	19.9

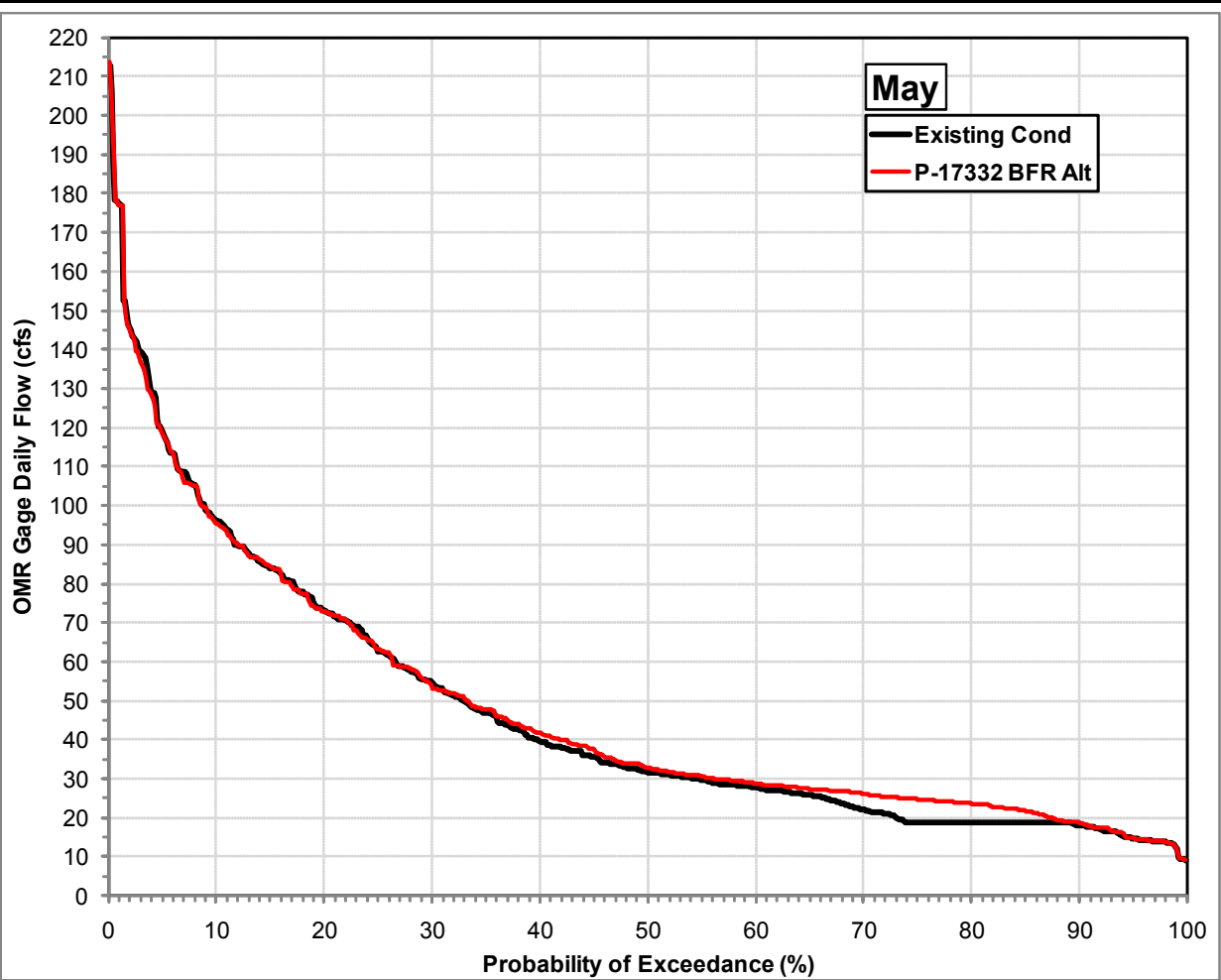
Differences in Monthly Averages of Daily Flows (cfs) at the OMR Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative Relative to the Existing Condition. Positive Values Indicate that the Permit 17332 Bypass Flow Requirements Alternative Flow Values are Higher than the Existing Condition Values

Runoff Year	Runoff Year Type	Average OMR Gage Daily Flow (cfs) Differences (P-17332 BFR Alt - Existing Cond)												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	0.9	5.2	4.5	3.7	0.7	0.9	0.3	0.3	1.1	0.3	0.4	0.0	1.5
1989	N	3.8	3.8	5.6	3.5	1.1	1.7	0.5	0.4	0.6	0.2	0.6	-0.1	1.8
1990	D	1.8	3.1	3.5	2.8	0.9	1.5	0.3	0.2	0.0	0.0	0.1	-0.2	1.2
1991	N	0.3	5.2	0.1	2.3	1.6	0.2	0.2	0.0	0.3	0.0	0.3	0.0	0.9
1992	N	3.3	1.9	1.5	0.2	0.6	0.2	0.0	0.1	0.1	0.2	0.3	-0.1	0.7
1993	W	1.4	0.8	-1.7	1.3	1.0	0.1	0.2	0.0	0.4	-0.3	-0.1	-0.3	0.2
1994	D	2.1	-0.6	1.6	1.7	0.4	1.2	0.4	0.9	0.3	0.0	0.1	-0.1	0.7
1995	W	-1.5	-1.0	-2.1	0.8	0.8	0.8	0.6	0.0	0.0	0.0	0.0	0.0	-0.1
1996	N	0.0	0.8	1.2	1.1	1.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
1997	N	0.5	0.5	1.4	1.1	1.0	0.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.4
1998	N	-0.2	0.2	0.2	0.8	1.0	0.9	0.5	0.0	0.0	0.0	0.0	-0.1	0.3
1999	N	0.1	0.0	0.0	1.5	0.7	-0.4	-0.2	0.0	1.2	0.2	0.0	0.0	0.3
2000	N	-1.4	0.3	0.8	3.0	1.0	-0.3	0.0	0.5	0.2	0.0	0.0	-0.1	0.3
2001	N	-0.8	-0.4	3.2	3.0	1.0	0.5	0.5	0.2	0.1	0.2	0.0	0.0	0.6
2002	N	-0.4	0.6	0.1	3.6	1.2	-0.1	0.4	0.1	0.7	0.0	0.0	-0.2	0.5
2003	N	-0.2	2.2	-1.4	2.1	0.9	0.0	-0.3	0.2	0.3	-0.3	-0.1	-0.3	0.3
2004	N	-1.9	0.4	2.3	3.6	0.8	0.5	0.1	0.2	0.3	0.0	0.0	0.0	0.5
2005	W	-2.0	-0.4	-0.7	1.4	1.0	0.9	0.7	0.0	0.0	0.1	0.0	0.0	0.1
2006	W	0.0	0.2	0.4	0.9	0.6	1.0	1.0	0.0	0.1	-0.9	-0.2	-0.1	0.2
2007	D	-0.3	2.2	3.1	1.0	0.1	-0.2	0.4	0.3	0.2	-0.2	-0.1	-0.1	0.5
Average		0.3	1.2	1.2	2.0	0.9	0.6	0.3	0.2	0.3	0.0	0.1	-0.1	0.6



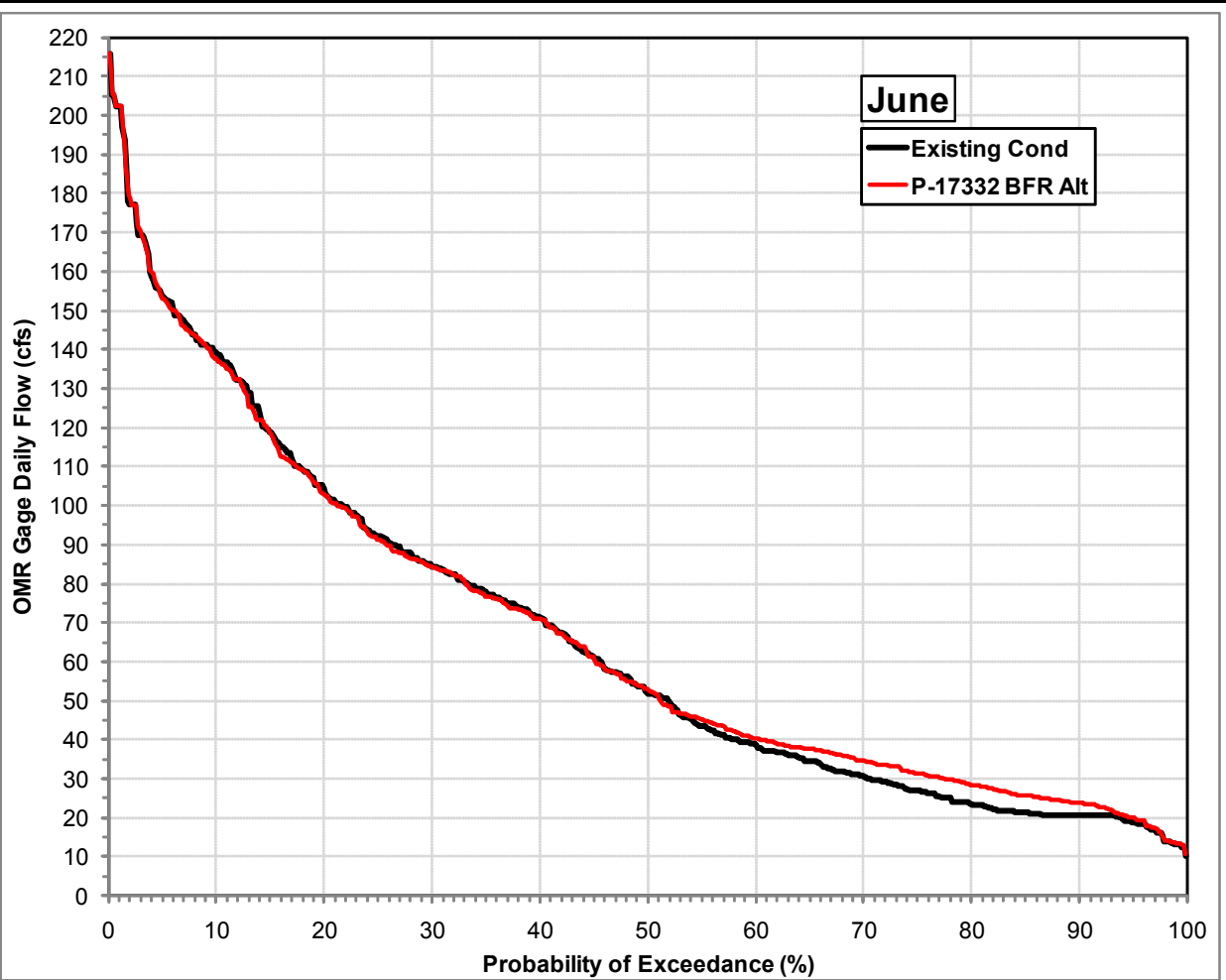
Probability of Exceedance (%)	April OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	25.5	24.6
10	21.5	20.3
20	17.2	16.8
25	16.1	16.0
50	12.3	12.7
75	11.0	9.8
80	10.8	9.8
90	9.9	9.8
95	8.7	8.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during April for the 20-Year Evaluation Period



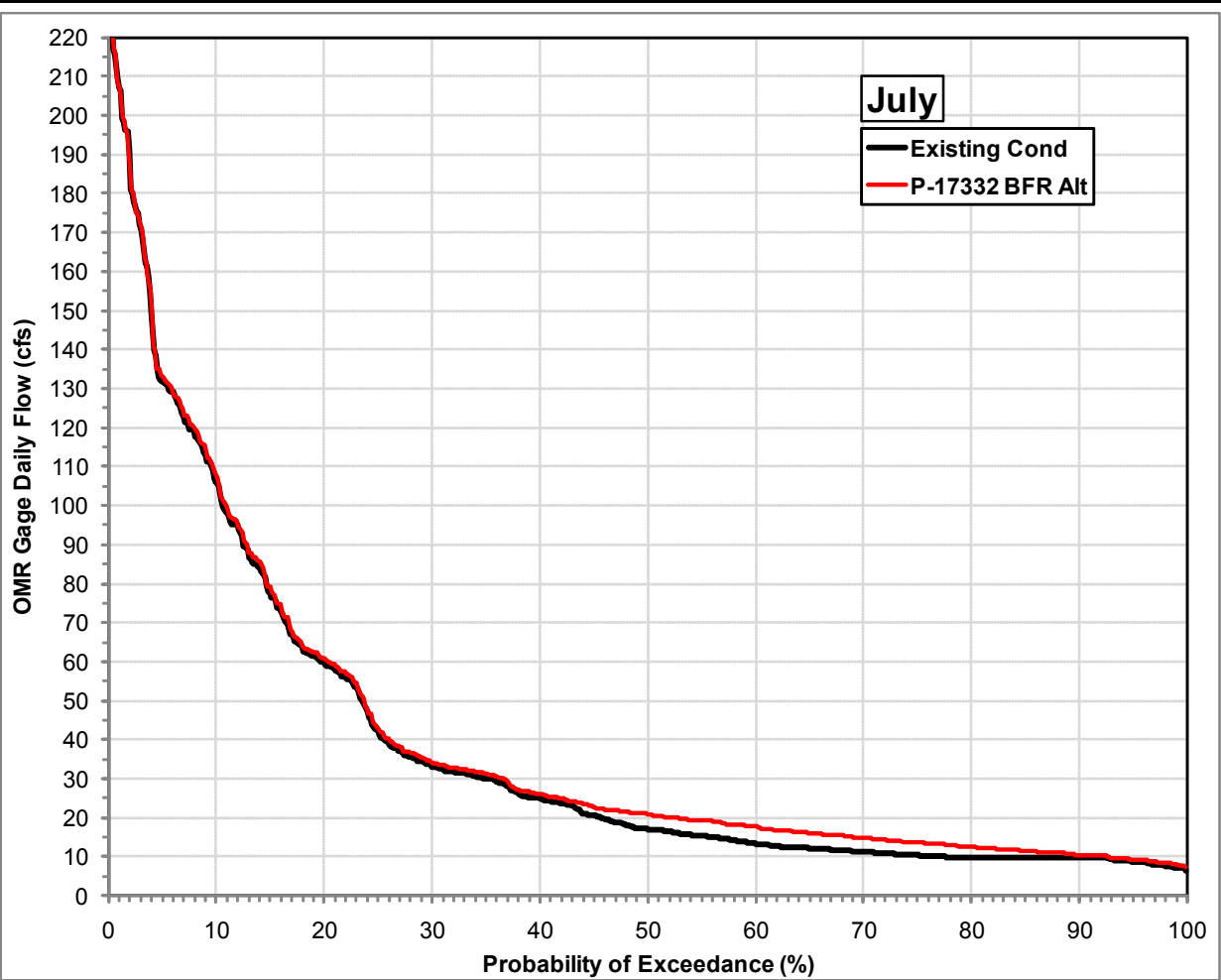
Probability of Exceedance (%)	May OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	118.5	117.8
10	95.5	95.9
20	72.9	72.9
25	63.2	62.7
50	32.9	31.7
75	24.7	18.7
80	23.6	18.7
90	18.7	18.1
95	14.7	14.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during May for the 20-Year Evaluation Period



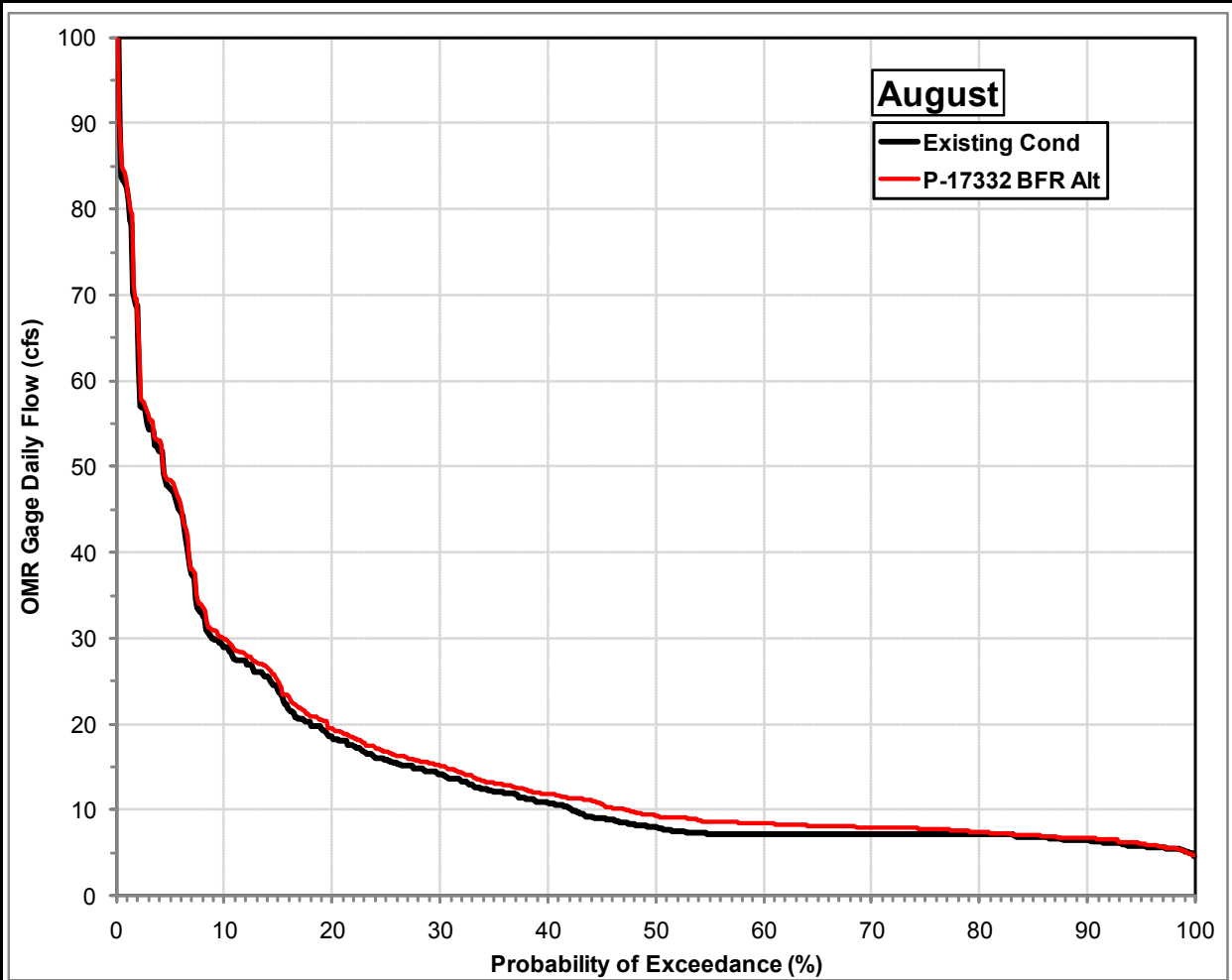
Probability of Exceedance (%)	June OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	153.2	153.2
10	137.6	138.6
20	102.7	103.0
25	91.3	92.0
50	52.7	51.9
75	31.4	27.0
80	28.3	23.4
90	23.8	20.8
95	20.0	18.9

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during June for the 20-Year Evaluation Period



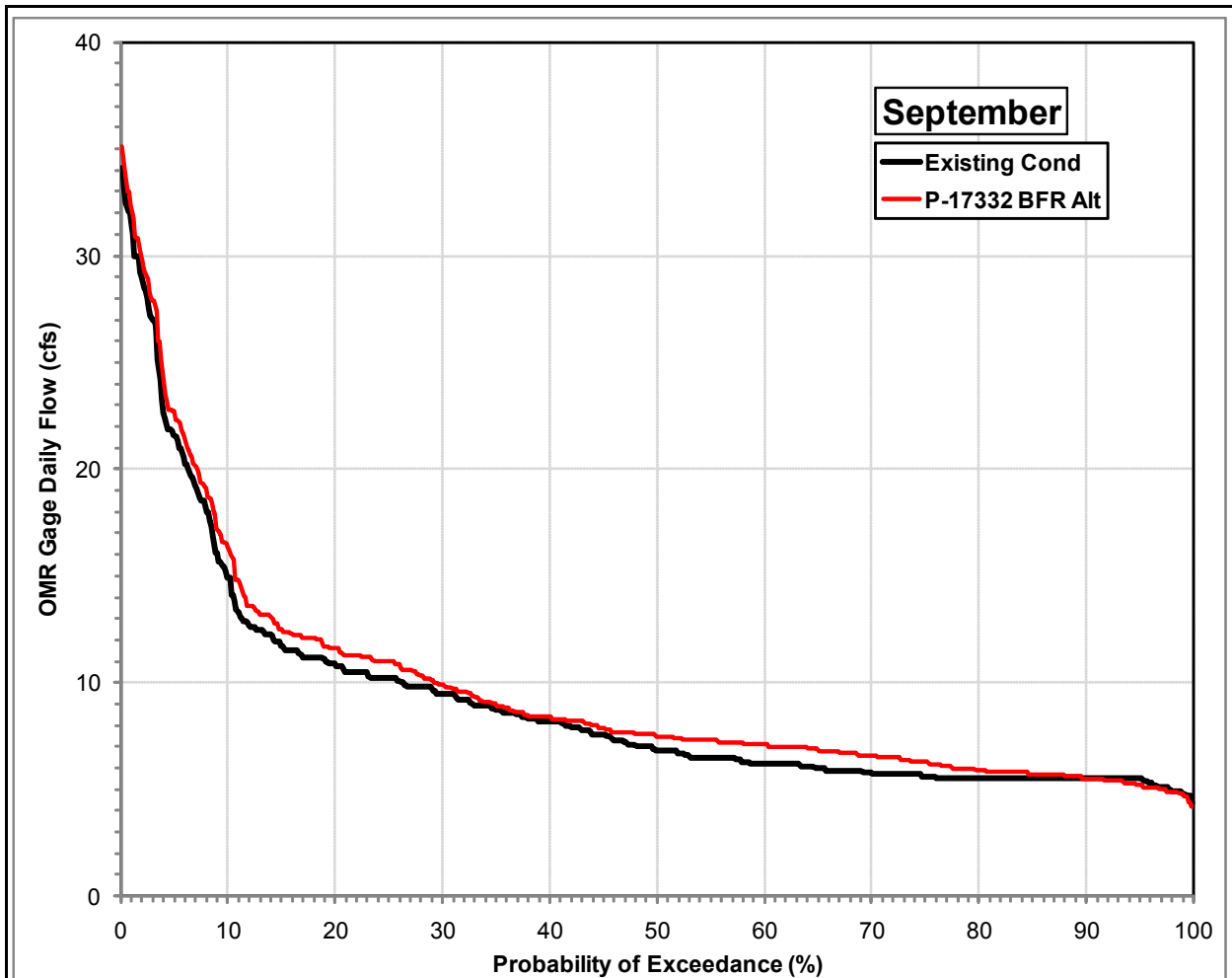
Probability of Exceedance (%)	July OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	133.3	131.5
10	107.6	105.4
20	60.7	59.4
25	43.2	41.3
50	21.0	17.1
75	13.6	10.4
80	12.5	9.9
90	10.5	9.9
95	9.4	8.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during July for the 20-Year Evaluation Period



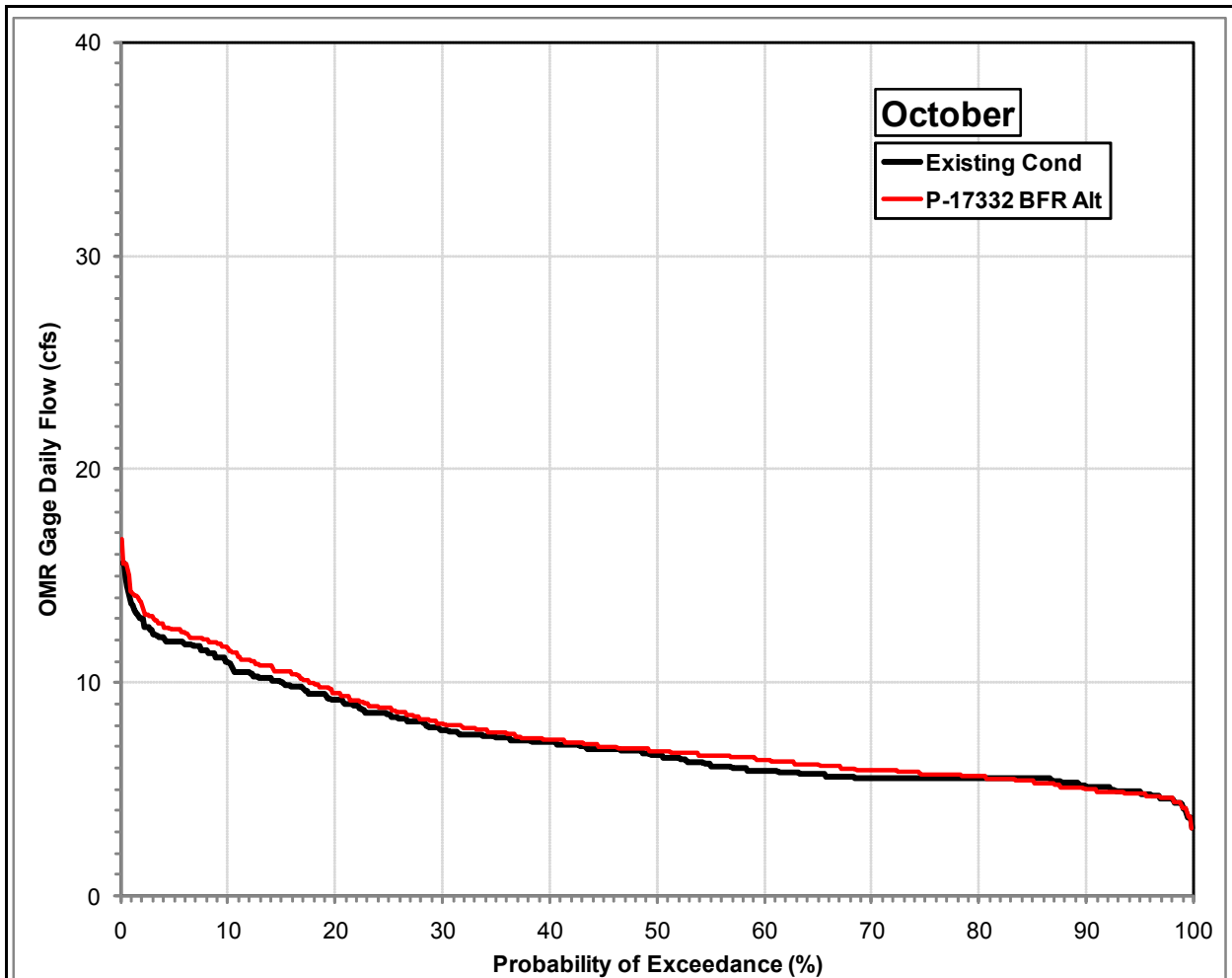
Probability of Exceedance (%)	August OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	48.4	47.1
10	29.9	29.0
20	19.5	18.2
25	16.8	15.8
50	9.3	8.0
75	7.8	7.2
80	7.4	7.2
90	6.7	6.5
95	6.1	5.8

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during August for the 20-Year Evaluation Period



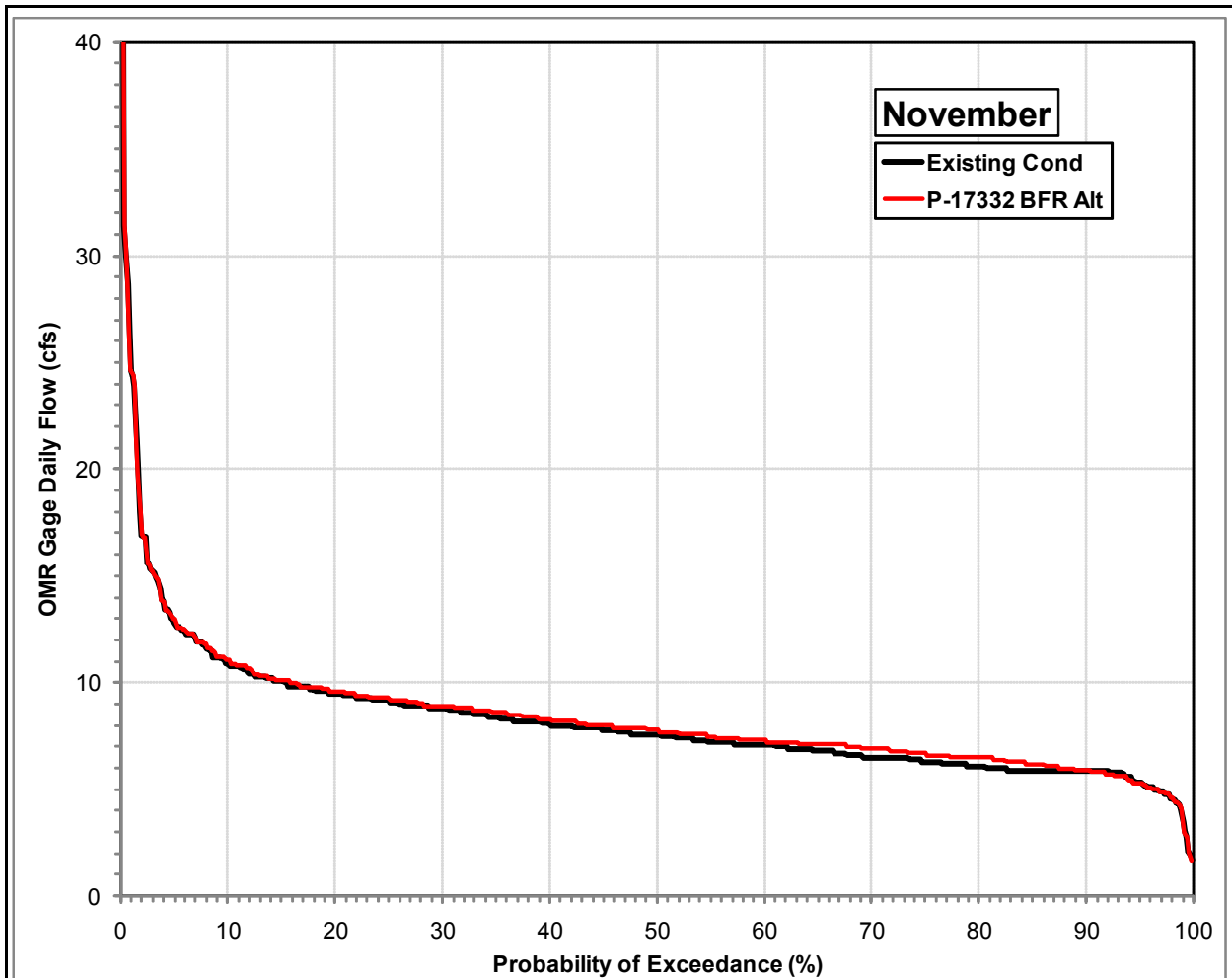
Probability of Exceedance (%)	September OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	22.7	21.5
10	16.3	14.9
20	11.6	10.8
25	11.0	10.2
50	7.5	6.8
75	6.3	5.6
80	5.9	5.5
90	5.5	5.5
95	5.2	5.5

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during September for the 20-Year Evaluation Period



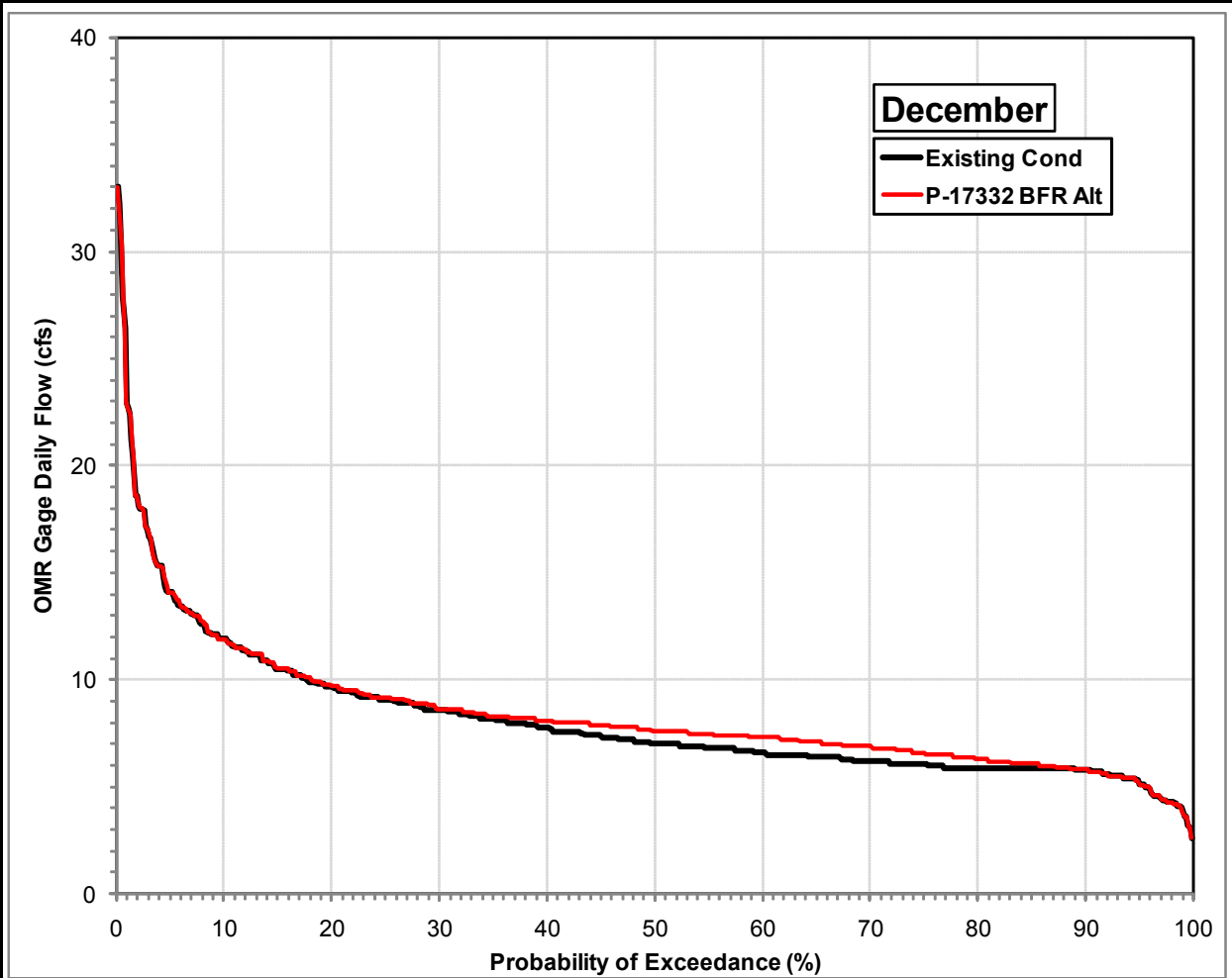
Probability of Exceedance (%)	October OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	12.5	11.9
10	11.6	10.9
20	9.5	9.2
25	8.8	8.5
50	6.8	6.6
75	5.7	5.5
80	5.6	5.5
90	5.0	5.1
95	4.8	4.9

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during October for the 20-Year Evaluation Period



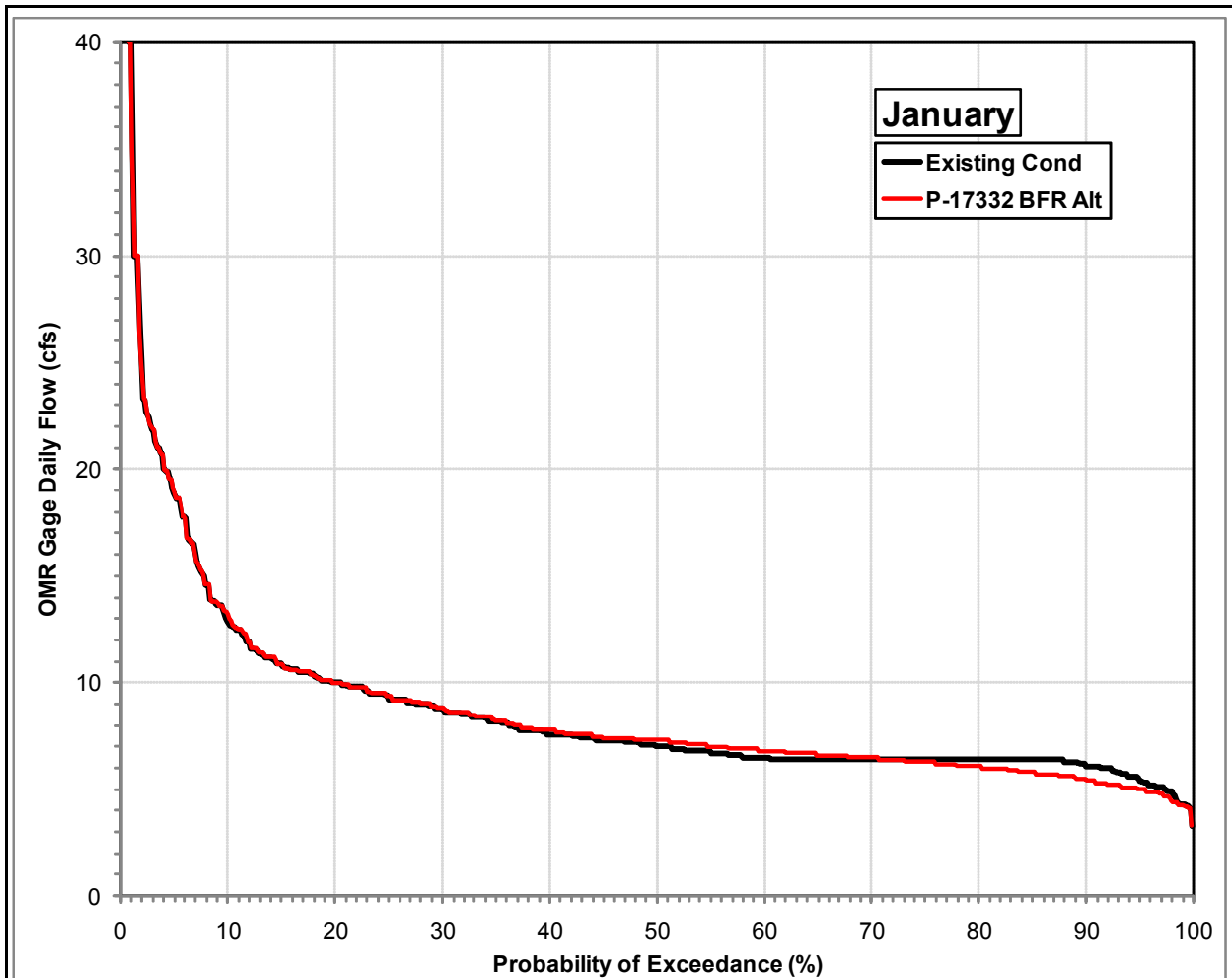
Probability of Exceedance (%)	November OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	13.0	12.6
10	11.1	10.8
20	9.6	9.5
25	9.3	9.1
50	7.8	7.6
75	6.7	6.3
80	6.5	6.1
90	5.9	5.9
95	5.3	5.3

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during November for the 20-Year Evaluation Period



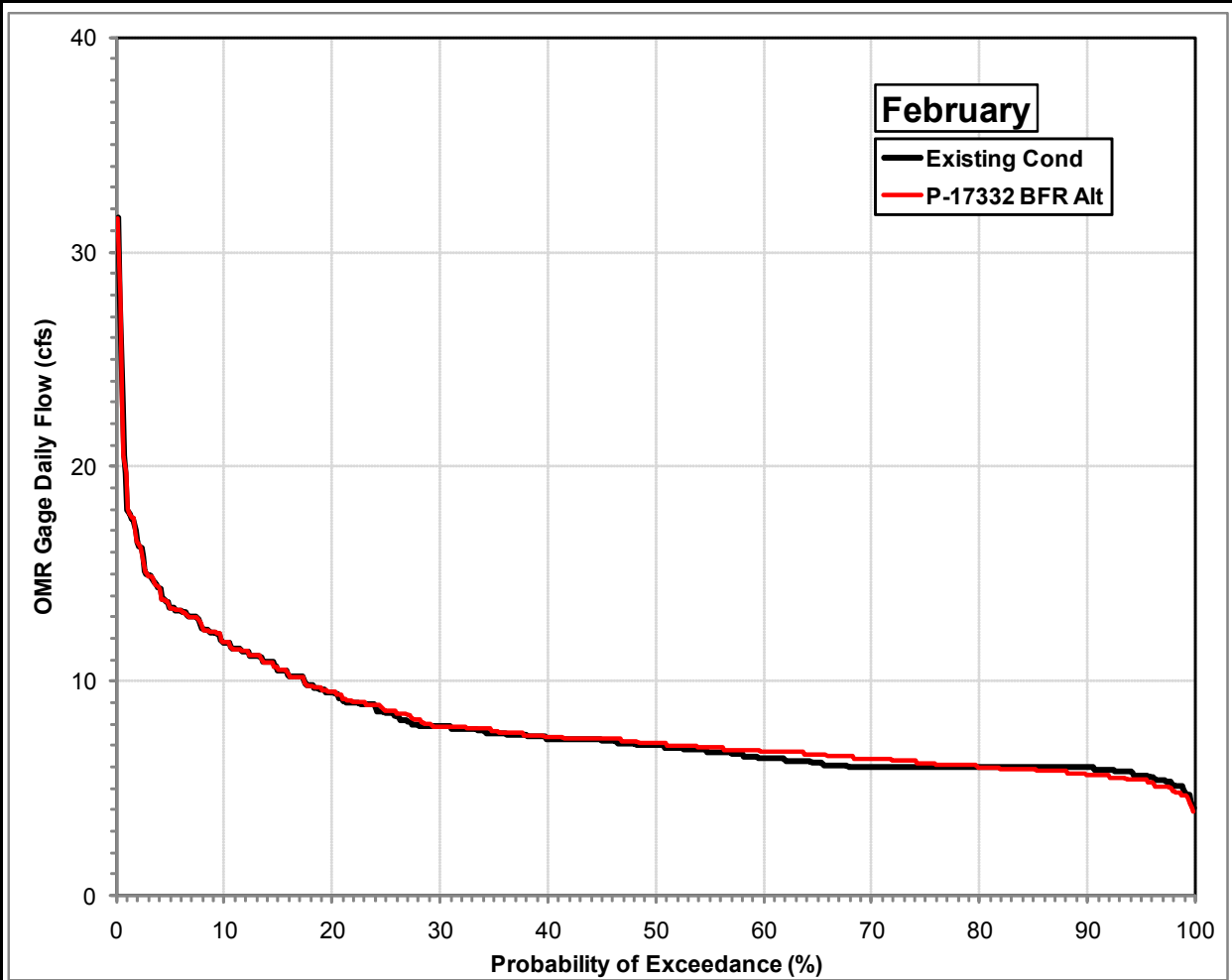
Probability of Exceedance (%)	December OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	14.1	14.1
10	11.9	11.9
20	9.7	9.7
25	9.2	9.1
50	7.6	7.0
75	6.6	6.1
80	6.3	5.9
90	5.8	5.8
95	5.1	5.1

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during December for the 20-Year Evaluation Period



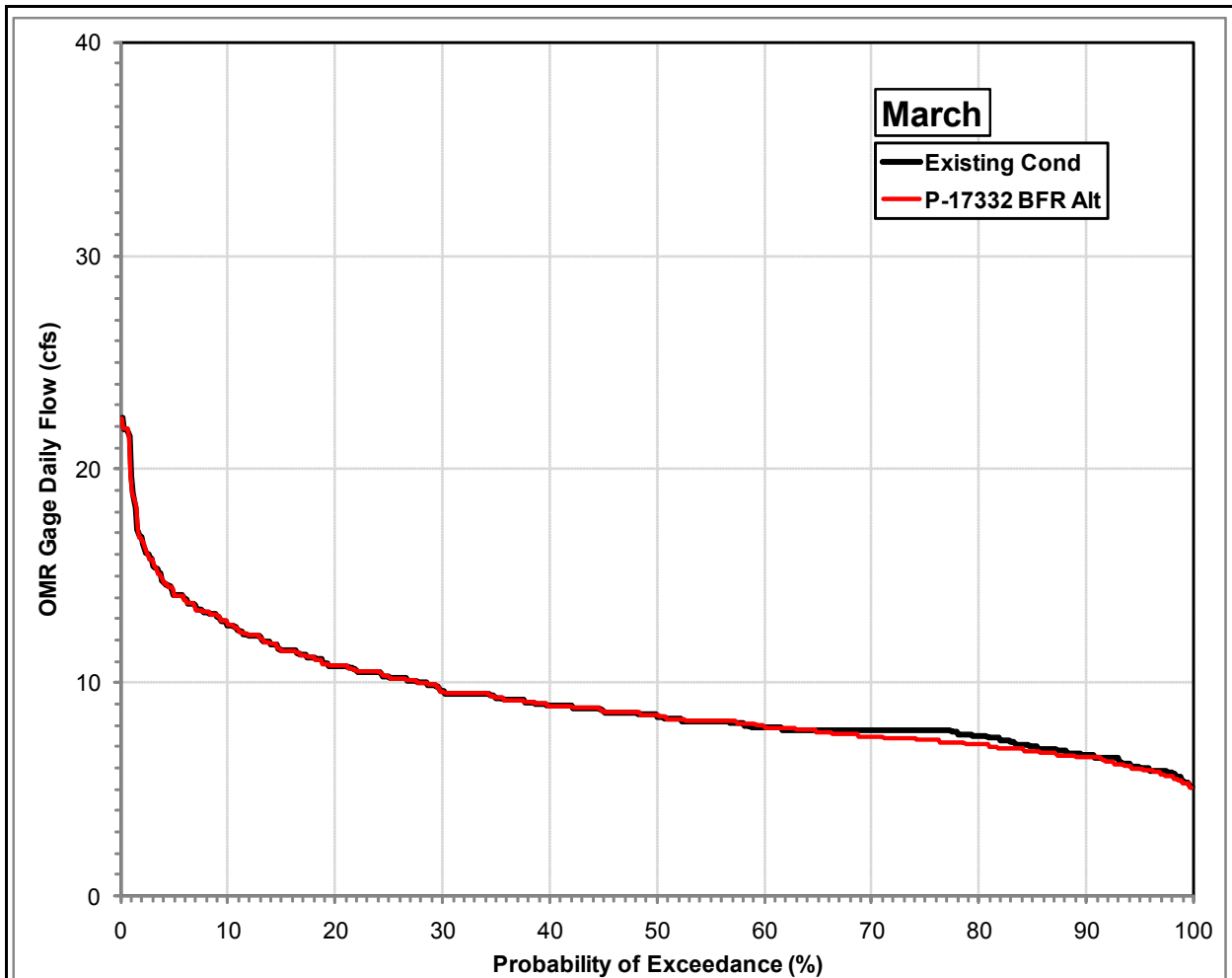
Probability of Exceedance (%)	January OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	18.9	18.6
10	13.2	12.7
20	10.0	10.0
25	9.4	9.2
50	7.3	7.0
75	6.3	6.4
80	6.1	6.4
90	5.4	6.1
95	5.0	5.4

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during January for the 20-Year Evaluation Period



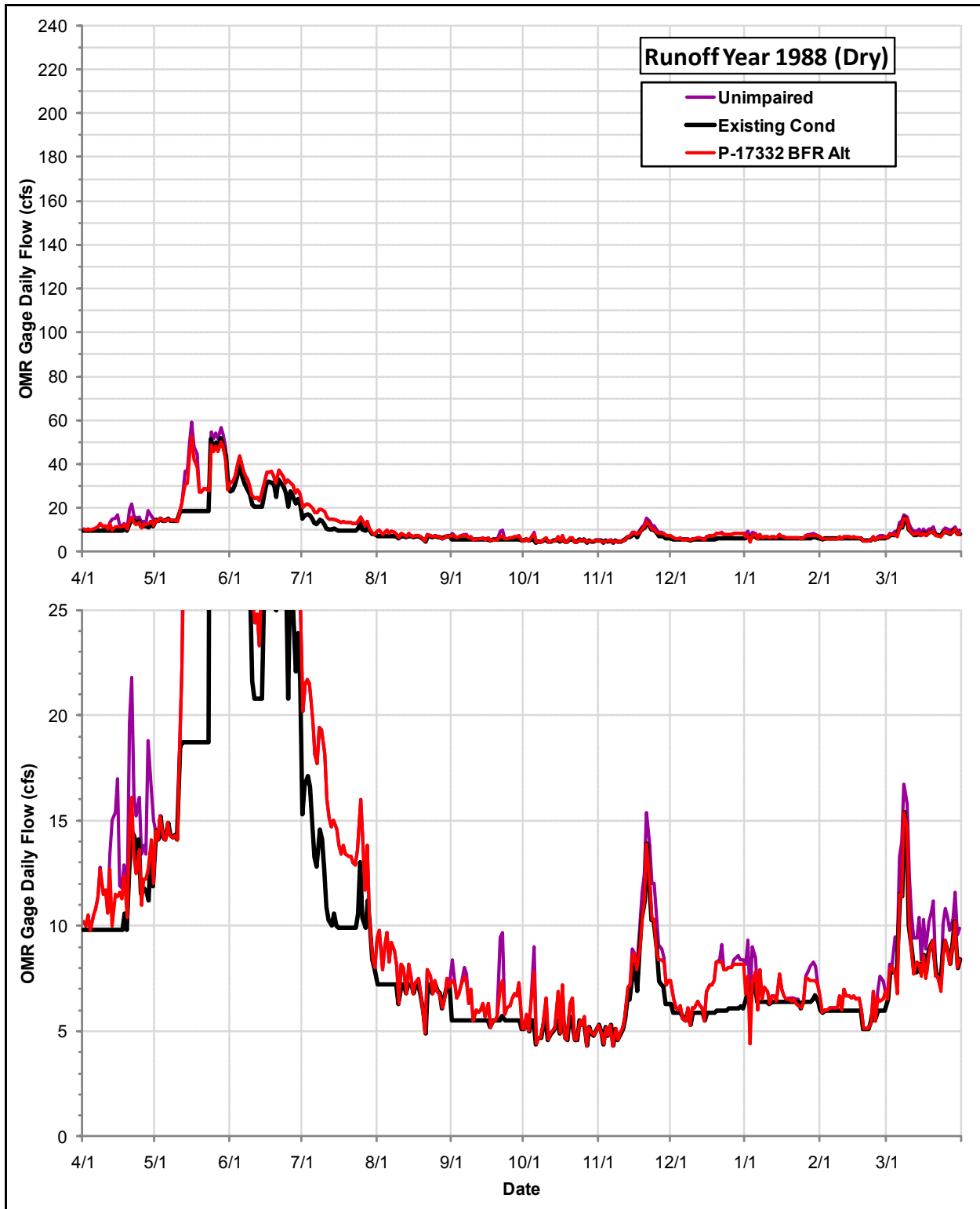
Probability of Exceedance (%)	February OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	13.4	13.4
10	11.8	11.8
20	9.5	9.5
25	8.6	8.5
50	7.1	7.0
75	6.2	6.0
80	6.0	6.0
90	5.6	6.0
95	5.4	5.6

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during February for the 20-Year Evaluation Period

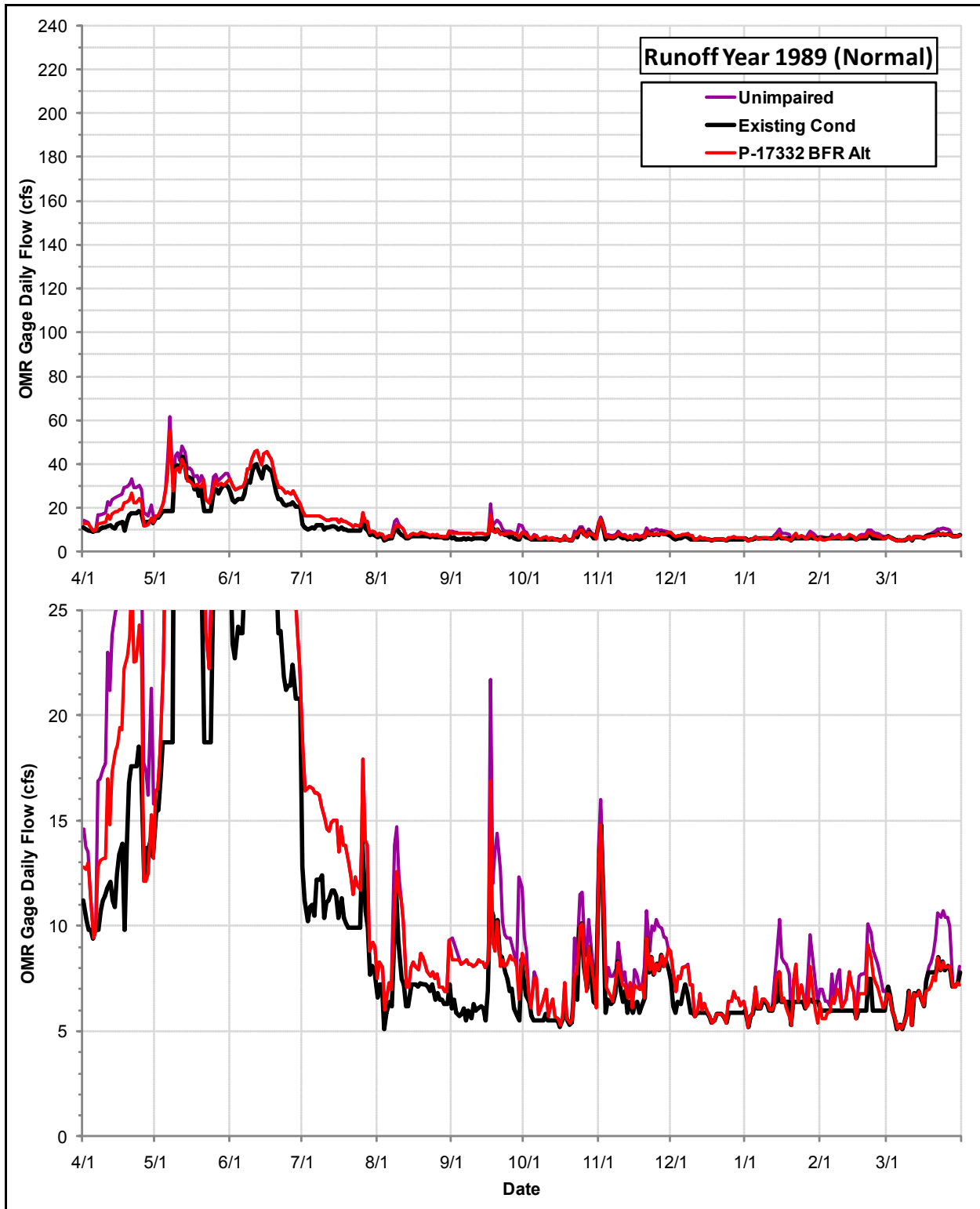


Probability of Exceedance (%)	March OMR Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	14.1	14.1
10	12.7	12.7
20	10.8	10.8
25	10.3	10.2
50	8.5	8.4
75	7.3	7.8
80	7.1	7.5
90	6.5	6.6
95	6.0	6.0

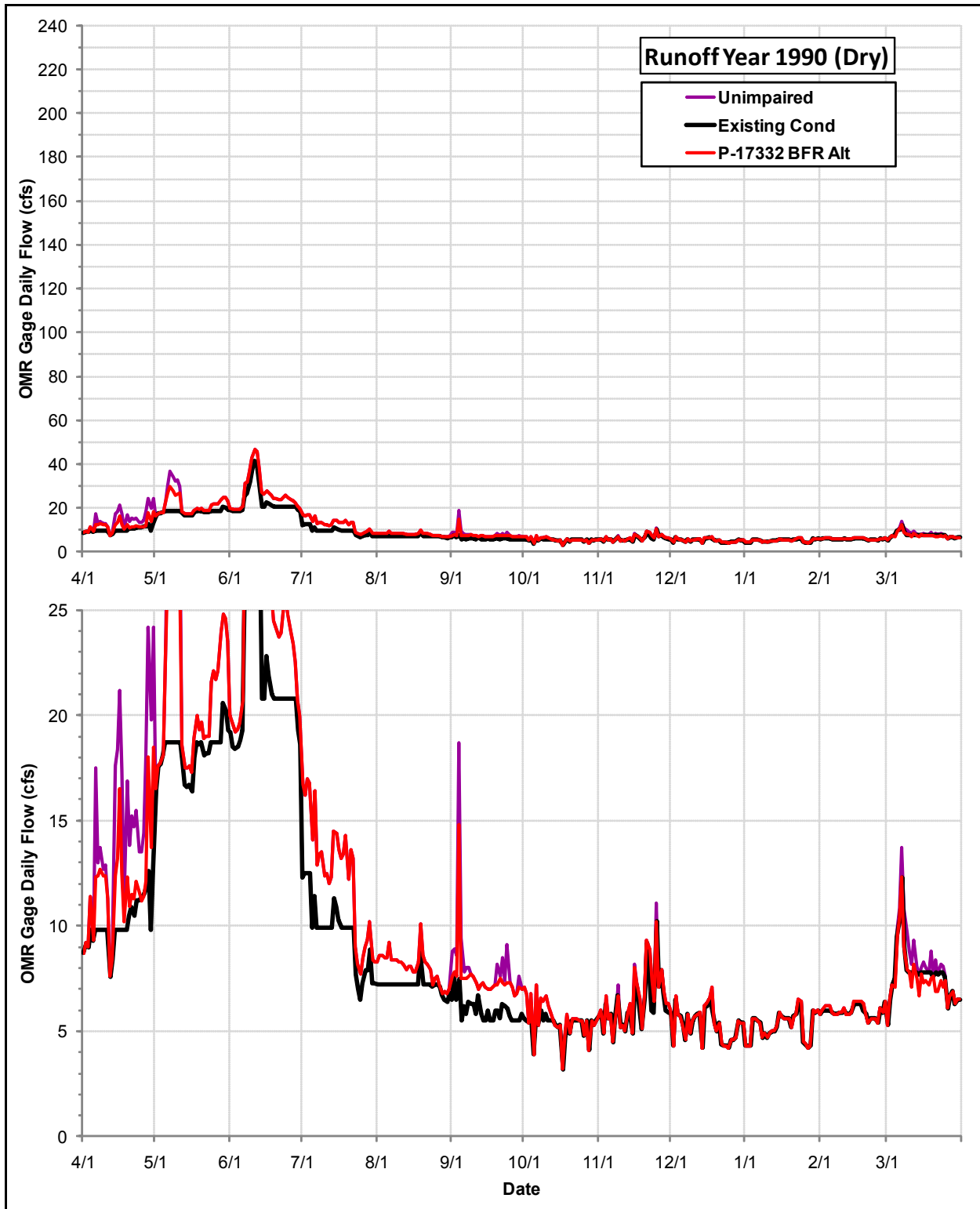
Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during March for the 20-Year Evaluation Period



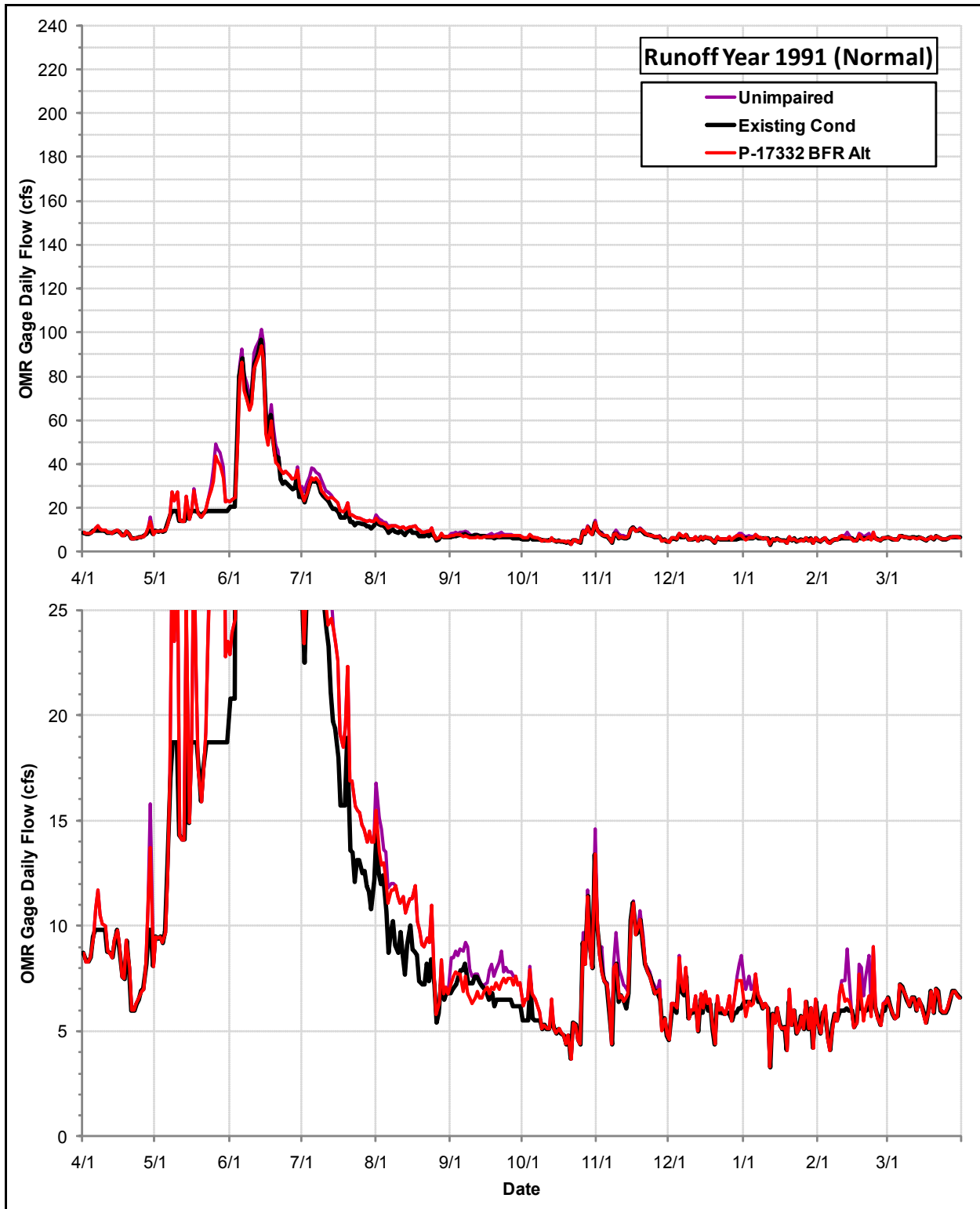
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1988



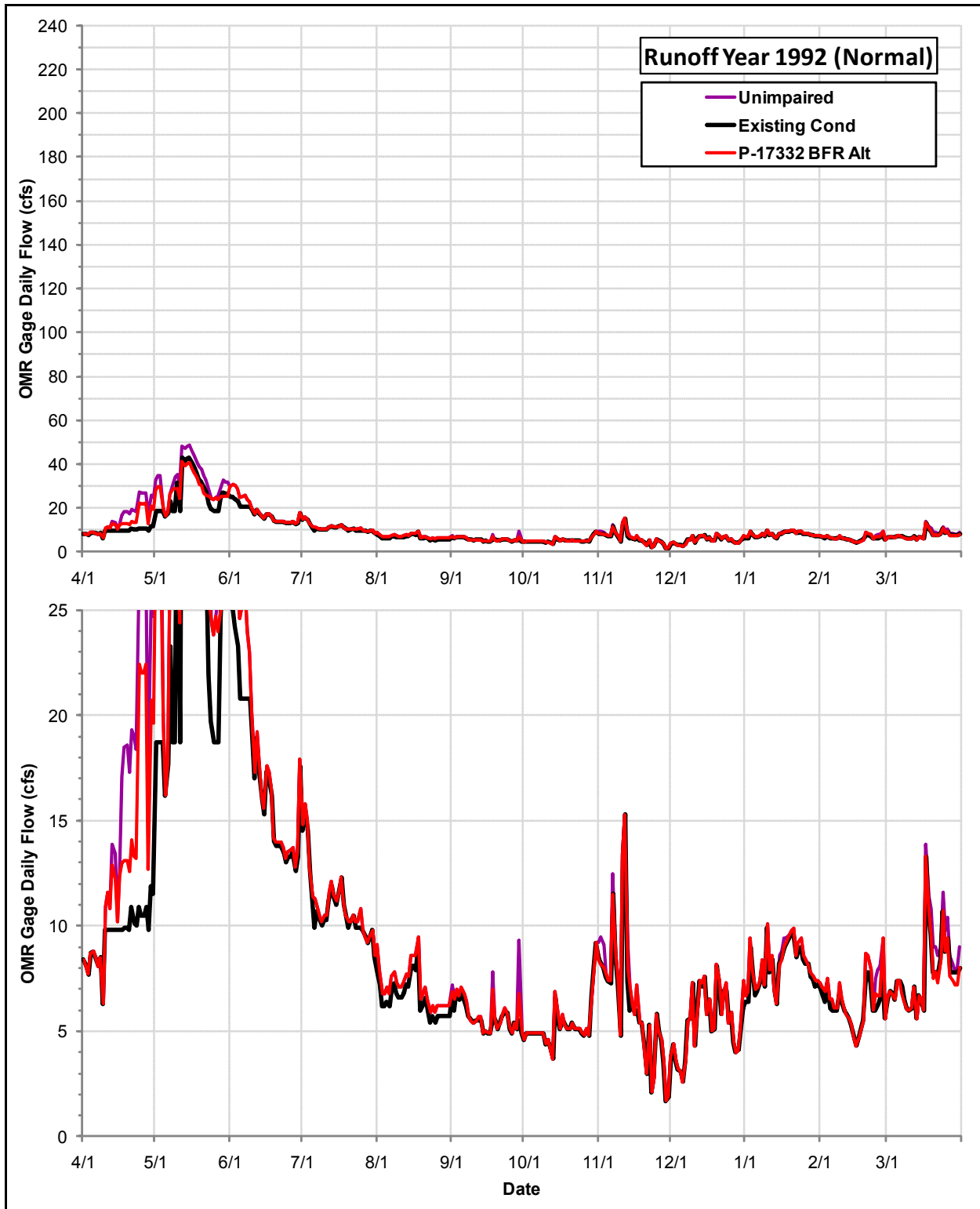
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1989



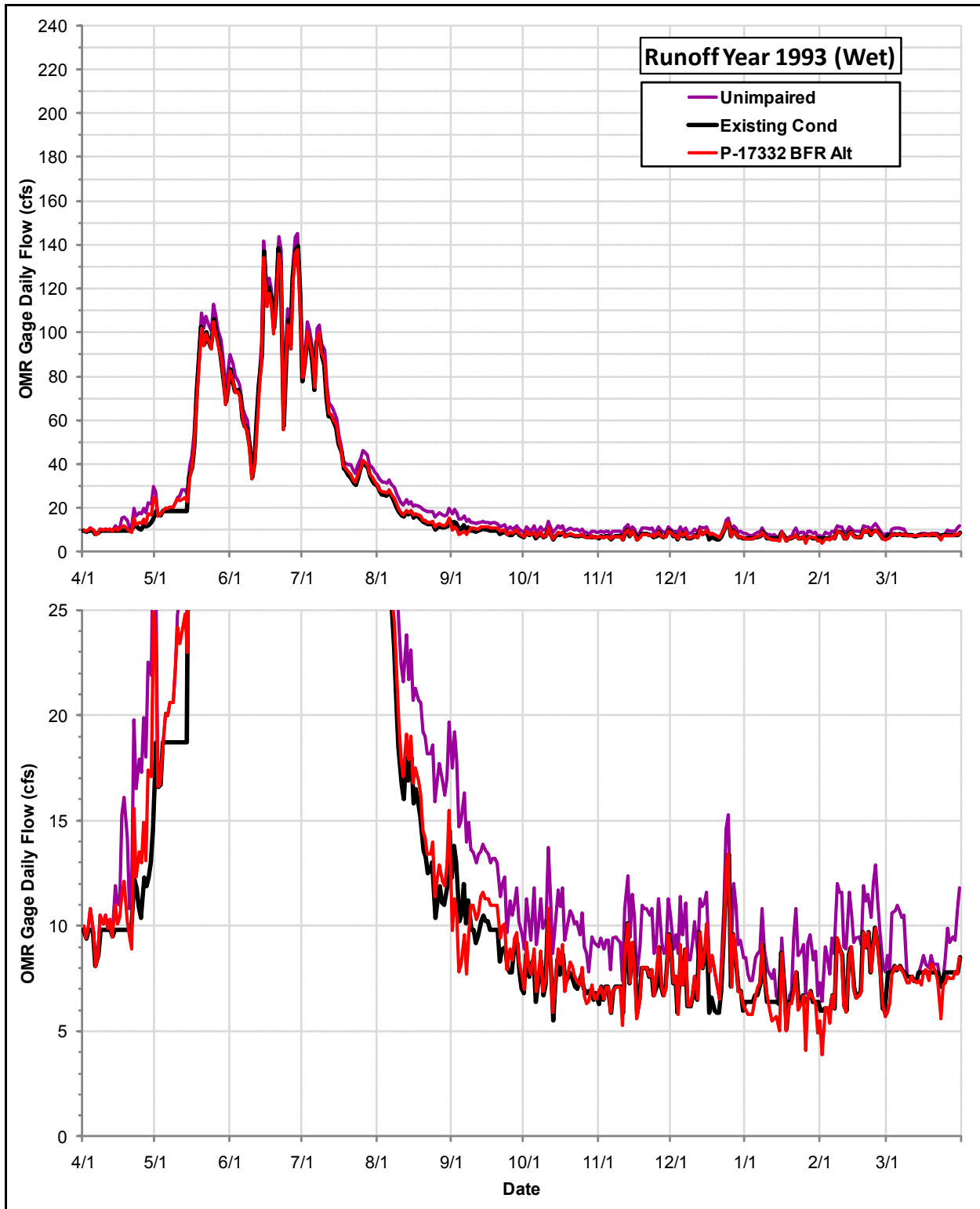
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1990



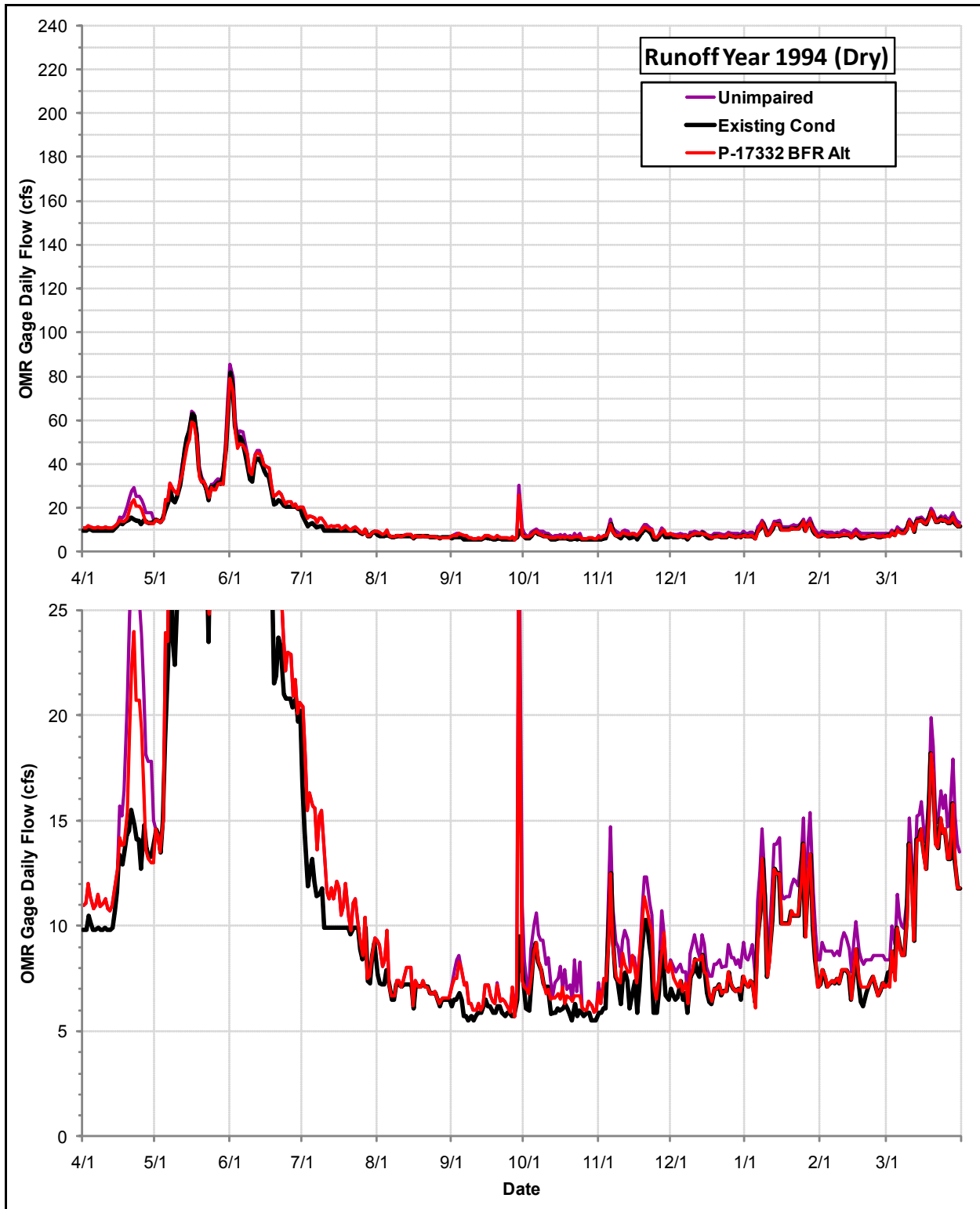
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1991



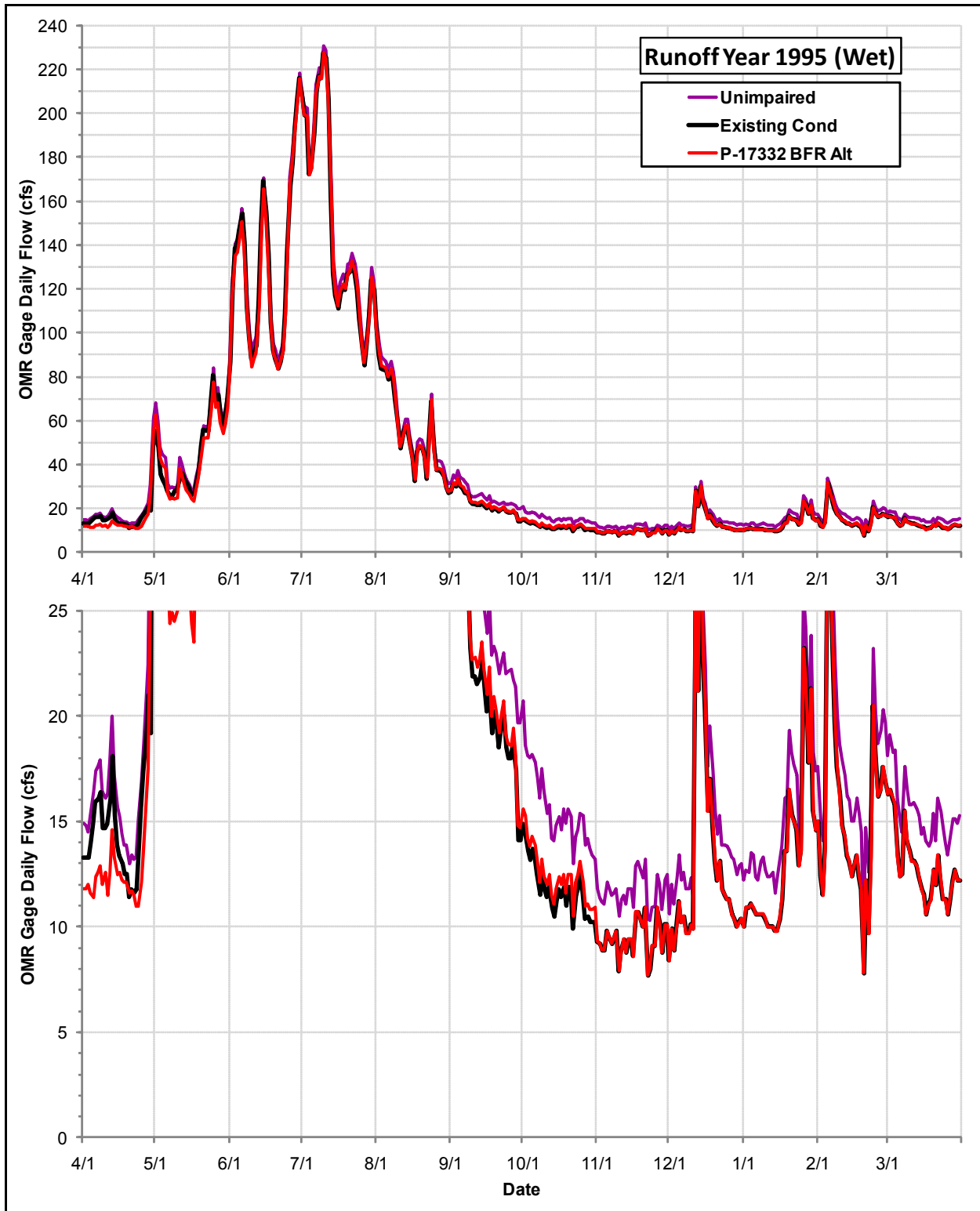
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index Unimpaired Conditions during Runoff Year 1992



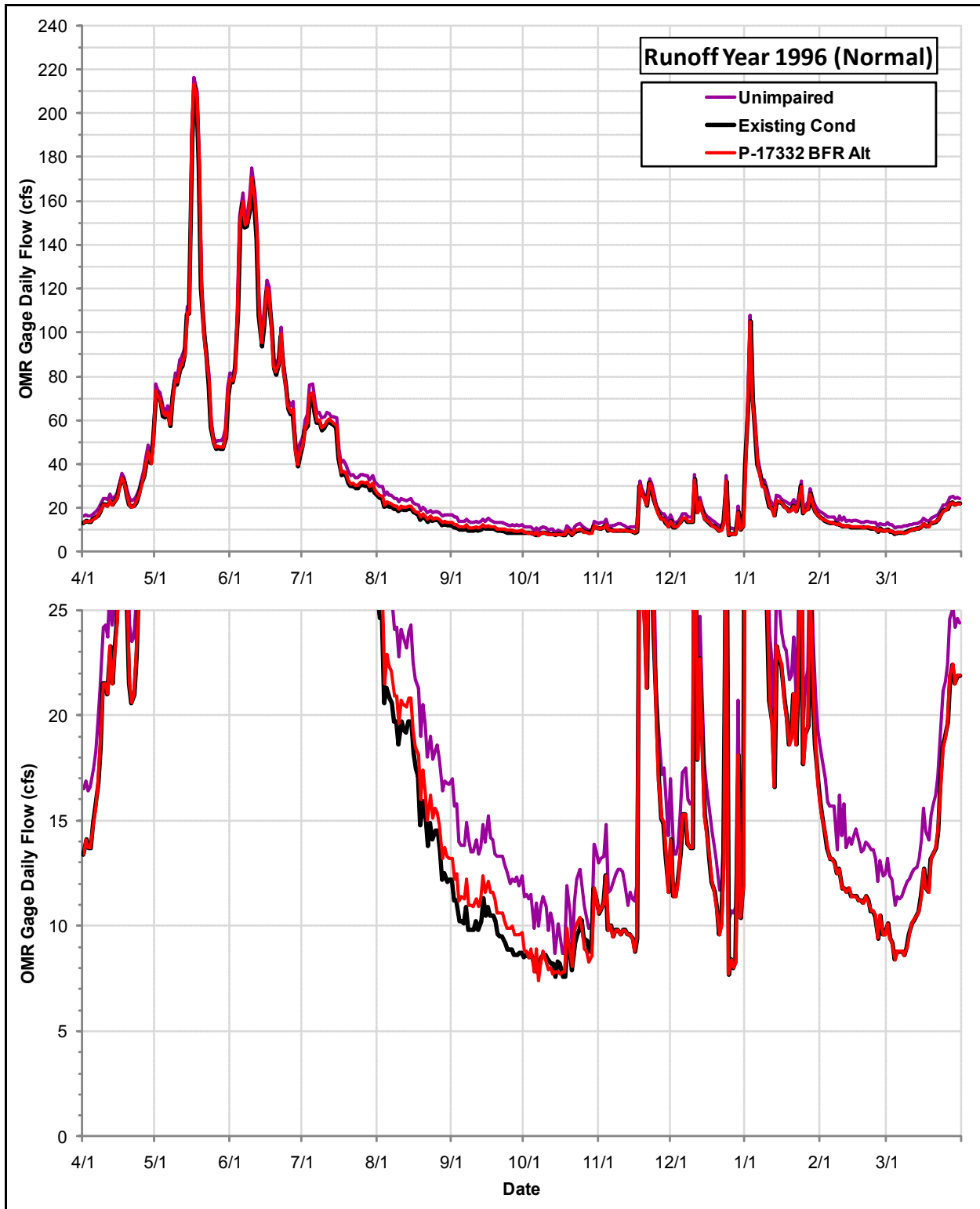
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1993



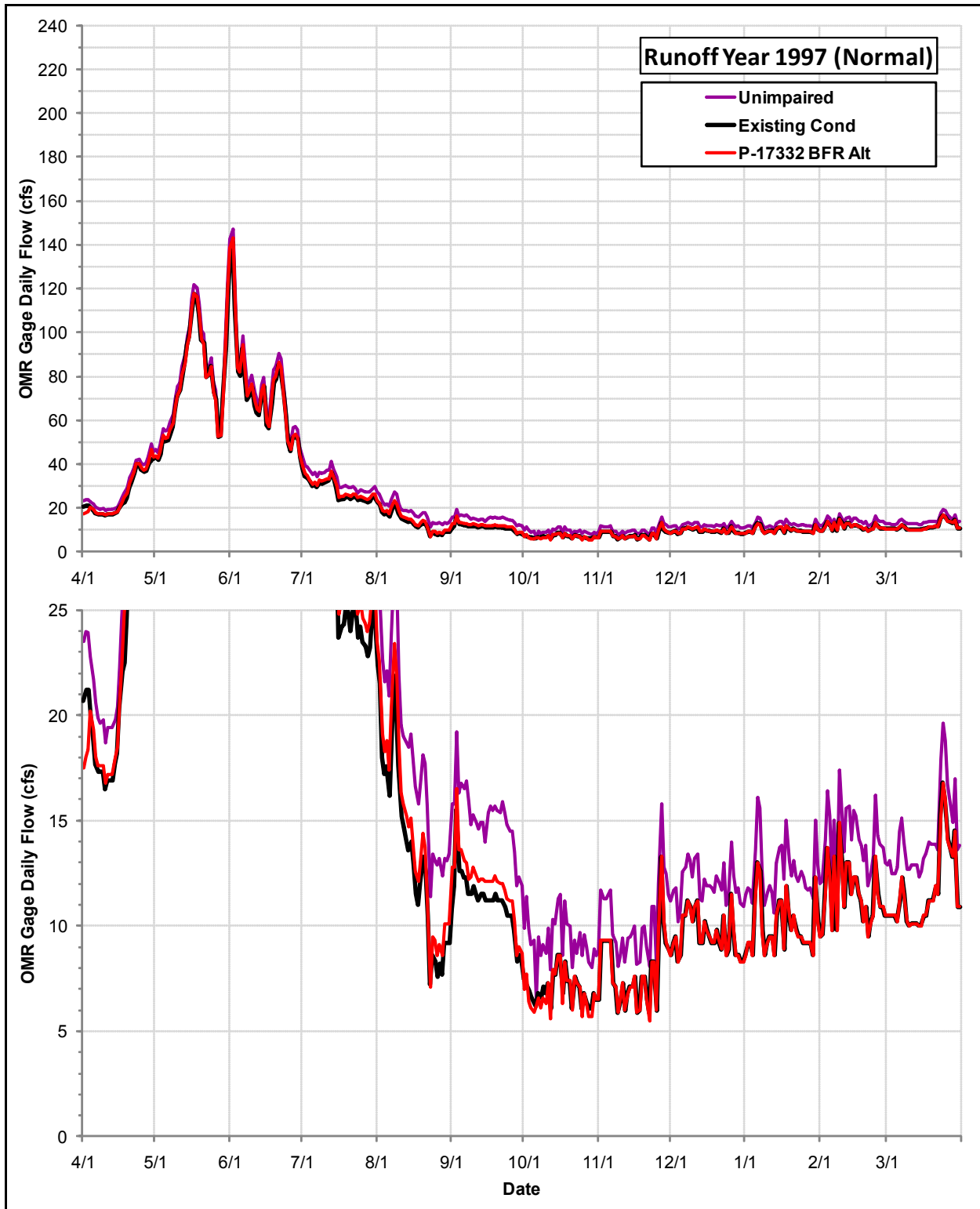
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1994



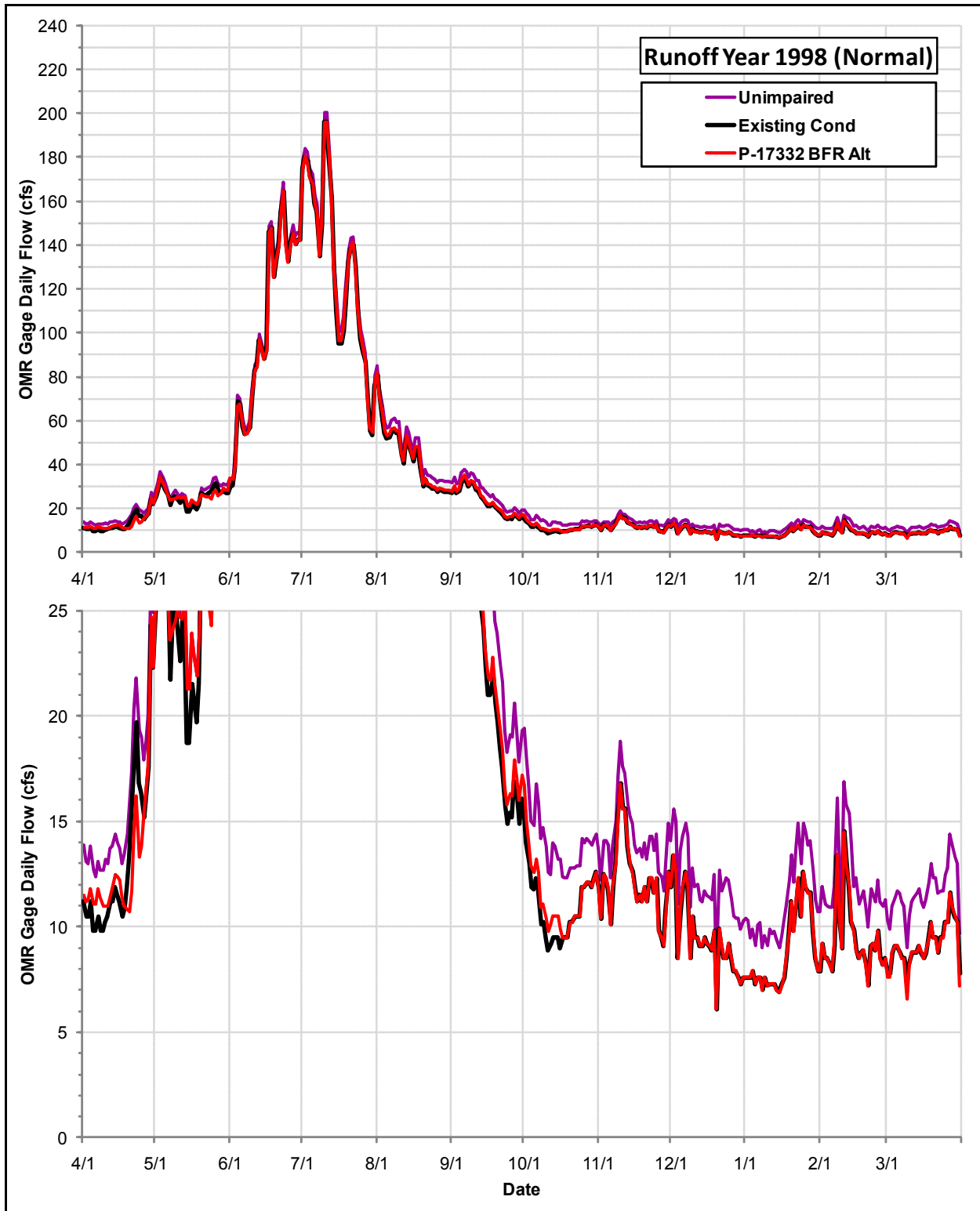
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1995



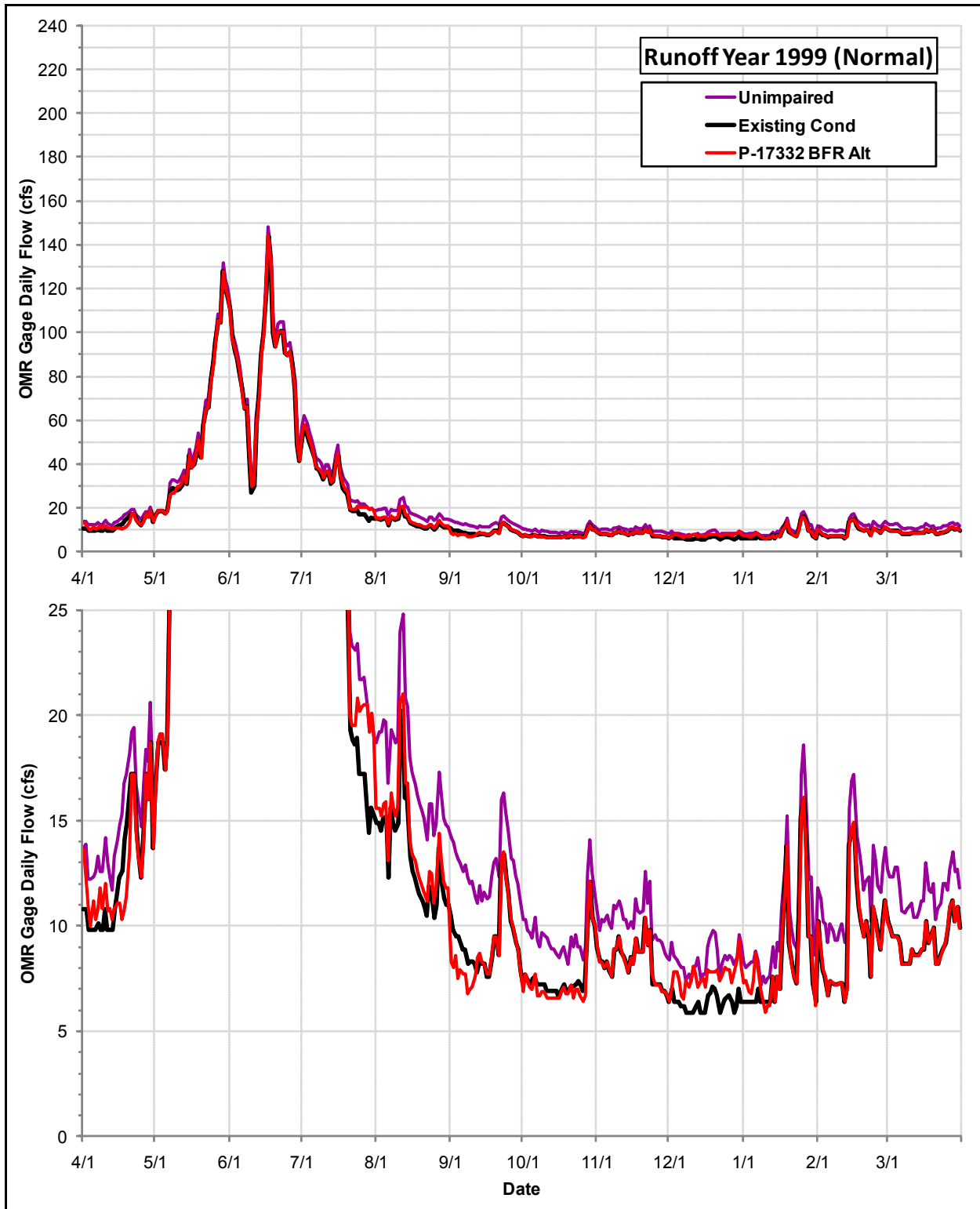
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1996



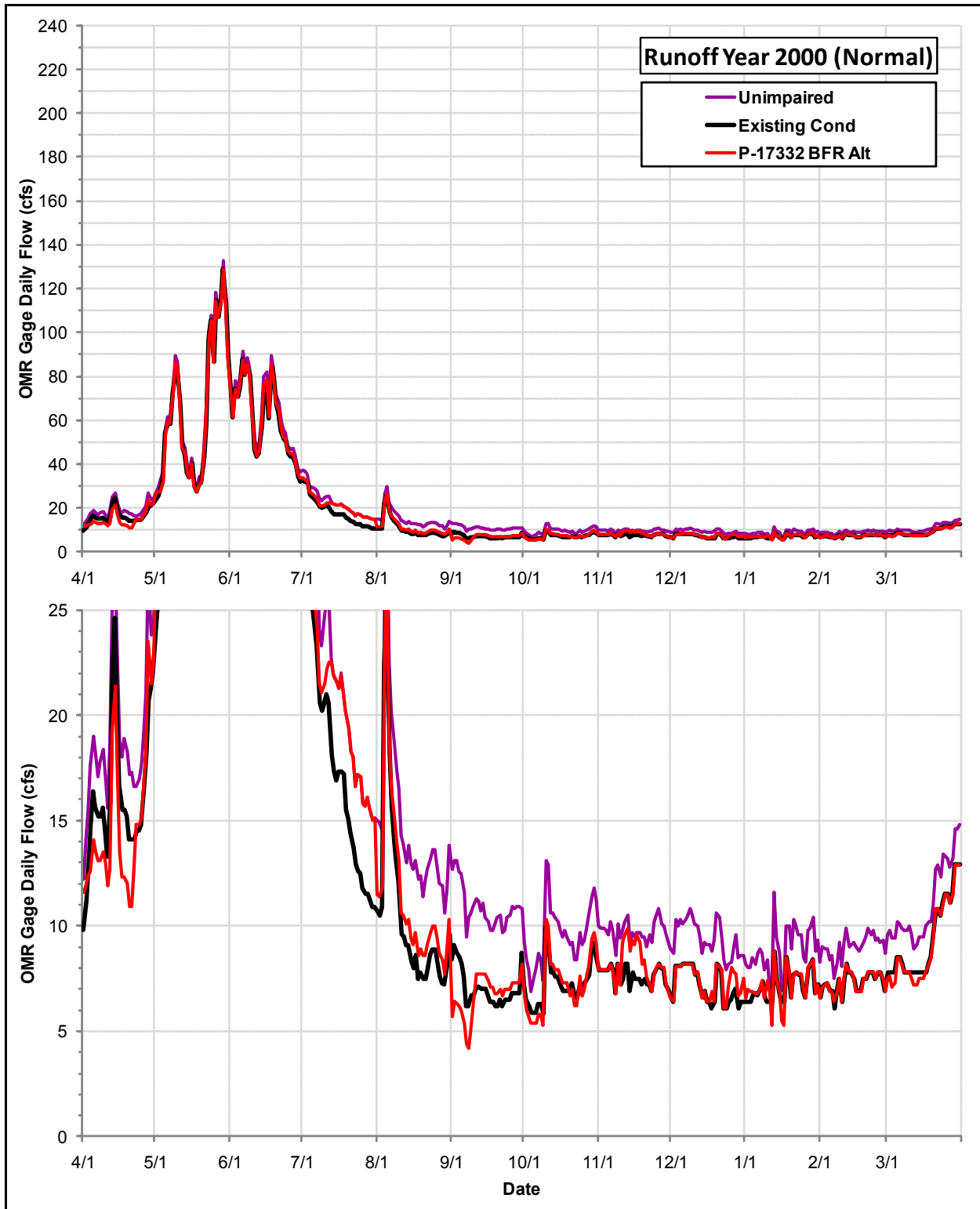
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1997



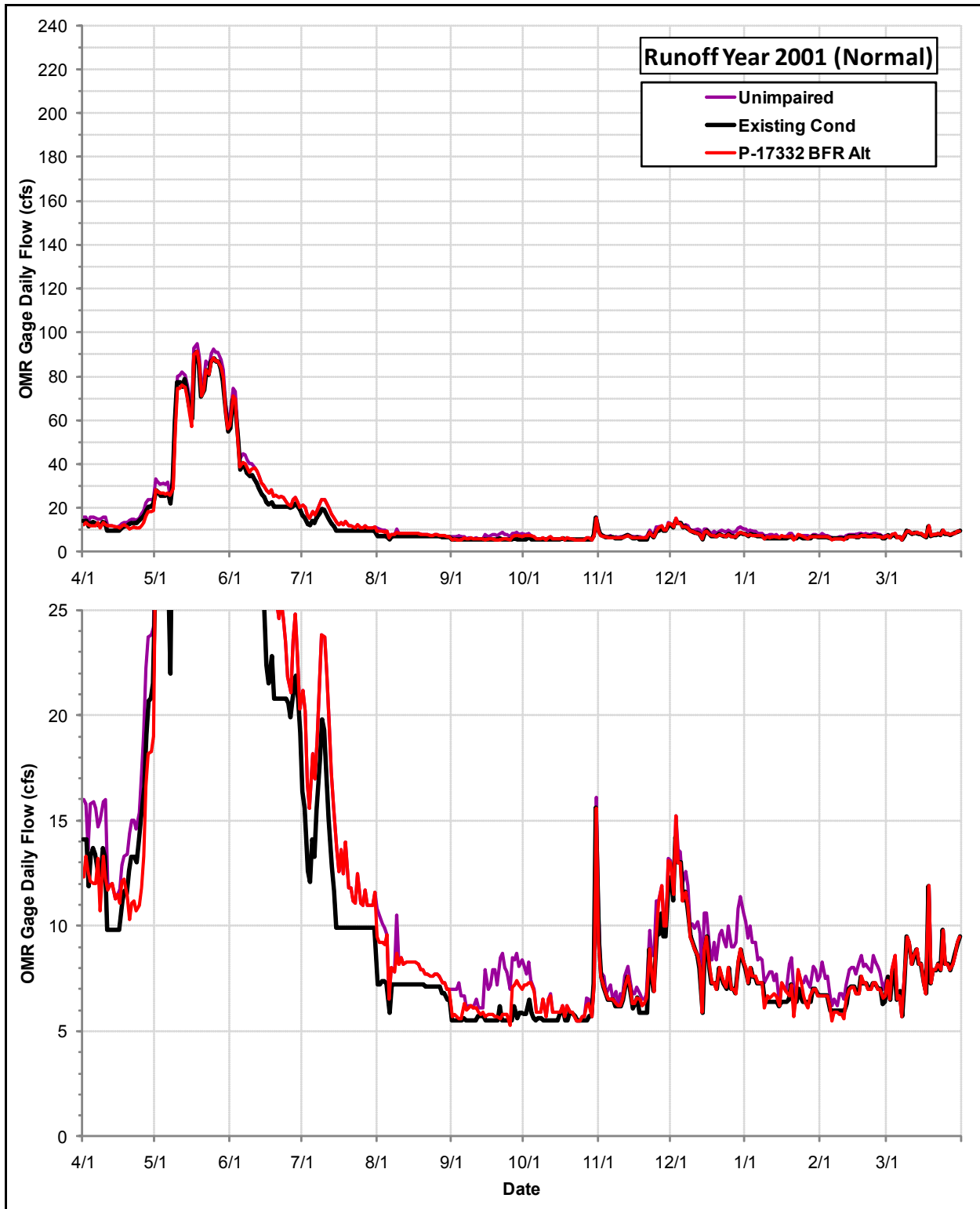
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1998



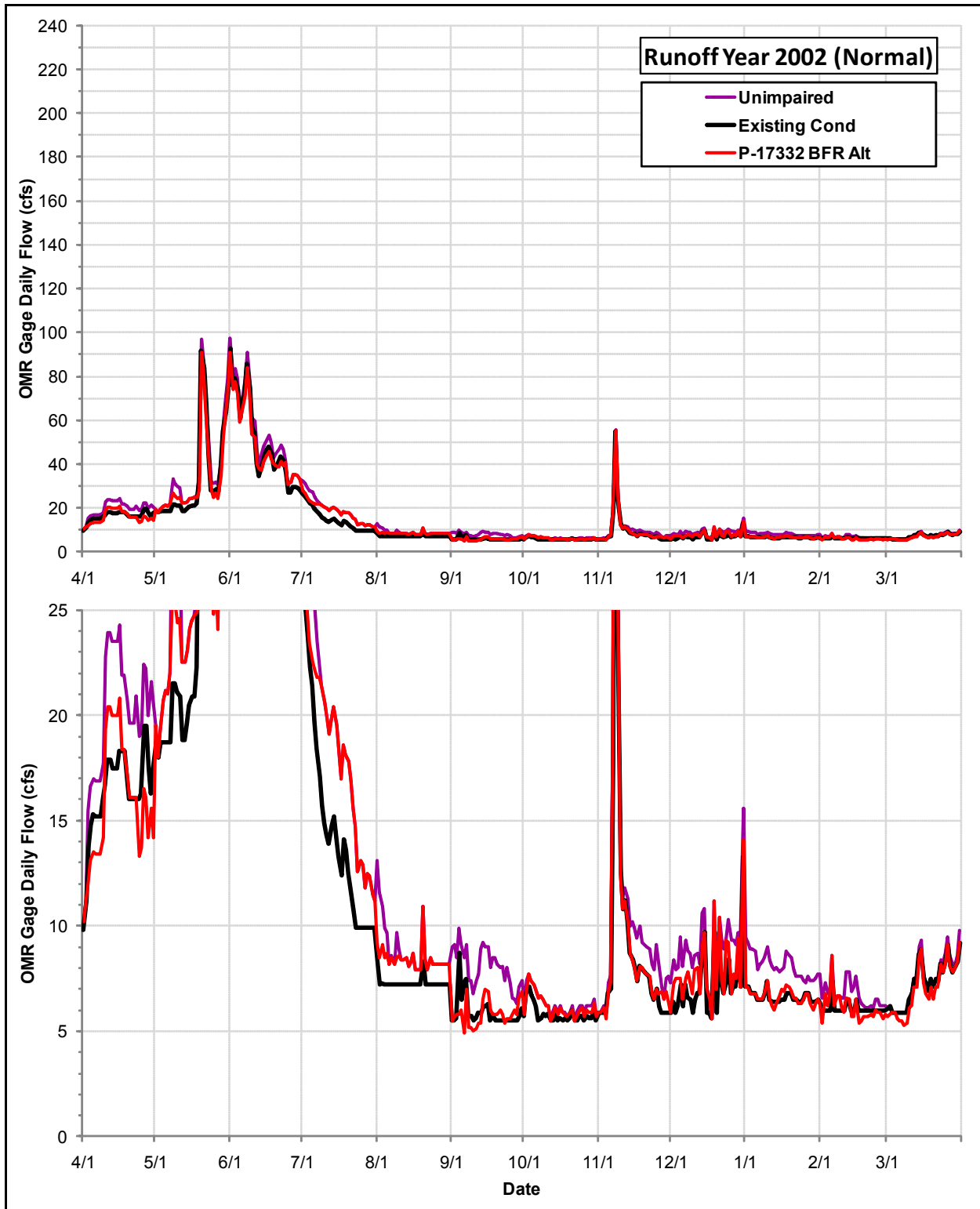
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1999



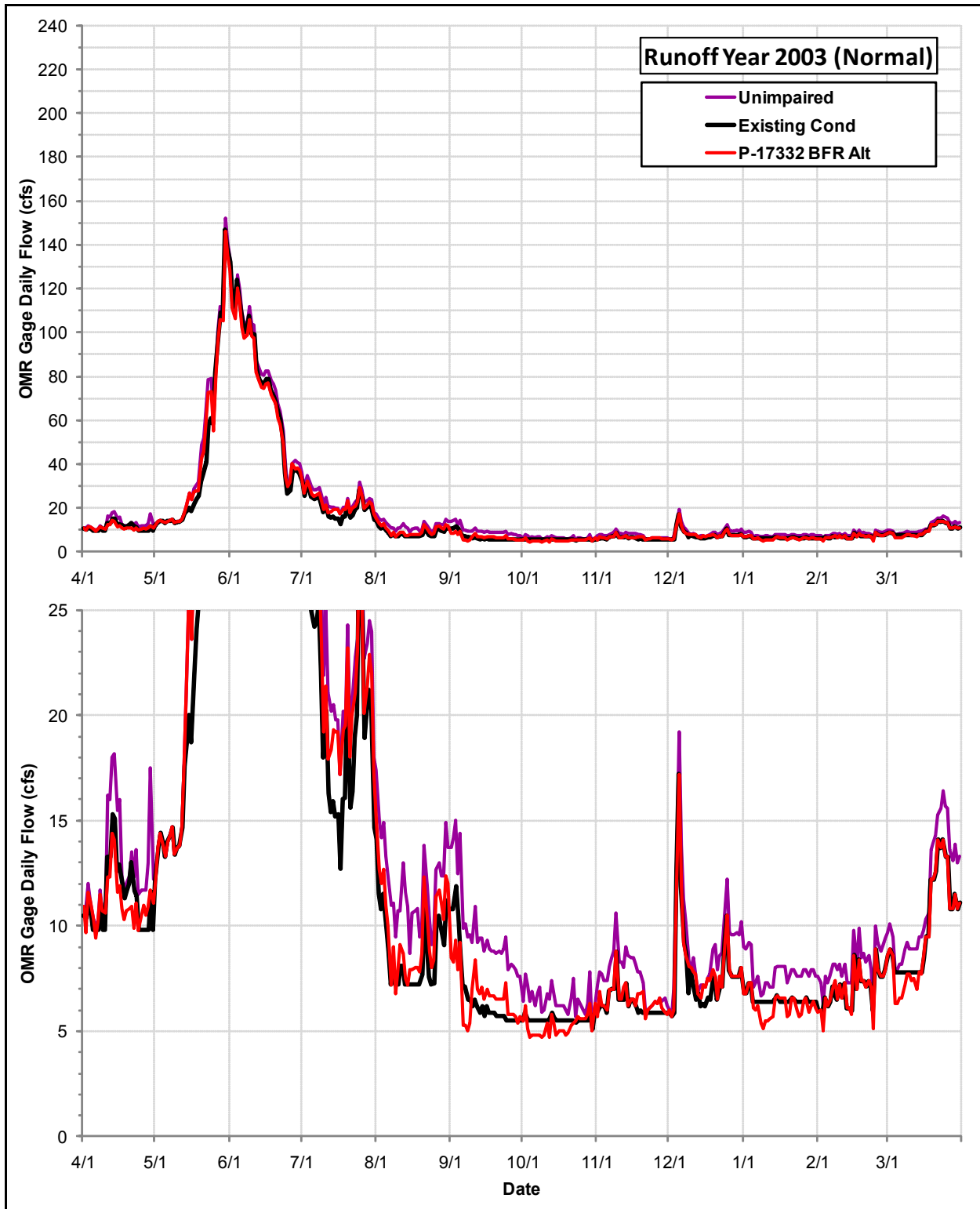
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2000



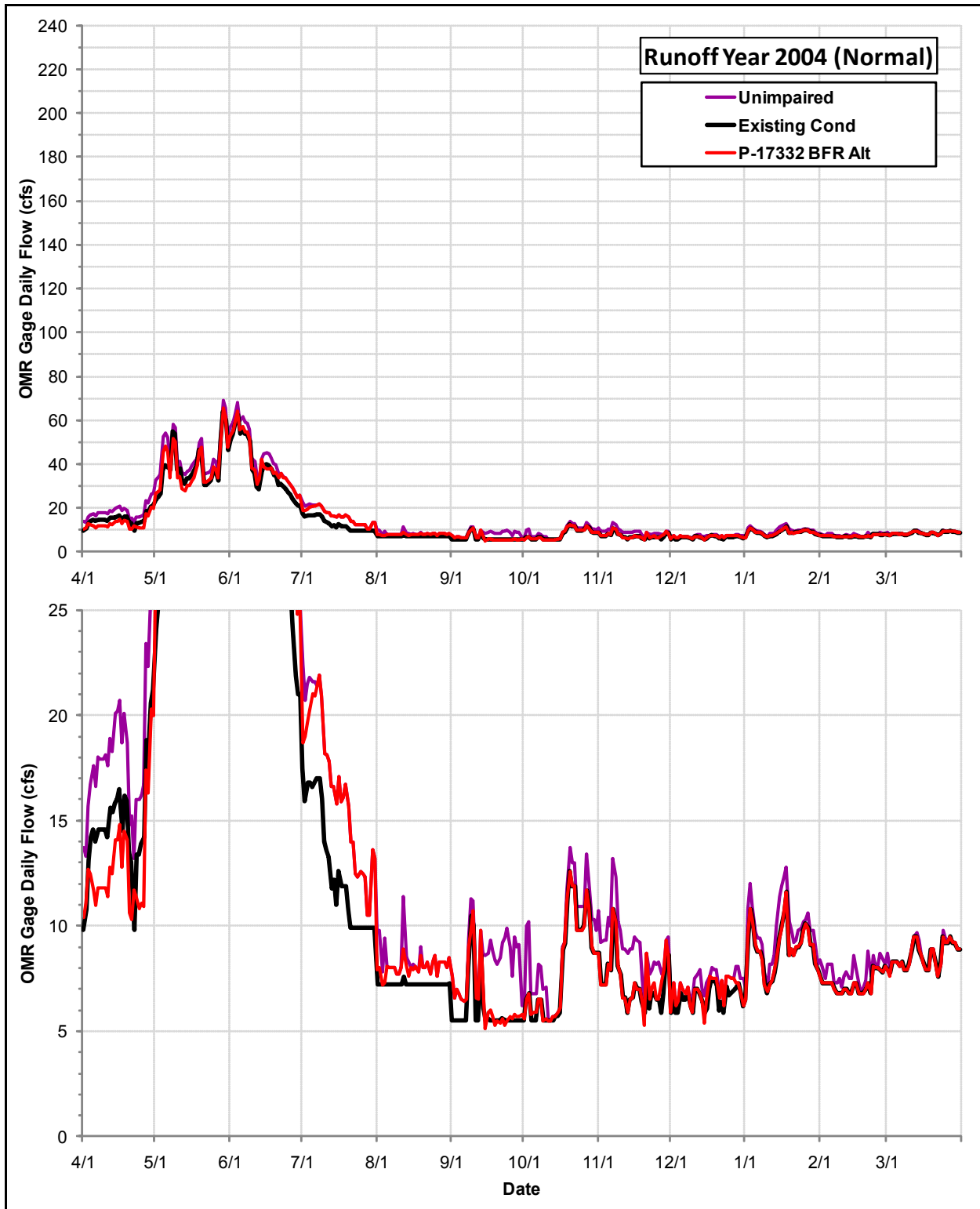
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2001



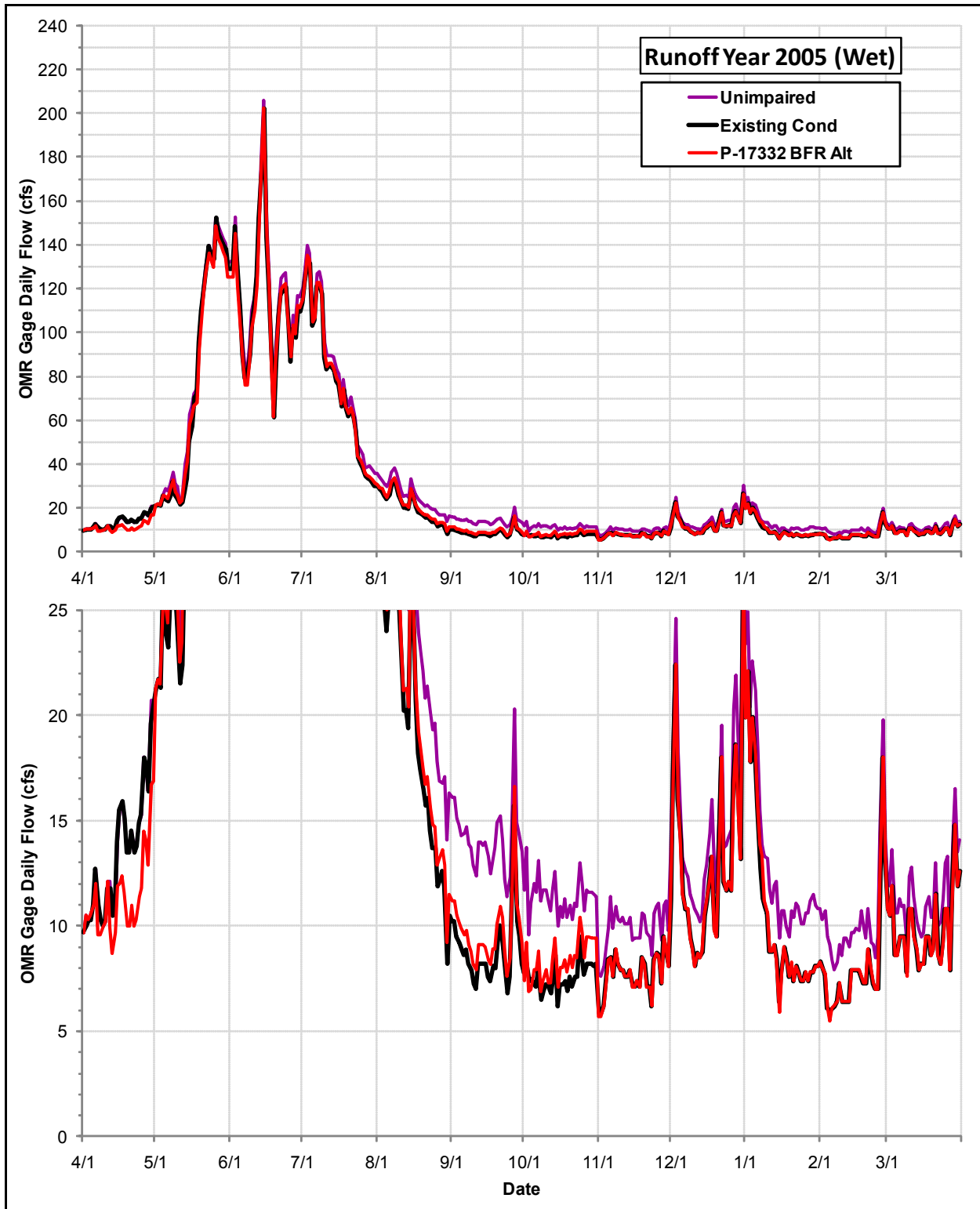
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2002



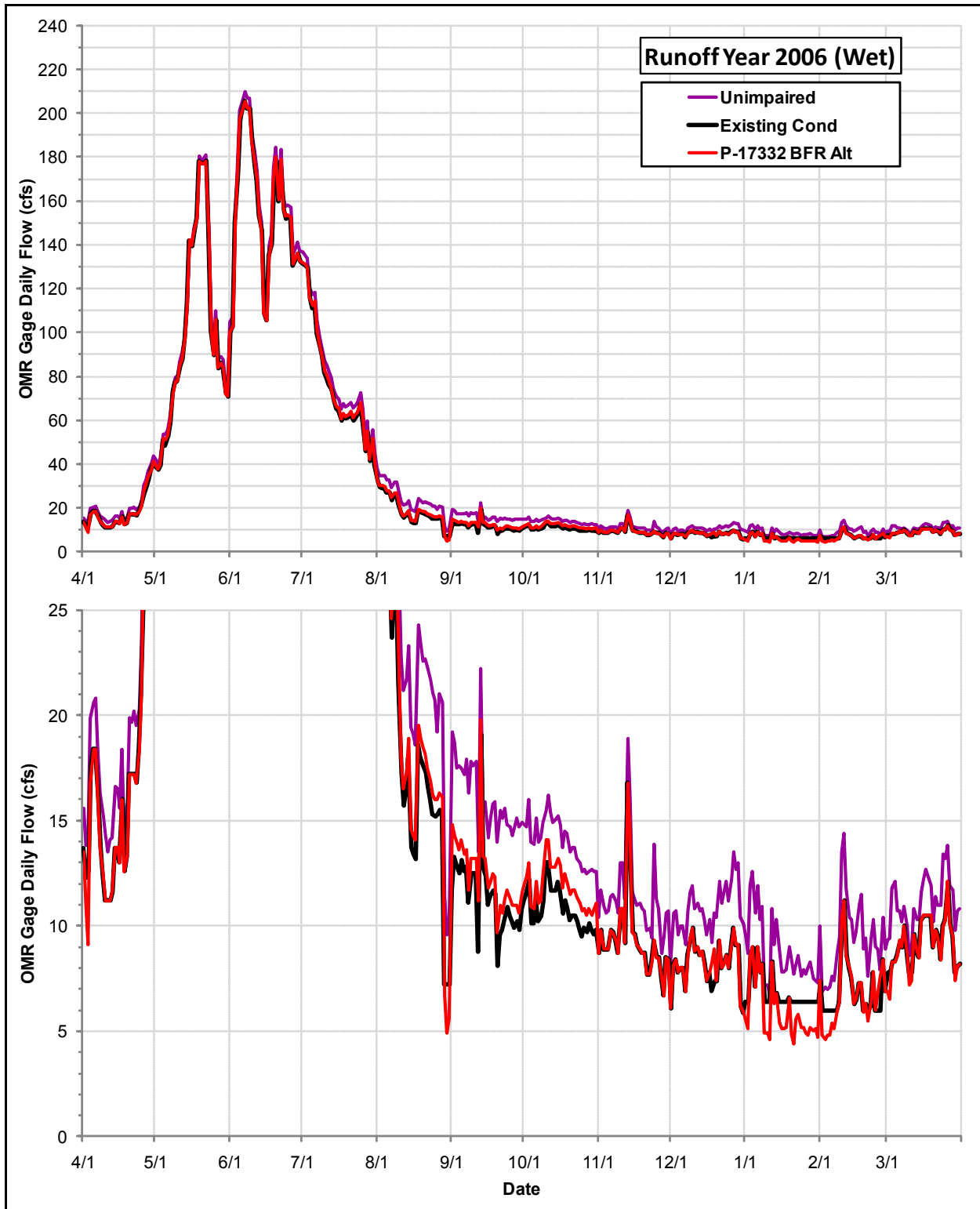
Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2003



Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2004



Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2005



Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2006



Daily Flows (cfs) at the OMR Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2007

Total Number of Days with a Recurrence Interval of Daily Flows $\geq Q_{20}$ at the OMR Gage by Runoff Year and Runoff Year Type under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition Over the 20-Year Evaluation Period

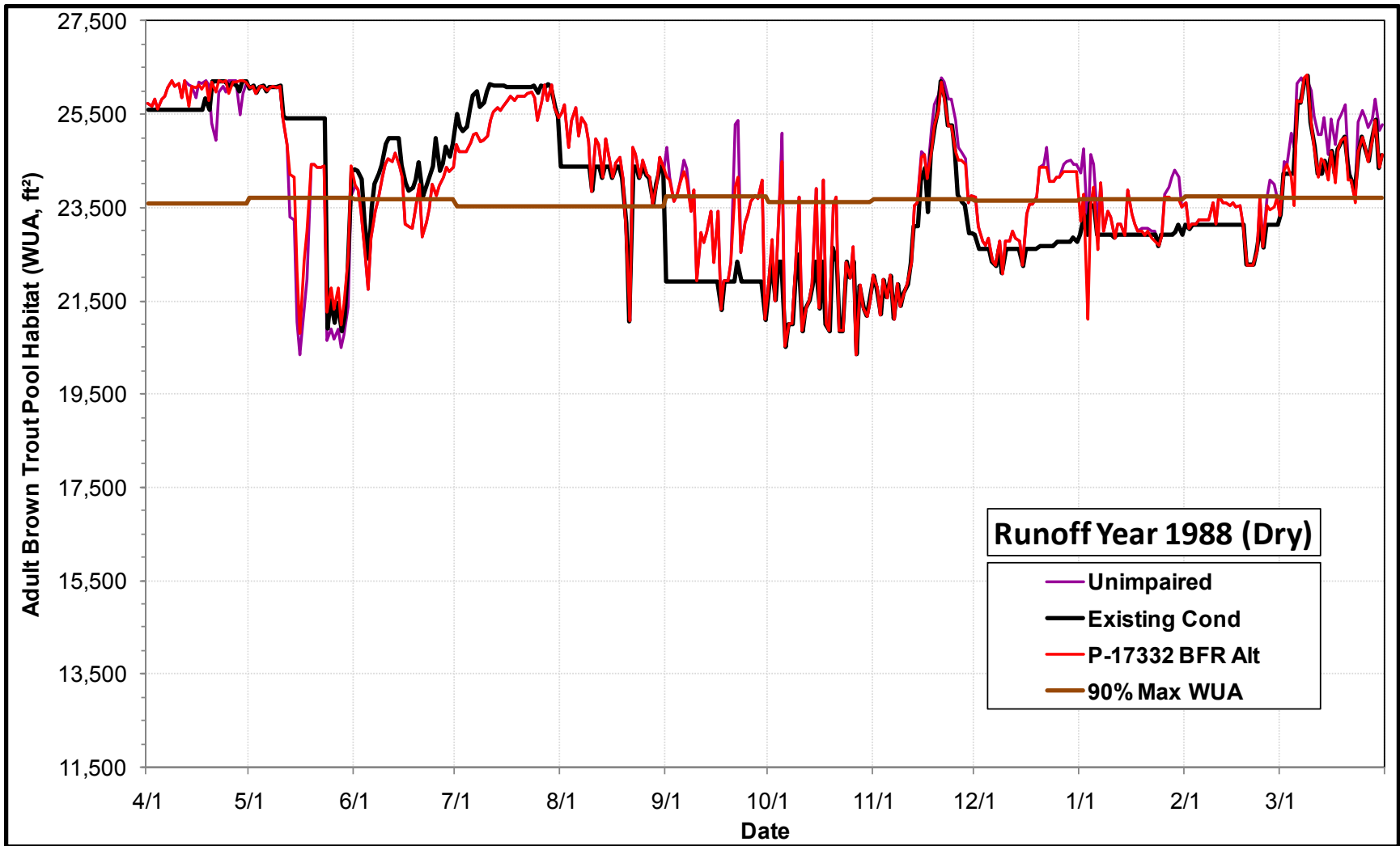
Runoff Year	Runoff Year Type	Number of Days with OMR Gage Daily Flows $\geq Q_{20}$ ($Q_{20} = 141$ cfs)		
		P-17332 BFR Alt	Existing Cond	(P-17332 BFR Alt - Existing Cond)
1988	D	0	0	0
1989	N	0	0	0
1990	D	0	0	0
1991	N	0	0	0
1992	N	0	0	0
1993	W	0	0	0
1994	D	0	0	0
1995	W	23	24	-1
1996	N	12	12	0
1997	N	1	1	0
1998	N	22	21	1
1999	N	1	1	0
2000	N	0	0	0
2001	N	0	0	0
2002	N	0	0	0
2003	N	1	1	0
2004	N	0	0	0
2005	W	7	8	-1
2006	W	28	28	0
2007	D	0	0	0
Total		95	96	-1

Total Number of Channel Maintenance and Flushing Flow Events (Daily Flows $\geq Q_{1.75}$) at the OMR Gage by Runoff Year and Runoff Year Type under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions Over the 20-Year Evaluation Period

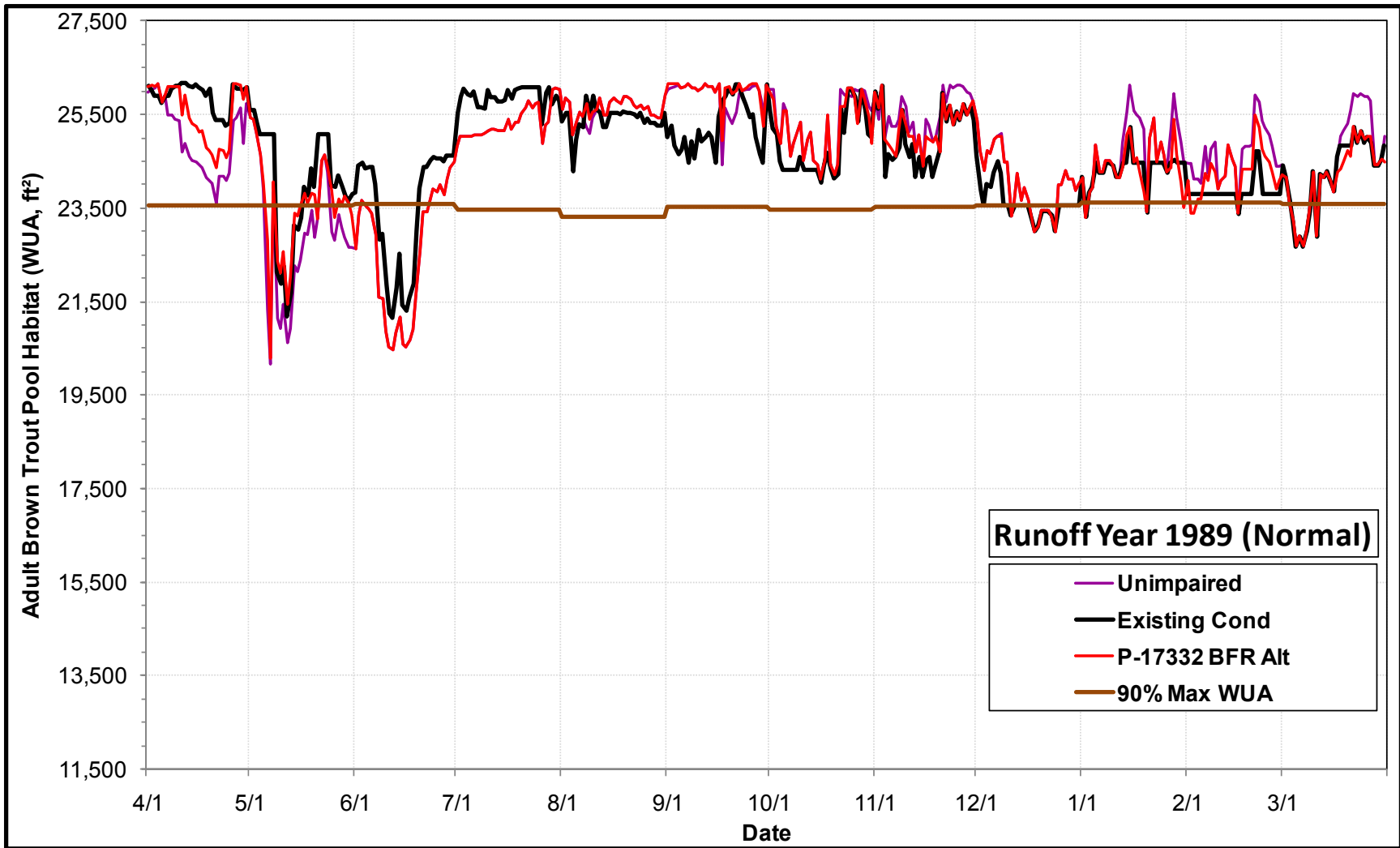
Runoff Year	Runoff Year Type	Number of Events (Consecutive days) with OMR Gage Daily Flows $\geq Q_{1.75}$ ($Q_{1.75} = 109.7$ cfs)		
		P-17332 BFR Alt	Existing Cond	Unimpaired
1988	D	0	0	0
1989	N	0	0	0
1990	D	0	0	0
1991	N	0	0	0
1992	N	0	0	0
1993	W	3	3	5
1994	D	0	0	0
1995	W	4	4	4
1996	N	3	3	3
1997	N	2	2	2
1998	N	2	2	2
1999	N	2	2	2
2000	N	2	2	1
2001	N	0	0	0
2002	N	0	0	0
2003	N	2	1	2
2004	N	0	0	0
2005	W	5	6	5
2006	W	3	3	3
2007	D	0	0	0
Total		28	28	29

Total Number of Days with a Recurrence Interval of Daily Flows $\geq Q_{1.75}$ at the OMR Gage by Runoff Year and Runoff Year Type under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions Over the 20-Year Evaluation Period

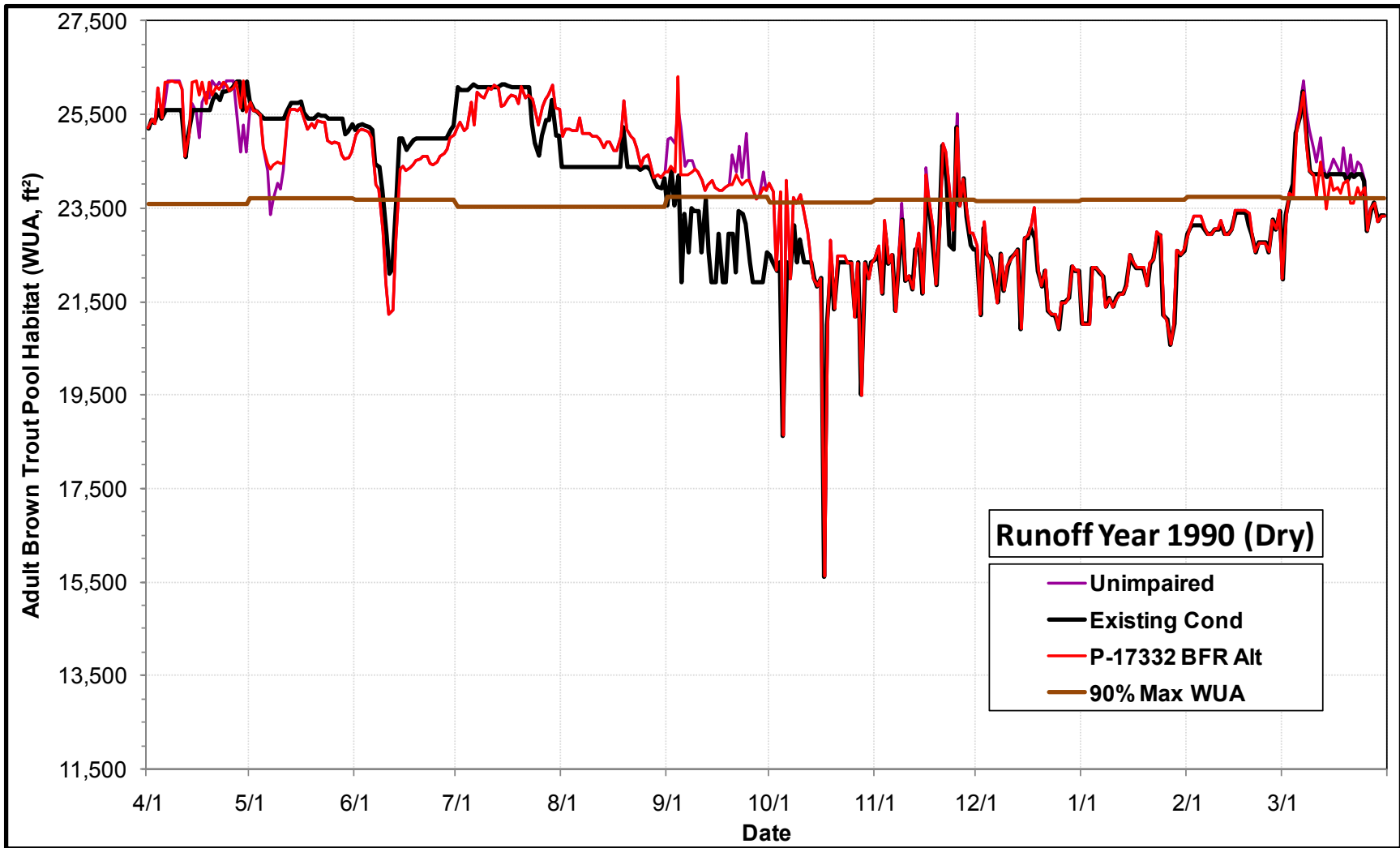
Runoff Year	Runoff Year Type	Number of Days with OMR Gage Daily Flows $\geq Q_{1.75}$ ($Q_{1.75} = 109.7$ cfs)		
		P-17332 BFR Alt	Existing Cond	Unimpaired
1988	D	0	0	0
1989	N	0	0	0
1990	D	0	0	0
1991	N	0	0	0
1992	N	11	11	13
1993	W	0	0	0
1994	D	43	44	47
1995	W	15	15	19
1996	N	7	7	8
1997	N	35	34	35
1998	N	7	7	7
1999	N	4	4	5
2000	N	0	0	0
2001	N	0	0	0
2002	N	6	7	10
2003	N	0	0	0
2004	N	34	34	40
2005	W	42	42	45
2006	W	0	0	0
2007	D	0	0	0
Total		204	205	229



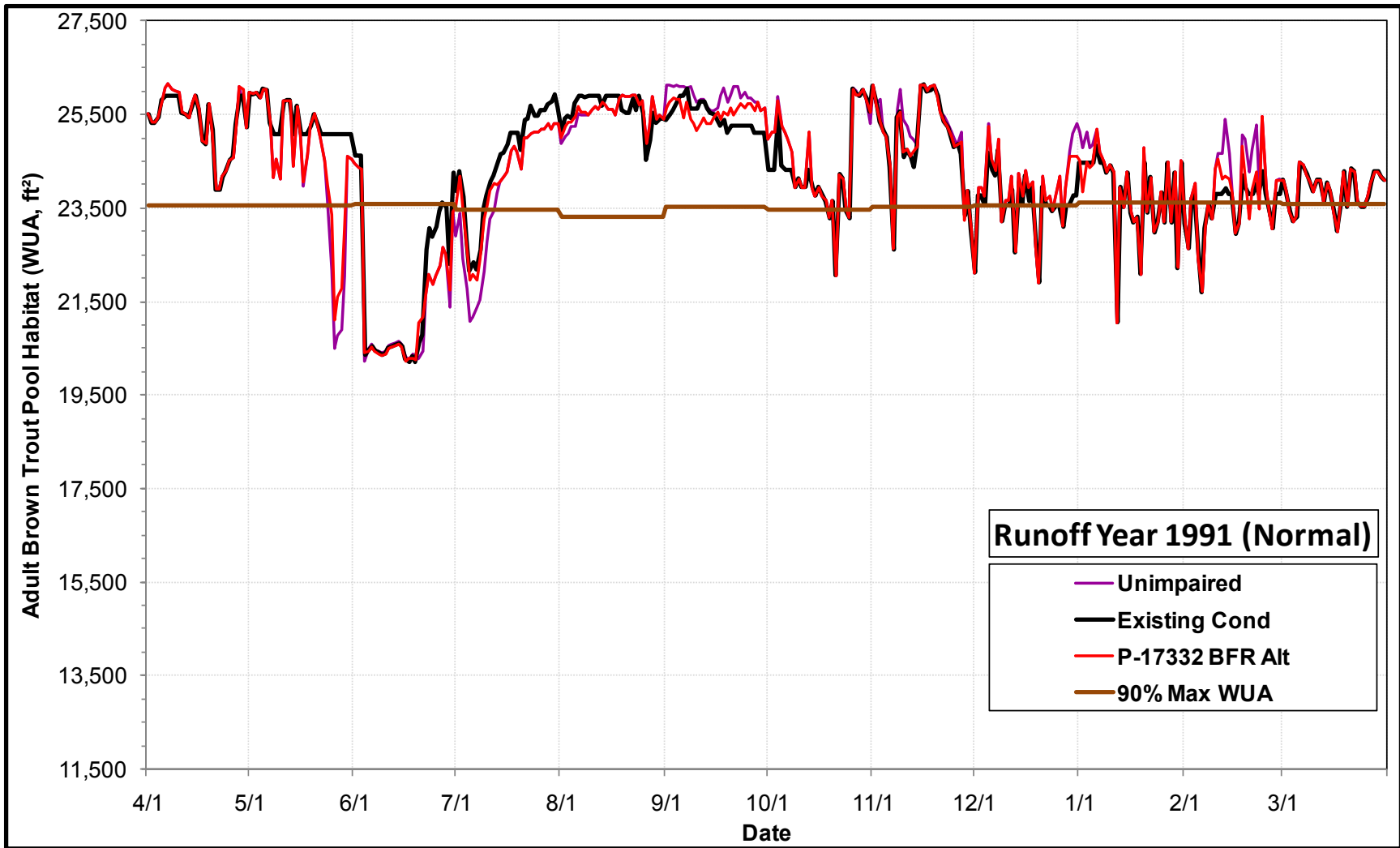
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1988



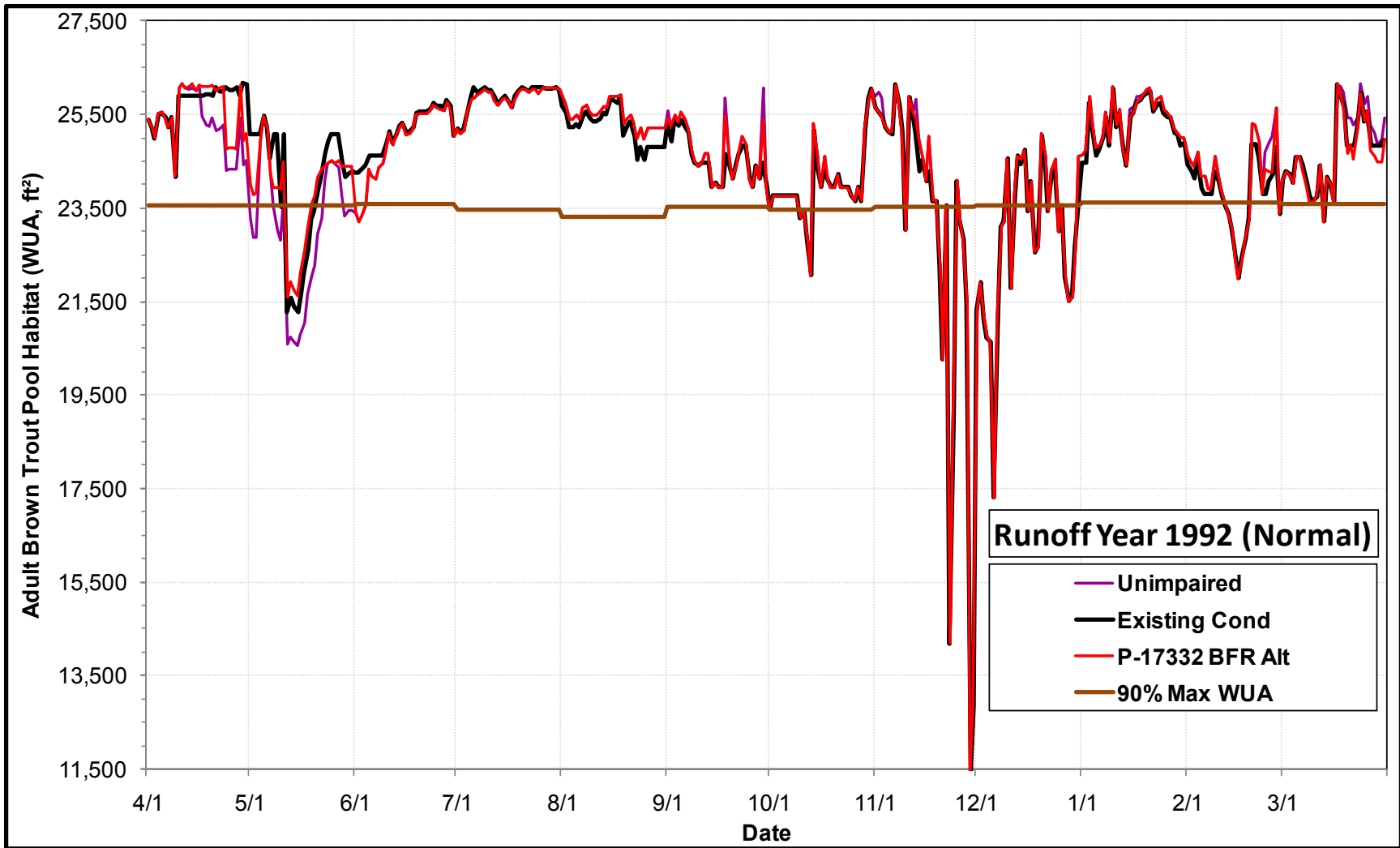
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1989



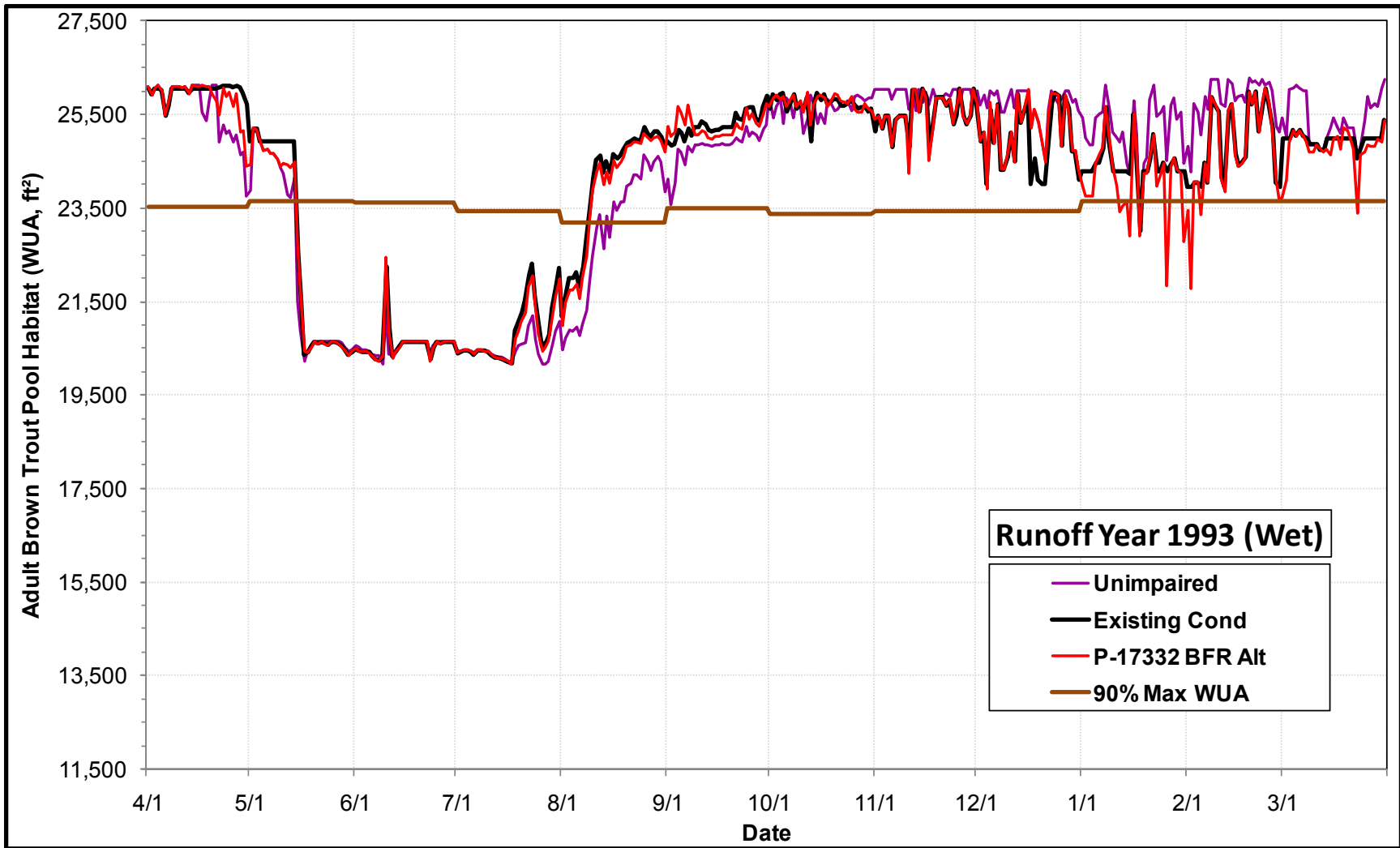
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1990



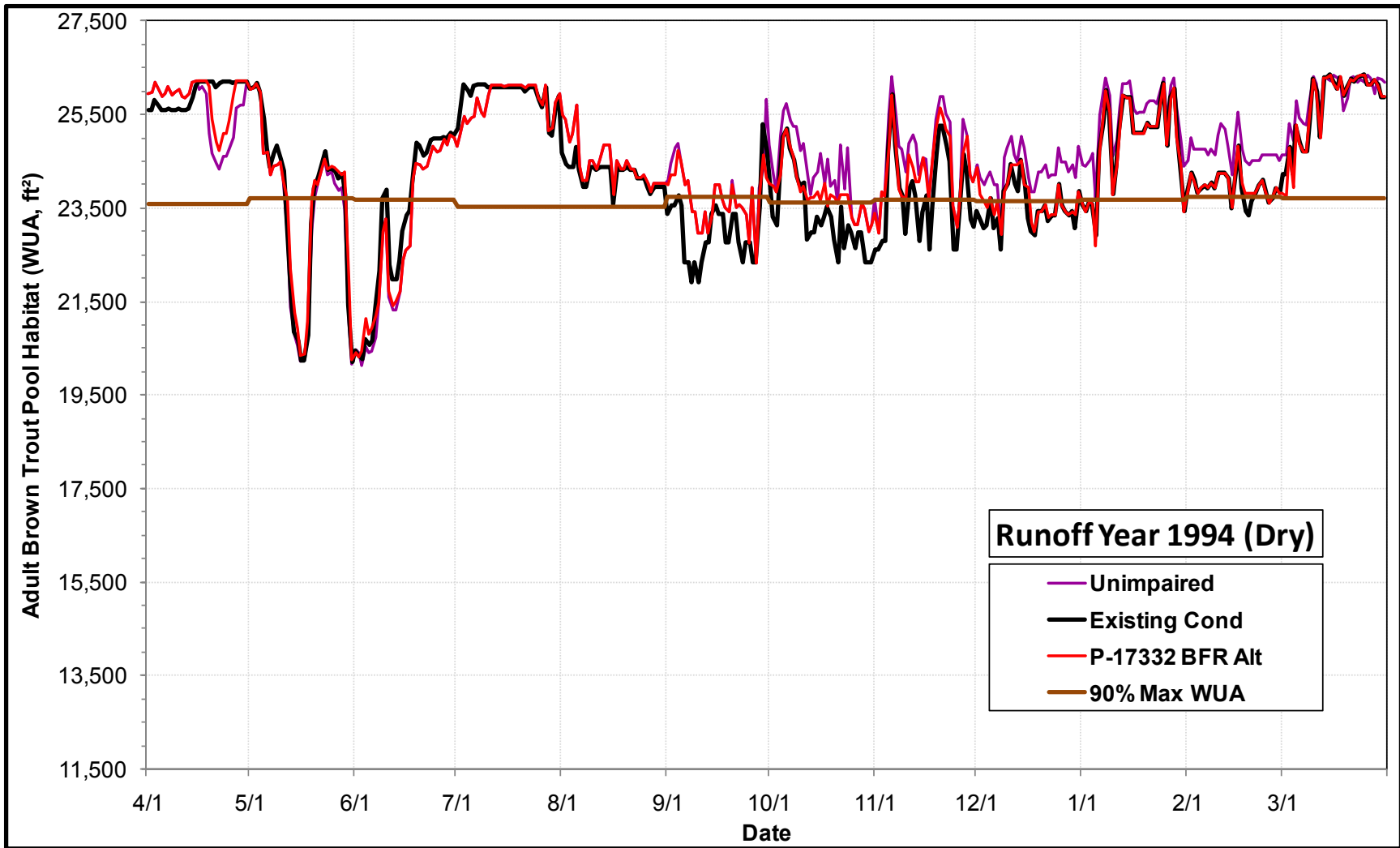
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1991



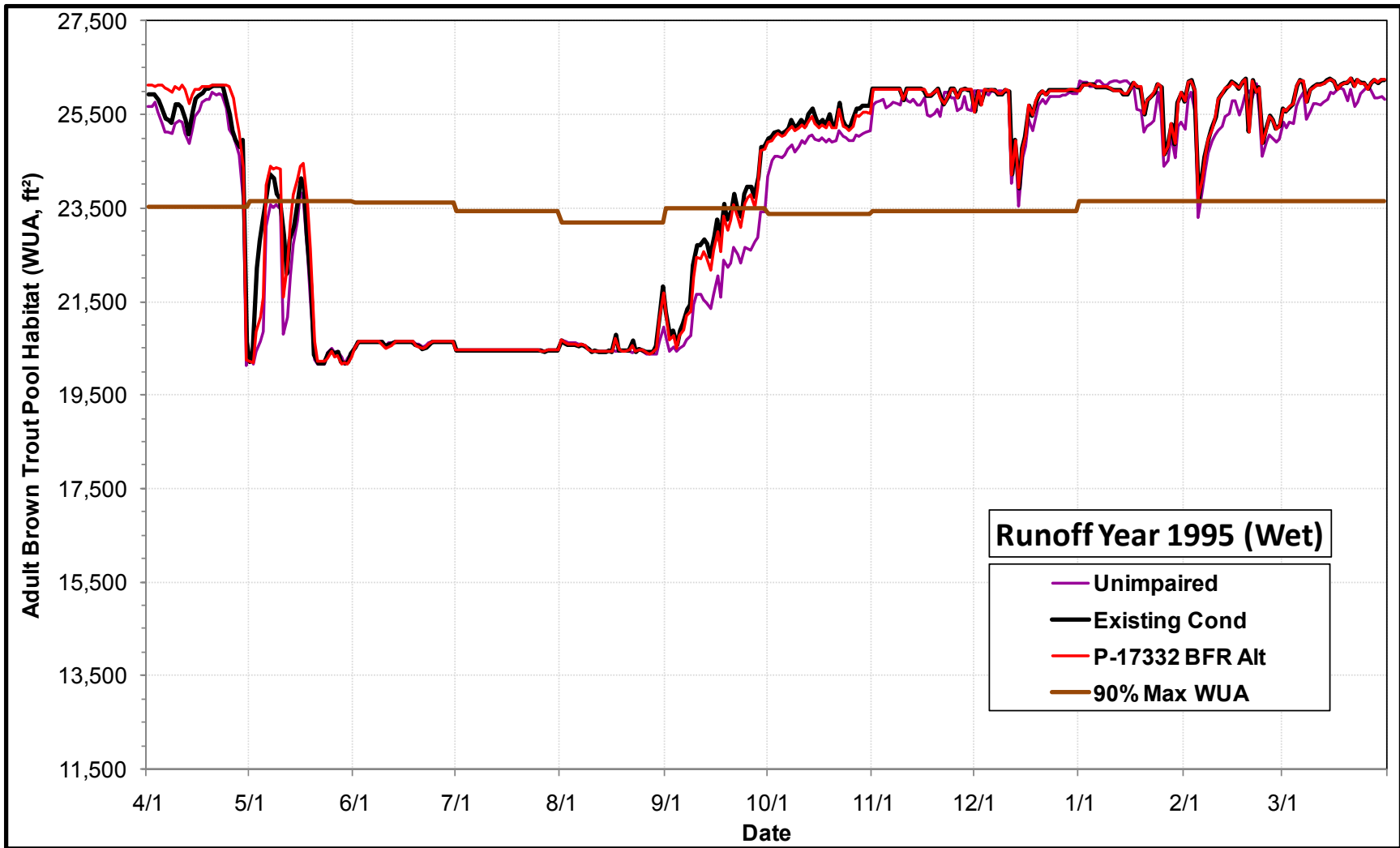
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1992



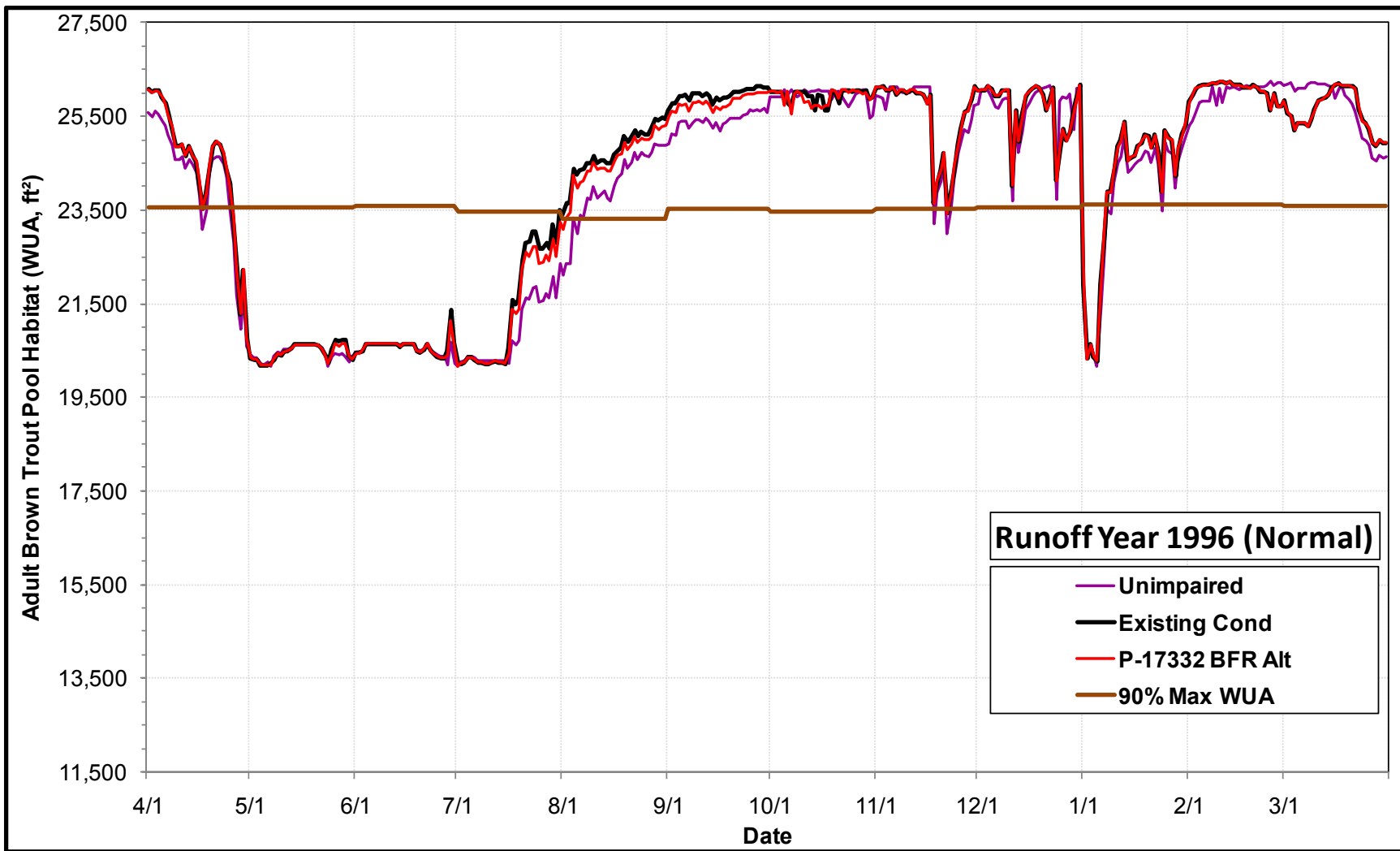
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1993



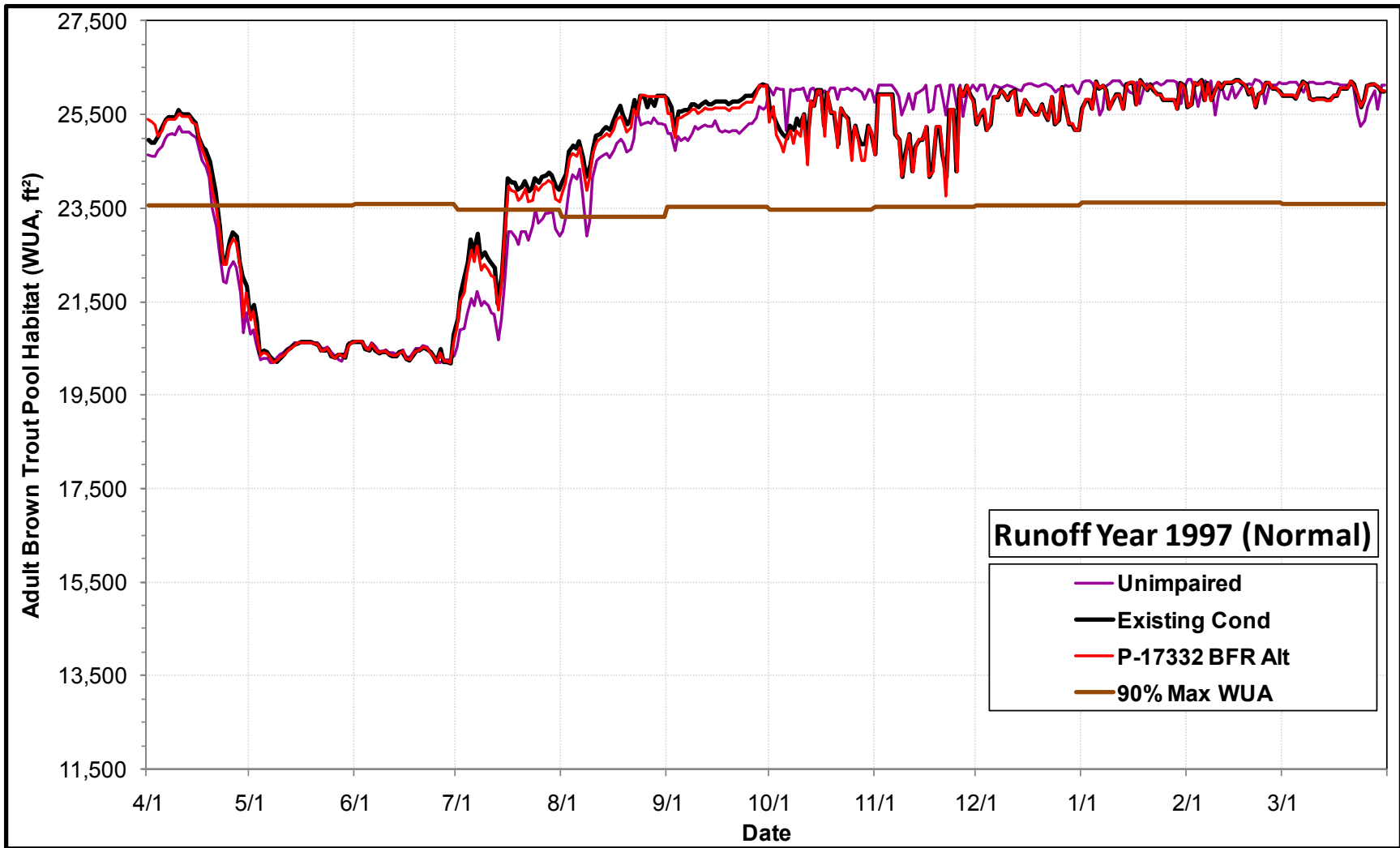
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1994



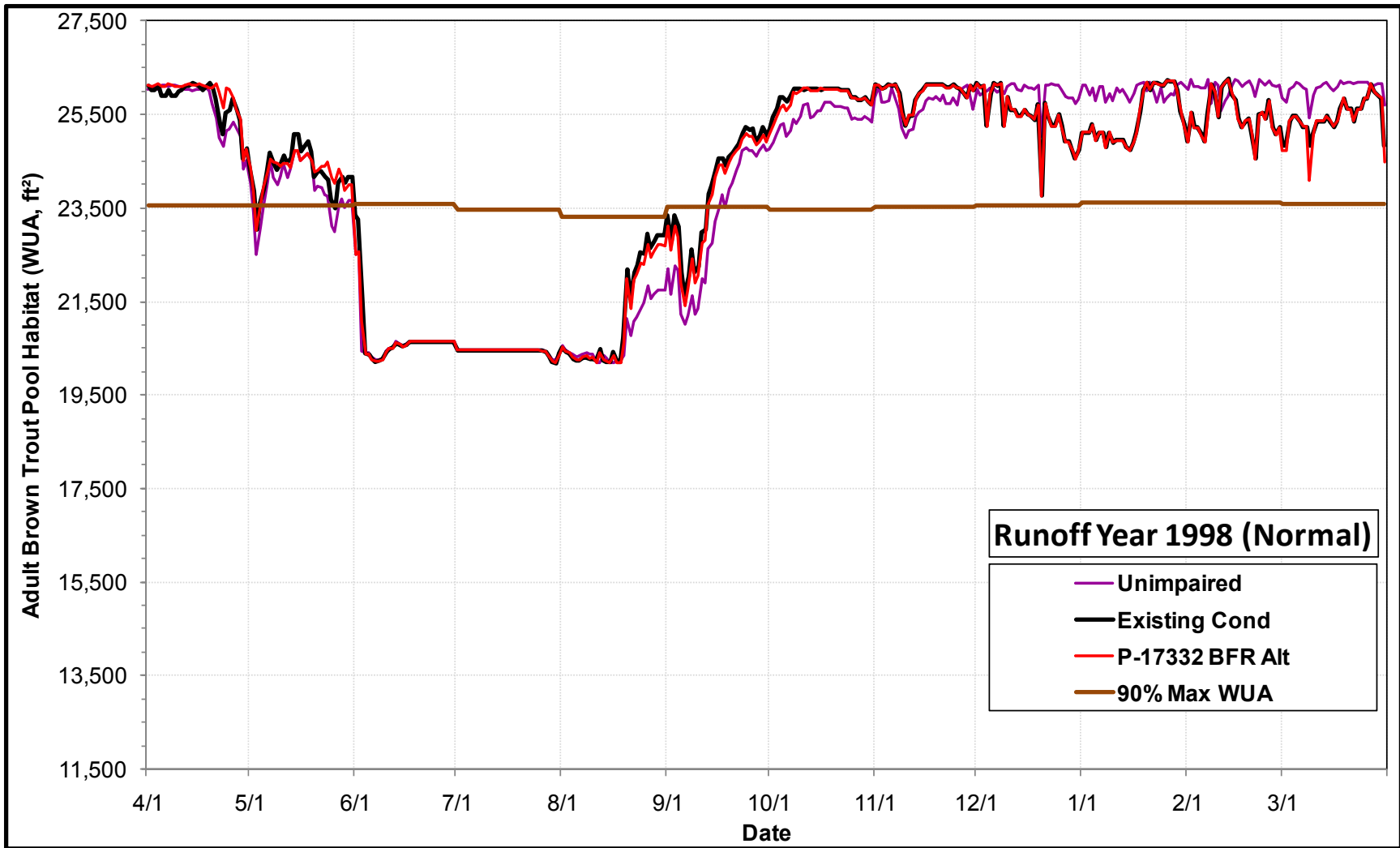
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1995



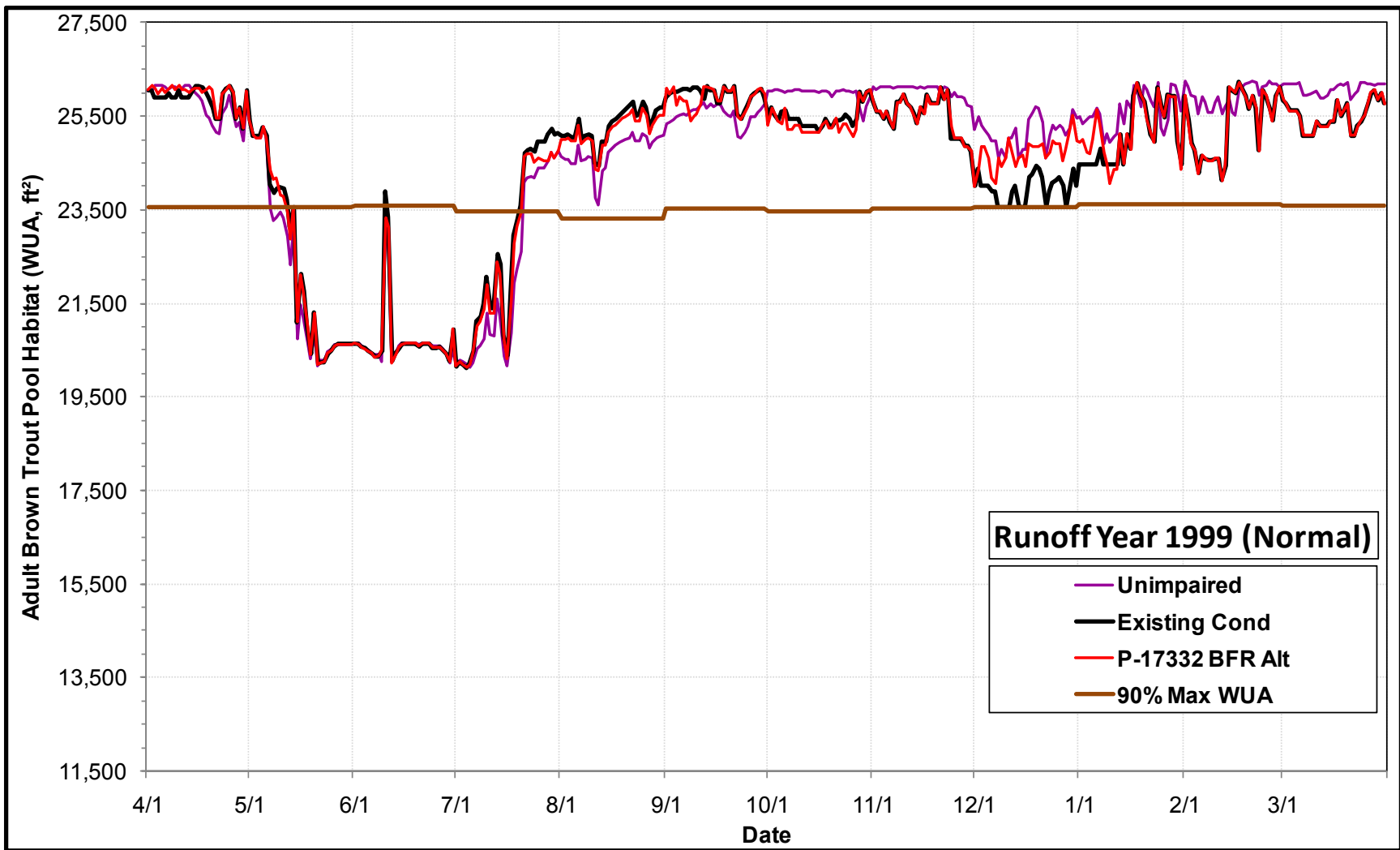
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1996



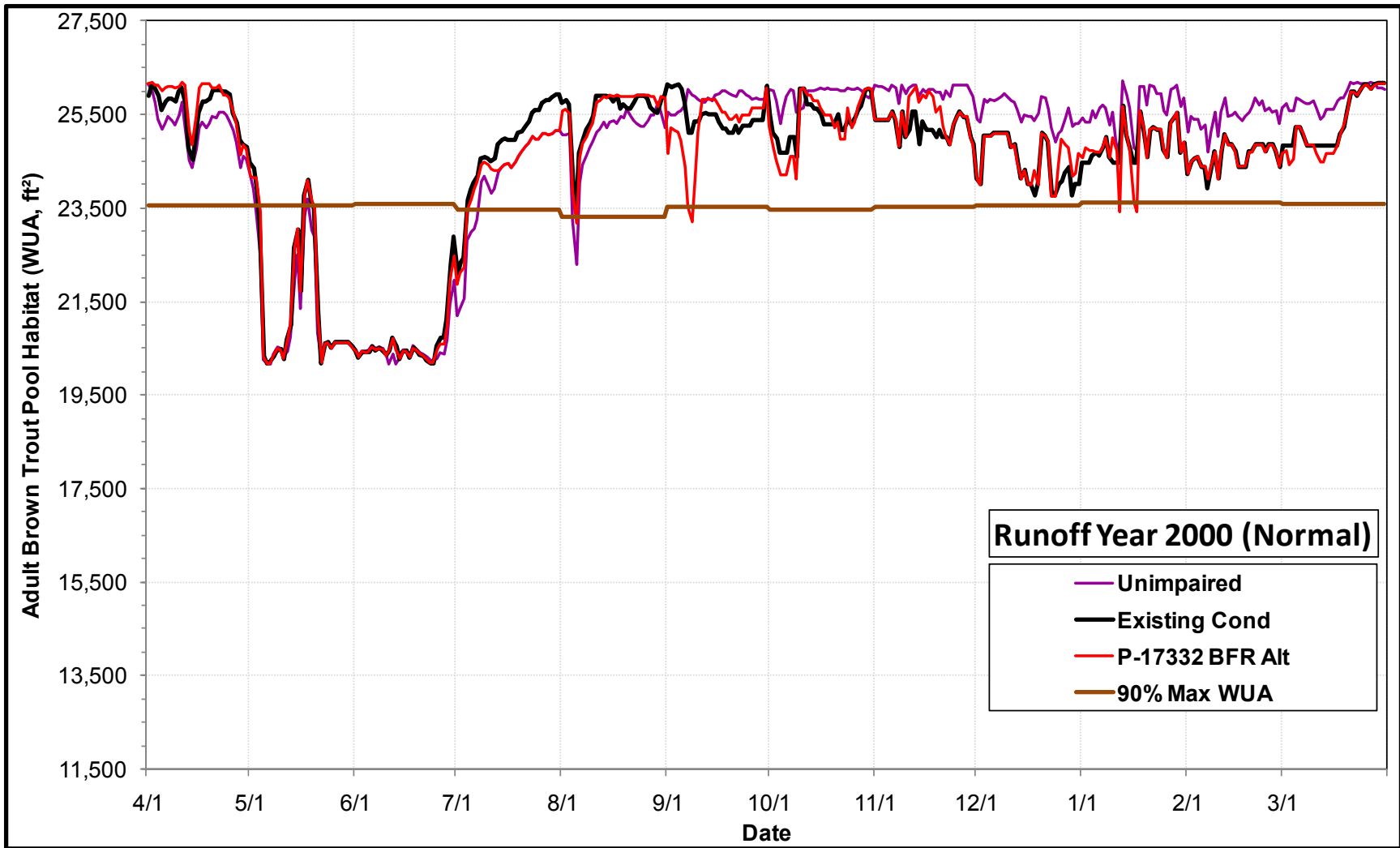
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1997



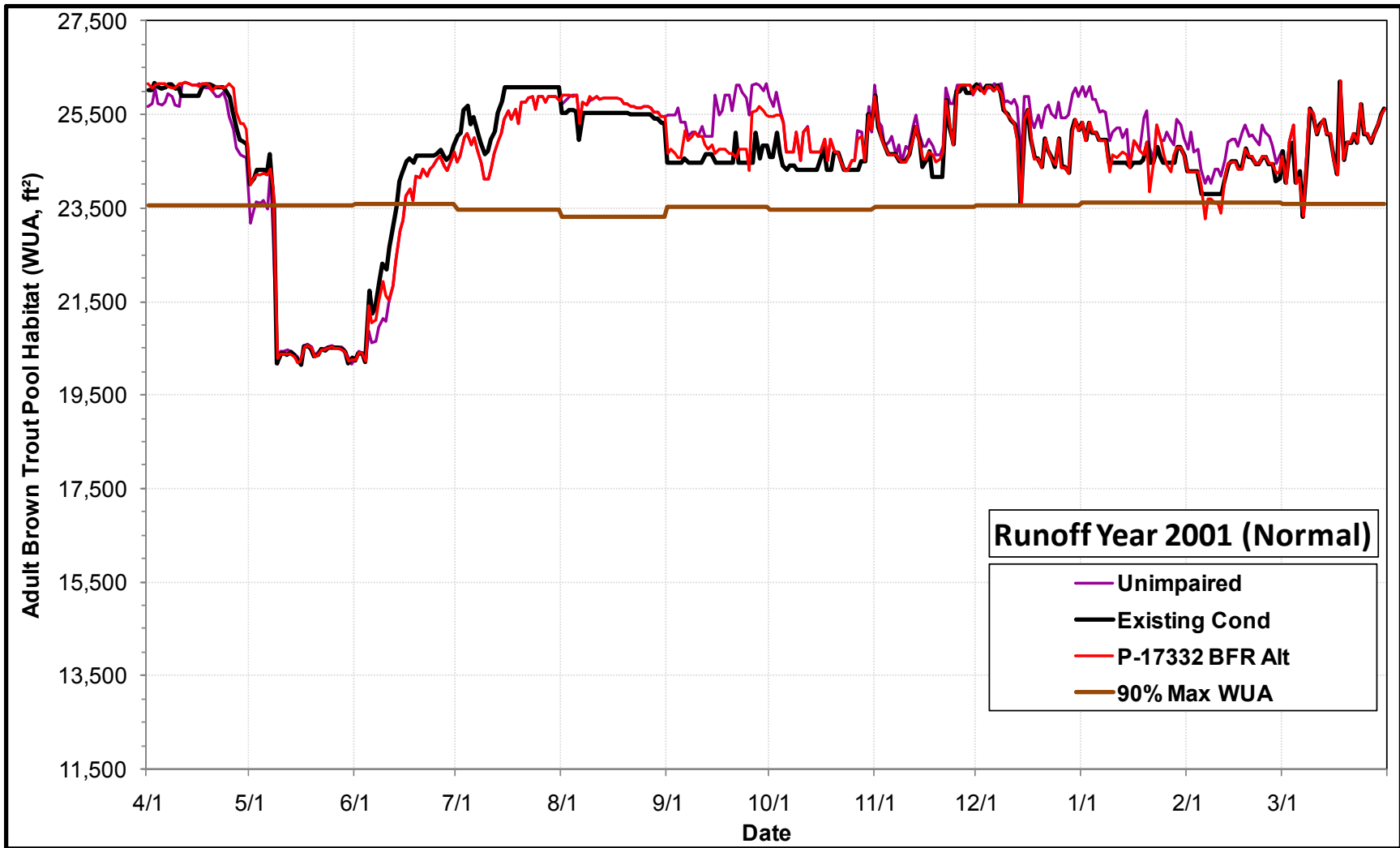
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1998



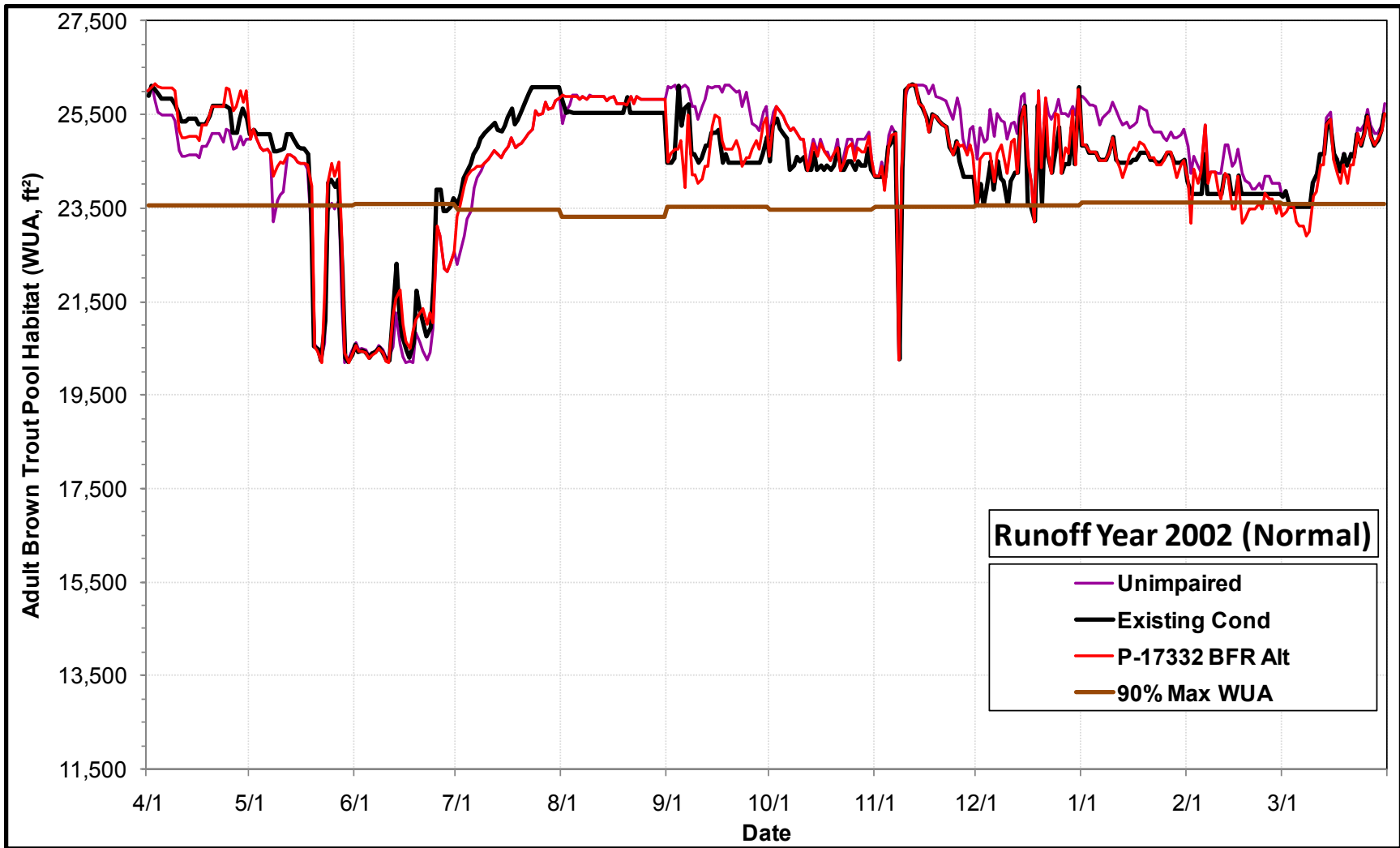
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1999



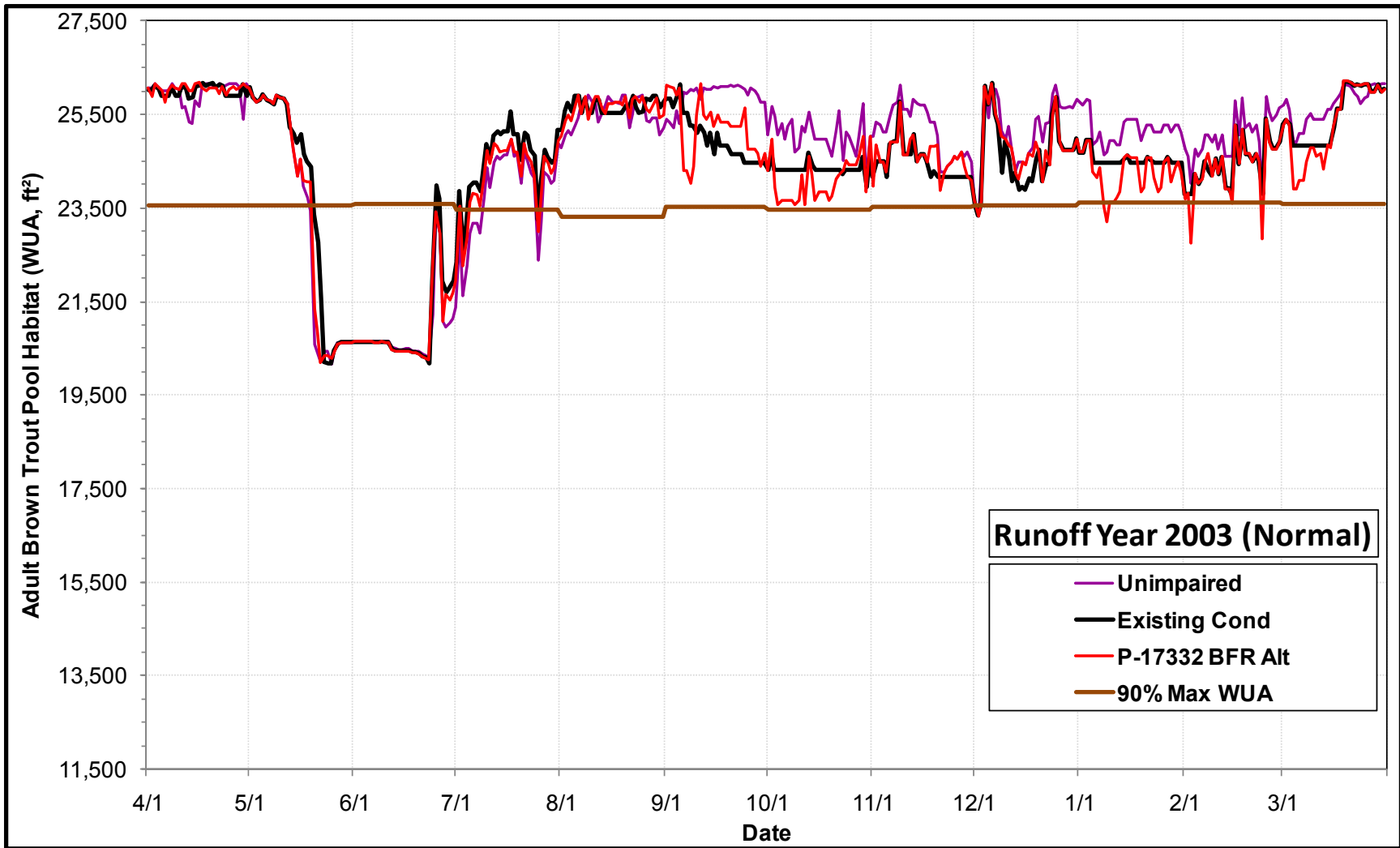
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2000



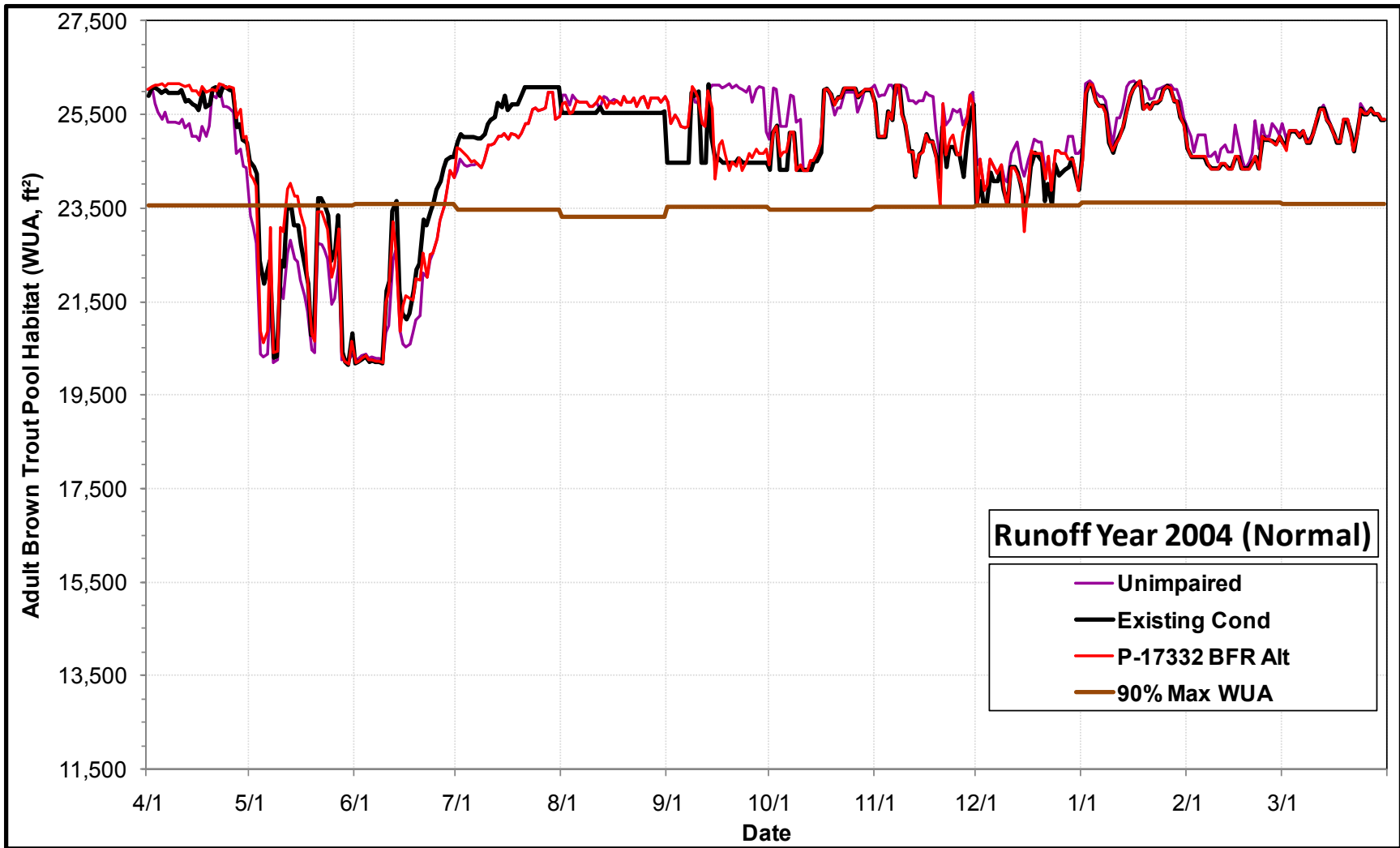
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2001



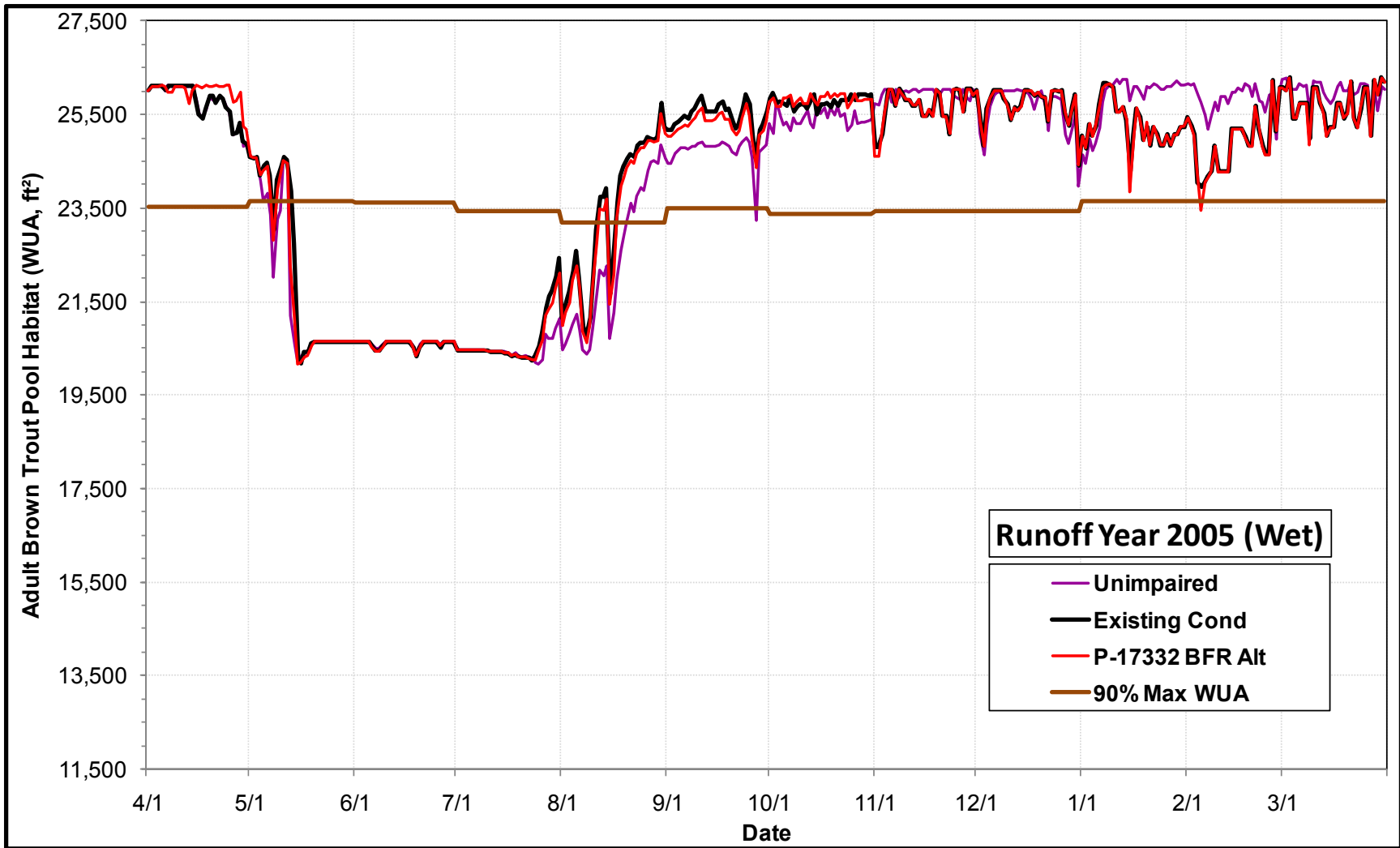
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2002



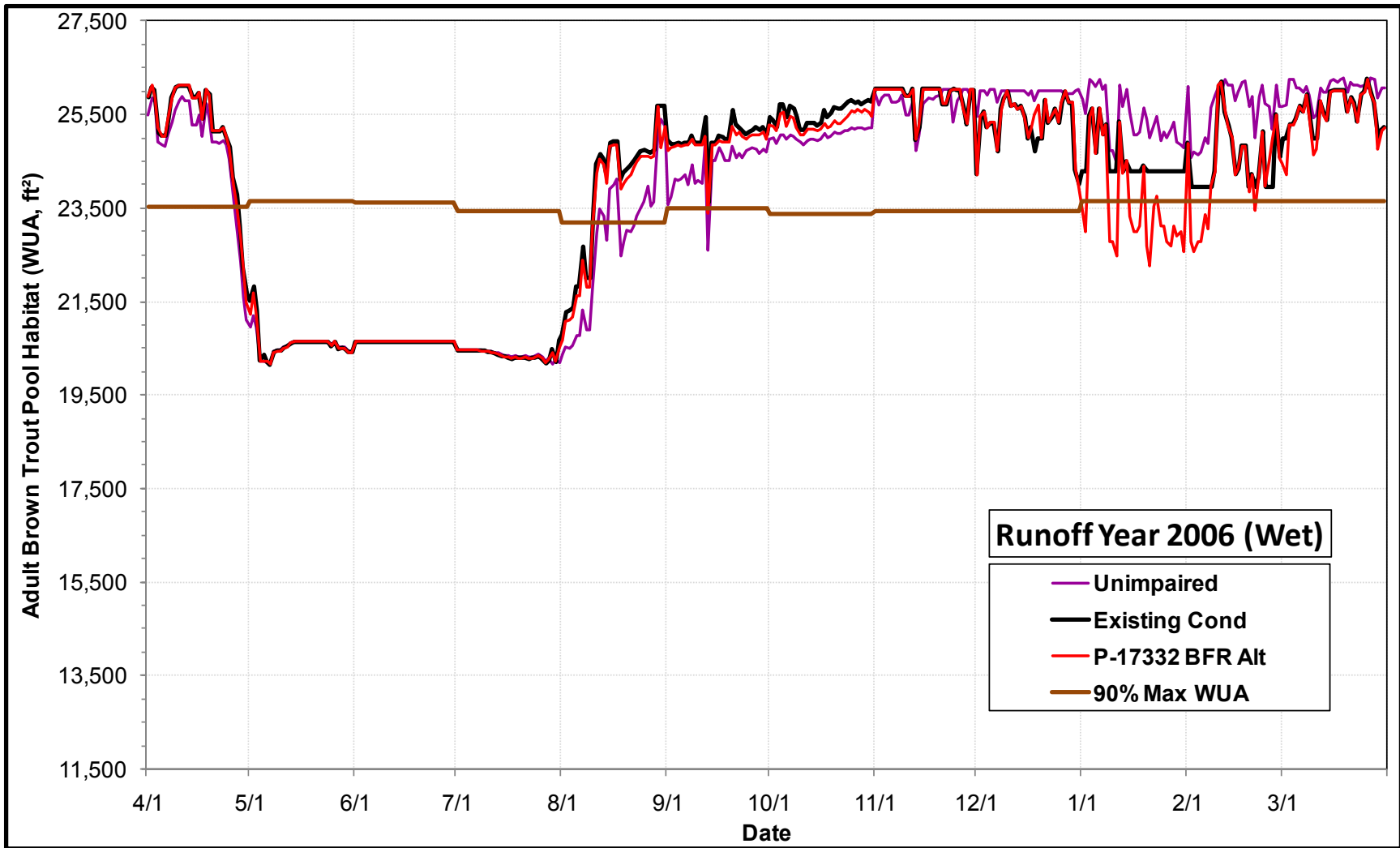
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2003



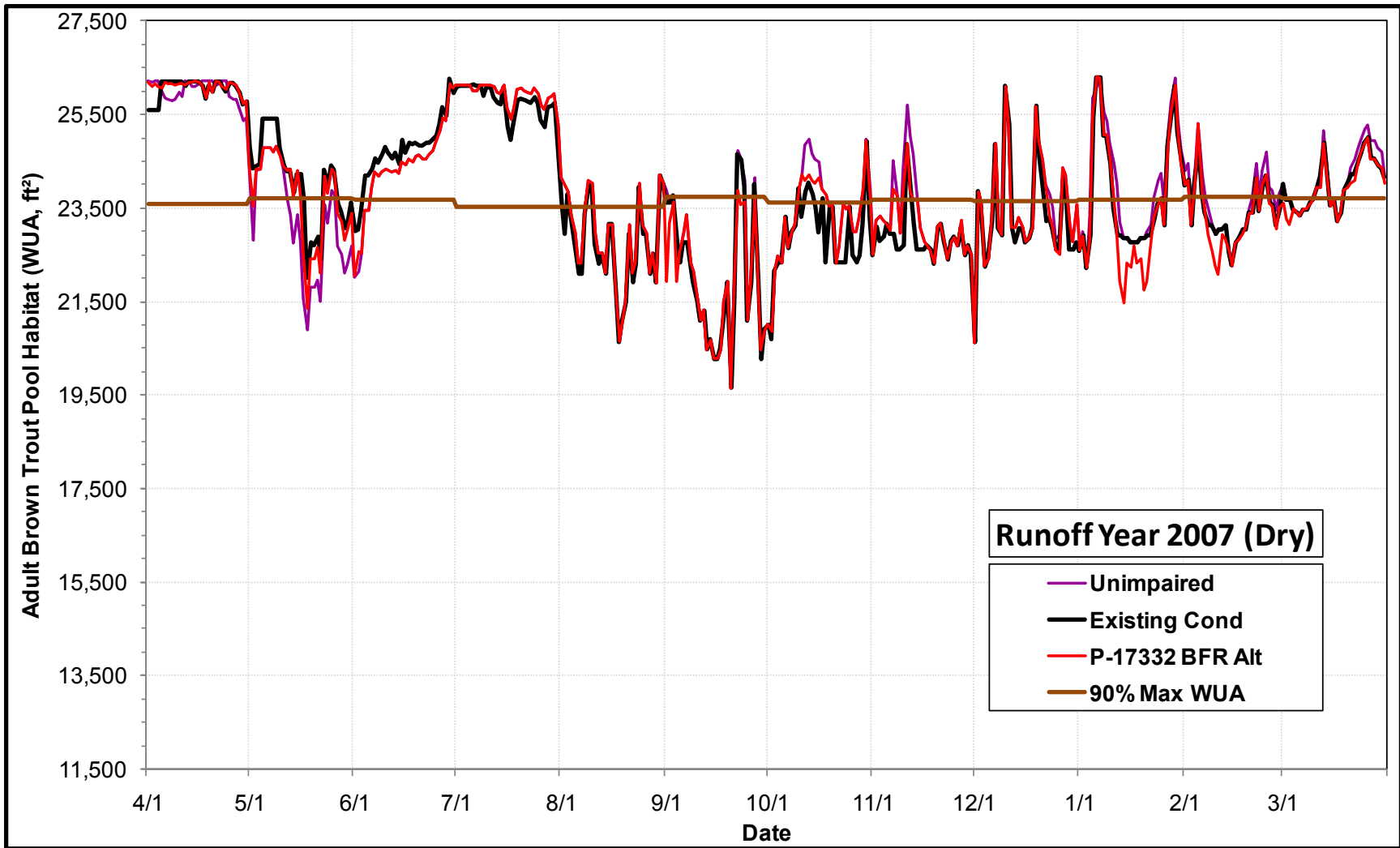
Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2004



Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2005



Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2006



Daily Time Series Comparing Adult Brown Trout Pool Habitat Availability (WUA, ft²) to 90% of Maximum (Theoretical) Habitat Availability under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2007

Monthly Averages of Daily Flows (cfs) at the OLD395 Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative

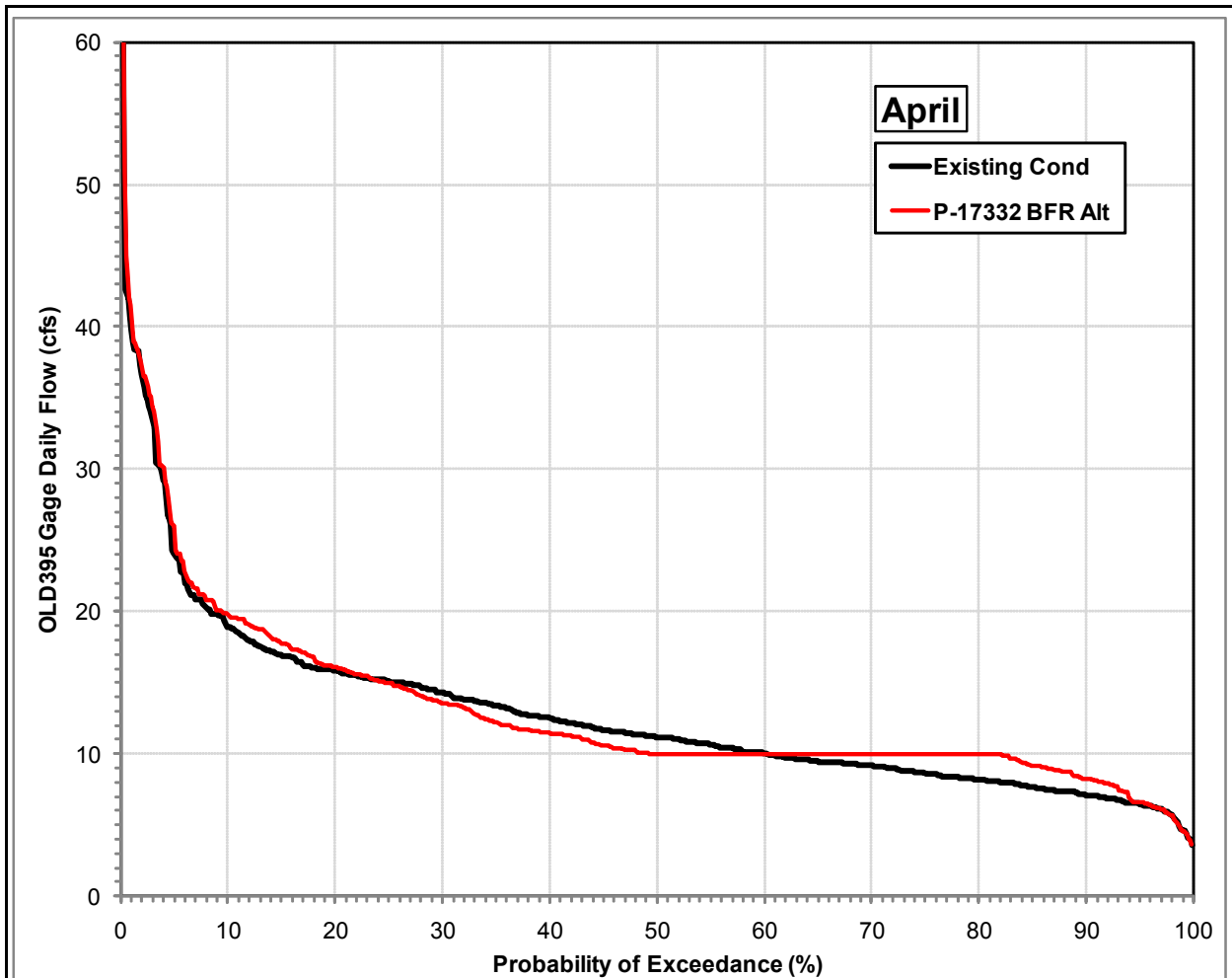
Runoff Year	Runoff Year Type	Average OLD395 Gage Daily Flow (cfs) under the P-17332 BFR Alt												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	9.8	23.1	26.2	14.7	6.9	5.0	3.8	5.1	4.9	4.8	4.2	6.4	9.6
1989	N	13.7	26.2	28.6	12.0	6.3	6.3	5.4	6.7	4.6	4.7	4.8	4.5	10.3
1990	D	10.0	19.6	22.6	12.3	6.9	6.0	4.2	4.6	2.9	2.5	3.8	5.1	8.4
1991	N	6.5	18.5	51.2	22.1	8.5	5.9	5.3	6.9	5.1	4.2	4.3	4.2	11.9
1992	N	10.7	26.8	20.0	10.2	6.1	4.8	3.8	4.7	2.6	3.5	3.9	5.4	8.6
1993	W	11.1	54.1	91.0	67.1	25.7	14.3	8.5	7.2	6.6	5.6	6.0	5.2	25.3
1994	D	11.3	27.1	32.9	11.2	5.3	6.0	6.1	6.0	6.1	7.1	6.0	9.4	11.2
1995	W	13.8	45.1	136.1	184.9	84.1	39.0	21.6	13.3	13.0	11.1	14.6	12.4	49.3
1996	N	24.6	90.1	112.1	57.1	28.7	16.5	11.4	15.5	12.9	40.8	12.5	13.4	36.4
1997	N	24.6	80.7	85.4	40.3	22.6	17.2	10.3	9.7	8.4	10.1	9.4	10.3	27.5
1998	N	11.8	26.1	111.4	147.4	57.8	31.9	17.2	15.3	10.3	9.6	9.3	8.4	38.2
1999	N	12.1	51.2	84.0	37.6	17.3	11.0	8.1	8.2	6.0	7.3	7.9	7.3	21.5
2000	N	13.1	59.2	65.8	24.8	13.9	8.1	8.4	7.2	6.6	5.9	6.1	7.1	18.9
2001	N	10.9	61.3	36.3	17.3	8.6	6.0	5.8	6.4	6.9	5.3	5.3	6.3	14.8
2002	N	14.7	31.2	50.1	21.1	9.3	6.5	5.8	10.3	5.9	5.5	5.2	6.7	14.4
2003	N	10.2	40.8	81.2	27.7	12.7	8.0	6.1	6.0	6.7	5.9	6.4	8.2	18.3
2004	N	12.1	37.0	44.2	17.0	9.6	5.8	8.4	6.9	5.8	8.0	7.1	7.6	14.1
2005	W	11.1	75.5	123.7	91.8	32.6	16.1	11.6	9.7	12.5	8.3	7.4	9.0	34.3
2006	W	17.8	104.8	173.6	100.4	33.8	18.5	11.9	10.2	9.1	6.7	7.1	8.2	42.0
2007	D	11.3	30.6	28.1	11.0	5.4	4.7	5.2	4.9	5.0	6.0	5.7	5.1	10.3
Average		13.1	46.5	70.2	46.4	20.1	11.9	8.4	8.2	7.1	8.1	6.9	7.5	21.3

Monthly Averages of Daily Flows (cfs) at the OLD395 Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Existing Condition

Runoff Year	Runoff Year Type	Average OLD395 Gage Daily Flow (cfs) under the Existing Cond												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	8.8	17.8	21.7	11.0	6.2	4.1	3.5	4.8	3.8	4.4	3.9	6.4	8.0
1989	N	10.0	22.4	23.1	8.5	5.1	4.6	4.9	6.3	4.0	4.5	4.1	4.6	8.5
1990	D	8.3	16.5	19.1	9.5	6.0	4.5	3.9	4.4	2.9	2.5	3.7	5.3	7.2
1991	N	6.2	13.3	51.1	19.8	6.9	5.7	5.0	6.8	4.7	4.2	4.0	4.2	11.0
1992	N	7.4	24.9	18.4	10.0	5.5	4.7	3.8	4.6	2.6	3.4	3.6	5.5	7.9
1993	W	9.7	53.2	92.6	65.8	24.6	14.2	8.3	7.2	6.2	5.9	6.1	5.5	25.1
1994	D	9.2	27.6	31.3	9.5	4.9	4.9	5.6	5.2	5.9	7.1	5.9	9.5	10.6
1995	W	15.3	46.1	138.2	184.1	83.3	38.3	21.0	13.3	13.0	11.1	14.6	12.4	49.4
1996	N	24.6	89.3	110.9	56.0	27.5	15.4	11.4	15.5	12.9	40.8	12.5	13.4	36.0
1997	N	24.1	80.2	84.1	39.3	21.6	16.4	10.5	9.7	8.4	10.1	9.4	10.3	27.1
1998	N	12.0	25.8	111.2	146.6	56.8	31.0	16.7	15.3	10.3	9.6	9.3	8.5	37.9
1999	N	12.0	51.2	84.0	36.1	16.6	11.4	8.3	8.1	4.8	7.1	7.9	7.3	21.2
2000	N	14.5	59.0	65.1	21.7	12.9	8.5	8.3	6.7	6.4	5.9	6.1	7.2	18.6
2001	N	11.7	61.8	33.2	14.3	7.6	5.6	5.3	6.1	6.9	5.2	5.3	6.3	14.2
2002	N	15.1	30.6	49.9	17.5	8.2	6.6	5.5	10.1	5.2	5.5	5.2	6.9	13.9
2003	N	10.4	38.6	82.6	25.6	11.8	8.0	6.4	5.8	6.5	6.2	6.5	8.5	18.0
2004	N	14.0	36.7	41.8	13.4	8.8	5.3	8.3	6.7	5.5	8.0	7.1	7.6	13.6
2005	W	13.1	76.0	124.4	90.4	31.5	15.2	10.9	9.7	12.5	8.2	7.4	9.0	34.2
2006	W	17.8	104.6	173.2	99.6	33.2	17.5	10.9	10.2	9.1	7.6	7.3	8.3	41.7
2007	D	11.6	28.4	25.0	10.0	5.3	4.9	4.9	4.6	4.8	6.2	5.8	5.2	9.7
Average		12.8	45.2	69.0	44.4	19.2	11.3	8.2	8.1	6.8	8.2	6.8	7.6	20.7

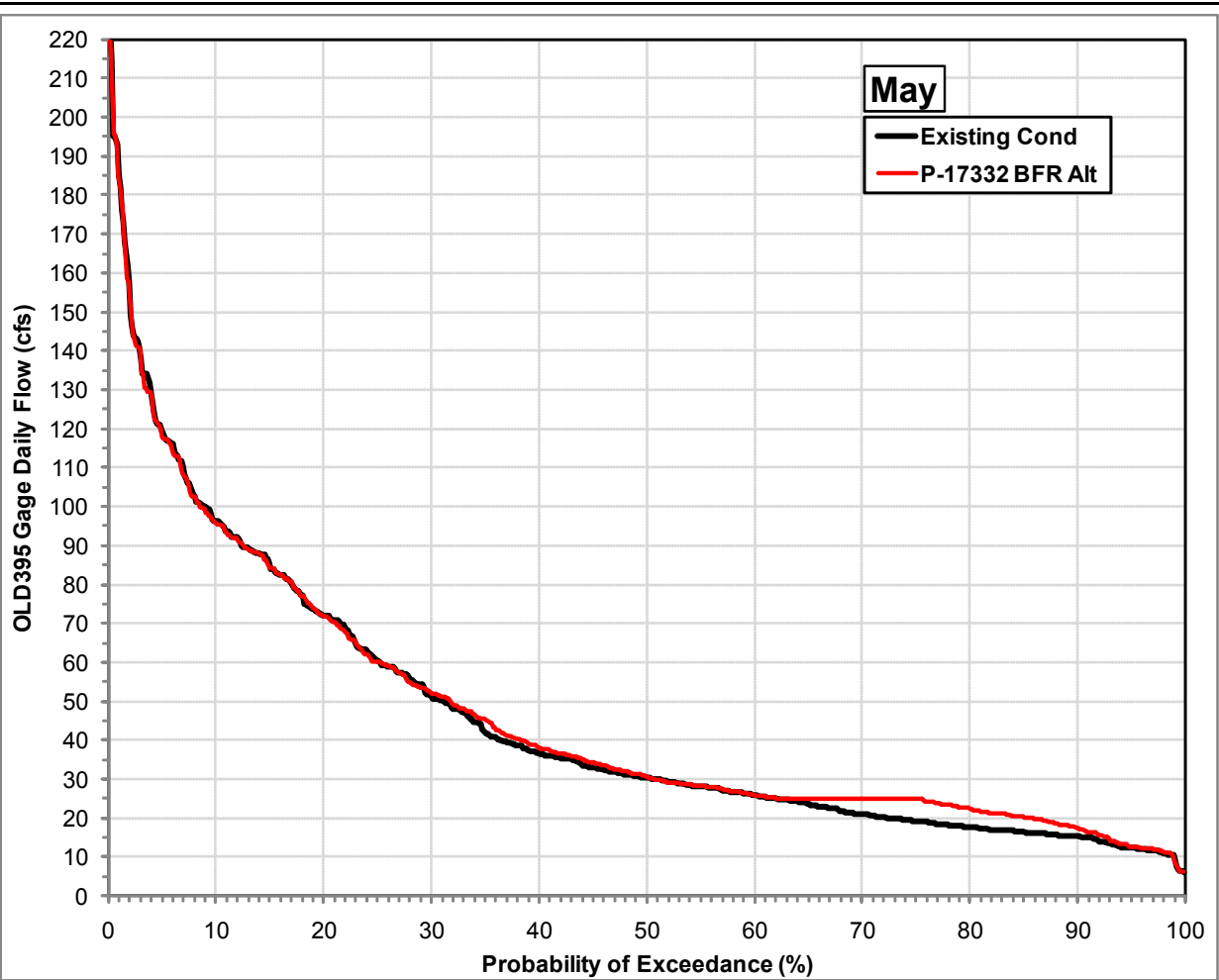
Differences in Monthly Averages of Daily Flows (cfs) at the OLD395 Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative Relative to the Existing Condition. Positive Values Indicate that the Permit 17332 Bypass Flow Requirements Alternative Flows are Higher than the Existing Condition Flows

Runoff Year	Runoff Year Type	Average OLD395 Gage Daily Flow (cfs) Differences (P-17332 BFR Alt - Existing Cond)												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	0.9	5.2	4.5	3.7	0.7	0.9	0.3	0.3	1.1	0.3	0.4	0.0	1.5
1989	N	3.8	3.8	5.6	3.5	1.1	1.7	0.5	0.4	0.6	0.2	0.6	-0.1	1.8
1990	D	1.8	3.1	3.5	2.8	0.9	1.5	0.3	0.2	0.0	0.0	0.1	-0.2	1.2
1991	N	0.3	5.2	0.1	2.3	1.6	0.2	0.2	0.0	0.3	0.0	0.3	0.0	0.9
1992	N	3.3	1.9	1.5	0.2	0.6	0.2	0.0	0.1	0.1	0.2	0.3	-0.1	0.7
1993	W	1.4	0.8	-1.7	1.3	1.0	0.1	0.2	0.0	0.4	-0.3	-0.1	-0.3	0.2
1994	D	2.1	-0.6	1.6	1.7	0.4	1.2	0.4	0.9	0.3	0.0	0.1	-0.1	0.7
1995	W	-1.5	-1.0	-2.1	0.8	0.8	0.8	0.6	0.0	0.0	0.0	0.0	0.0	-0.1
1996	N	0.0	0.8	1.2	1.1	1.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5
1997	N	0.5	0.5	1.4	1.1	1.0	0.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.4
1998	N	-0.2	0.2	0.2	0.8	1.0	0.9	0.5	0.0	0.0	0.0	0.0	-0.1	0.3
1999	N	0.1	0.0	0.0	1.5	0.7	-0.4	-0.2	0.0	1.2	0.2	0.0	0.0	0.3
2000	N	-1.4	0.3	0.8	3.0	1.0	-0.4	0.0	0.5	0.2	0.0	0.0	-0.1	0.3
2001	N	-0.8	-0.4	3.2	3.0	1.0	0.4	0.5	0.2	0.1	0.2	0.0	0.0	0.6
2002	N	-0.4	0.6	0.1	3.6	1.2	-0.1	0.4	0.1	0.7	0.0	0.0	-0.2	0.5
2003	N	-0.2	2.2	-1.4	2.1	0.9	0.0	-0.3	0.2	0.3	-0.3	-0.1	-0.3	0.3
2004	N	-1.9	0.4	2.3	3.6	0.8	0.5	0.1	0.2	0.3	0.0	0.0	0.0	0.5
2005	W	-2.0	-0.4	-0.7	1.4	1.0	0.9	0.7	0.0	0.0	0.1	0.0	0.0	0.1
2006	W	0.0	0.2	0.4	0.9	0.6	1.0	1.0	0.0	0.1	-0.9	-0.2	-0.1	0.2
2007	D	-0.3	2.2	3.1	1.0	0.1	-0.2	0.3	0.3	0.2	-0.2	-0.1	-0.1	0.5
Average		0.3	1.2	1.2	2.0	0.9	0.6	0.3	0.2	0.3	0.0	0.1	-0.1	0.6



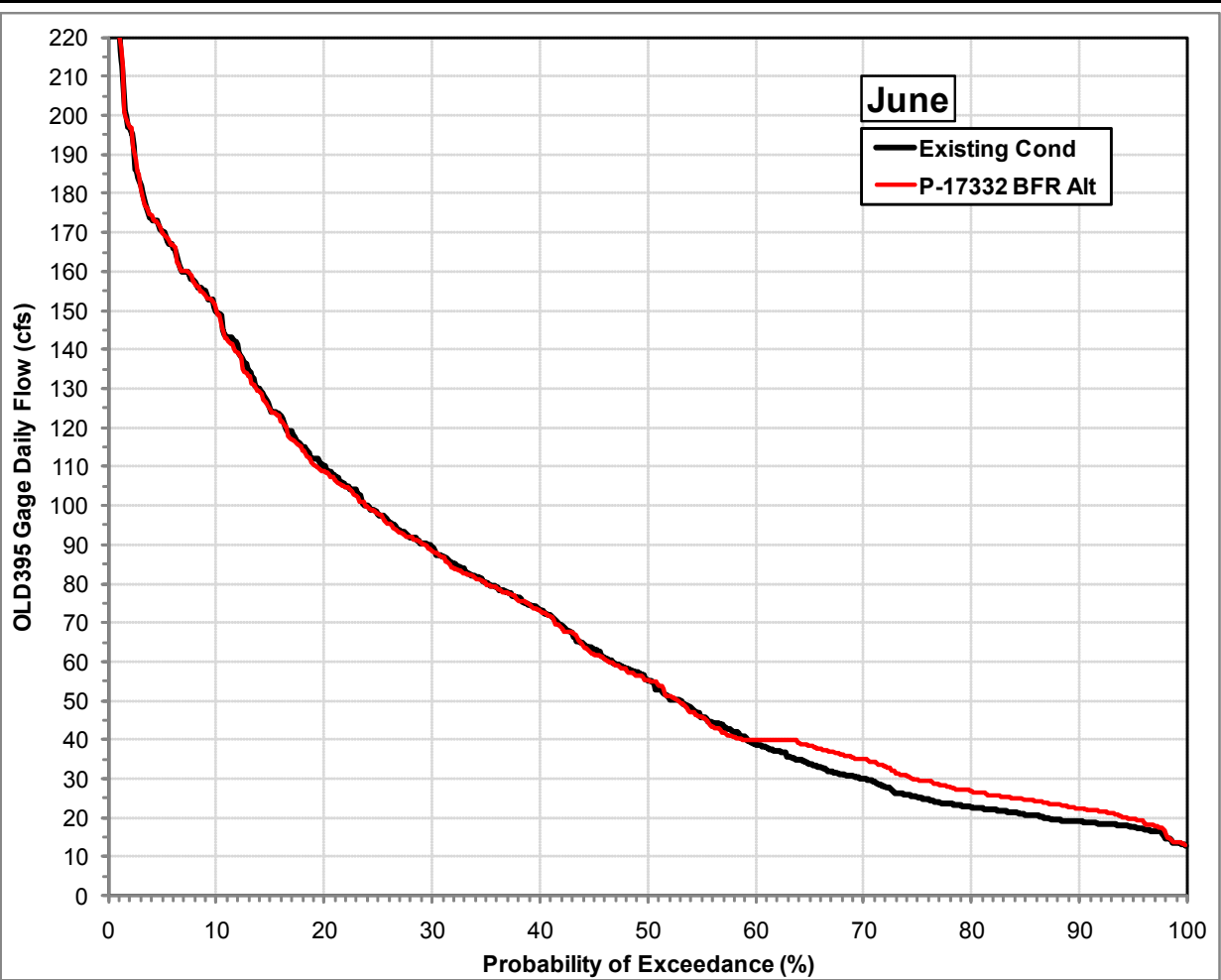
Probability of Exceedance (%)	April OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	25.9	23.8
10	19.8	18.9
20	16.1	15.8
25	15.0	15.0
50	10.0	11.2
75	10.0	8.6
80	10.0	8.2
90	8.2	7.1
95	6.6	6.5

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during April for the 20-Year Evaluation Period



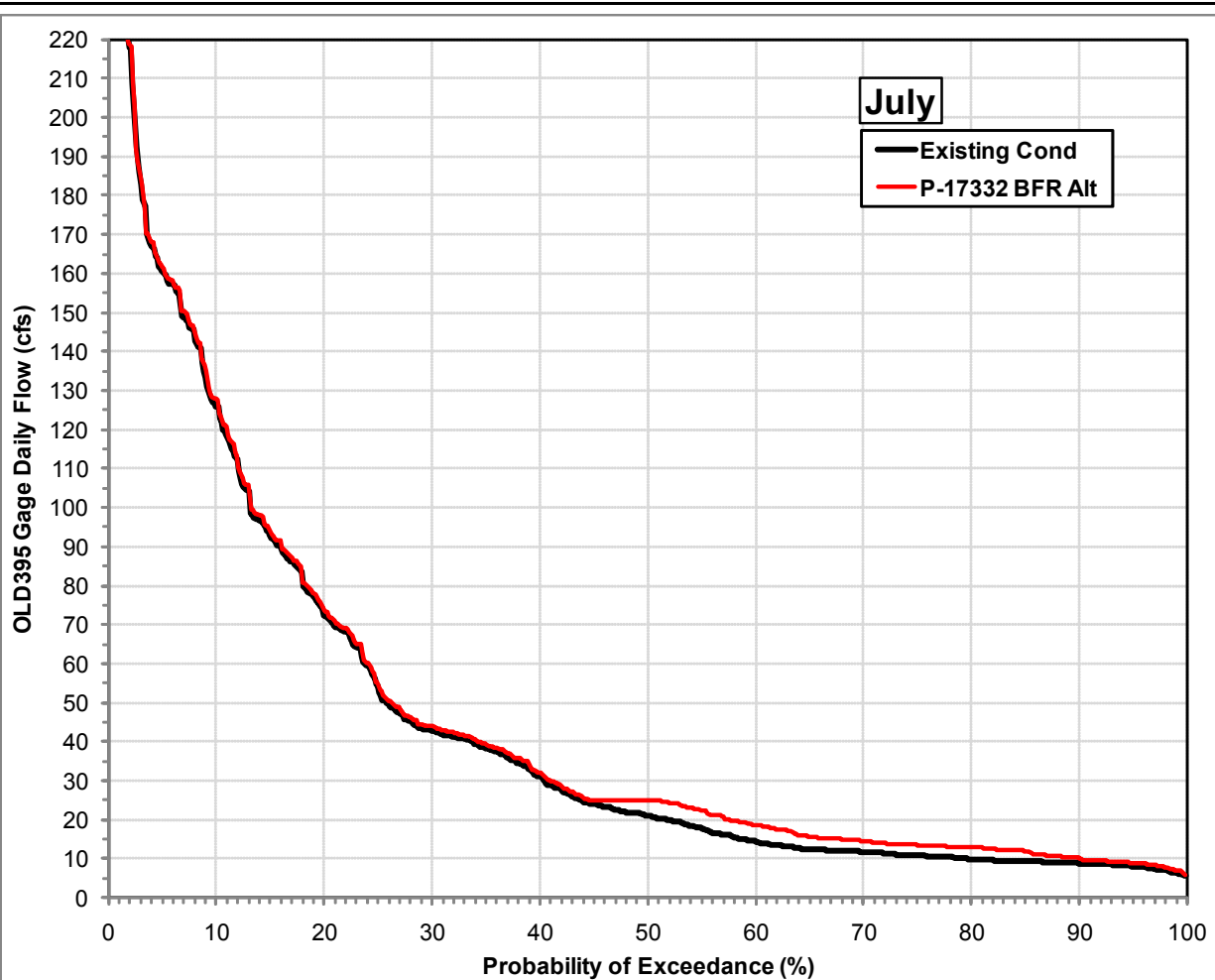
Probability of Exceedance (%)	May OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	118.0	118.0
10	95.8	96.2
20	71.9	71.8
25	60.1	60.4
50	30.6	30.3
75	24.9	19.2
80	22.4	17.7
90	17.4	15.3
95	12.6	12.4

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during May for the 20-Year Evaluation Period



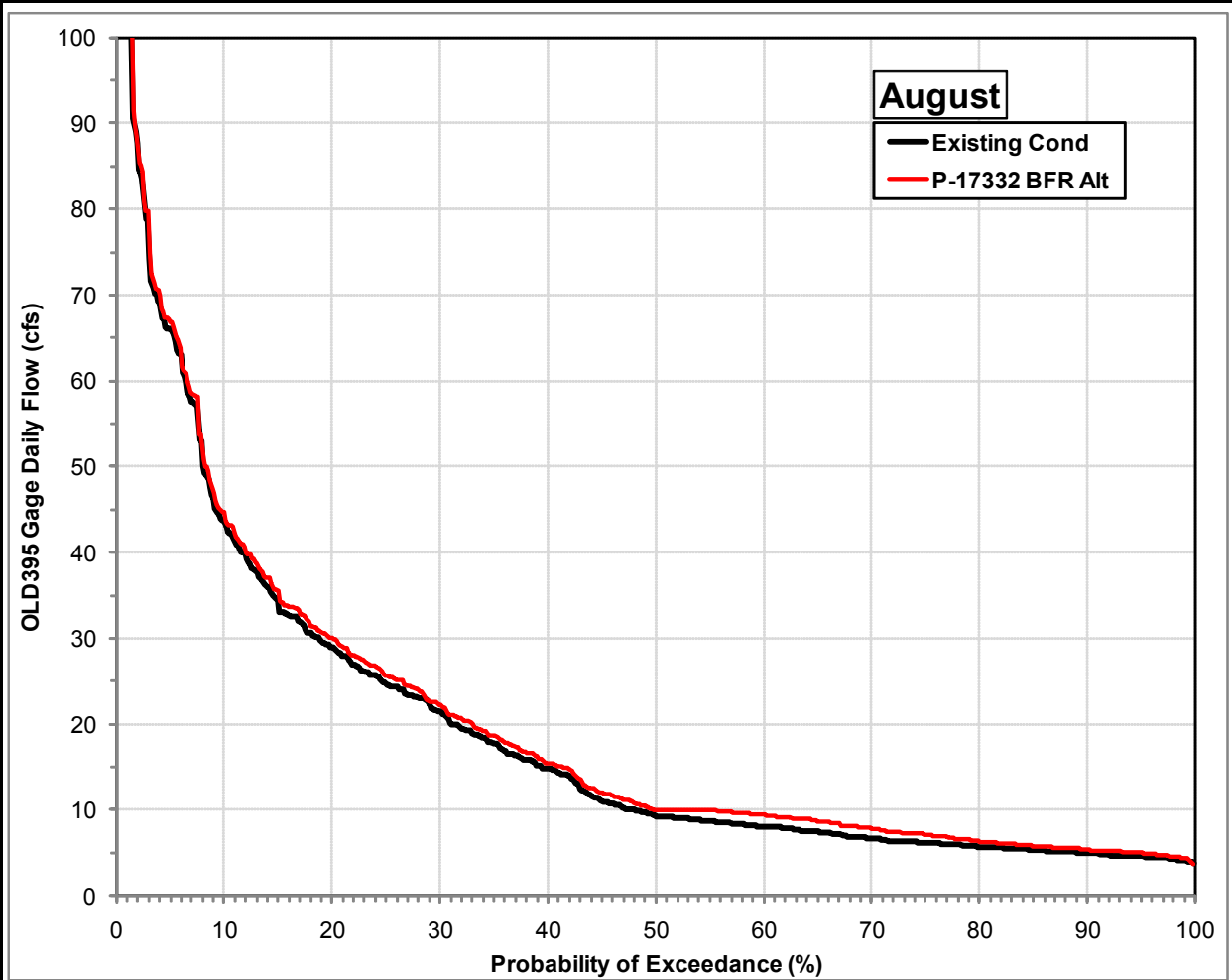
Probability of Exceedance (%)	June OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	170.0	170.0
10	149.9	149.0
20	108.9	110.0
25	97.9	97.5
50	55.2	55.2
75	29.7	25.1
80	26.9	22.7
90	22.4	19.0
95	19.6	17.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during June for the 20-Year Evaluation Period



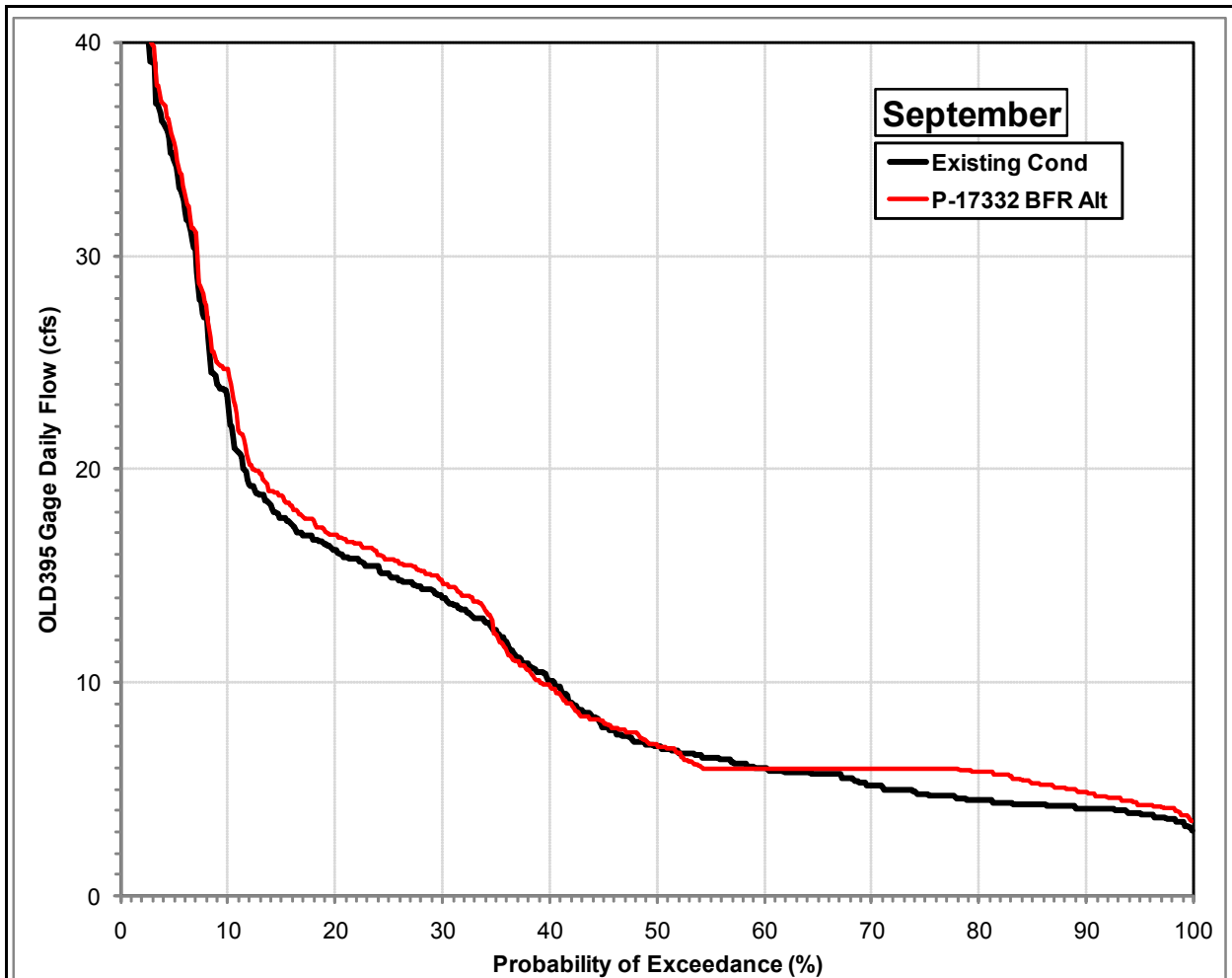
Probability of Exceedance (%)	July OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	161.7	160.0
10	127.9	125.9
20	73.7	72.3
25	54.9	52.6
50	25.0	21.0
75	13.5	10.9
80	12.9	9.9
90	10.1	8.8
95	8.9	8.1

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during July for the 20-Year Evaluation Period



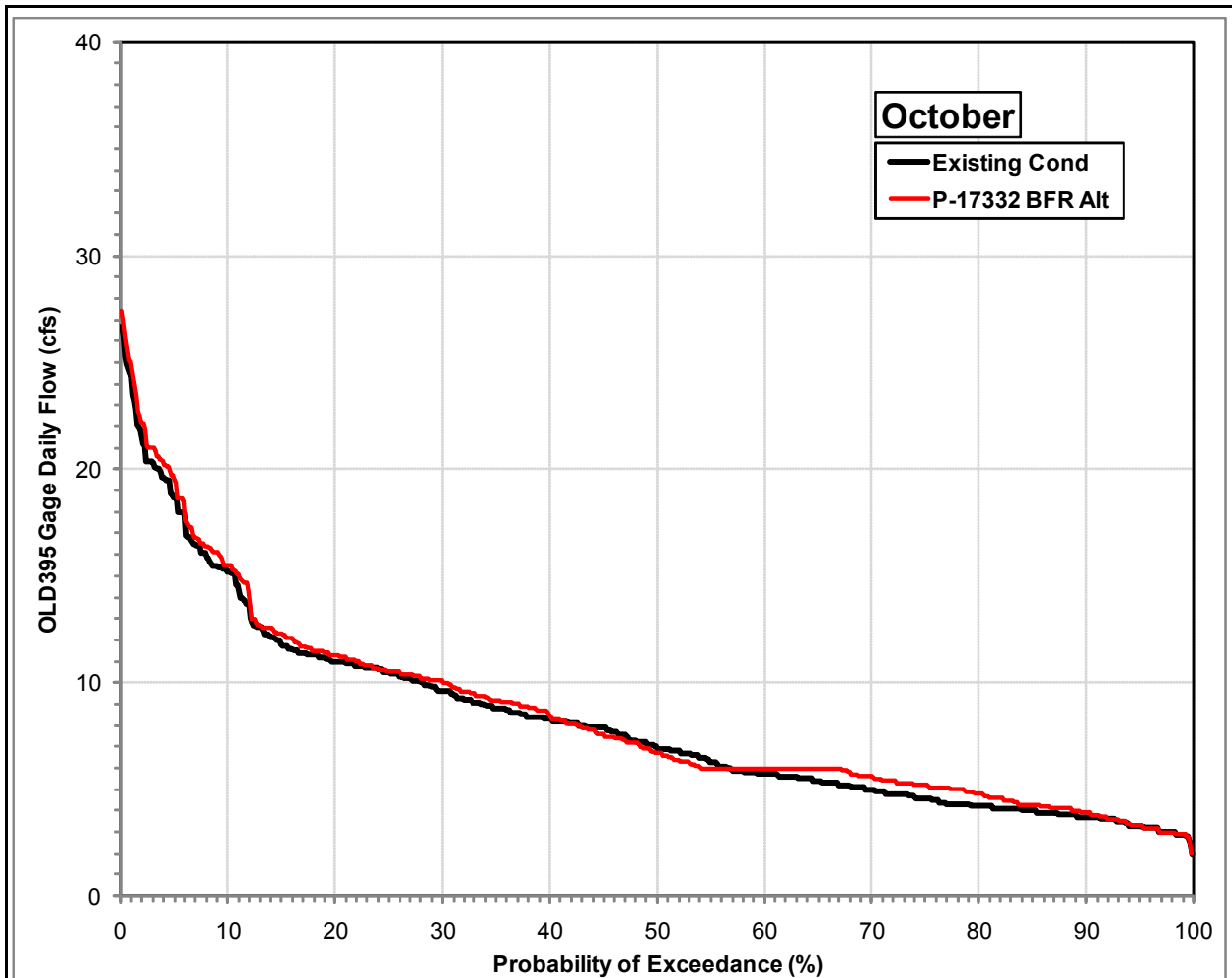
Probability of Exceedance (%)	August OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	66.8	65.7
10	44.6	43.1
20	30.1	28.9
25	25.7	24.6
50	10.0	9.3
75	7.1	6.1
80	6.3	5.7
90	5.4	5.0
95	5.0	4.6

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during August for the 20-Year Evaluation Period



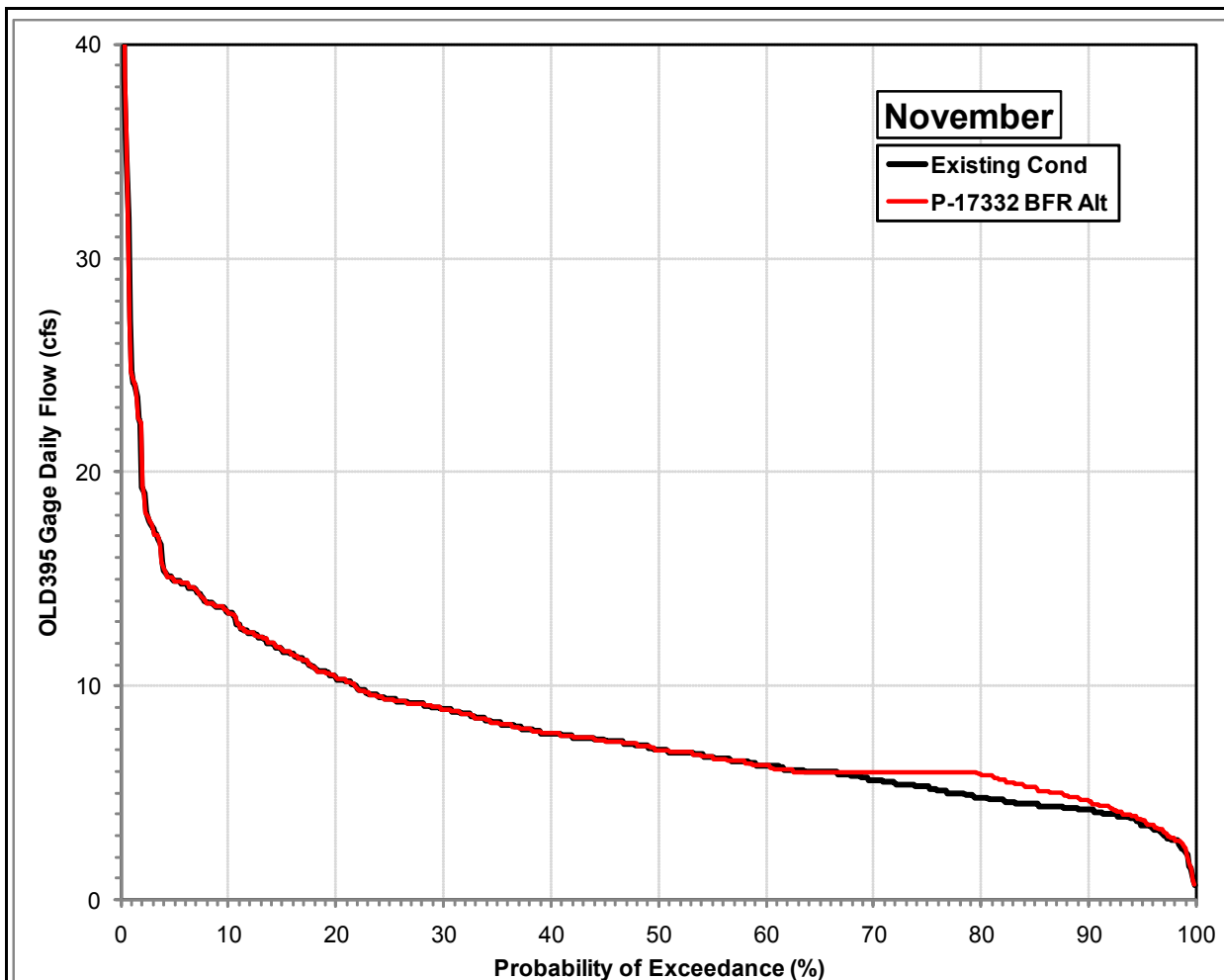
Probability of Exceedance (%)	September OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	35.3	34.2
10	24.7	22.1
20	16.9	16.2
25	15.8	15.0
50	7.1	7.0
75	6.0	4.8
80	5.8	4.5
90	4.9	4.1
95	4.3	3.9

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during September for the 20-Year Evaluation Period



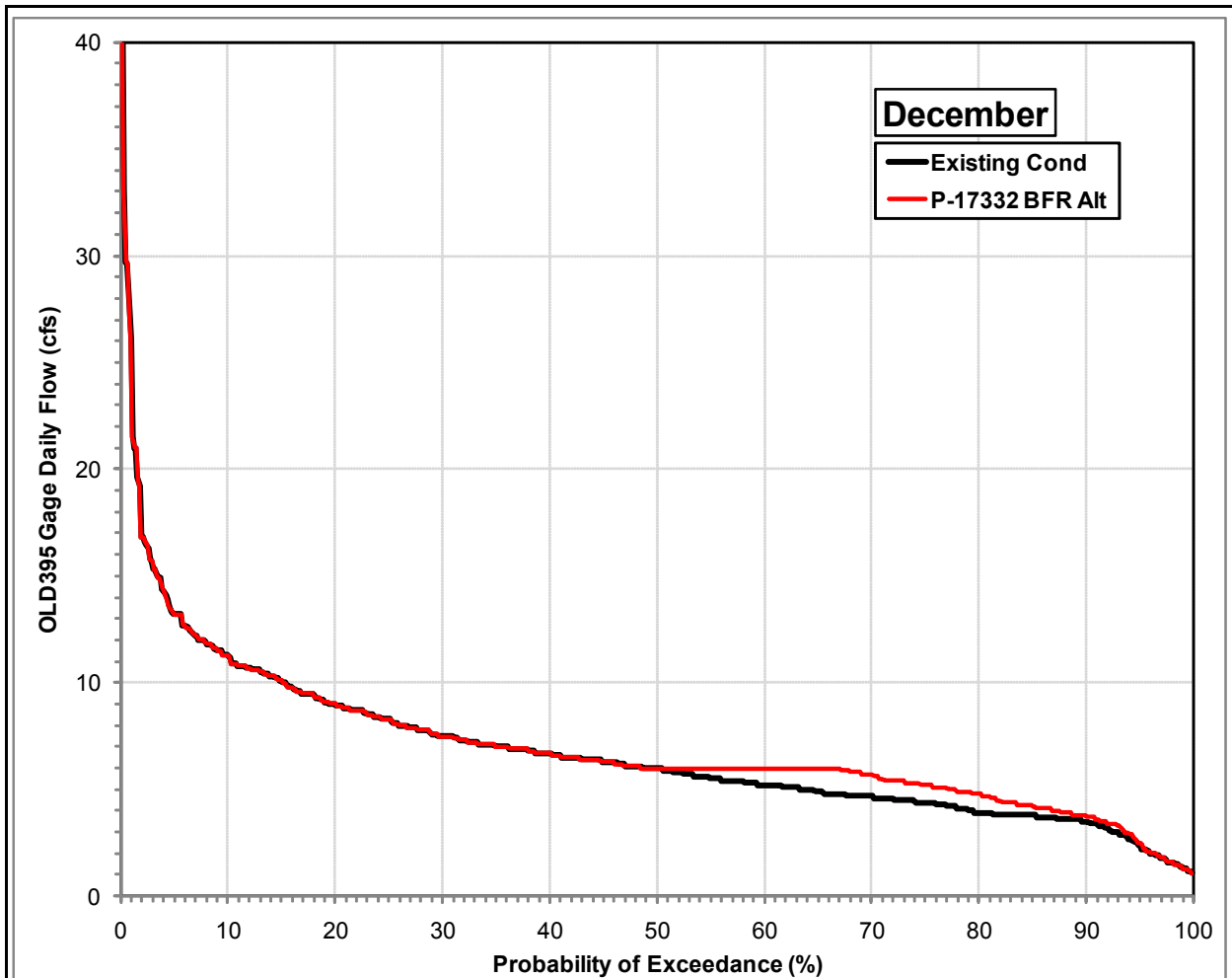
Probability of Exceedance (%)	October OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	19.5	18.7
10	15.5	15.2
20	11.3	11.0
25	10.5	10.4
50	6.7	6.9
75	5.2	4.6
80	4.8	4.2
90	3.9	3.7
95	3.3	3.3

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during October for the 20-Year Evaluation Period



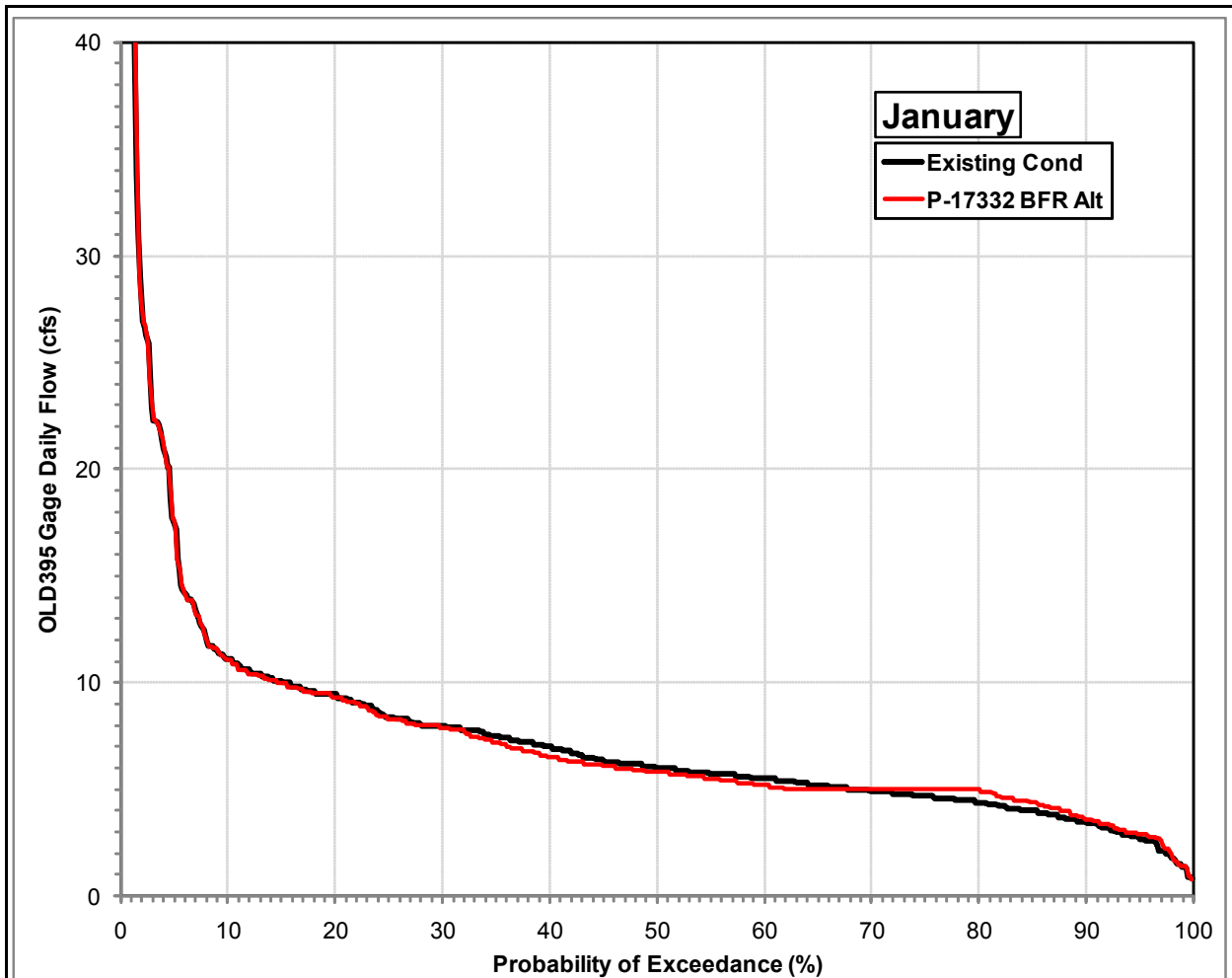
Probability of Exceedance (%)	November OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	14.9	14.9
10	13.4	13.4
20	10.4	10.3
25	9.4	9.4
50	7.0	7.0
75	6.0	5.3
80	5.8	4.8
90	4.6	4.2
95	3.7	3.5

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during November for the 20-Year Evaluation Period



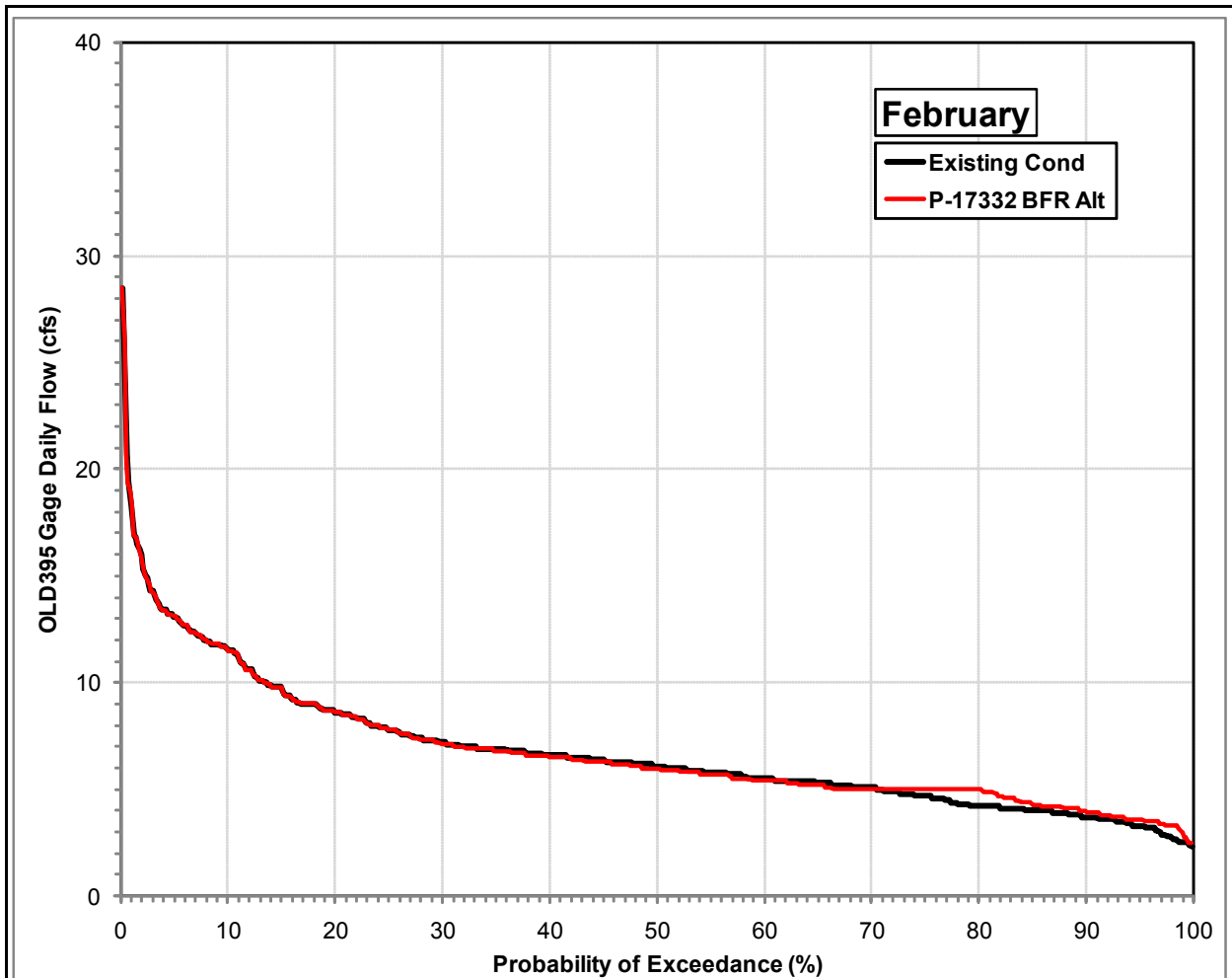
Probability of Exceedance (%)	December OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	13.2	13.2
10	11.3	11.2
20	9.0	8.9
25	8.3	8.3
50	6.0	6.0
75	5.2	4.4
80	4.8	3.9
90	3.7	3.5
95	2.5	2.4

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during December for the 20-Year Evaluation Period



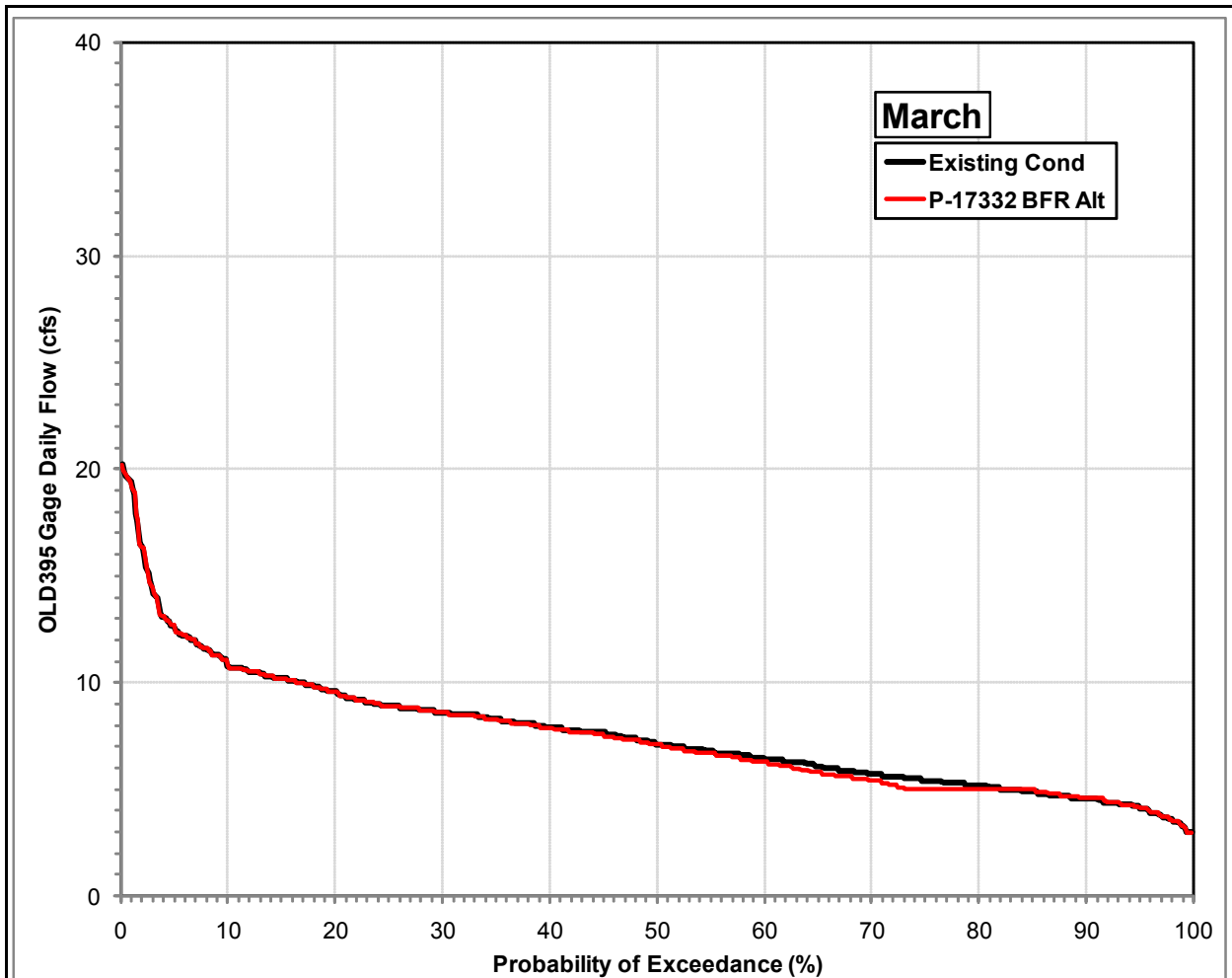
Probability of Exceedance (%)	January OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	17.6	17.2
10	11.1	11.1
20	9.3	9.5
25	8.3	8.4
50	5.8	6.0
75	5.0	4.7
80	5.0	4.4
90	3.6	3.5
95	2.9	2.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during January for the 20-Year Evaluation Period



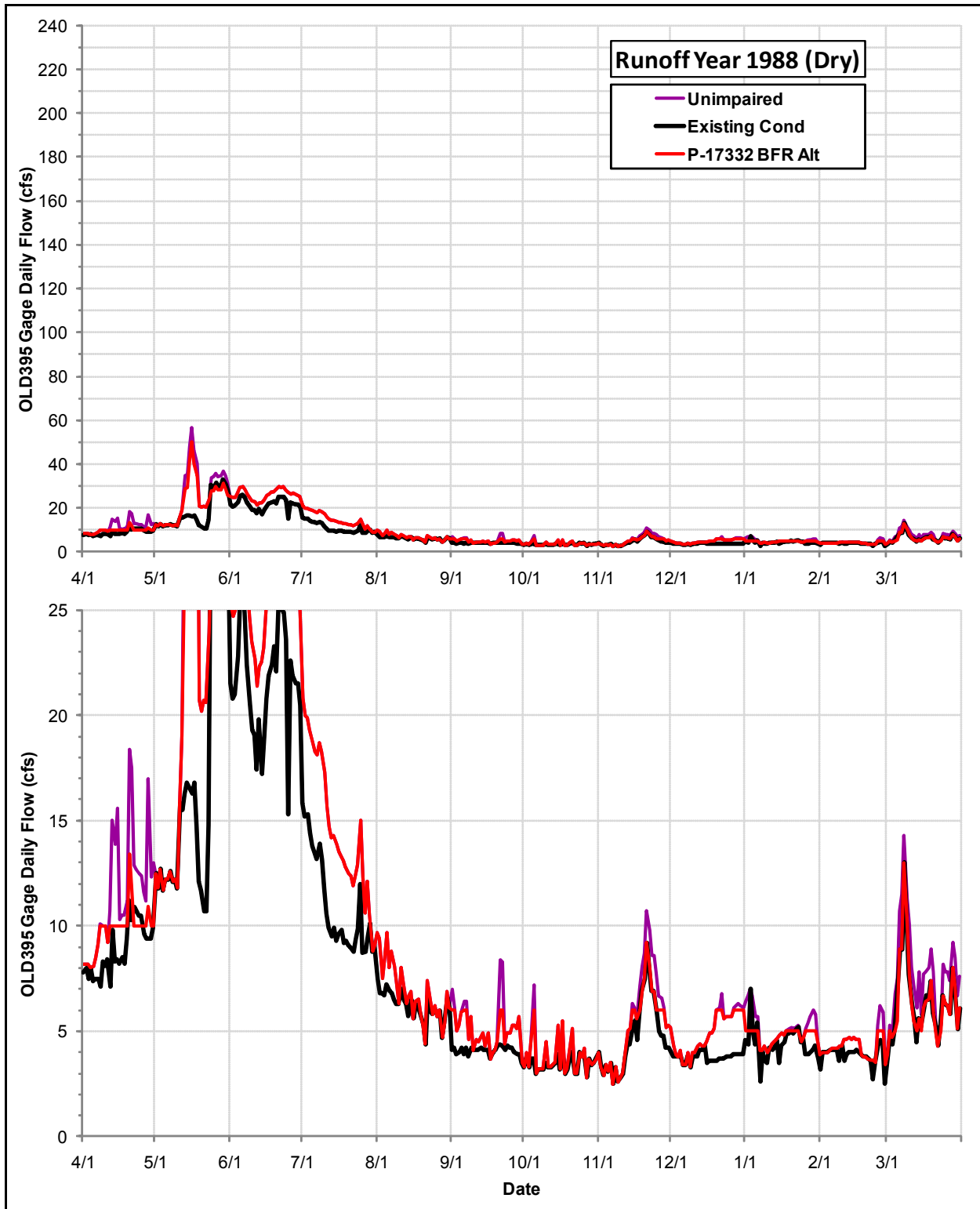
Probability of Exceedance (%)	February OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	13.1	13.1
10	11.5	11.5
20	8.6	8.6
25	7.8	7.8
50	6.0	6.1
75	5.0	4.7
80	5.0	4.2
90	4.0	3.7
95	3.6	3.3

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during February for the 20-Year Evaluation Period

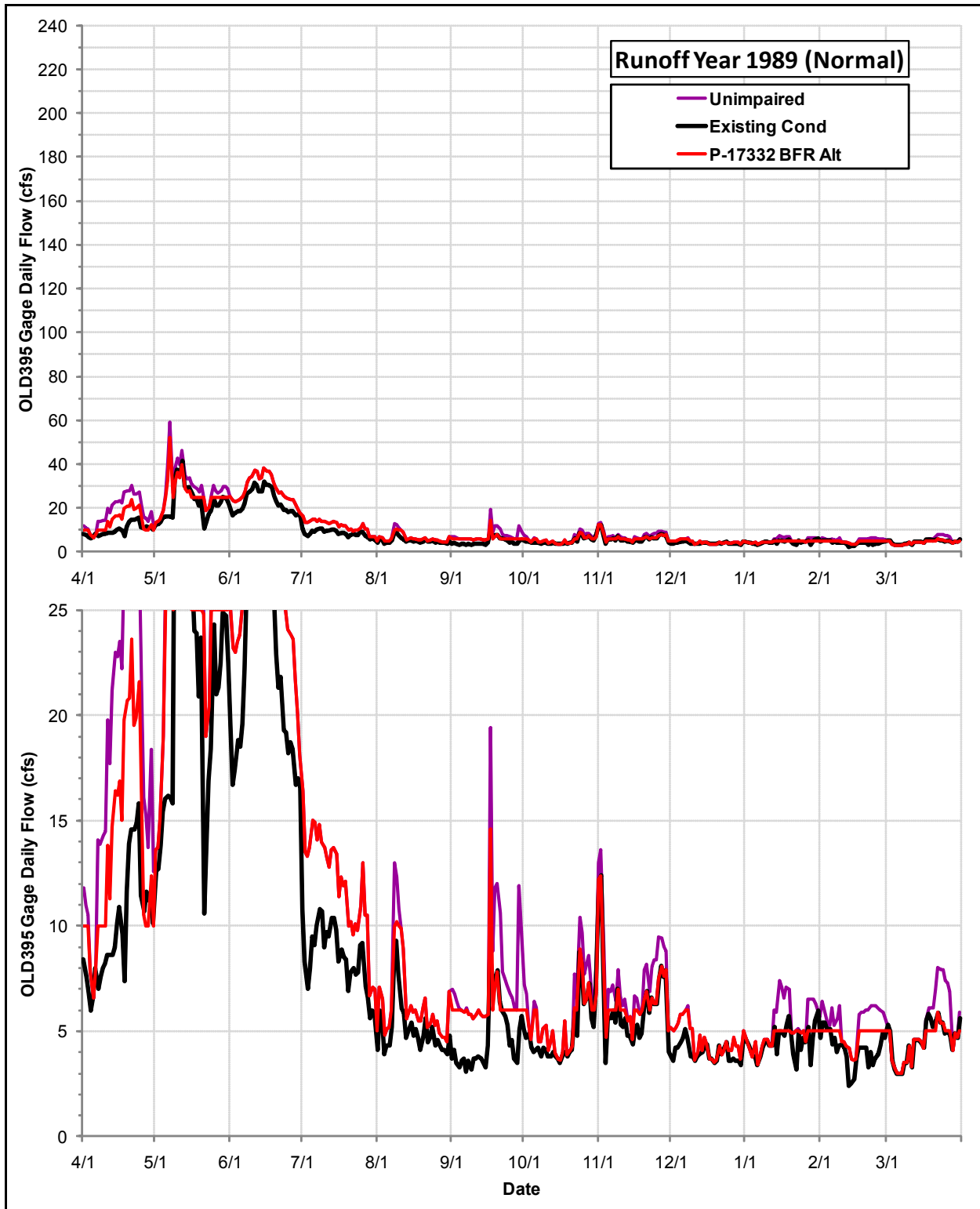


Probability of Exceedance (%)	March OLD395 Gage Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	12.7	12.4
10	10.8	10.7
20	9.6	9.6
25	8.9	8.9
50	7.1	7.1
75	5.0	5.4
80	5.0	5.2
90	4.6	4.6
95	4.1	4.1

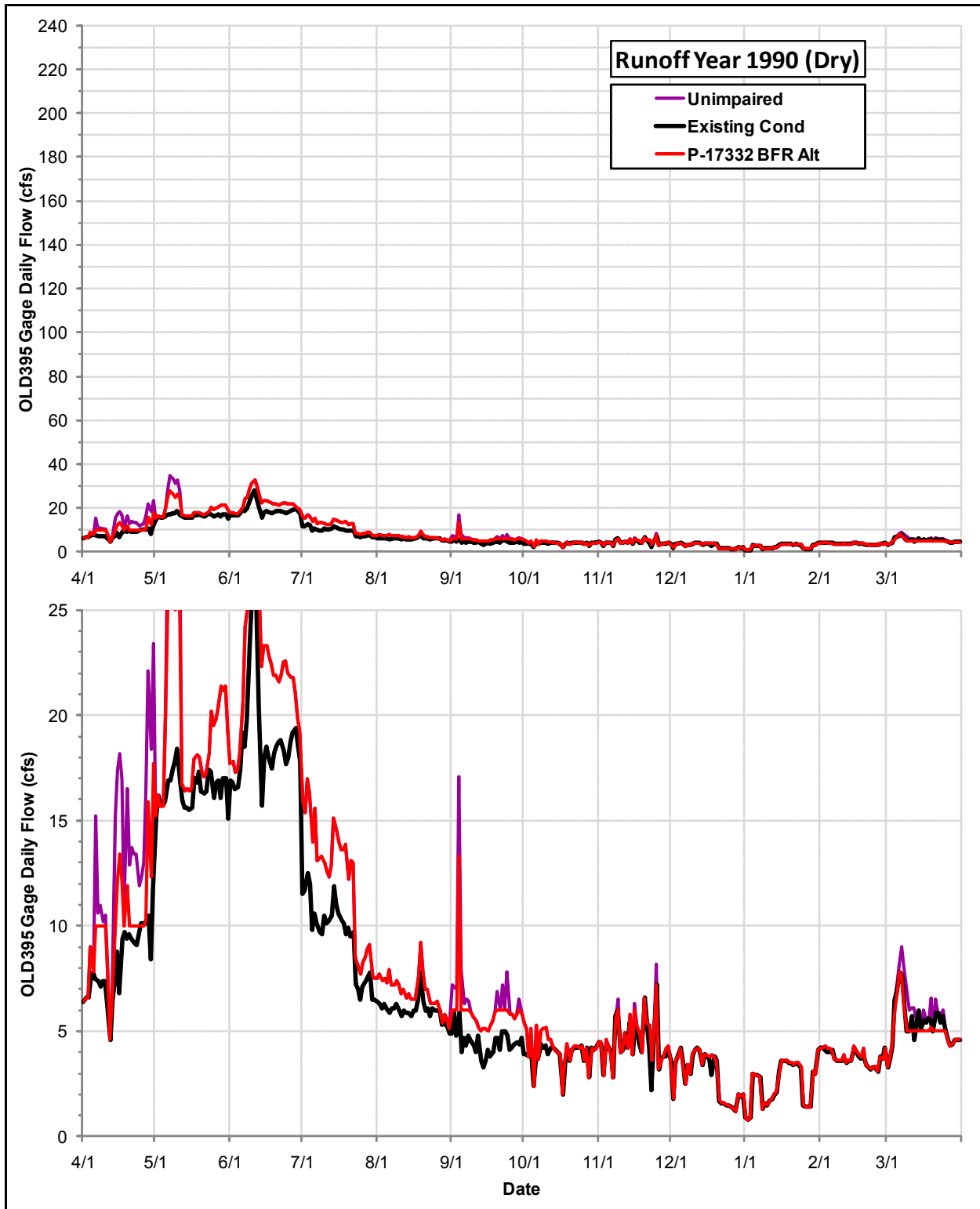
Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during March for the 20-Year Evaluation Period



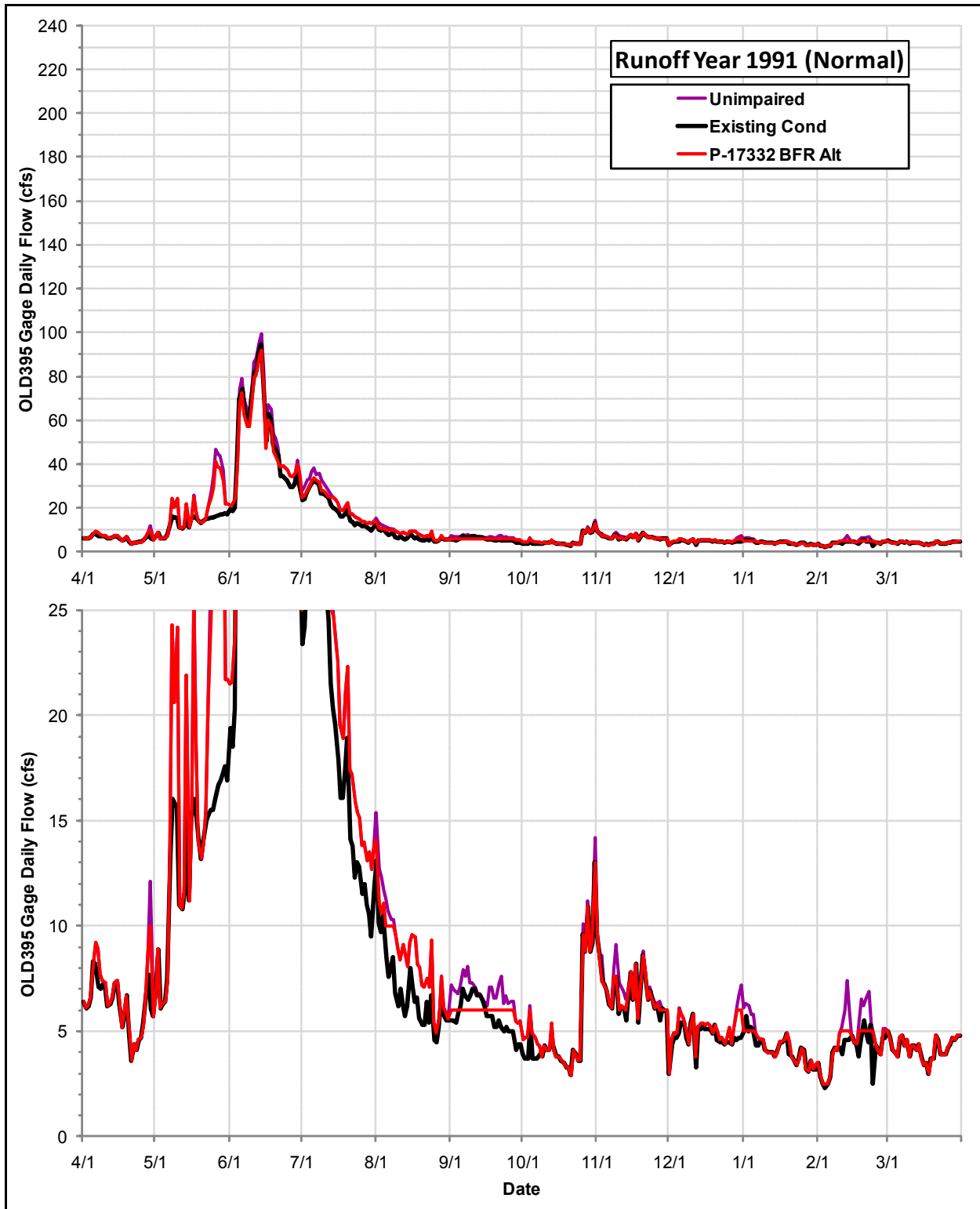
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1988



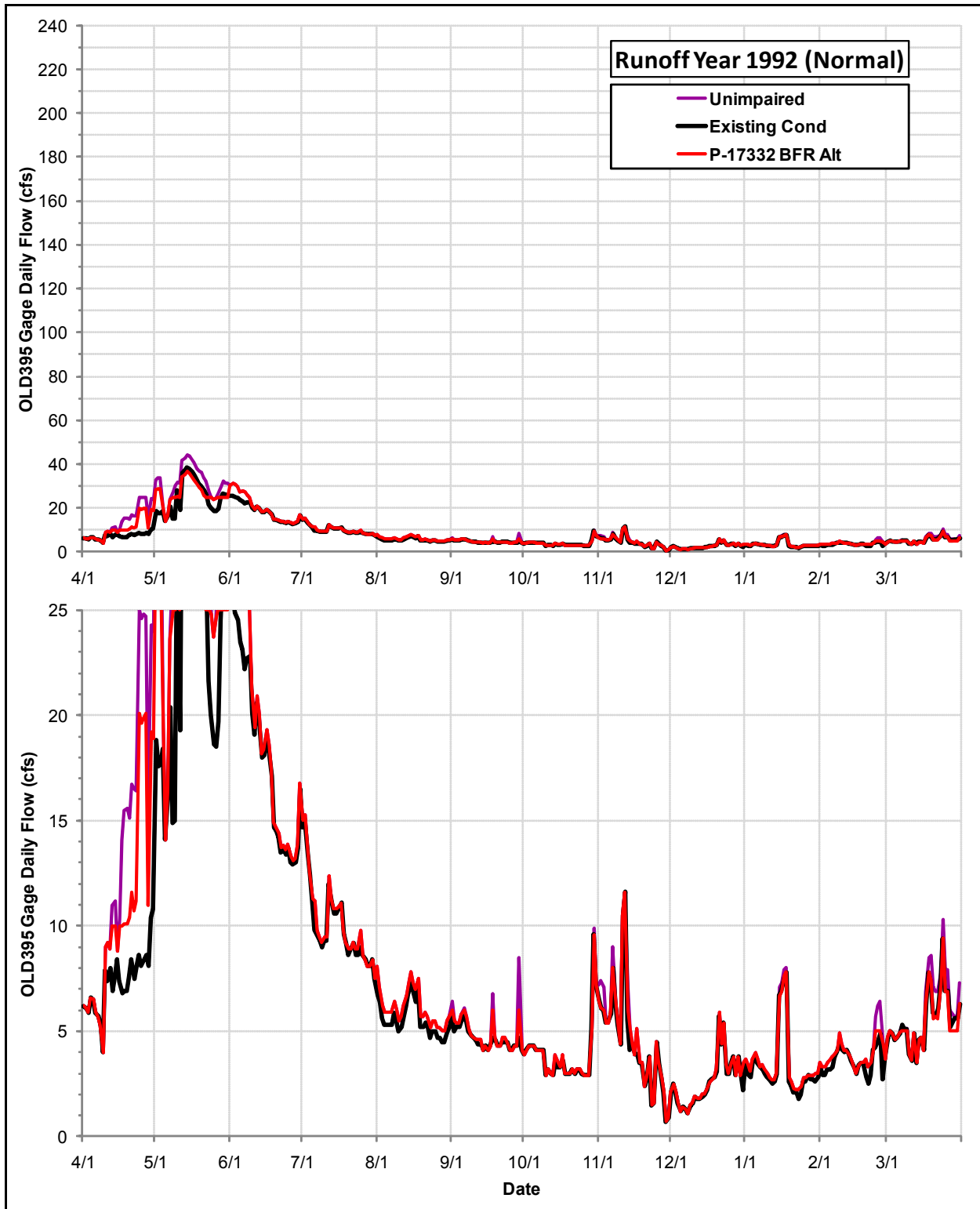
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1989



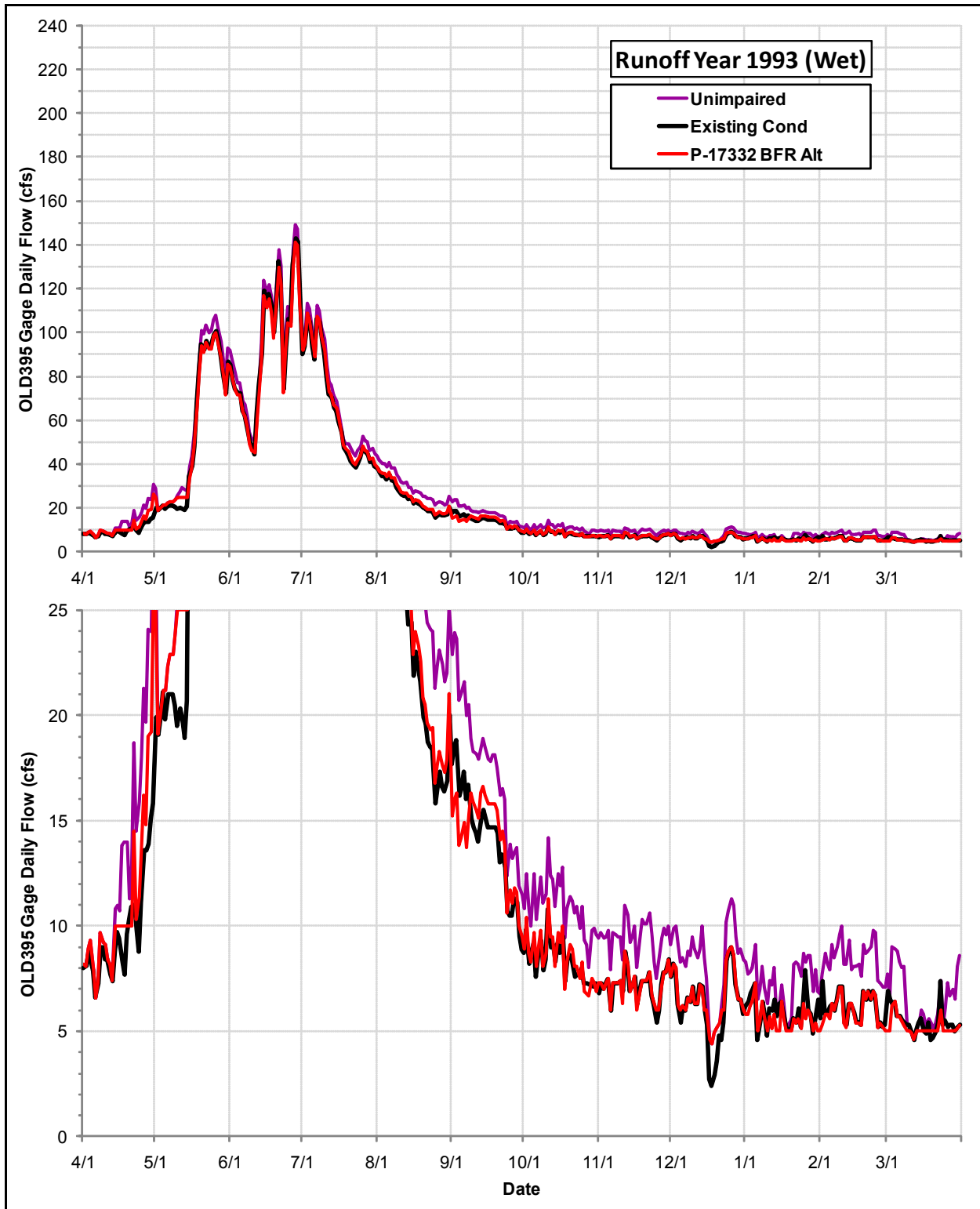
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1990



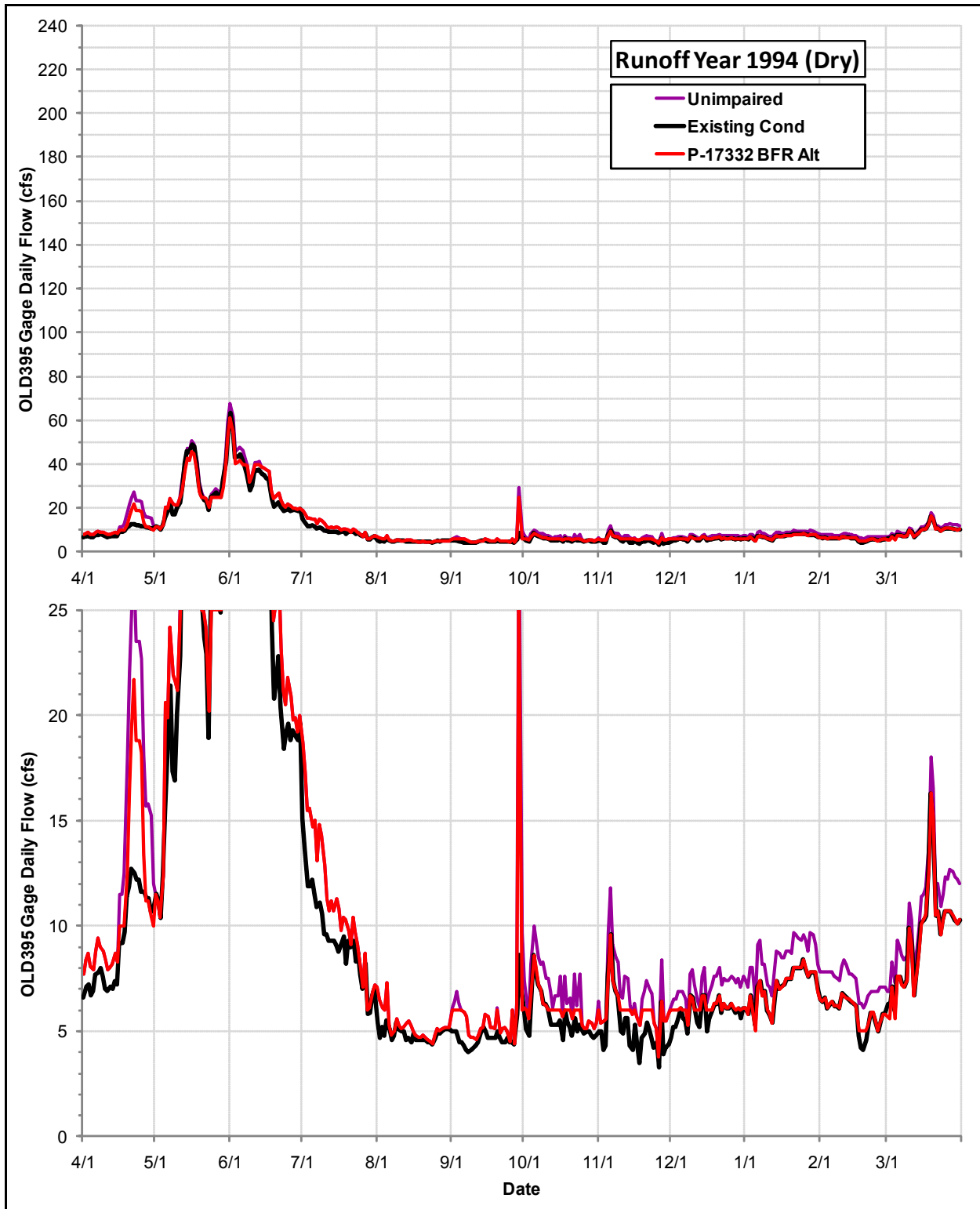
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1991



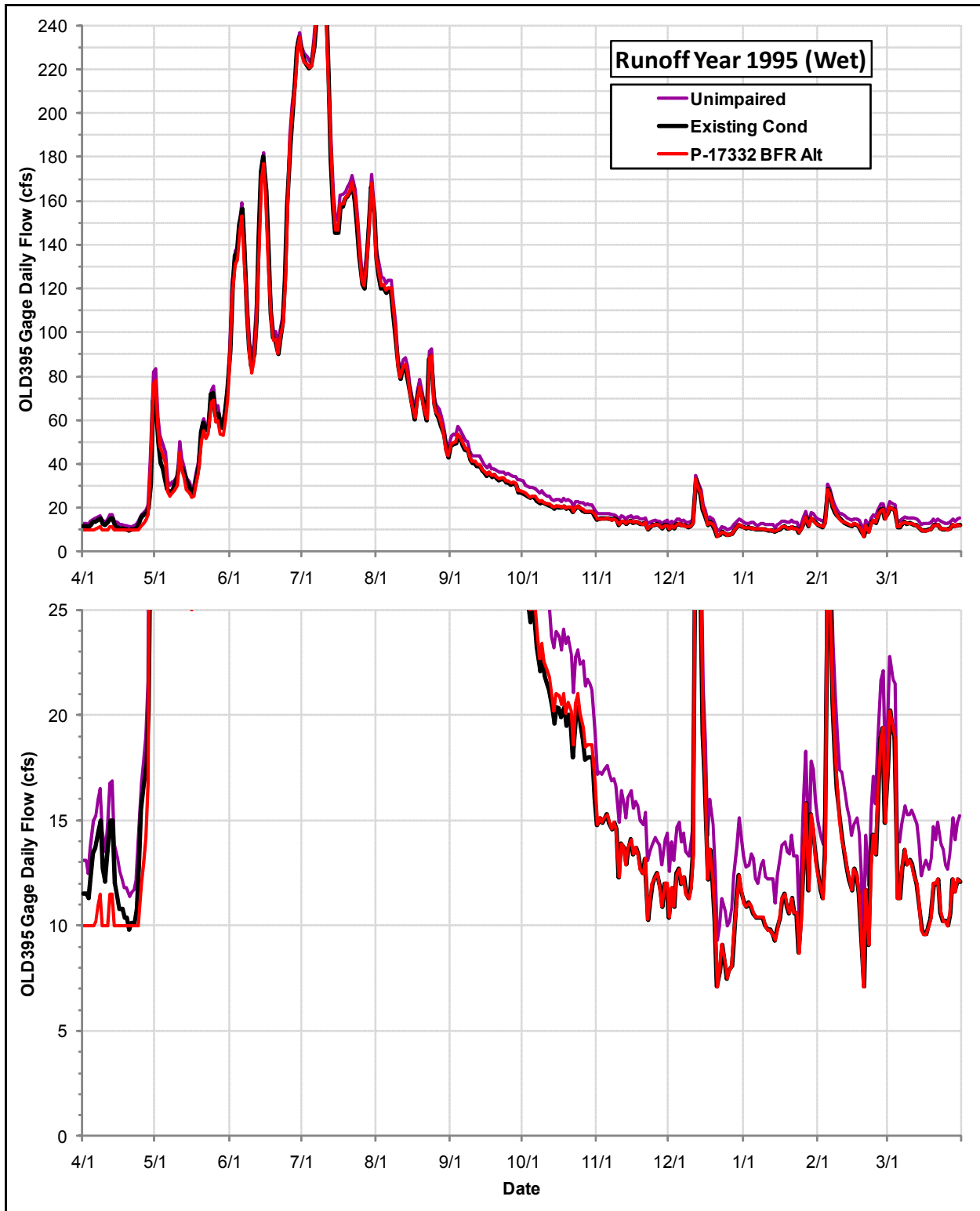
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index Unimpaired Conditions during Runoff Year 1992



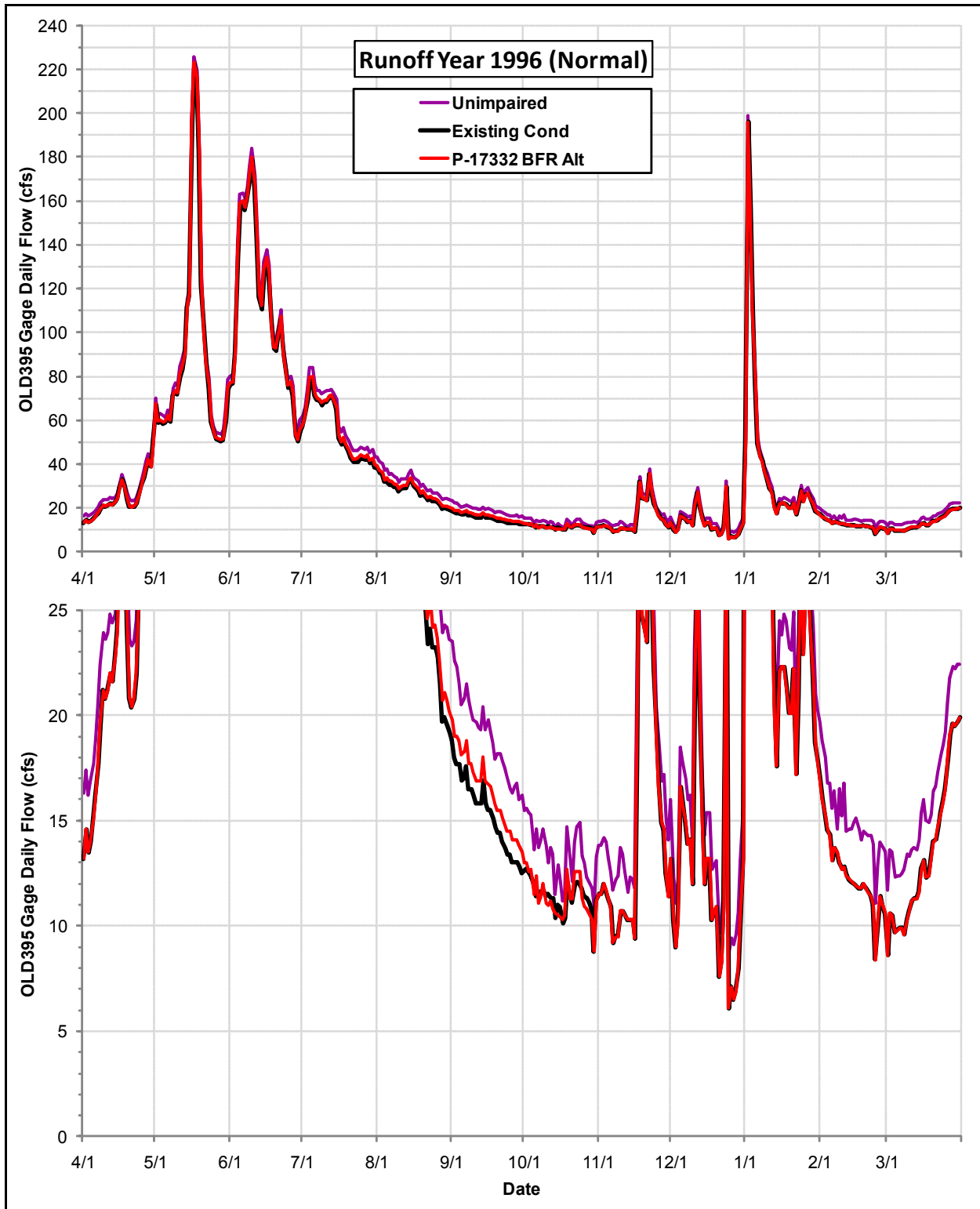
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1993



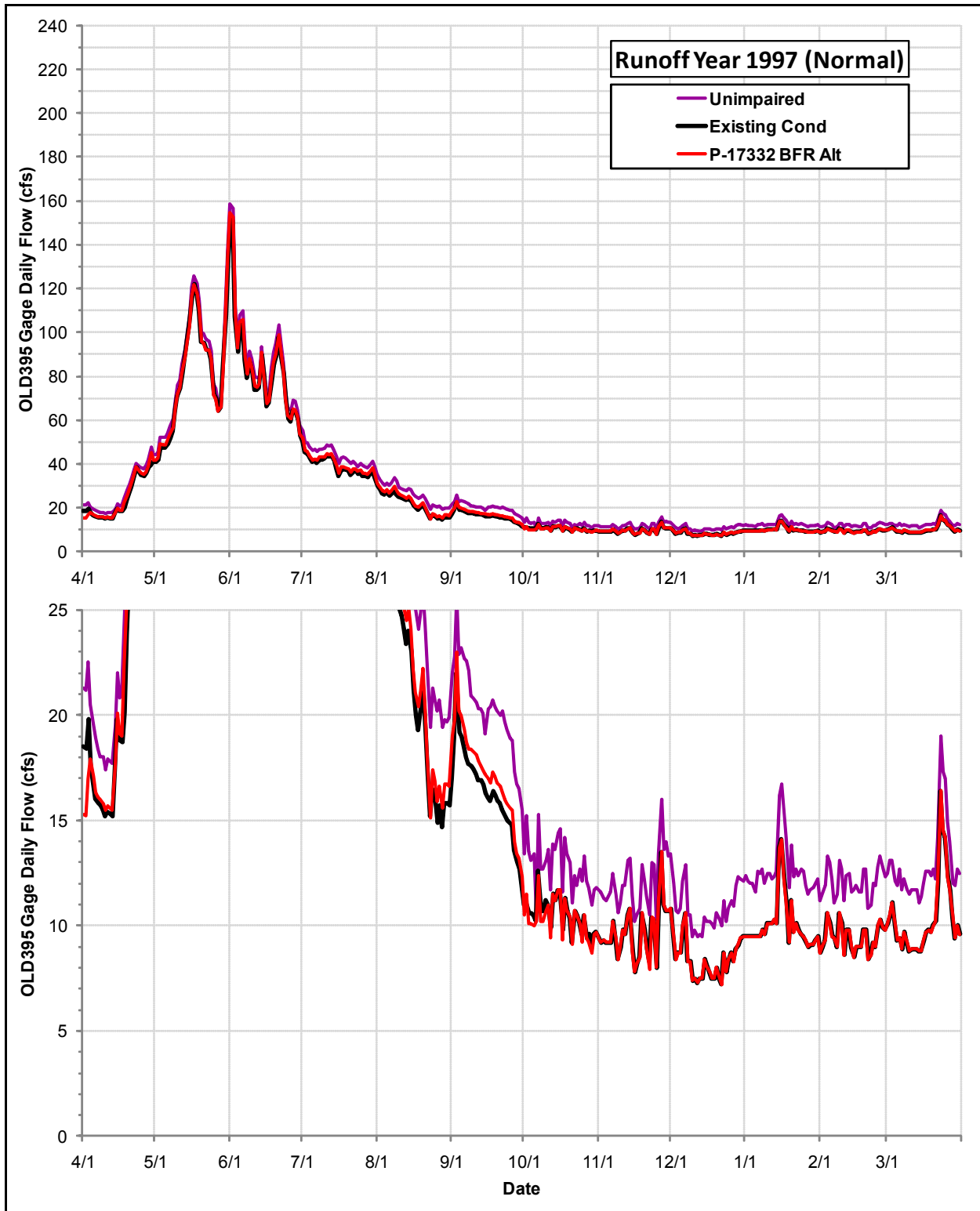
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1994



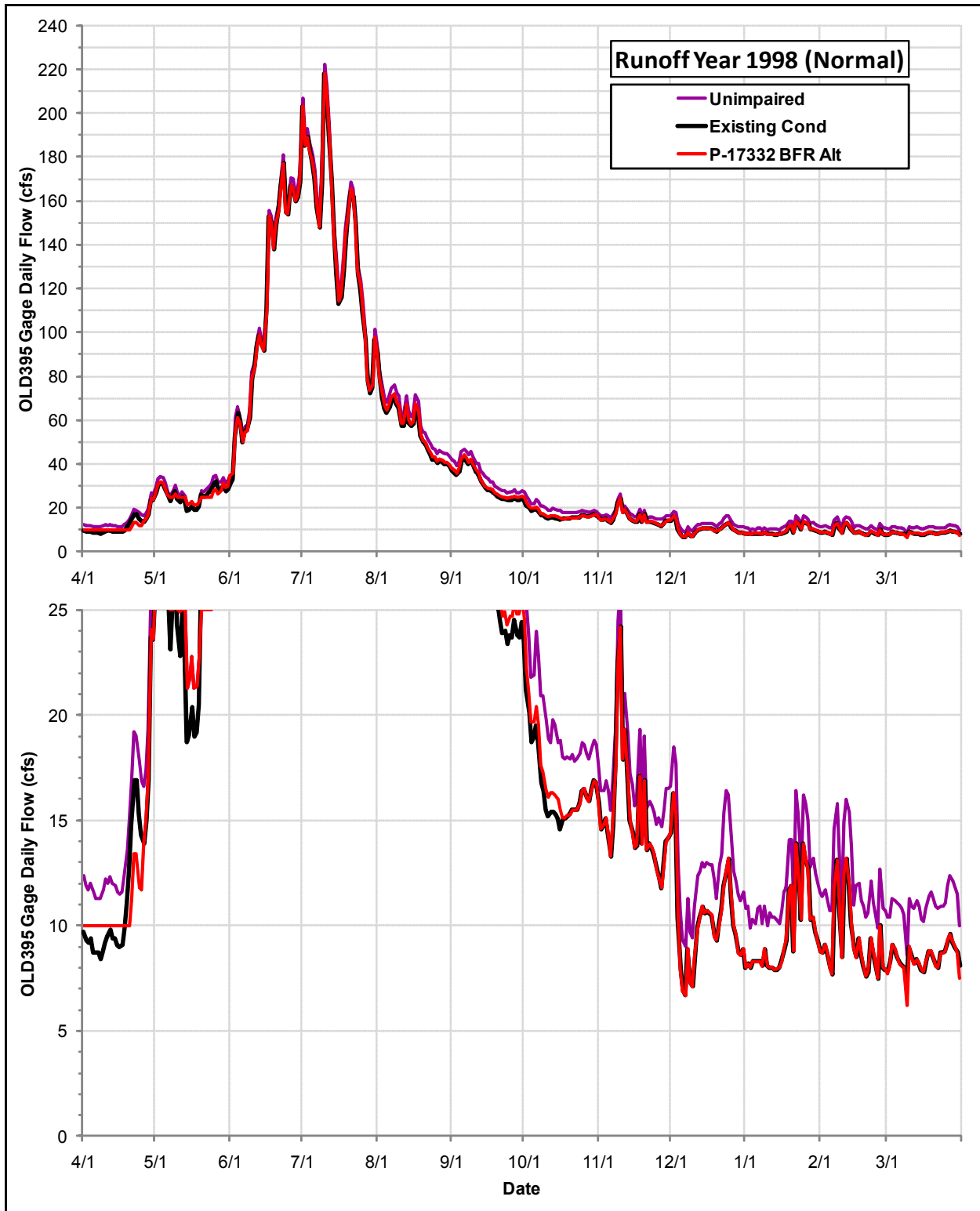
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1995



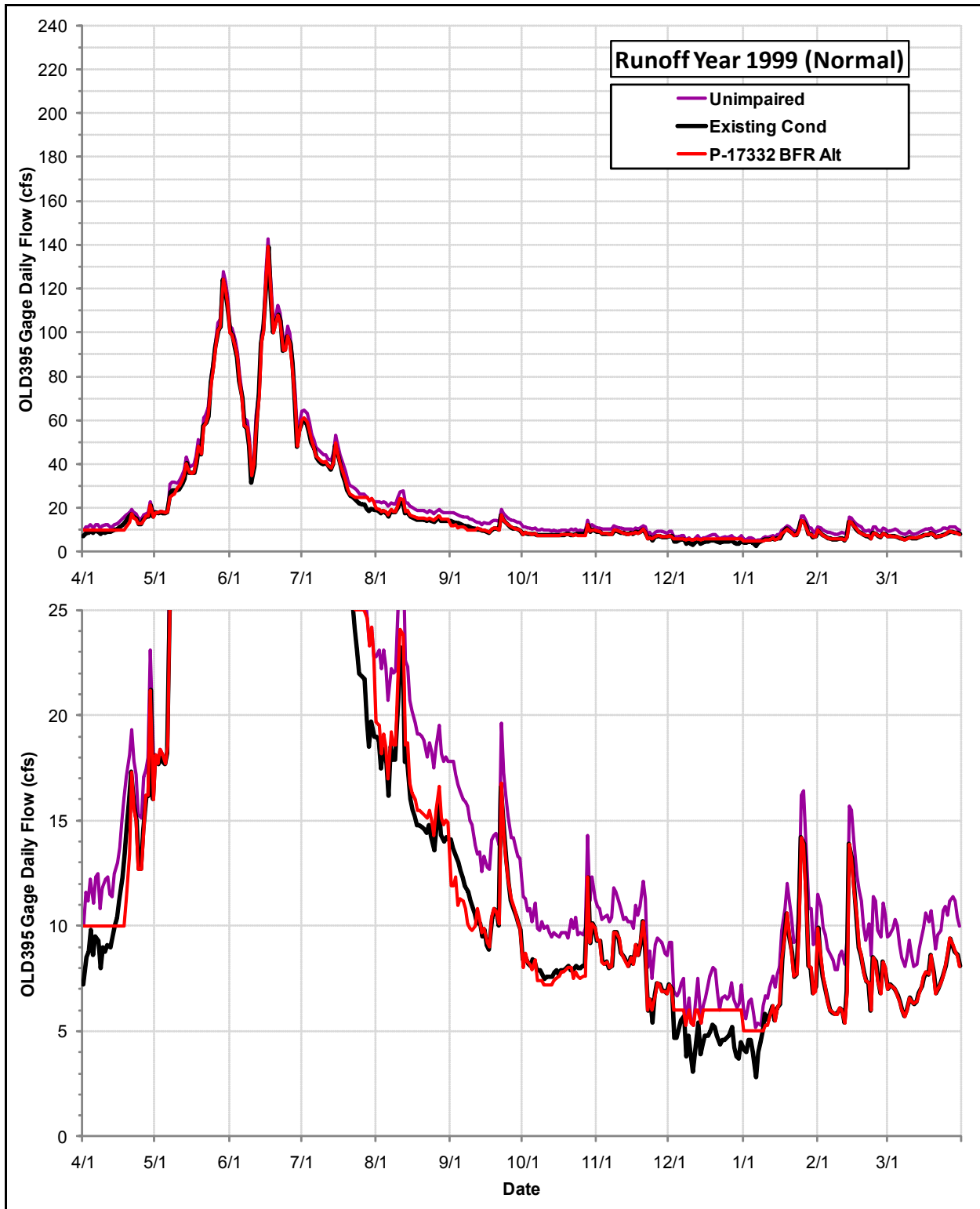
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1996



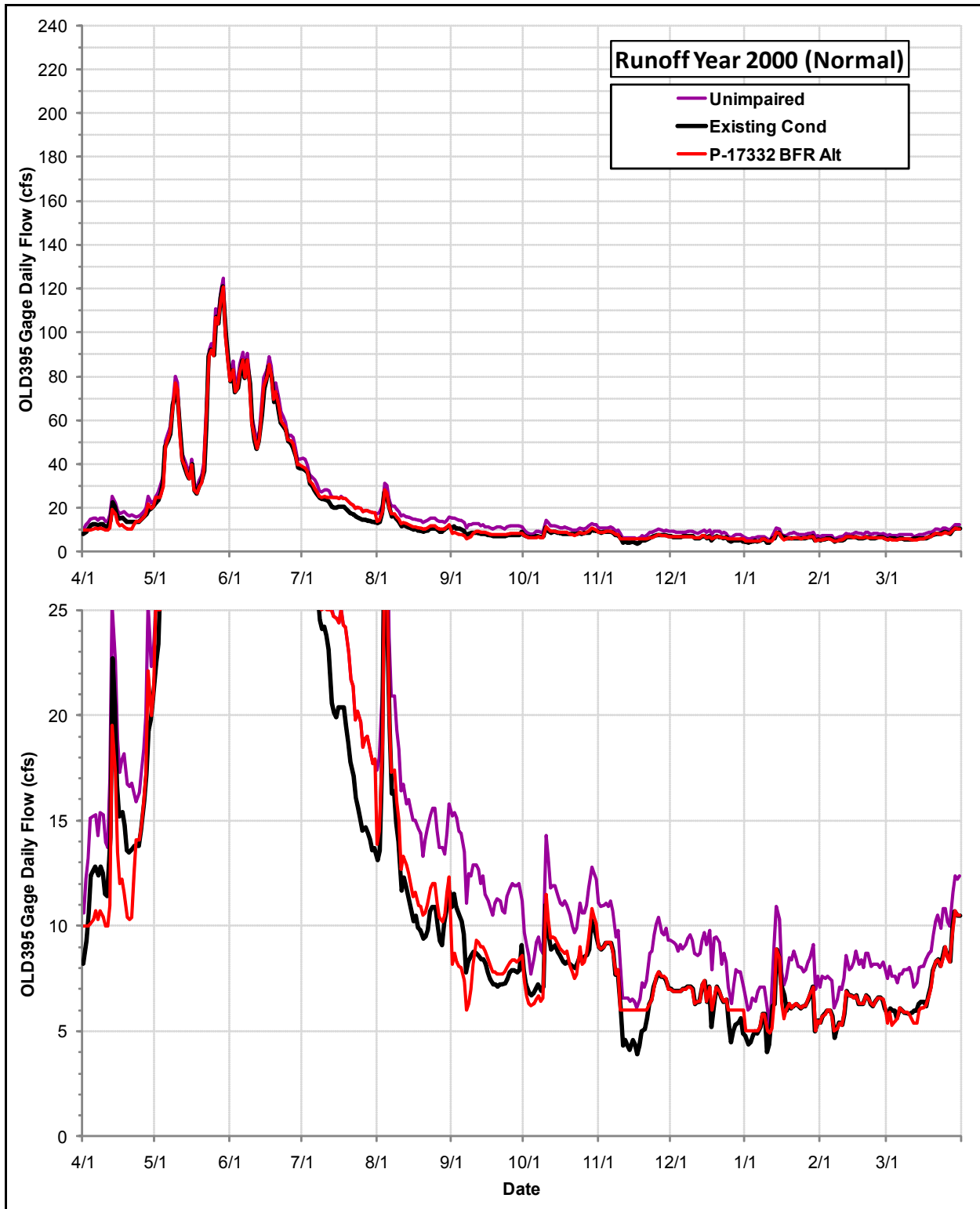
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1997



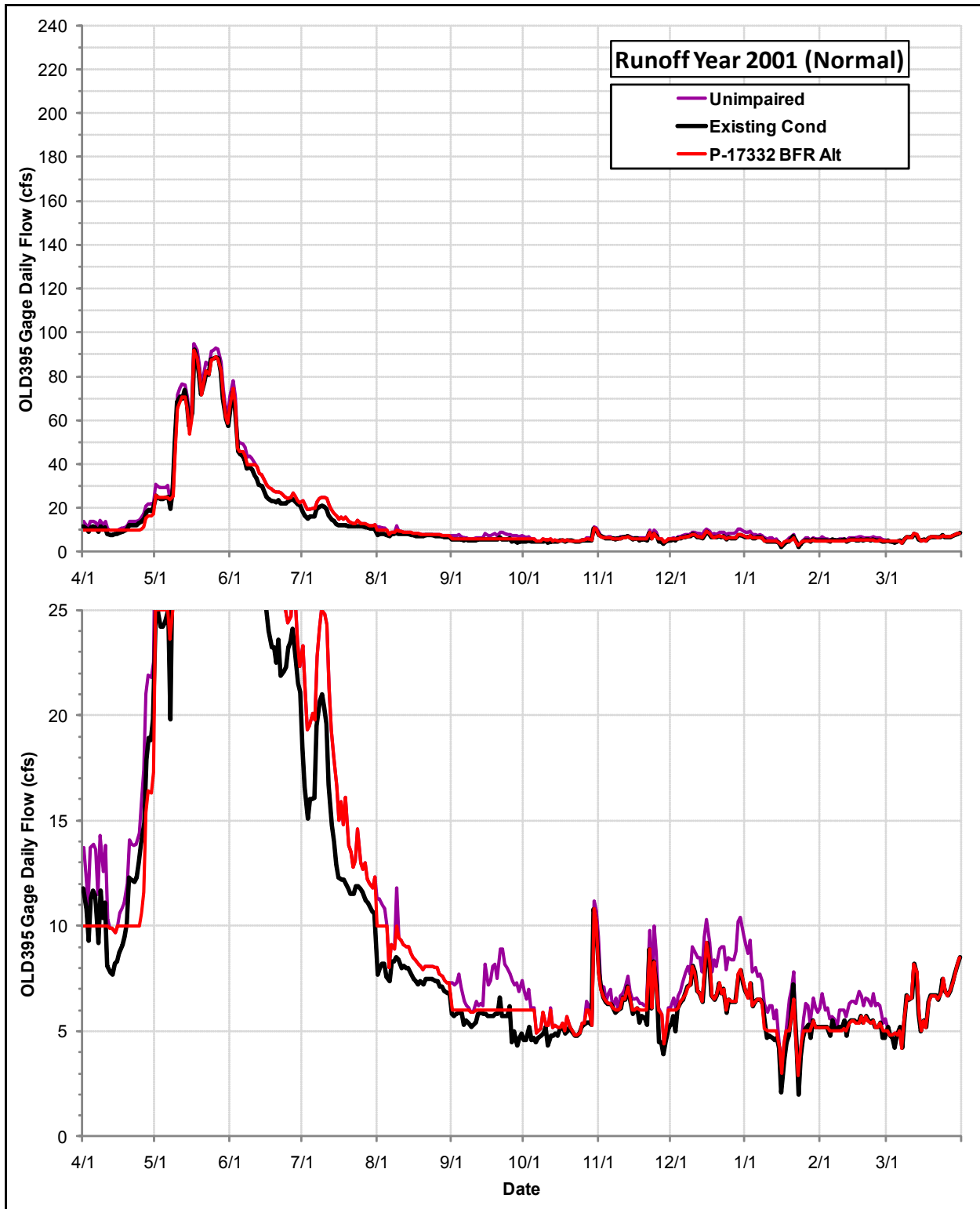
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1998



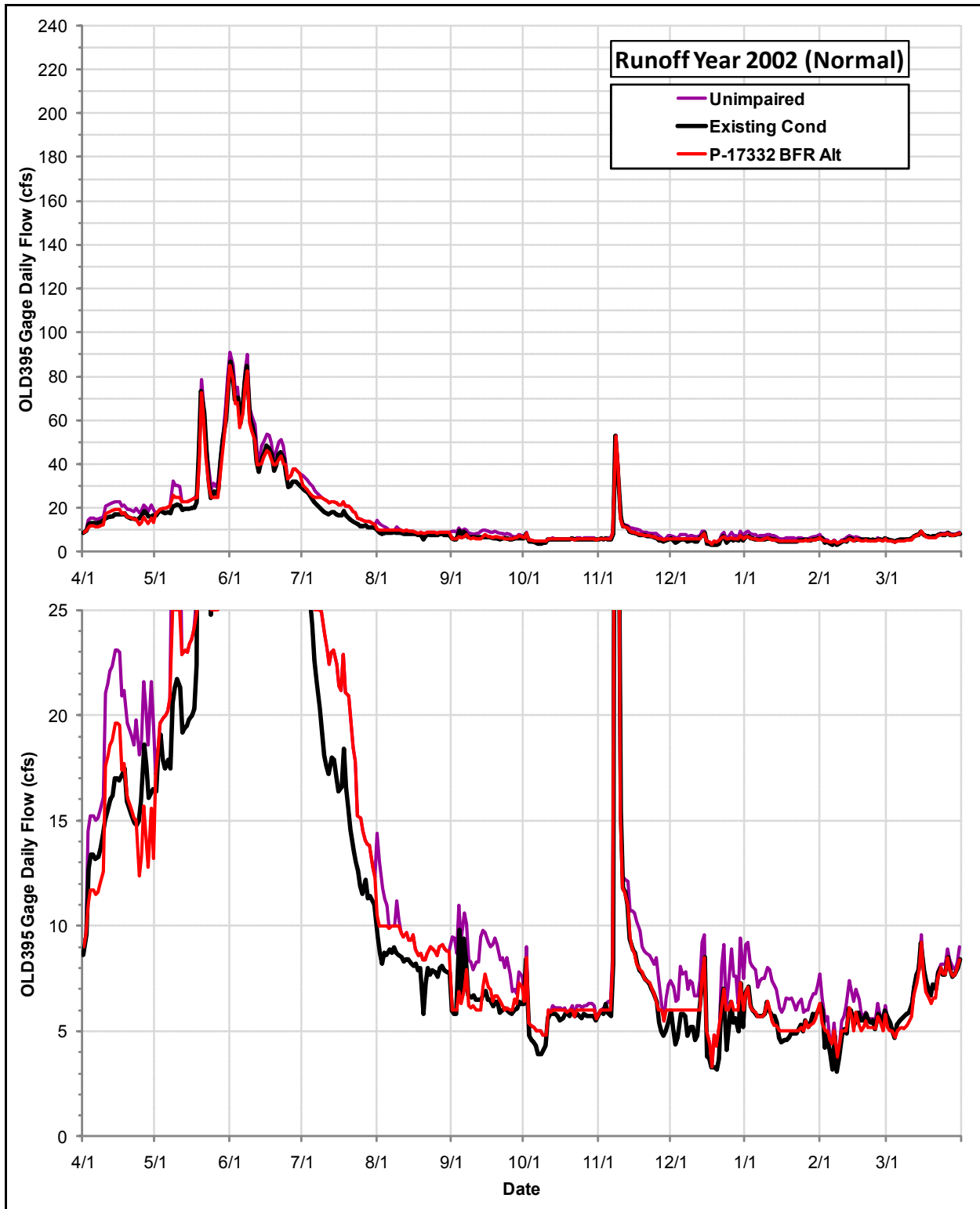
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1999



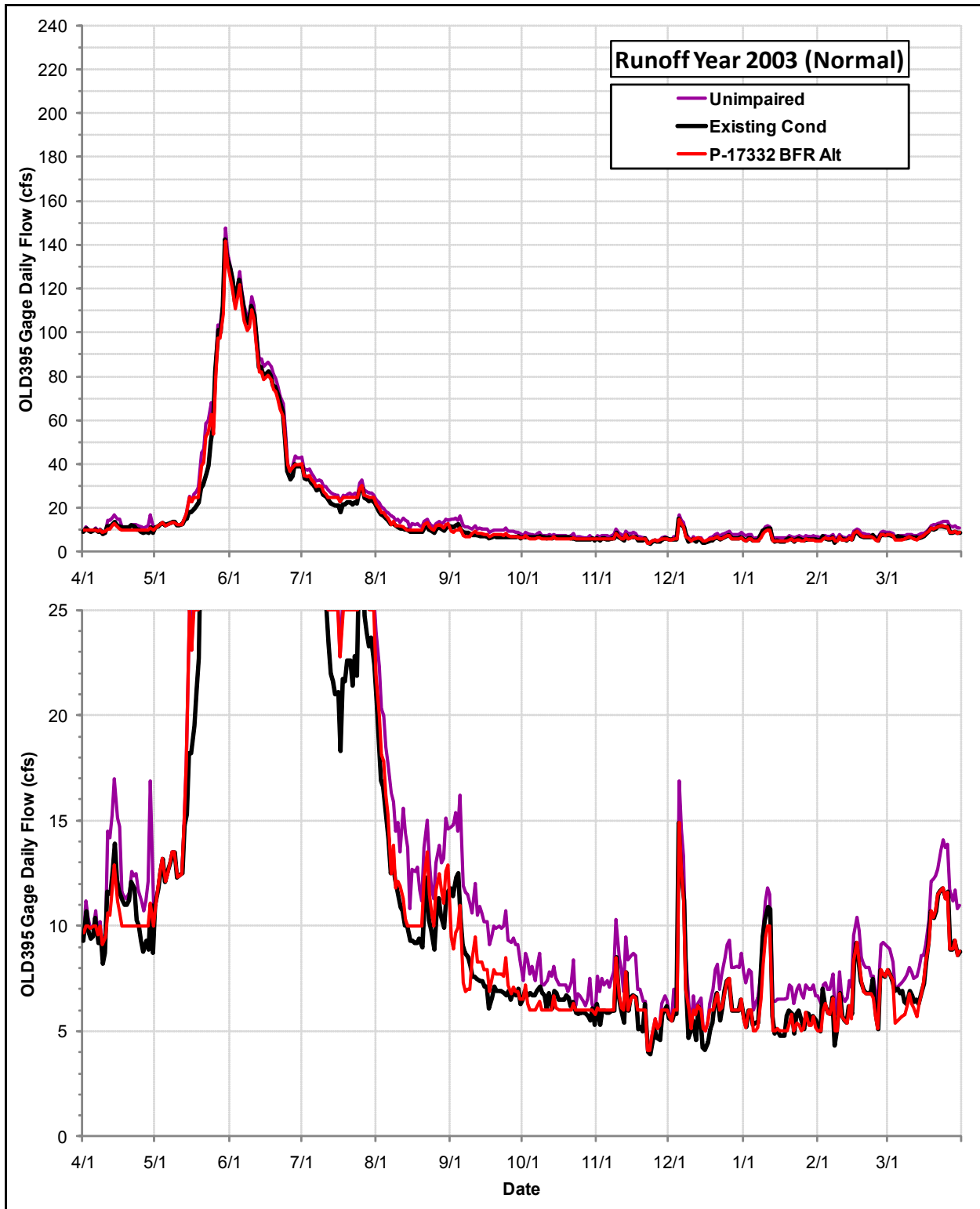
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2000



Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2001



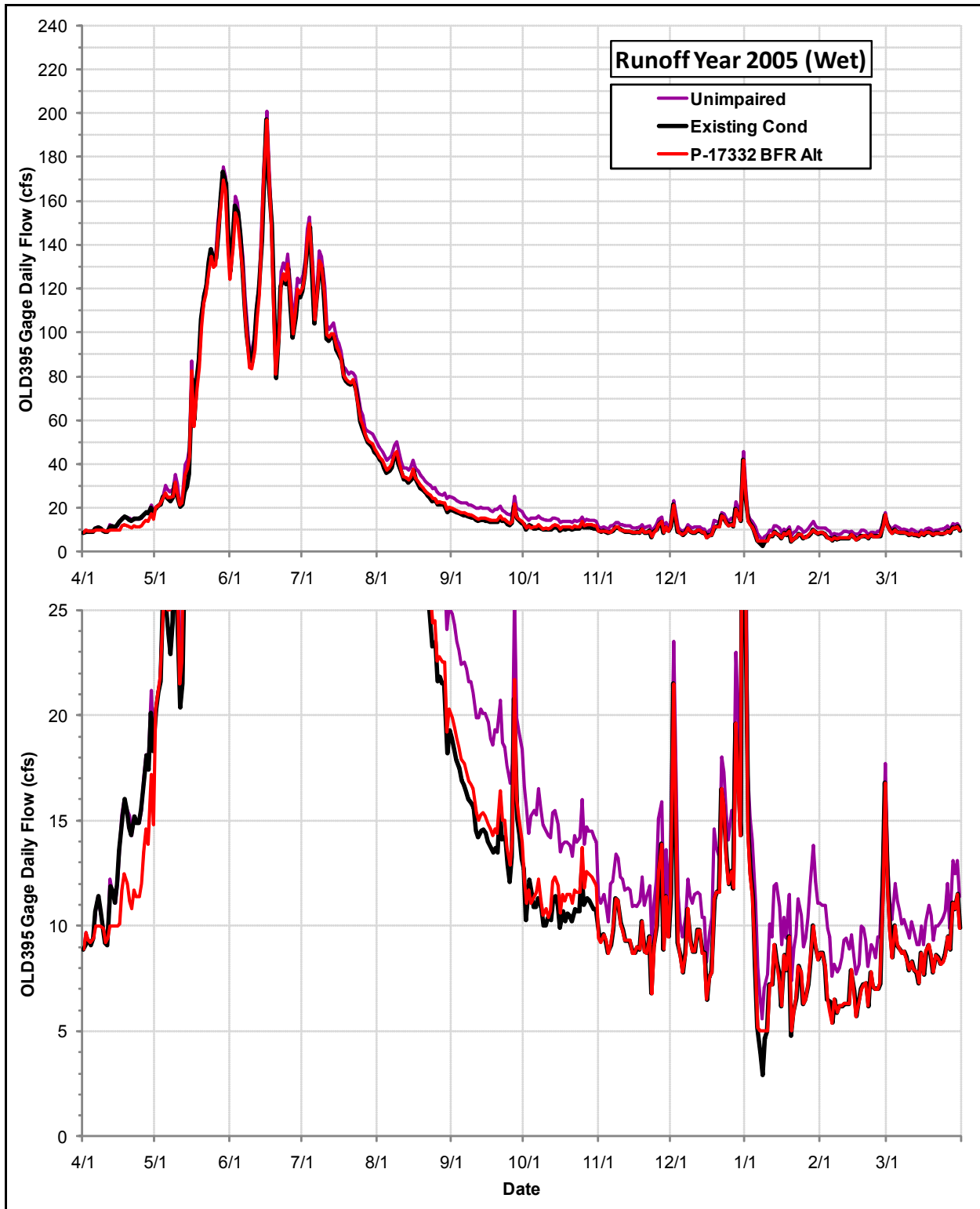
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2002



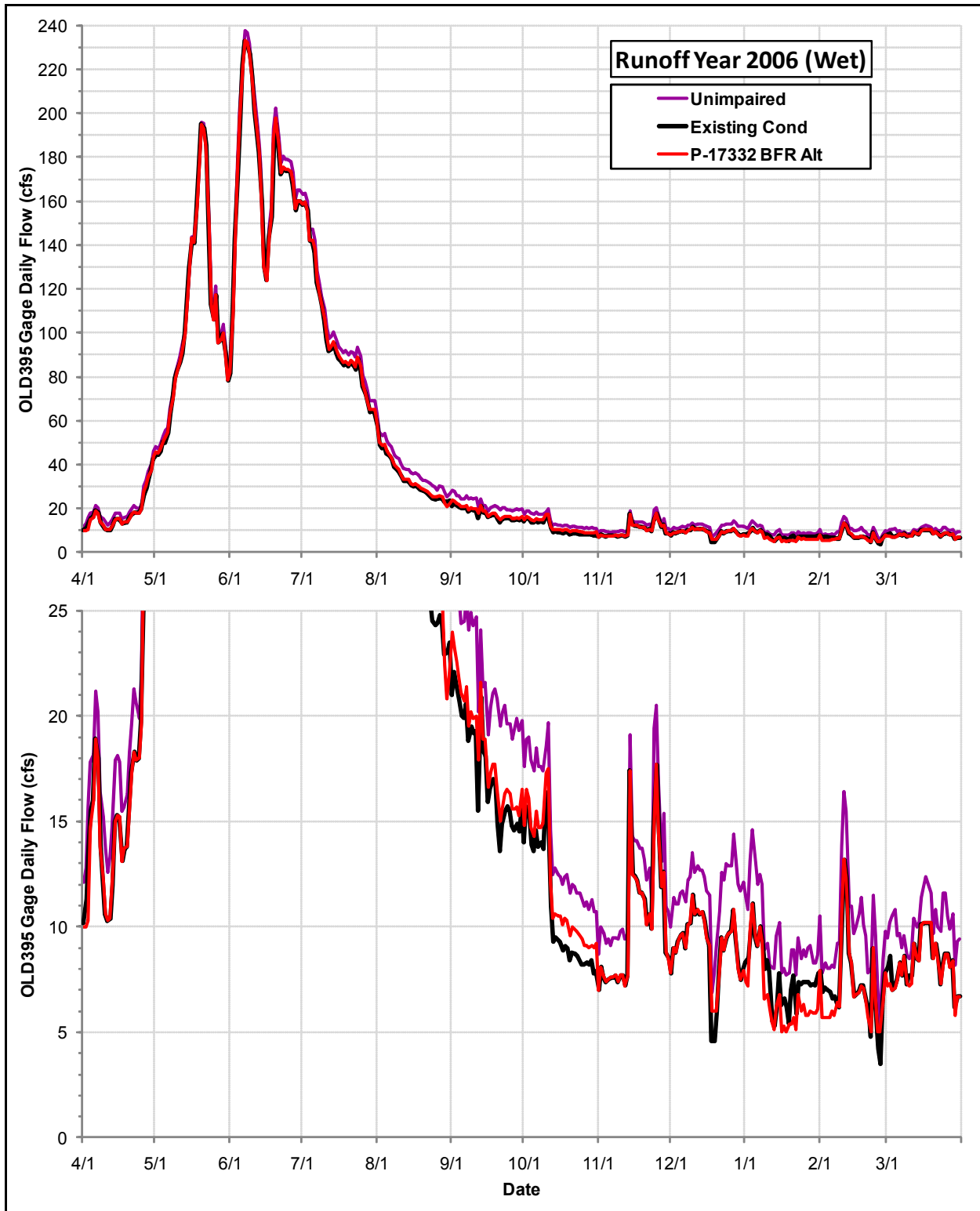
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2003



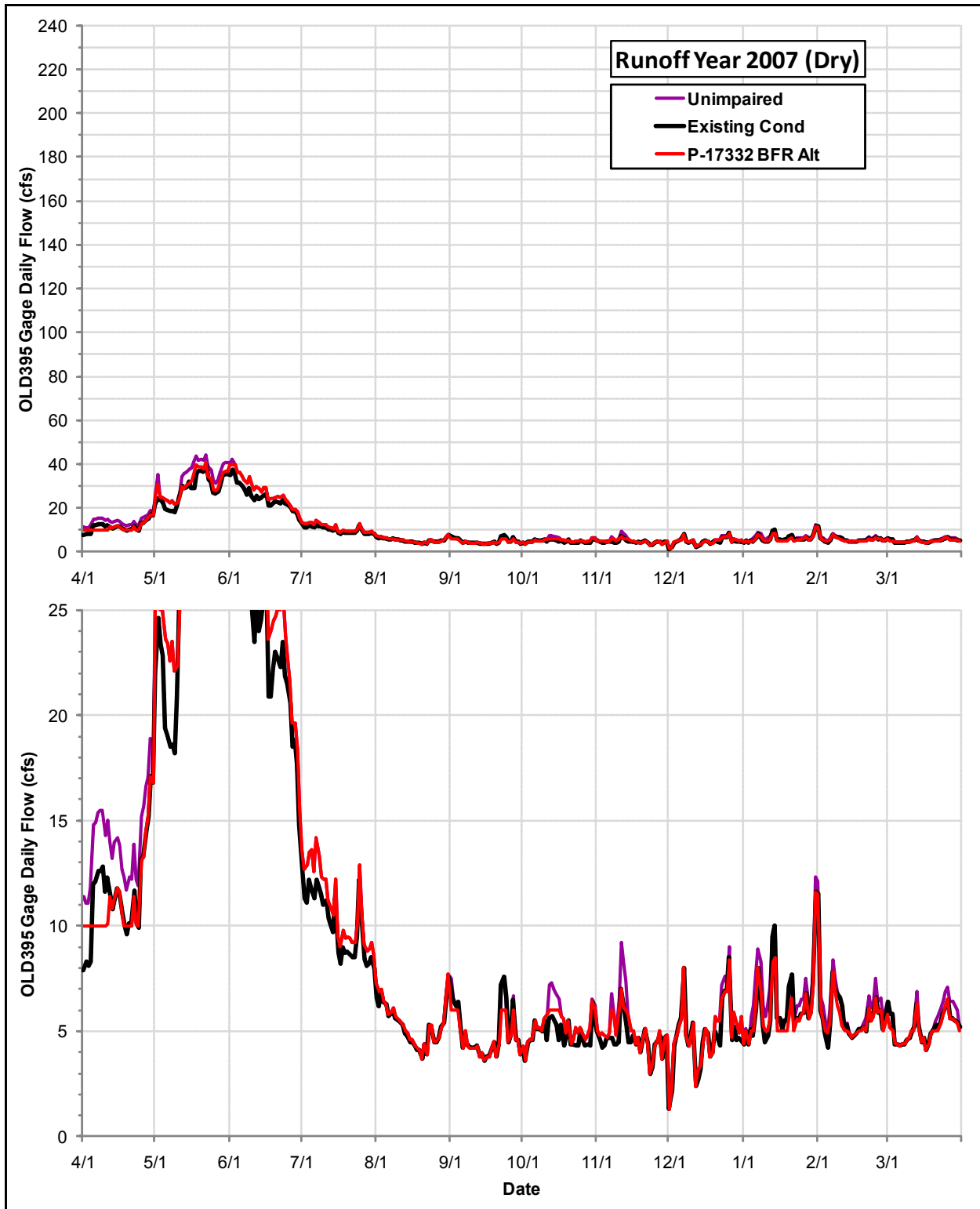
Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2004



Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2005



Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2006



Daily Flows (cfs) at the OLD395 Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2007

Monthly Averages of Daily Flows (cfs) at the USGS Hot Creek Flume Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative

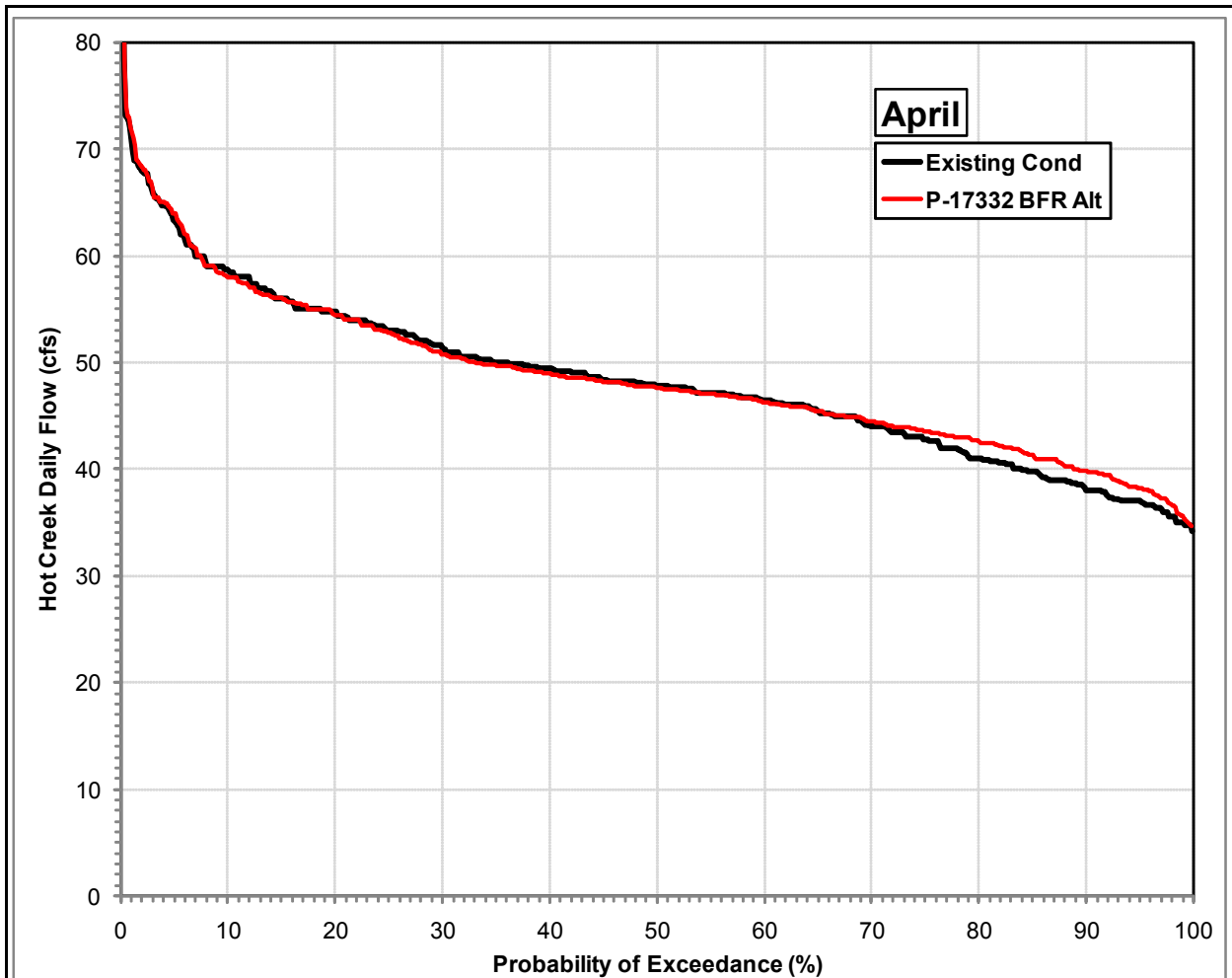
Runoff Year	Runoff Year Type	Average Hot Creek Daily Flow (cfs) under the P-17332 BFR Alt												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	46.5	55.3	62.0	50.4	45.3	43.1	41.8	43.2	40.1	39.4	41.1	41.8	45.8
1989	N	45.6	58.0	60.8	46.7	42.1	42.2	39.3	39.8	38.2	38.0	38.9	39.8	44.1
1990	D	39.7	45.5	49.2	41.6	39.2	37.0	34.4	35.0	32.7	33.2	35.5	37.3	38.4
1991	N	42.2	47.3	69.8	51.5	45.1	42.5	37.8	37.5	34.4	34.3	35.1	36.5	42.8
1992	N	40.4	49.4	46.9	40.3	35.9	34.1	33.5	33.5	29.8	32.1	33.0	39.0	37.3
1993	W	50.6	75.1	115.8	105.2	65.1	54.7	47.5	43.4	40.2	38.4	37.5	37.3	59.3
1994	D	40.9	52.0	56.8	43.3	35.8	33.8	32.1	33.0	33.6	36.0	35.8	44.3	39.8
1995	W	52.6	75.6	157.3	213.4	134.6	94.4	68.0	57.4	57.4	52.0	54.6	52.8	89.4
1996	N	61.2	116.6	143.6	98.1	73.5	61.7	53.1	57.6	53.3	94.7	58.2	55.2	77.4
1997	N	59.9	108.3	120.2	81.4	64.0	59.6	52.5	50.6	49.9	52.6	50.9	55.1	67.2
1998	N	57.1	65.4	137.5	183.1	107.4	85.5	68.6	64.0	55.4	54.1	55.0	51.0	82.2
1999	N	52.1	82.6	116.8	78.0	59.5	51.9	49.0	49.0	45.8	47.0	47.7	45.9	60.4
2000	N	45.8	85.0	100.0	64.8	54.2	48.5	47.0	45.6	44.1	42.8	43.3	47.7	55.8
2001	N	47.5	85.2	72.0	55.5	47.4	44.5	41.2	40.9	40.7	39.1	39.3	40.1	49.5
2002	N	46.6	52.2	72.0	50.4	43.4	39.6	39.5	47.4	41.9	43.1	41.8	42.5	46.7
2003	N	42.5	61.7	99.8	60.7	50.5	42.2	39.4	40.5	41.2	40.3	41.3	45.0	50.4
2004	N	45.6	60.1	70.8	53.0	44.4	40.9	41.2	39.4	37.5	39.6	40.2	42.7	46.3
2005	W	48.5	91.8	139.2	121.6	76.9	61.5	53.6	47.4	50.9	45.9	49.1	49.4	69.8
2006	W	59.6	124.7	191.8	140.8	85.2	66.0	62.4	56.9	52.1	47.2	46.1	49.2	82.0
2007	D	48.3	58.4	59.8	48.6	42.1	41.8	41.0	40.1	38.7	40.6	41.8	45.1	45.5
Average		48.6	72.5	97.1	81.4	59.6	51.3	46.1	45.1	42.9	44.5	43.3	44.9	56.5

Monthly Averages of Daily Flows (cfs) at the USGS Hot Creek Flume Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Existing Condition

Runoff Year	Runoff Year Type	Average Hot Creek Daily Flow (cfs) under the Existing Cond												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	45.6	50.1	57.5	46.7	44.7	42.2	41.5	42.9	39.0	39.1	40.7	41.8	44.3
1989	N	41.8	54.2	55.2	43.2	41.0	40.5	38.8	39.4	37.6	37.8	38.2	39.9	42.3
1990	D	38.0	42.4	45.8	38.8	38.4	35.5	34.1	34.8	32.7	33.2	35.4	37.5	37.2
1991	N	41.9	42.0	69.7	49.2	43.5	42.3	37.5	37.4	34.0	34.3	34.8	36.5	41.9
1992	N	37.1	47.5	45.3	40.1	35.4	33.9	33.5	33.5	29.8	31.9	32.7	39.1	36.7
1993	W	49.3	74.3	117.5	104.0	64.0	54.6	47.3	43.4	39.8	38.7	37.6	37.5	59.1
1994	D	38.8	52.6	55.2	41.6	35.4	32.6	31.7	32.1	33.3	36.0	35.7	44.4	39.1
1995	W	54.1	76.6	159.5	212.6	133.8	93.7	67.4	57.4	57.4	52.0	54.6	52.8	89.5
1996	N	61.2	115.8	142.4	97.0	72.3	60.6	53.1	57.6	53.3	94.7	58.2	55.2	76.9
1997	N	59.4	107.9	118.8	80.3	62.9	58.8	52.7	50.6	49.9	52.6	50.9	55.1	66.7
1998	N	57.2	65.2	137.3	182.3	106.4	84.6	68.1	64.0	55.4	54.1	55.0	51.0	81.9
1999	N	52.0	82.6	116.8	76.5	58.8	52.4	49.2	49.0	44.6	46.8	47.7	45.9	60.2
2000	N	47.3	84.7	99.2	61.7	53.2	48.9	47.0	45.0	43.9	42.8	43.3	47.8	55.5
2001	N	48.3	85.6	68.9	52.5	46.4	44.0	40.7	40.7	40.6	38.9	39.4	40.1	48.9
2002	N	47.0	51.6	71.8	46.9	42.2	39.7	39.1	47.3	41.2	43.0	41.7	42.8	46.2
2003	N	42.7	59.4	101.2	58.6	49.7	42.2	39.7	40.3	40.9	40.6	41.4	45.3	50.2
2004	N	47.5	59.7	68.5	49.4	43.6	40.4	41.1	39.2	37.2	39.6	40.2	42.7	45.8
2005	W	50.5	92.2	140.0	120.2	75.9	60.6	52.9	47.4	50.9	45.8	49.1	49.4	69.7
2006	W	59.6	124.6	191.4	139.9	84.5	65.1	61.4	56.9	52.1	48.1	46.3	49.3	81.8
2007	D	48.6	56.2	56.6	47.7	42.1	42.0	40.7	39.7	38.5	40.8	41.9	45.2	45.0
Average		48.4	71.3	95.9	79.5	58.7	50.7	45.9	44.9	42.6	44.5	43.2	45.0	55.9

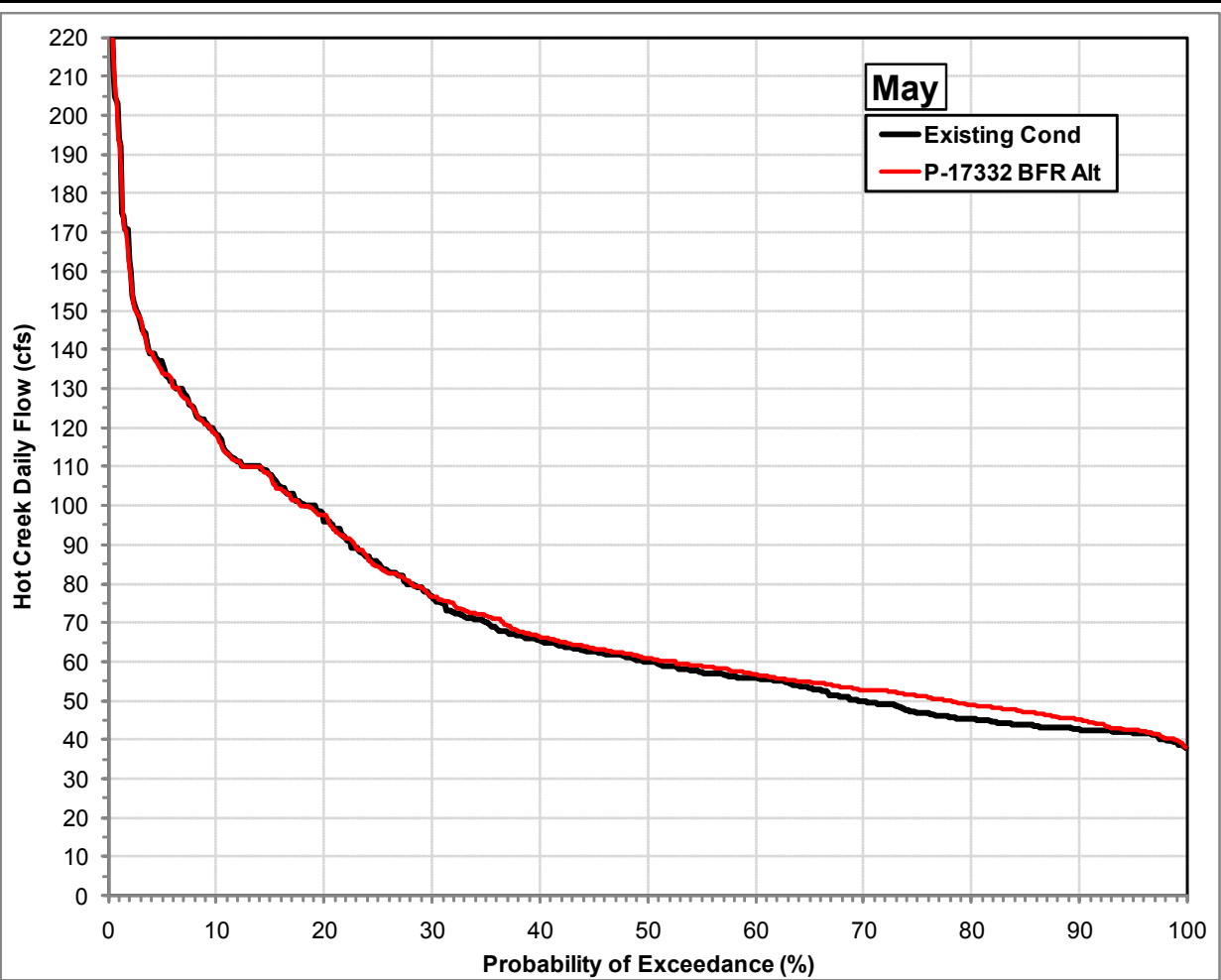
Differences in Monthly Averages of Daily Flows (cfs) at the USGS Hot Creek Flume Gage by Runoff Year and Runoff Year Type for the 20-Year Evaluation Period under the Permit 17332 Bypass Flow Requirements Alternative Relative to the Existing Condition. Positive Values Indicate that the Permit 17332 Bypass Flow Requirements Alternative Flow Values are Higher than the Existing Condition Values

Runoff Year	Runoff Year Type	Average Hot Creek Daily Flow (cfs) Differences (P-17332 BFR Alt - Existing Cond)												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1988	D	0.9	5.2	4.5	3.7	0.7	0.9	0.3	0.3	1.1	0.3	0.4	0.0	1.5
1989	N	3.8	3.8	5.6	3.5	1.1	1.7	0.5	0.4	0.6	0.2	0.6	-0.1	1.8
1990	D	1.8	3.1	3.5	2.8	0.9	1.5	0.3	0.2	0.0	0.0	0.1	-0.2	1.2
1991	N	0.3	5.2	0.1	2.3	1.6	0.2	0.2	0.0	0.3	0.0	0.3	0.0	0.9
1992	N	3.3	1.9	1.5	0.2	0.6	0.2	0.0	0.1	0.1	0.2	0.3	-0.1	0.7
1993	W	1.4	0.8	-1.7	1.3	1.0	0.1	0.2	0.0	0.4	-0.3	-0.1	-0.3	0.2
1994	D	2.1	-0.6	1.6	1.7	0.4	1.2	0.4	0.9	0.3	0.0	0.1	-0.1	0.7
1995	W	-1.5	-1.0	-2.1	0.8	0.8	0.8	0.6	0.0	0.0	0.0	0.0	0.0	-0.1
1996	N	0.0	0.8	1.2	1.1	1.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5
1997	N	0.4	0.5	1.4	1.1	1.0	0.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.4
1998	N	-0.2	0.2	0.2	0.8	1.0	0.9	0.5	0.0	0.0	0.0	0.0	-0.1	0.3
1999	N	0.1	0.0	0.0	1.5	0.7	-0.4	-0.2	0.0	1.2	0.2	0.0	0.0	0.3
2000	N	-1.4	0.3	0.8	3.0	1.0	-0.4	0.0	0.5	0.2	0.0	0.0	-0.1	0.3
2001	N	-0.8	-0.4	3.2	3.0	1.0	0.4	0.5	0.2	0.1	0.2	0.0	0.0	0.6
2002	N	-0.4	0.6	0.1	3.6	1.2	-0.1	0.4	0.1	0.7	0.0	0.0	-0.2	0.5
2003	N	-0.2	2.2	-1.4	2.1	0.9	0.0	-0.3	0.2	0.3	-0.3	-0.1	-0.3	0.3
2004	N	-1.9	0.4	2.3	3.6	0.8	0.5	0.1	0.2	0.3	0.0	0.0	0.0	0.5
2005	W	-2.0	-0.4	-0.7	1.4	1.0	0.9	0.7	0.0	0.0	0.1	0.0	0.0	0.1
2006	W	0.0	0.2	0.4	0.9	0.6	1.0	1.0	0.0	0.1	-0.9	-0.2	-0.1	0.2
2007	D	-0.3	2.2	3.1	1.0	0.1	-0.2	0.3	0.3	0.2	-0.2	-0.1	-0.1	0.5
Average		0.3	1.2	1.2	2.0	0.9	0.6	0.3	0.2	0.3	0.0	0.1	-0.1	0.6



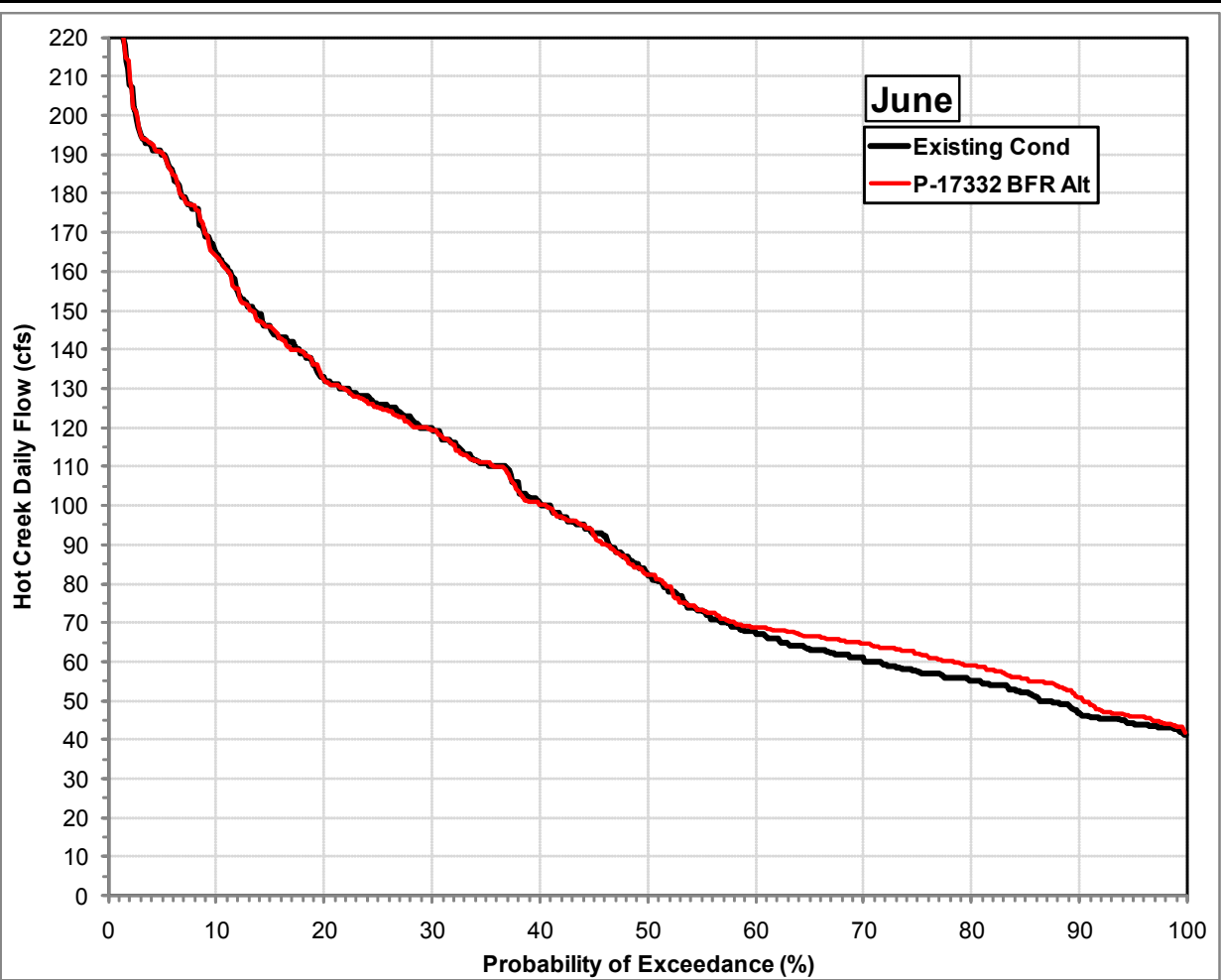
Probability of Exceedance (%)	April Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	63.9	63.0
10	58.0	58.4
20	54.4	54.7
25	52.8	53.0
50	47.6	47.8
75	43.5	42.8
80	42.6	41.0
90	39.8	38.0
95	38.2	37.0

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during April for the 20-Year Evaluation Period



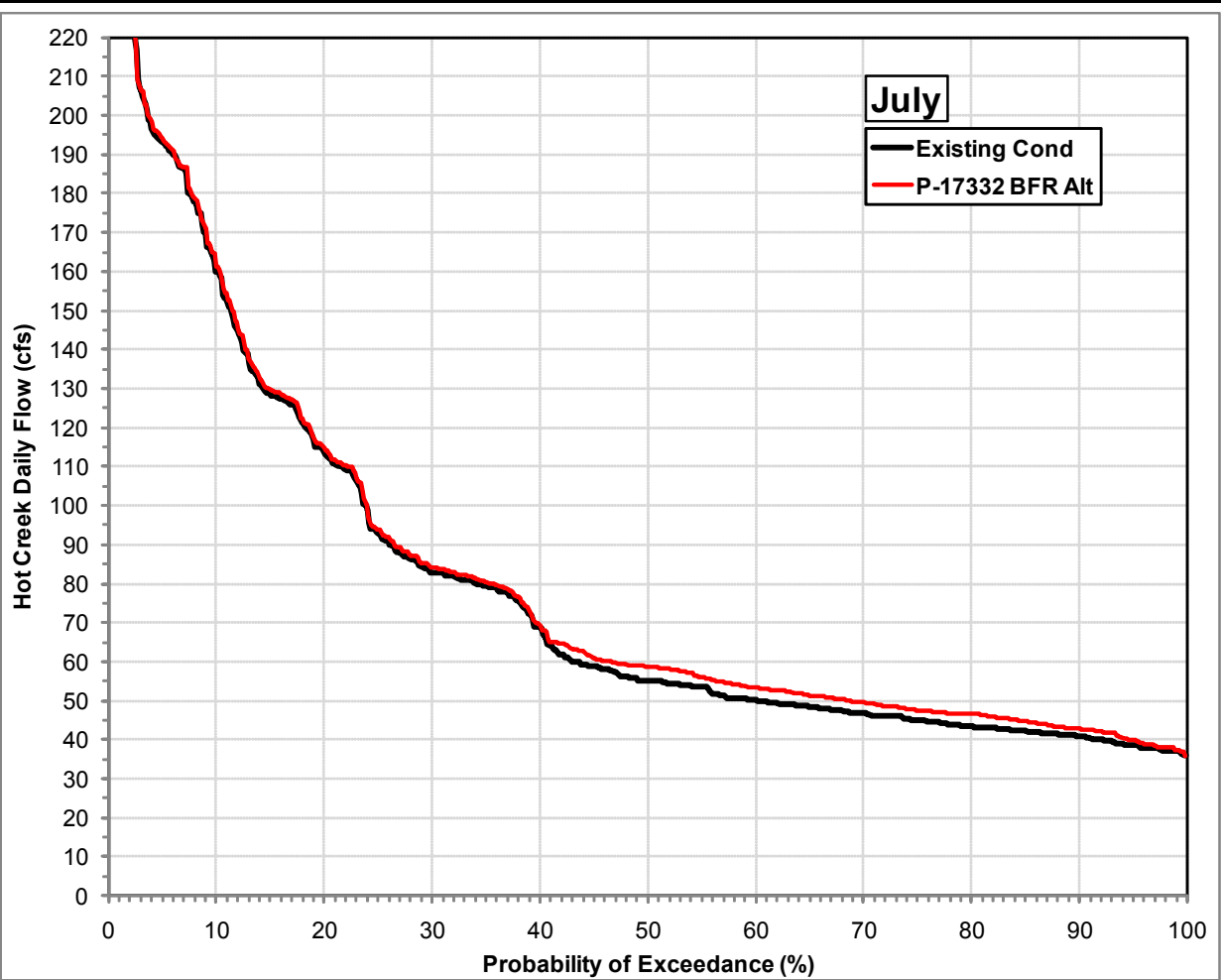
Probability of Exceedance (%)	May Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	134.0	135.0
10	118.1	118.2
20	97.5	96.0
25	84.5	85.0
50	61.0	60.0
75	51.3	47.0
80	48.8	45.2
90	45.2	42.7
95	42.5	41.8

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during May for the 20-Year Evaluation Period



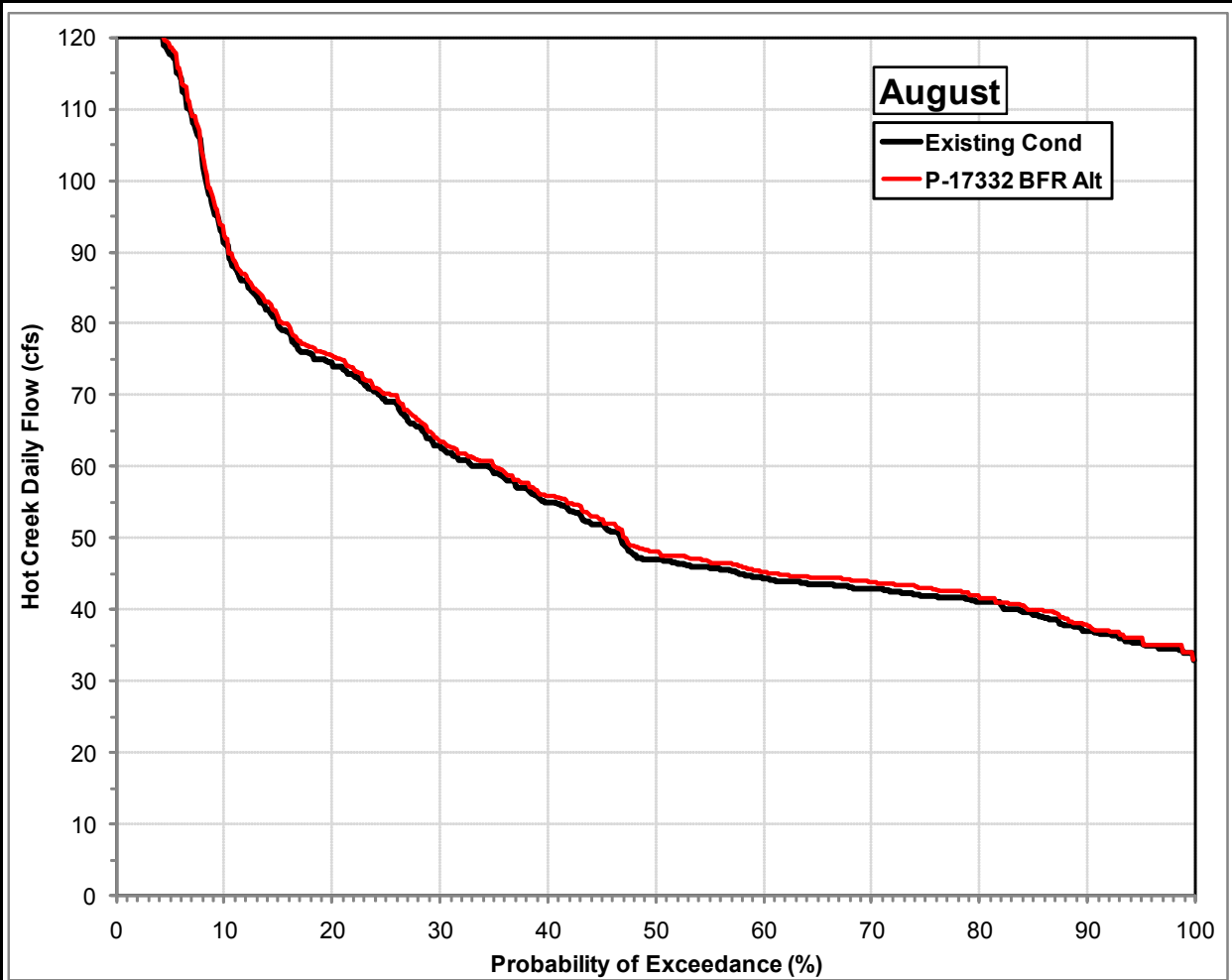
Probability of Exceedance (%)	June Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	190.4	190.0
10	163.8	164.0
20	132.0	132.0
25	125.2	126.0
50	82.3	82.0
75	61.9	57.4
80	59.0	55.2
90	50.8	47.0
95	46.0	44.1

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during June for the 20-Year Evaluation Period



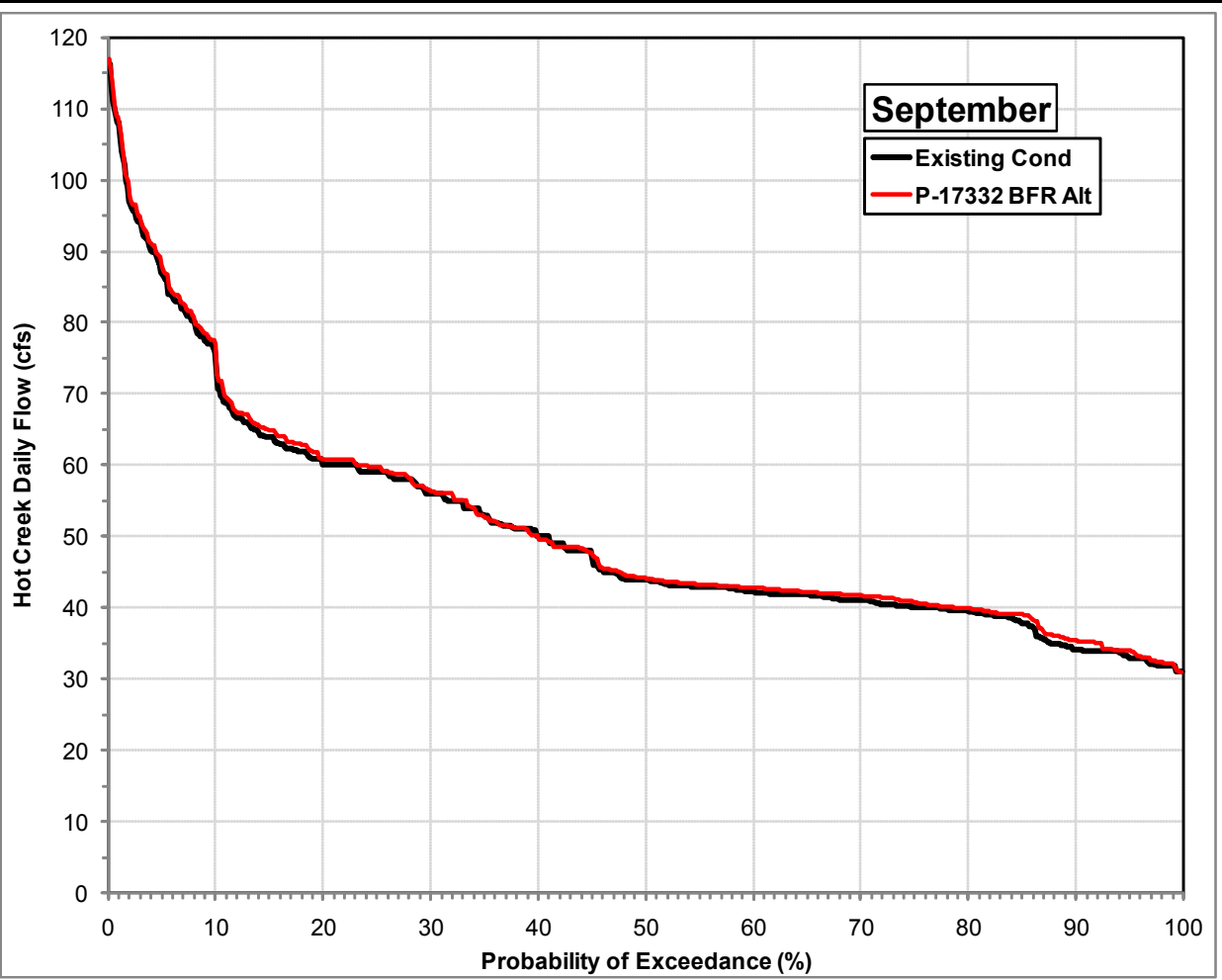
Probability of Exceedance (%)	July Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	194.1	193.0
10	161.3	159.9
20	114.6	113.0
25	94.0	93.0
50	58.8	55.0
75	47.6	45.0
80	46.7	43.4
90	42.8	41.0
95	40.0	38.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during July for the 20-Year Evaluation Period



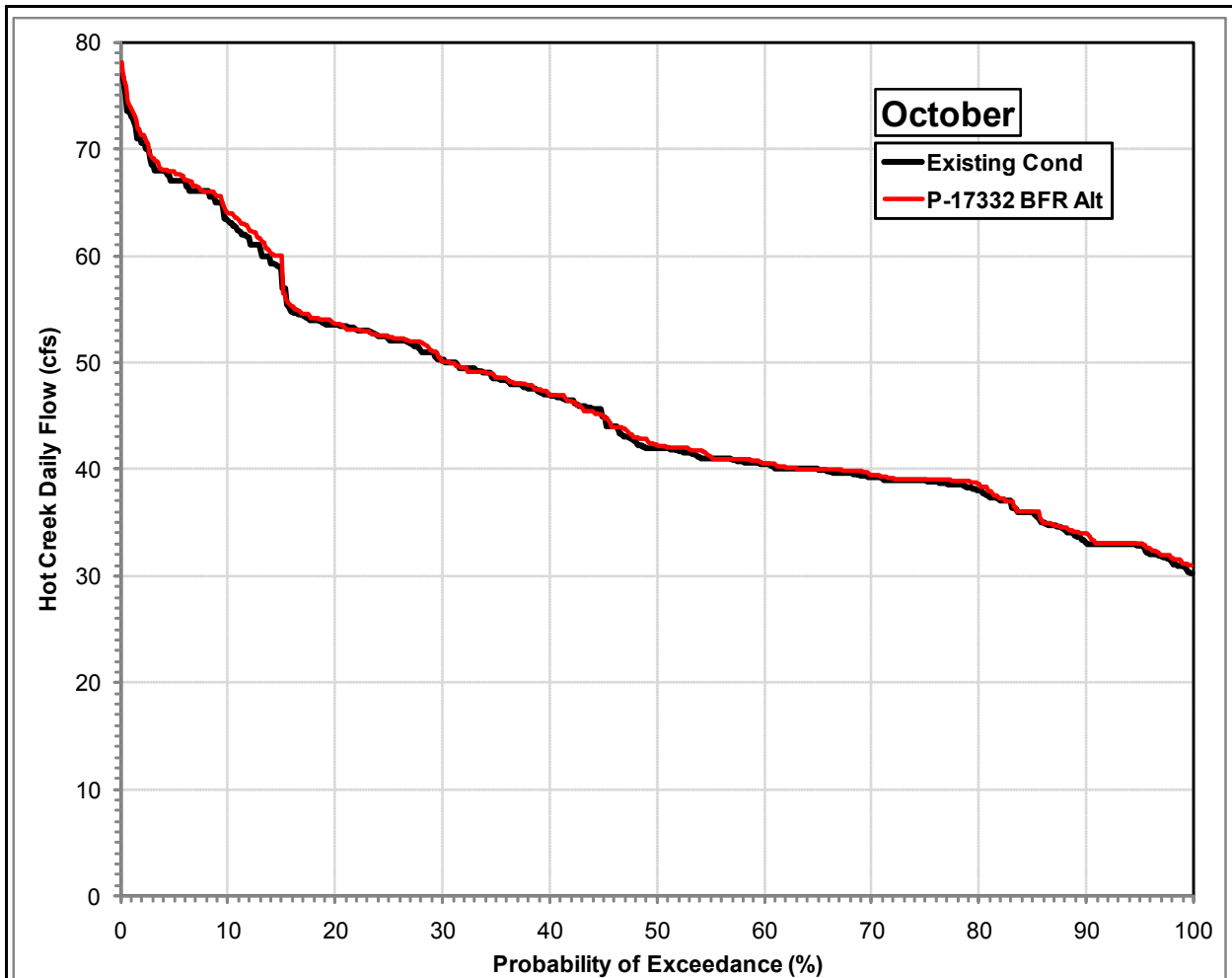
Probability of Exceedance (%)	August Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	118.7	117.5
10	92.3	91.0
20	75.5	74.0
25	70.1	69.0
50	48.2	47.0
75	43.0	41.9
80	41.8	41.0
90	37.8	37.0
95	36.0	35.3

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during August for the 20-Year Evaluation Period



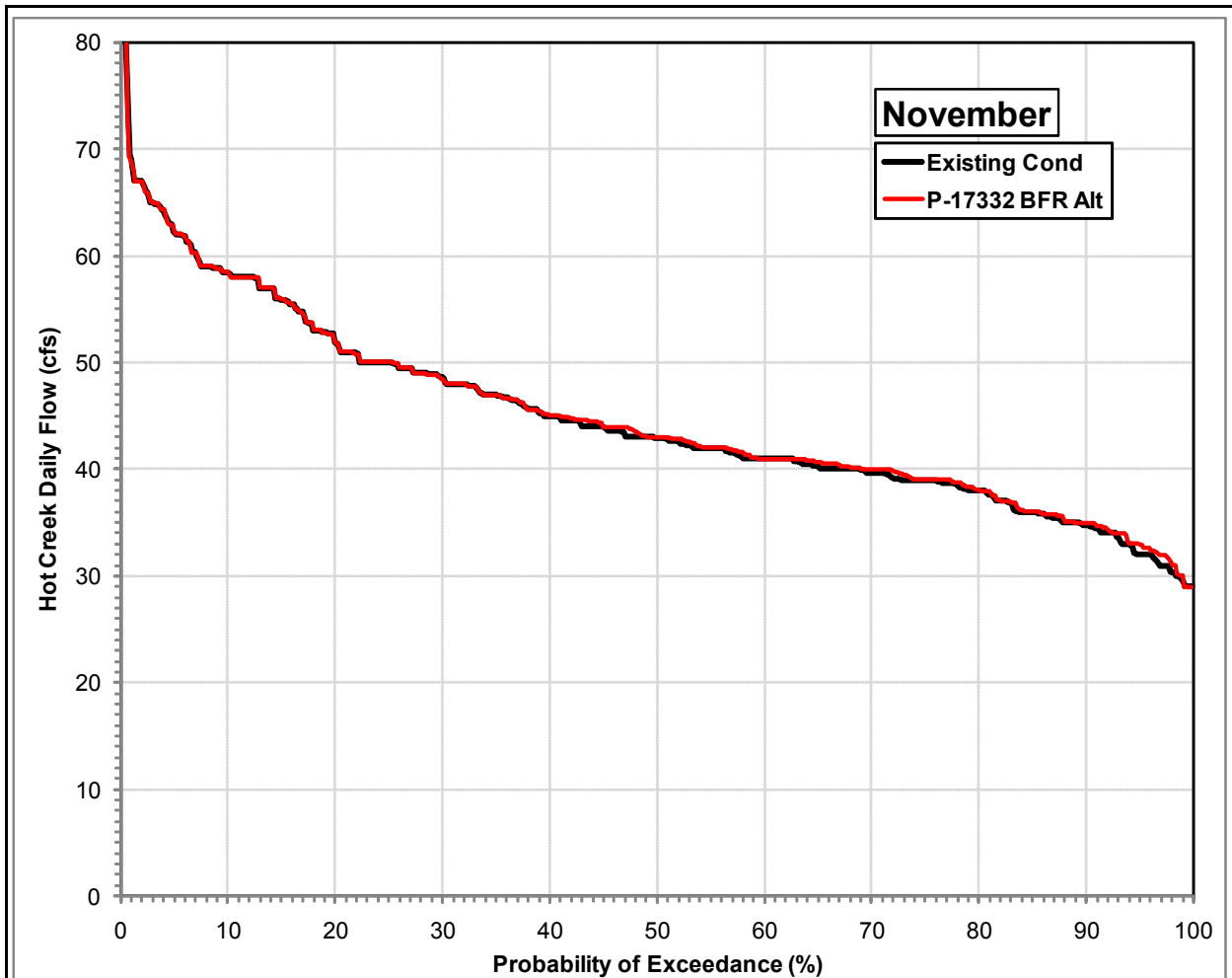
Probability of Exceedance (%)	September Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	87.9	86.5
10	76.6	70.7
20	60.9	60.0
25	59.8	59.0
50	44.2	44.0
75	40.8	40.1
80	39.9	39.5
90	35.4	34.1
95	34.0	33.0

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during September for the 20-Year Evaluation Period



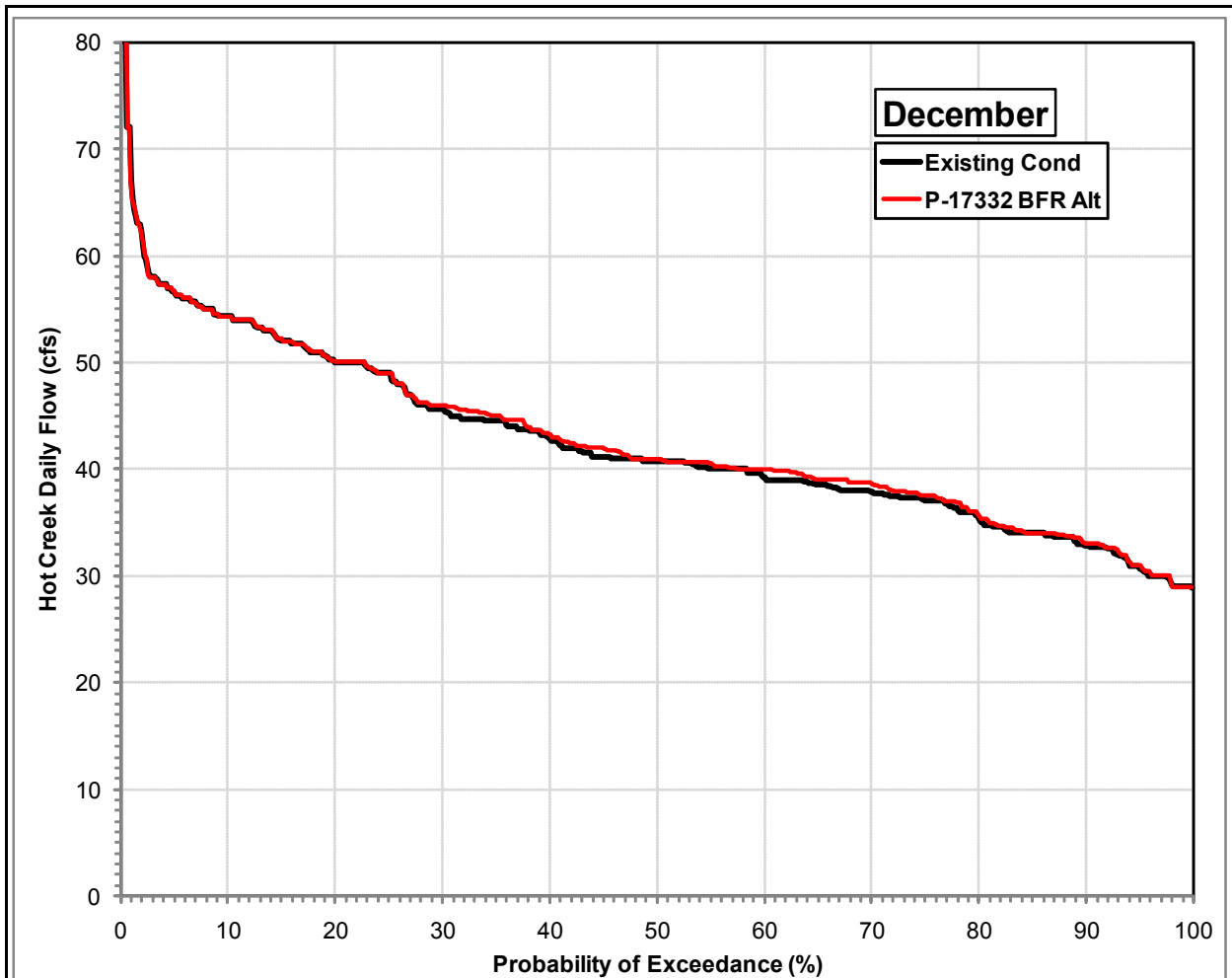
Probability of Exceedance (%)	October Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	67.9	67.0
10	64.0	63.0
20	53.6	53.5
25	52.4	52.0
50	42.3	42.0
75	39.0	38.9
80	38.6	38.0
90	34.0	33.1
95	33.0	32.9

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during October for the 20-Year Evaluation Period



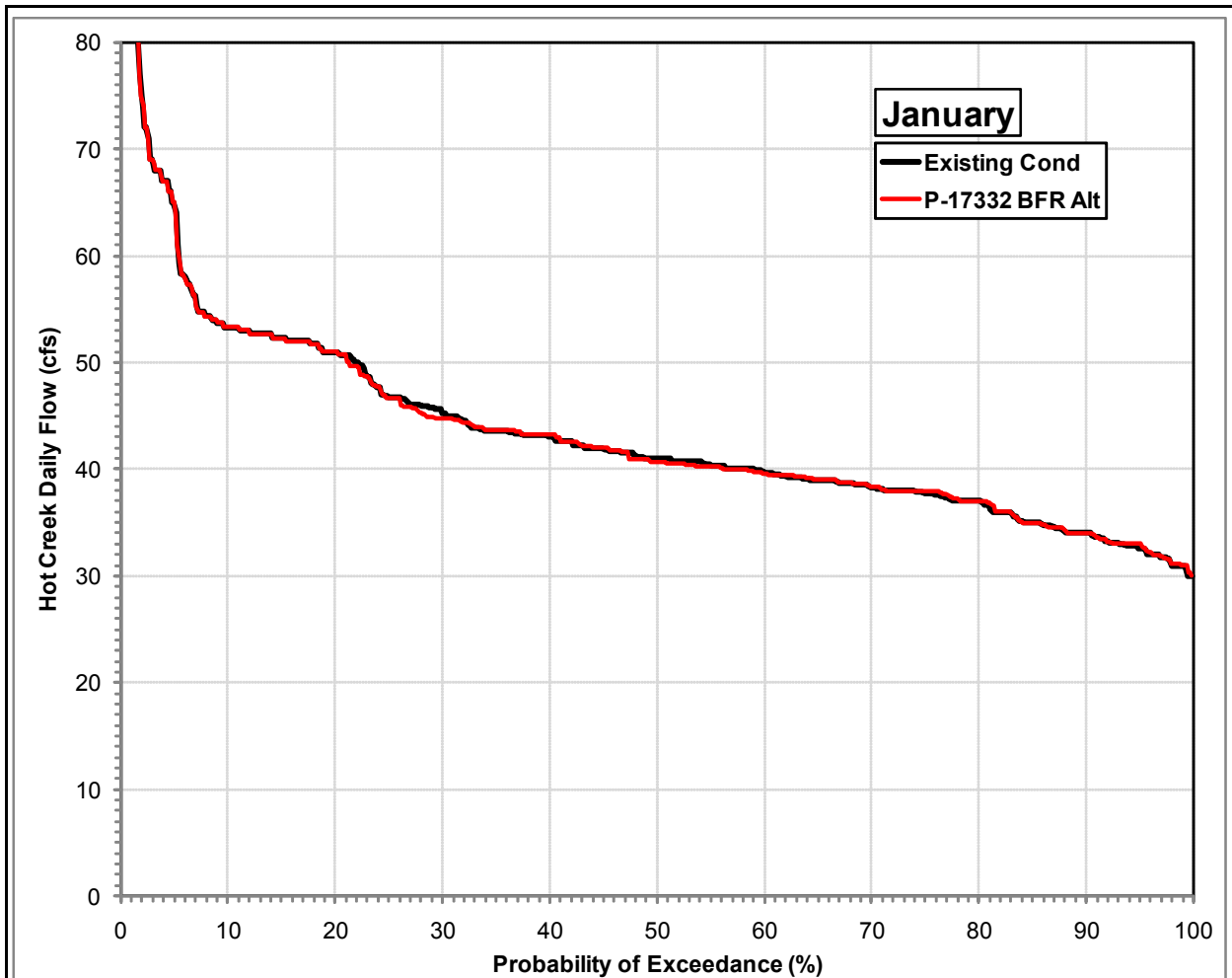
Probability of Exceedance (%)	November Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	62.3	62.0
10	58.5	58.3
20	51.9	51.8
25	50.0	50.0
50	43.0	42.9
75	39.0	39.0
80	38.1	38.0
90	35.0	34.7
95	32.9	32.0

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during November for the 20-Year Evaluation Period



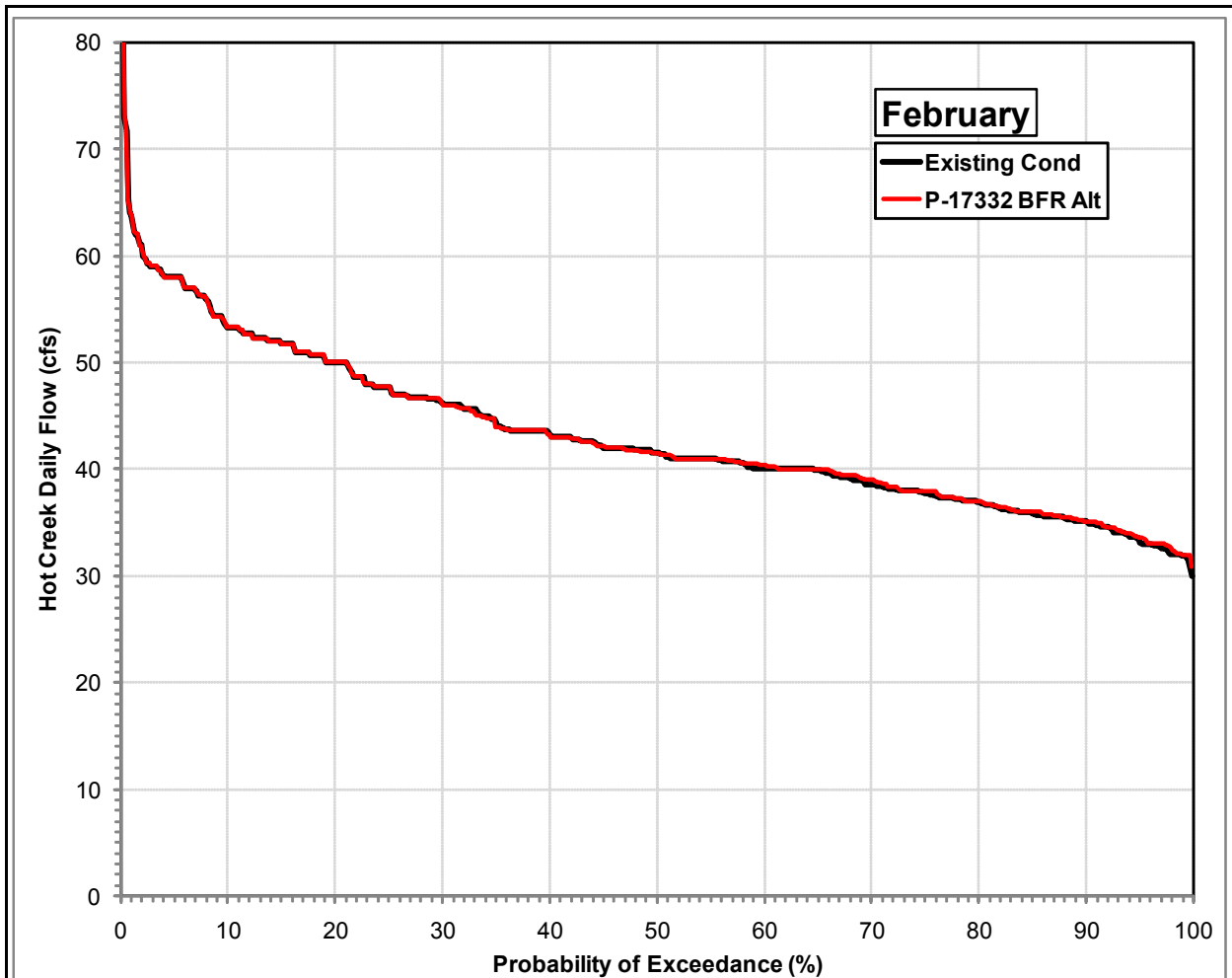
Probability of Exceedance (%)	December Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	56.7	56.3
10	54.3	54.3
20	50.0	50.0
25	49.0	49.0
50	40.9	40.7
75	37.6	37.1
80	35.6	35.2
90	33.1	32.9
95	31.0	30.7

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during December for the 20-Year Evaluation Period



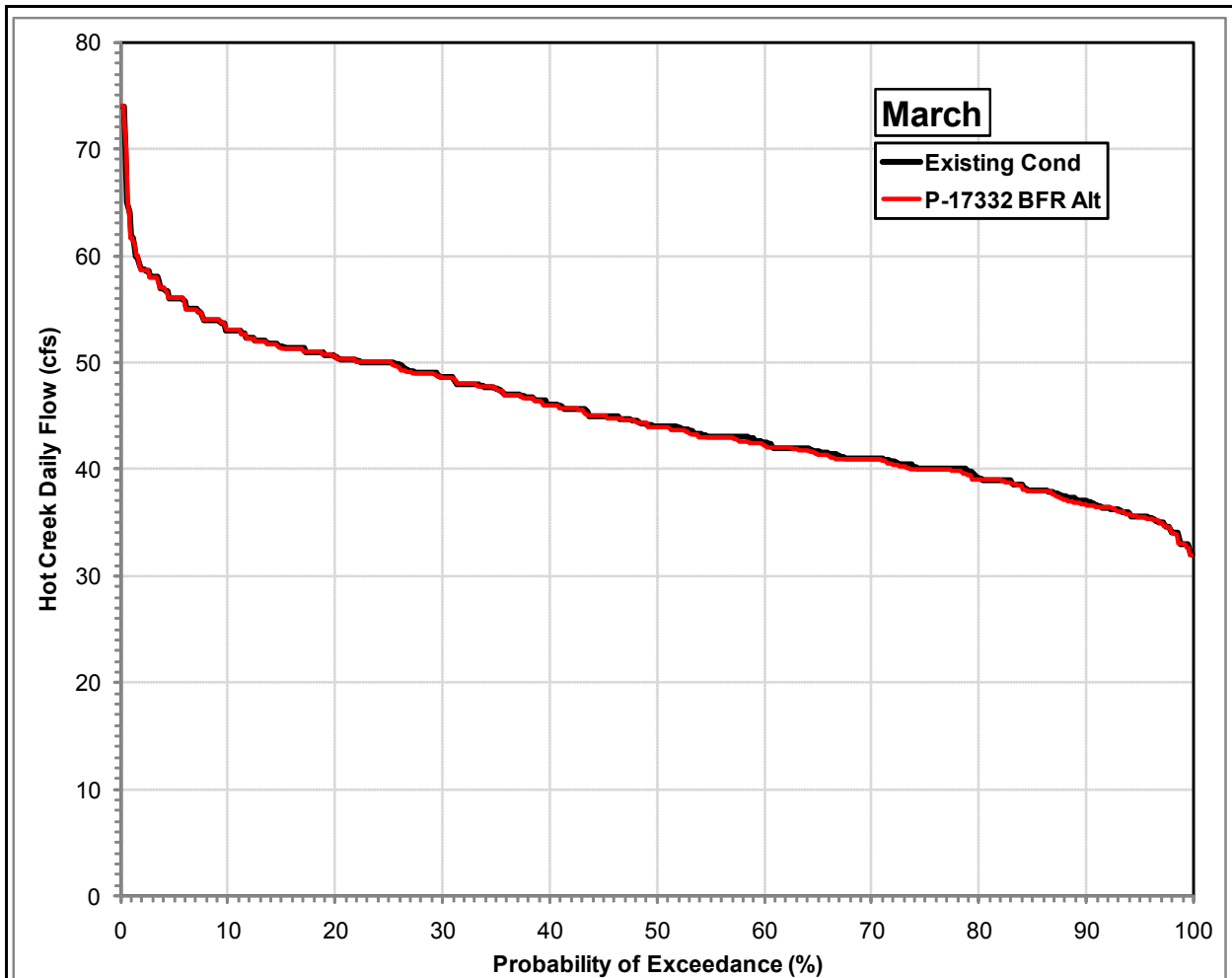
Probability of Exceedance (%)	January Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	65.0	64.0
10	53.3	53.3
20	51.0	51.0
25	46.7	46.7
50	40.7	41.0
75	38.0	37.8
80	37.0	37.0
90	34.0	34.0
95	33.0	32.6

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during January for the 20-Year Evaluation Period



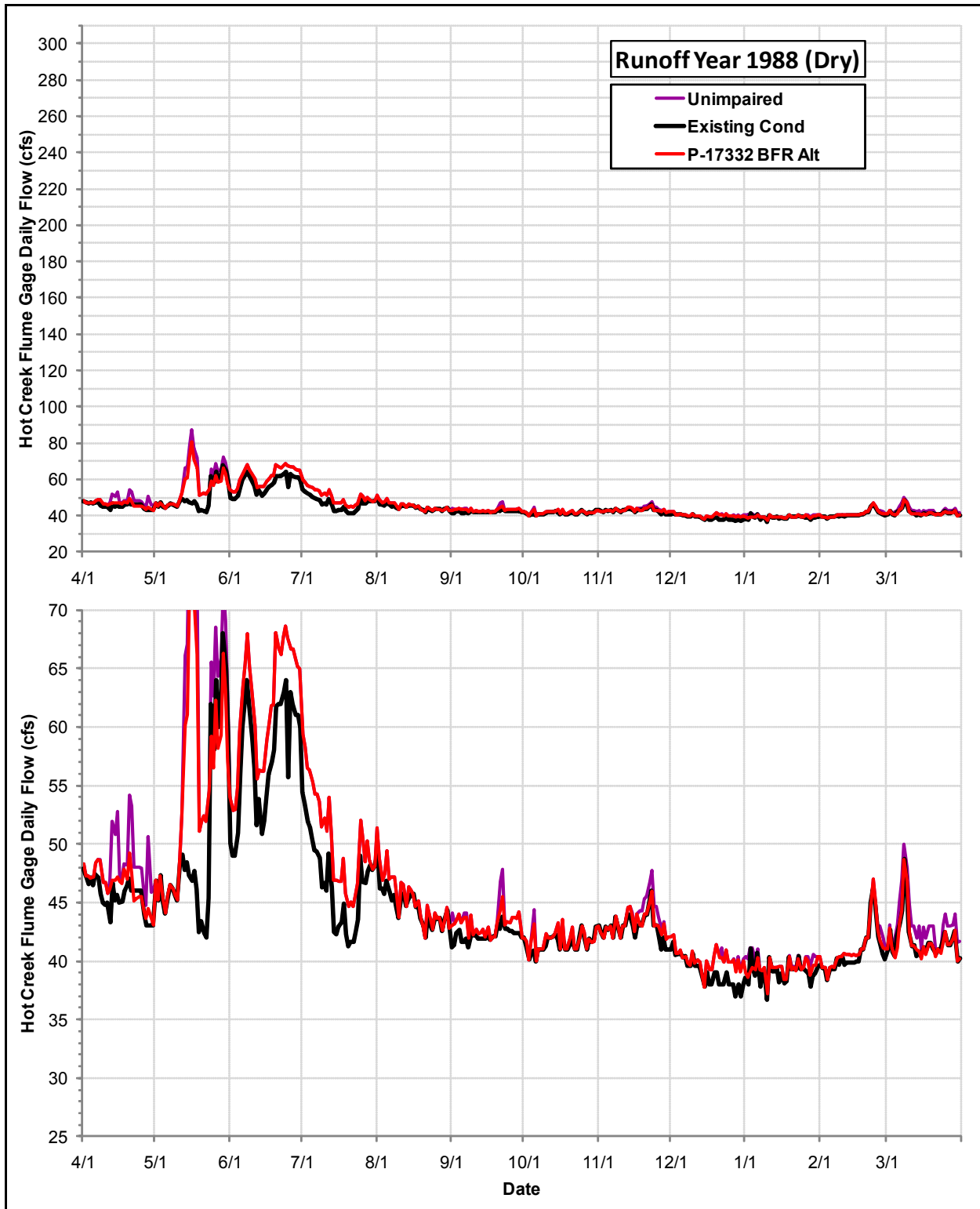
Probability of Exceedance (%)	February Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	58.0	58.0
10	53.3	53.3
20	50.0	50.0
25	47.7	47.7
50	41.5	41.5
75	38.0	37.8
80	37.0	36.9
90	35.1	35.0
95	33.6	33.1

Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during February for the 20-Year Evaluation Period

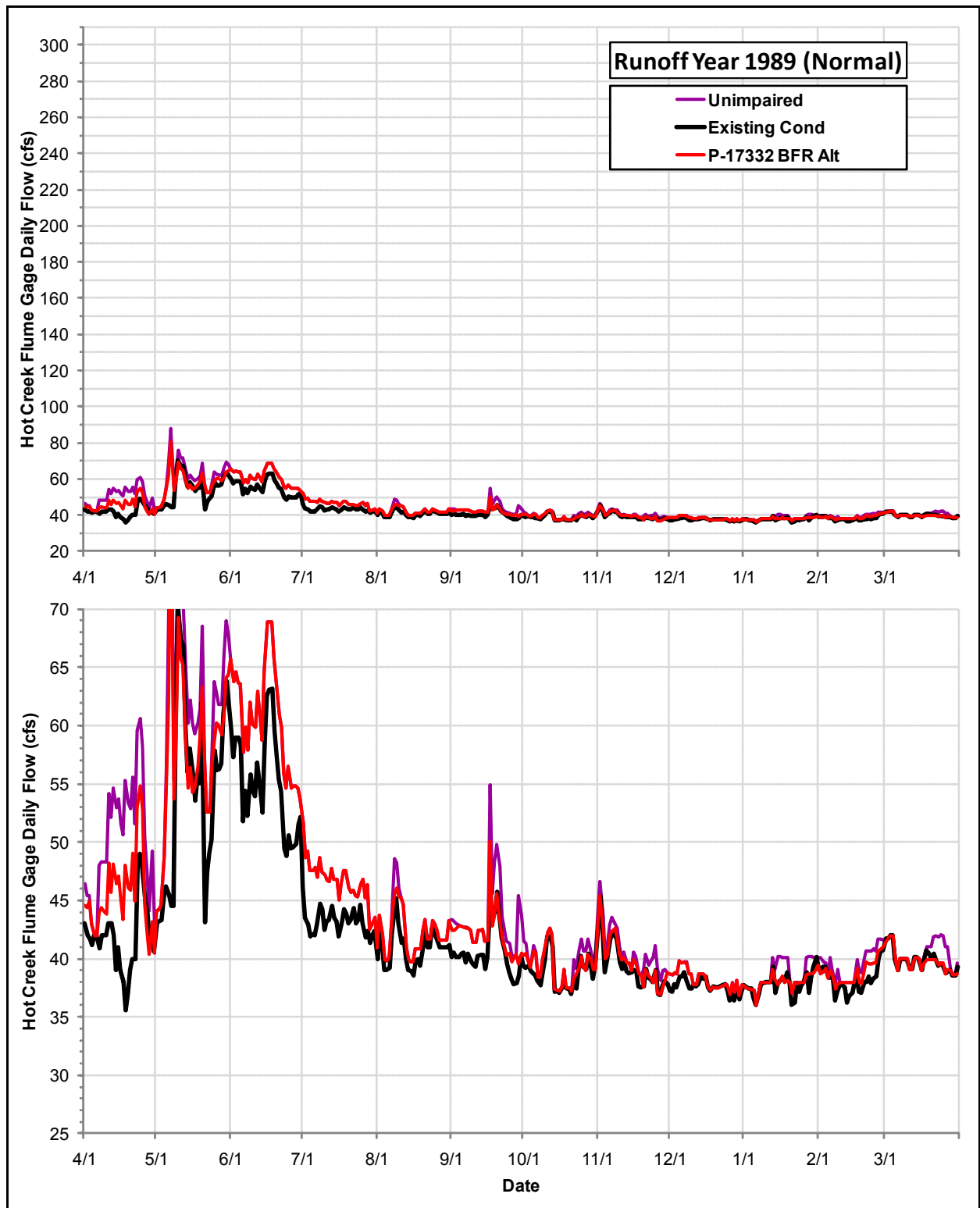


Probability of Exceedance (%)	March Hot Creek Daily Flow (cfs)	
	P-17332 BFR Alt	Existing Cond
5	56.0	56.0
10	53.0	53.0
20	50.5	50.6
25	50.0	50.0
50	44.0	44.0
75	40.0	40.0
80	39.0	39.1
90	36.6	37.0
95	35.5	35.5

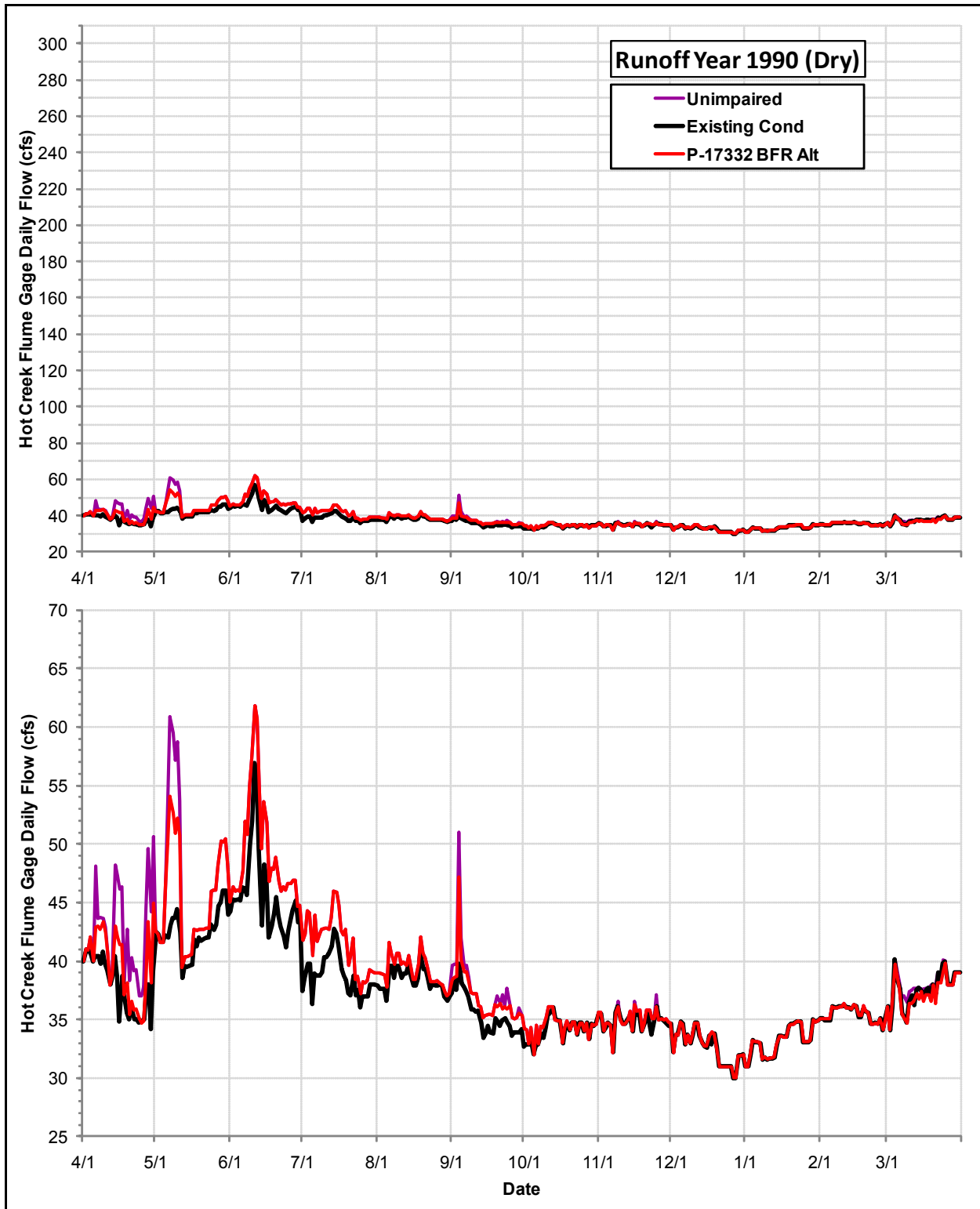
Cumulative Exceedance Probability Distribution of Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative and the Existing Condition during March for the 20-Year Evaluation Period



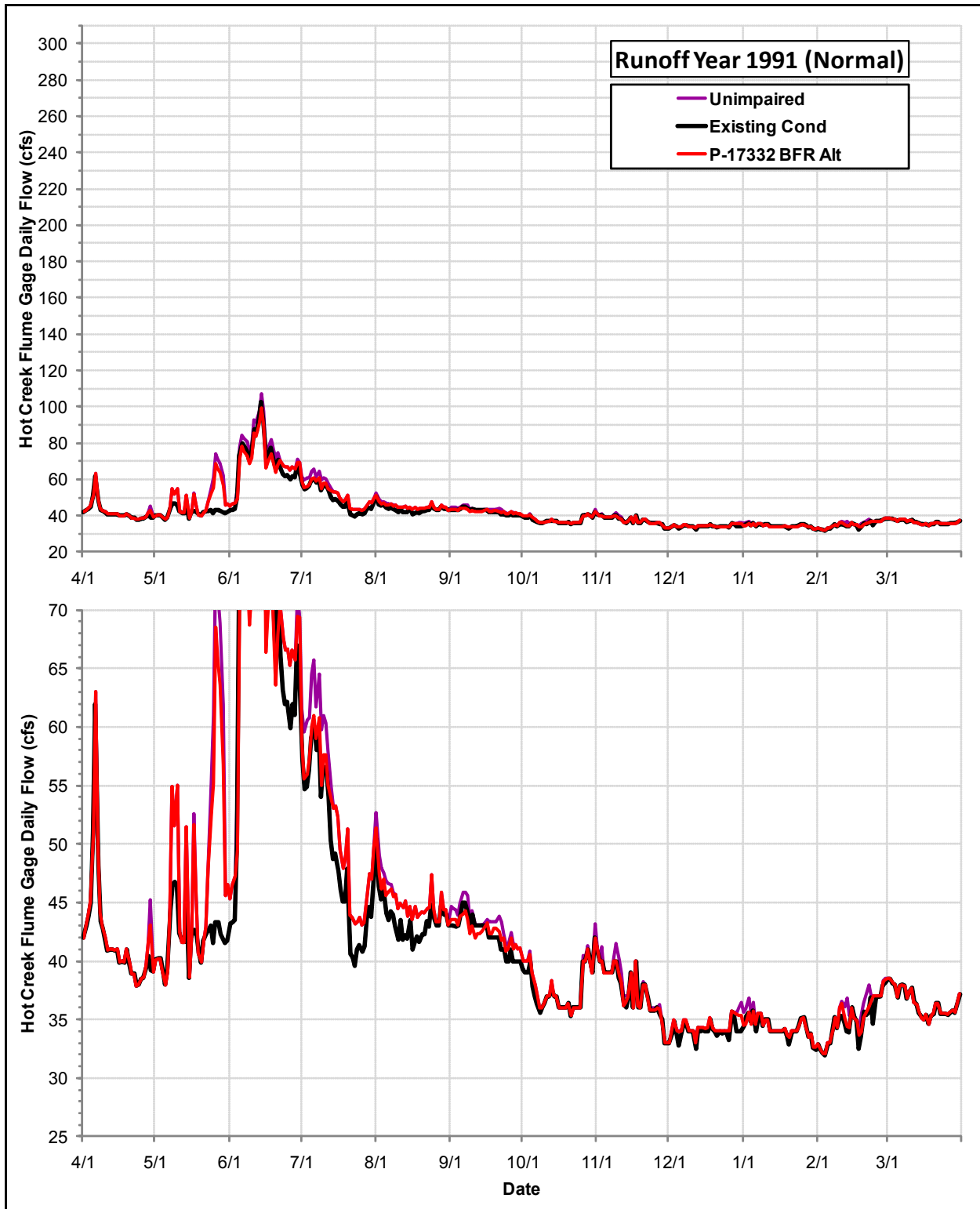
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1988



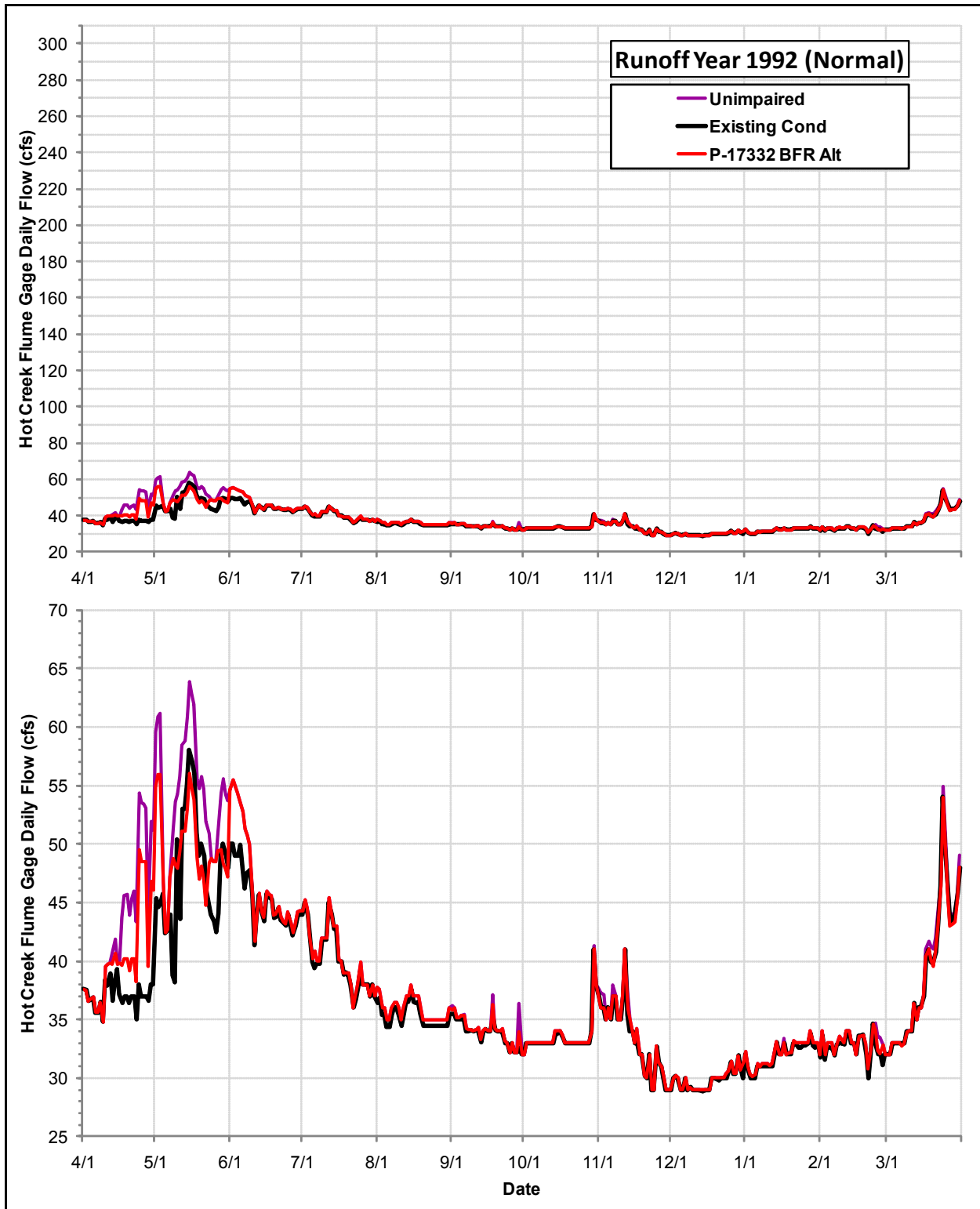
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1989



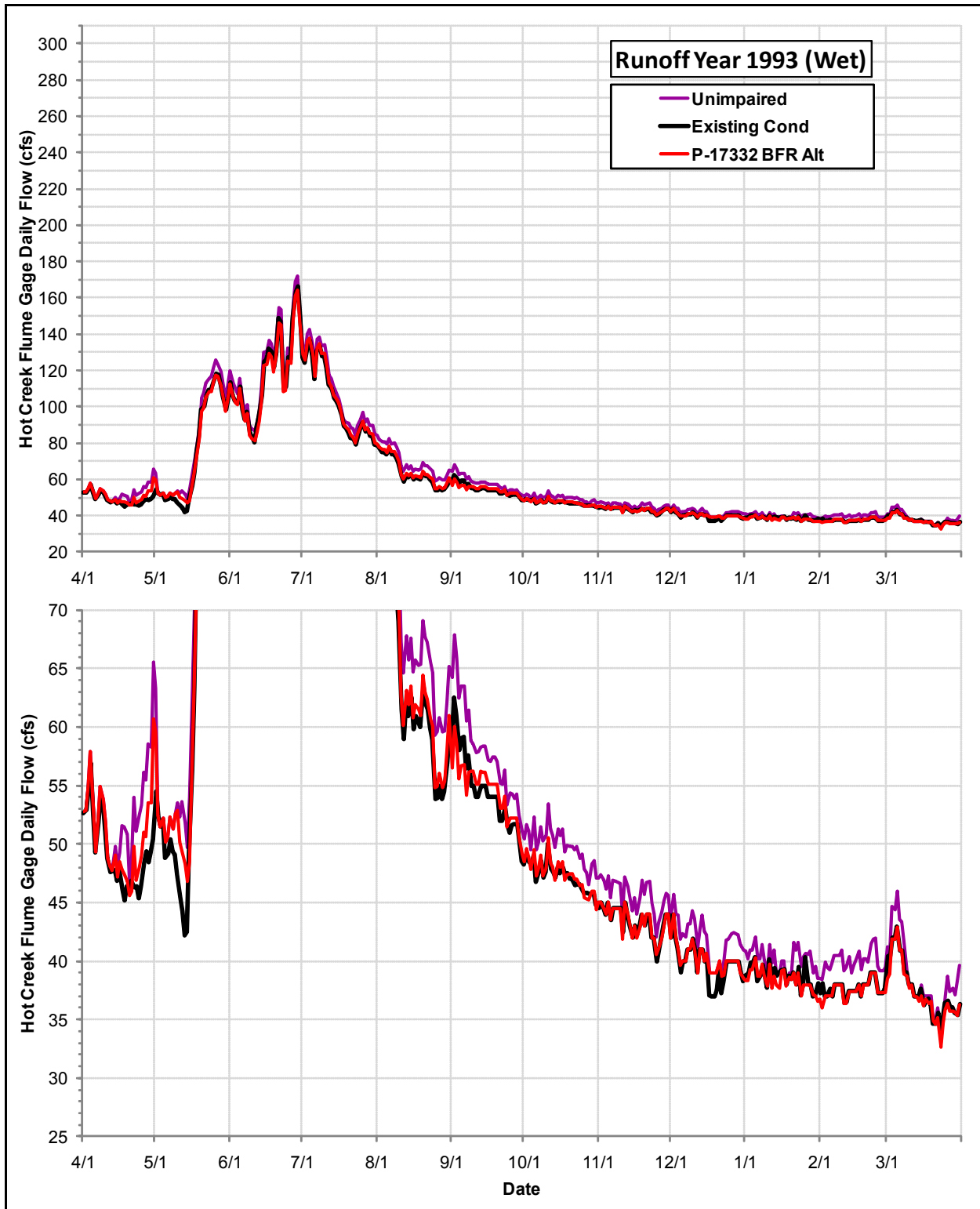
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1990



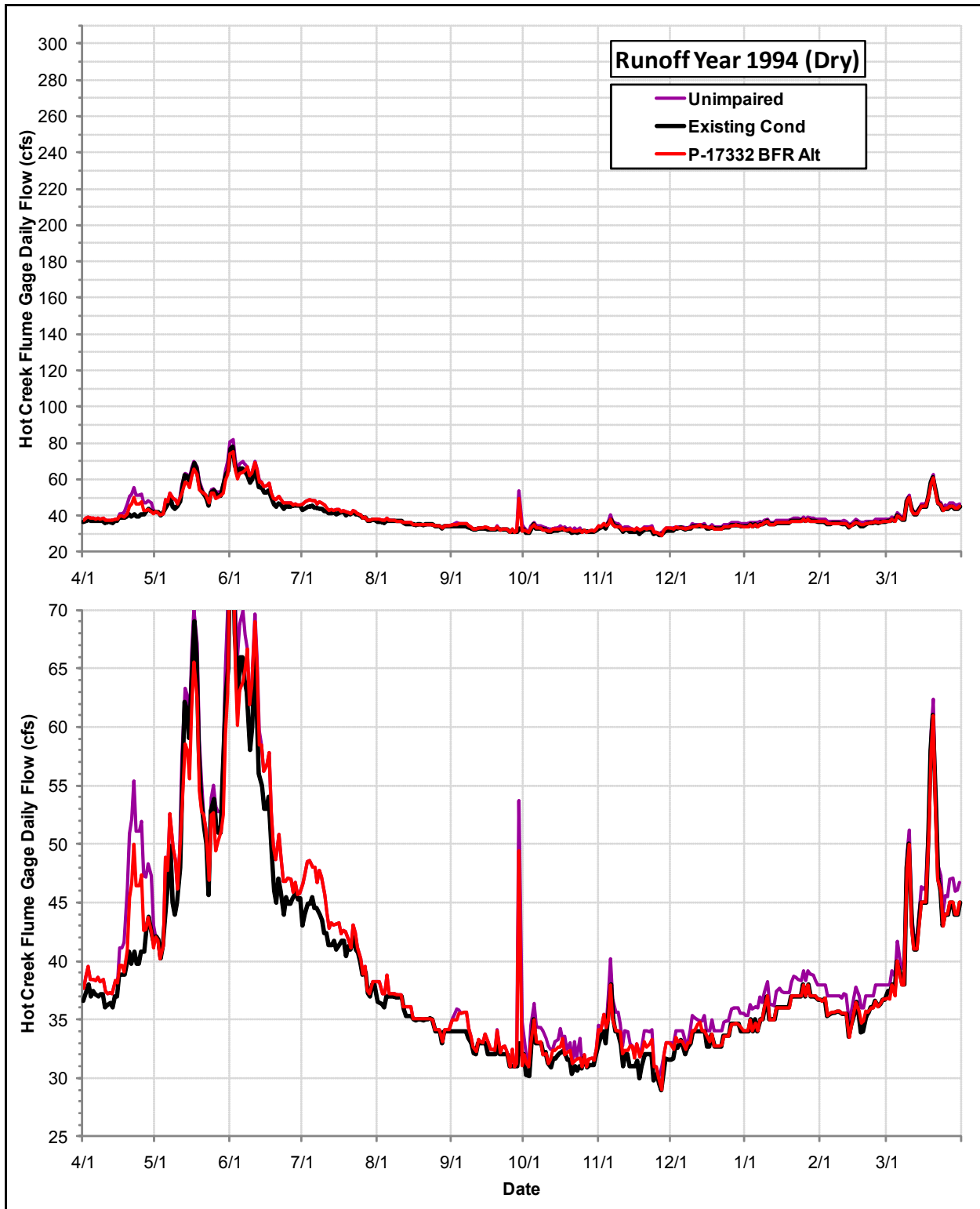
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1991



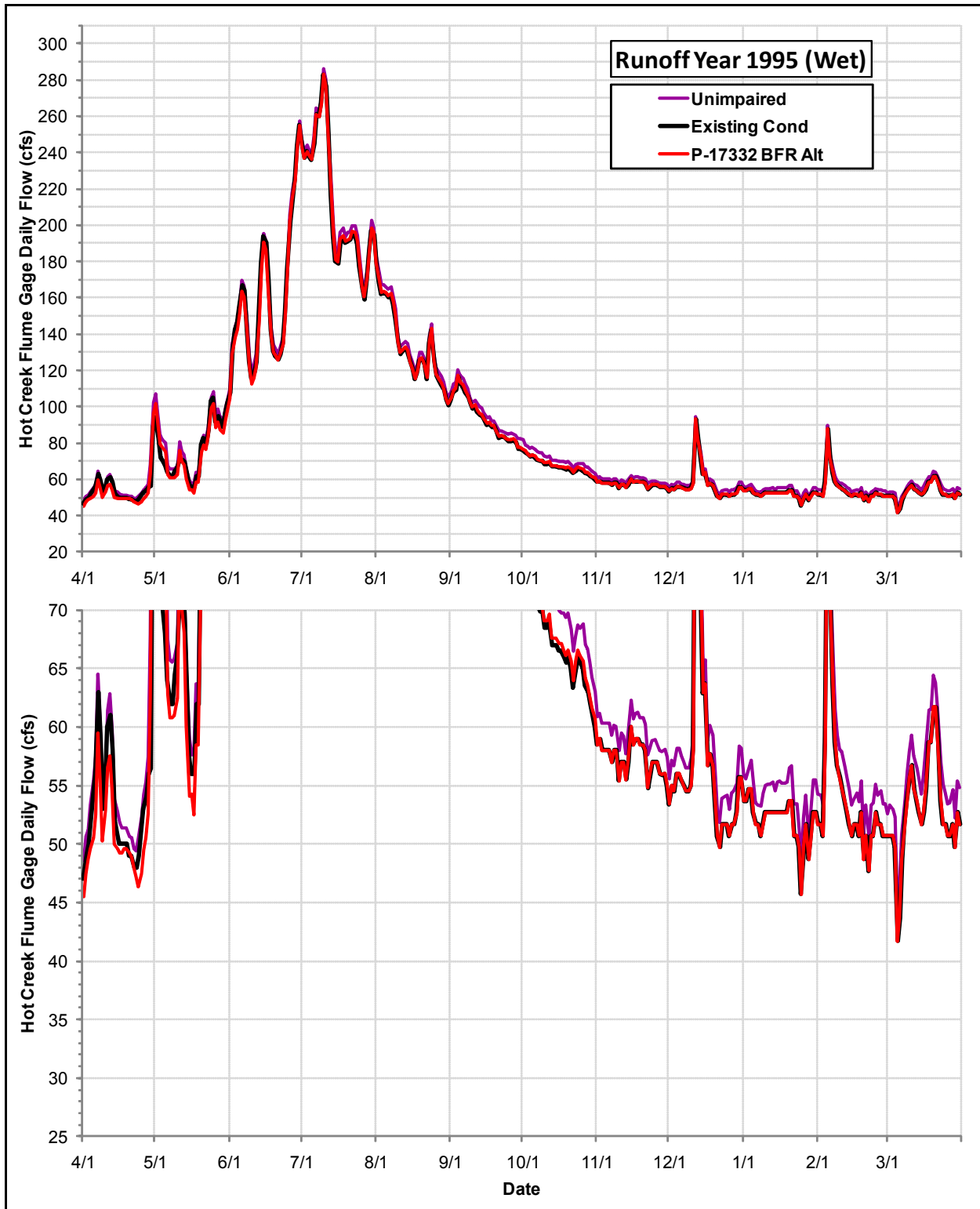
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1992



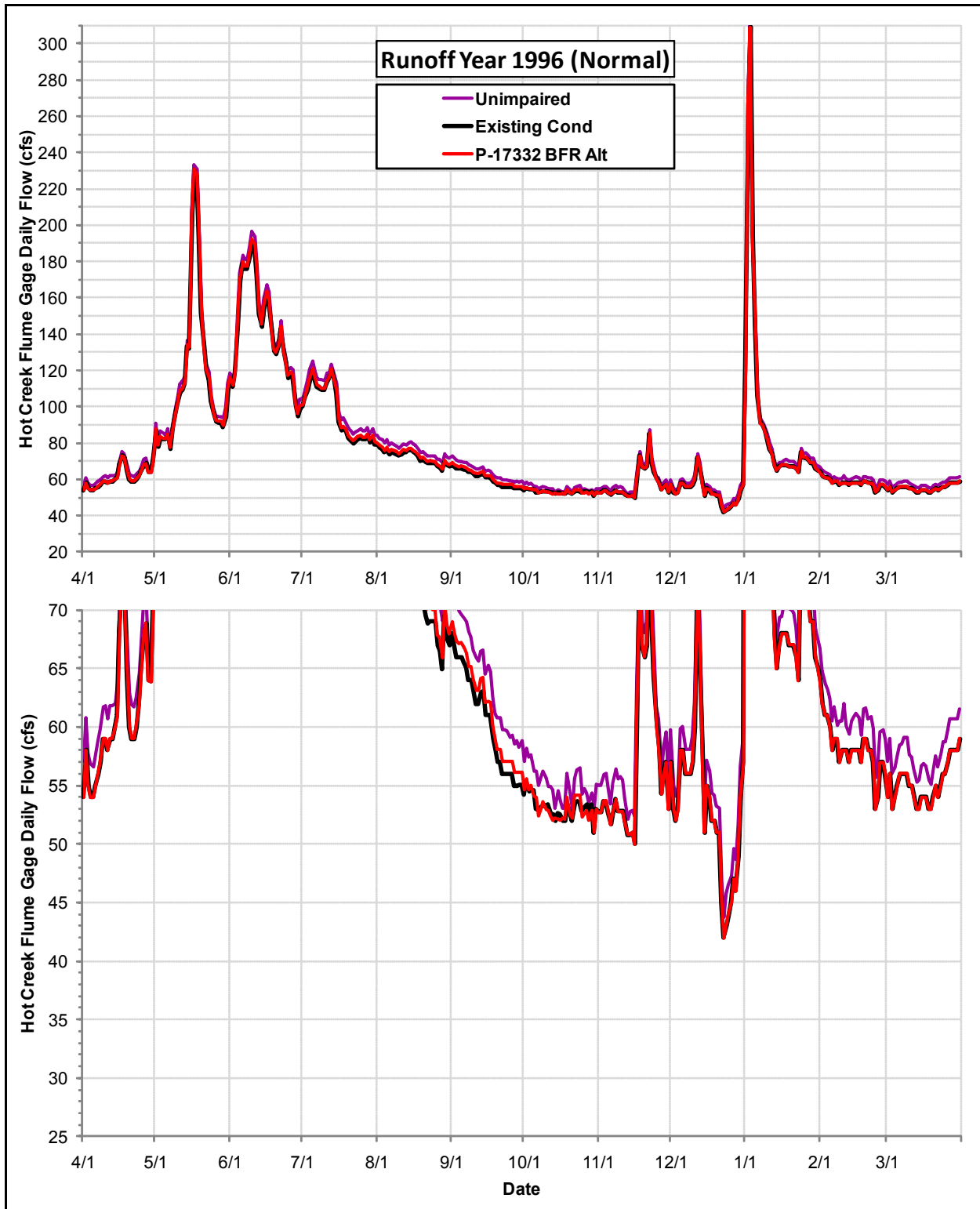
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1993



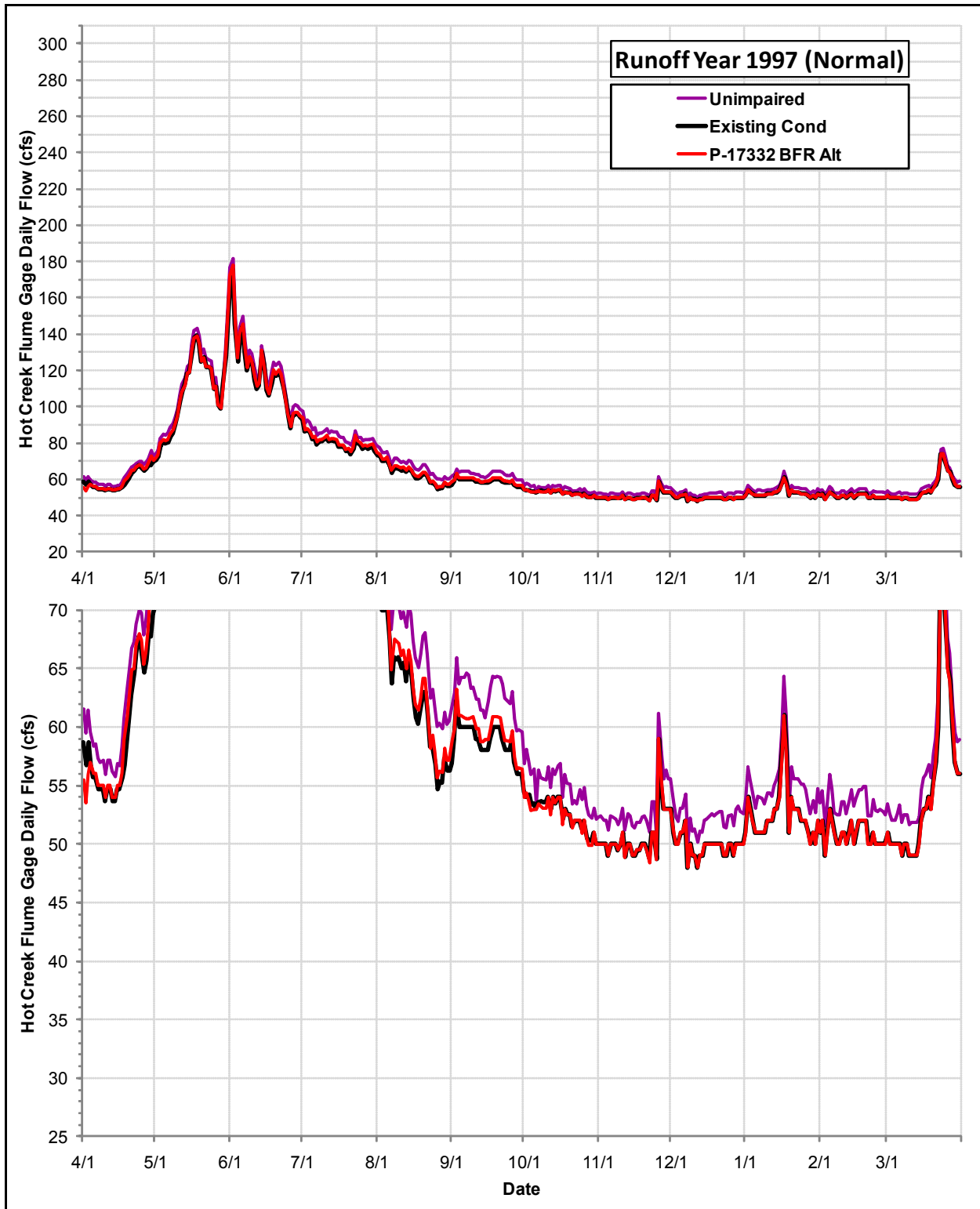
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1994



Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1995



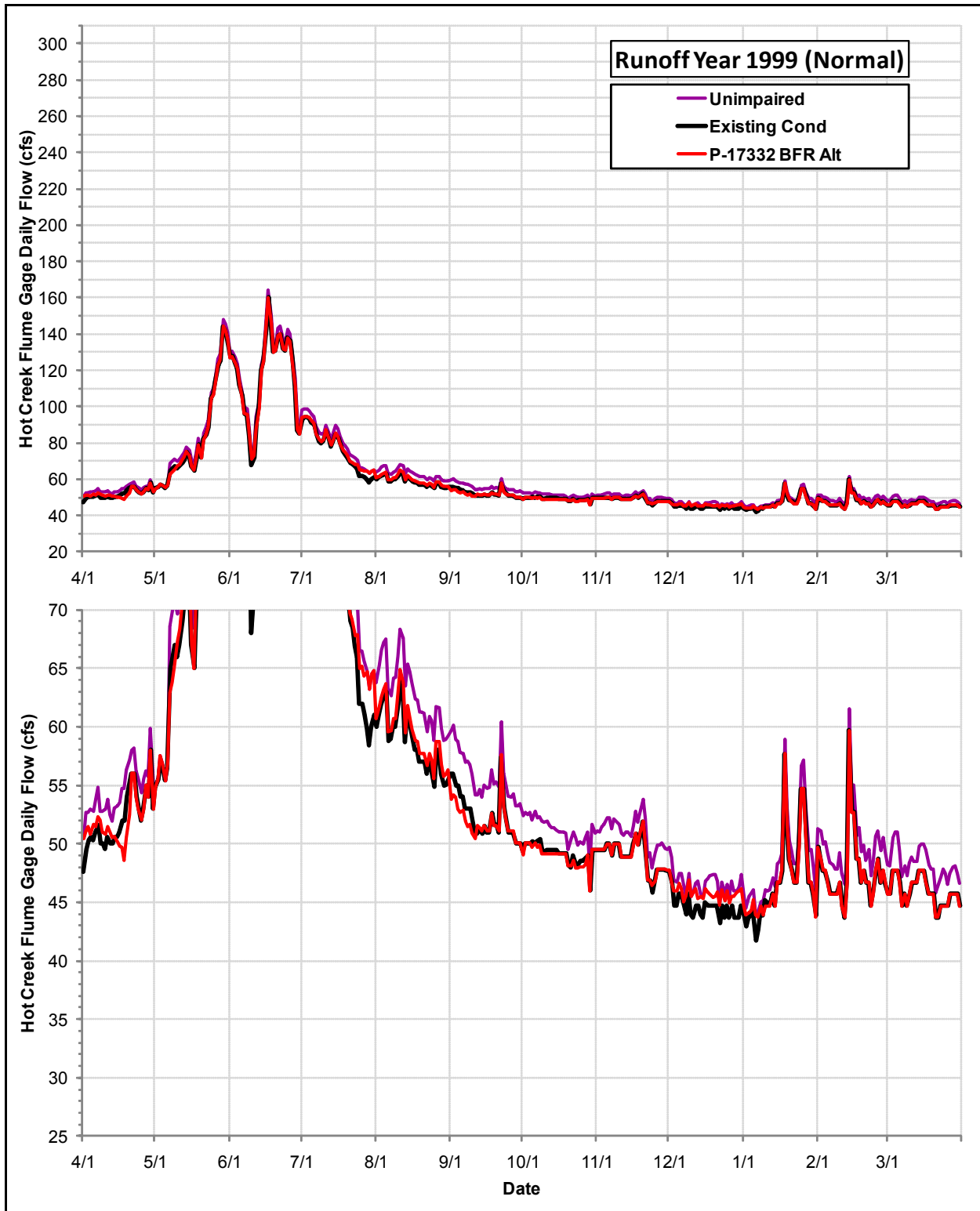
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1996



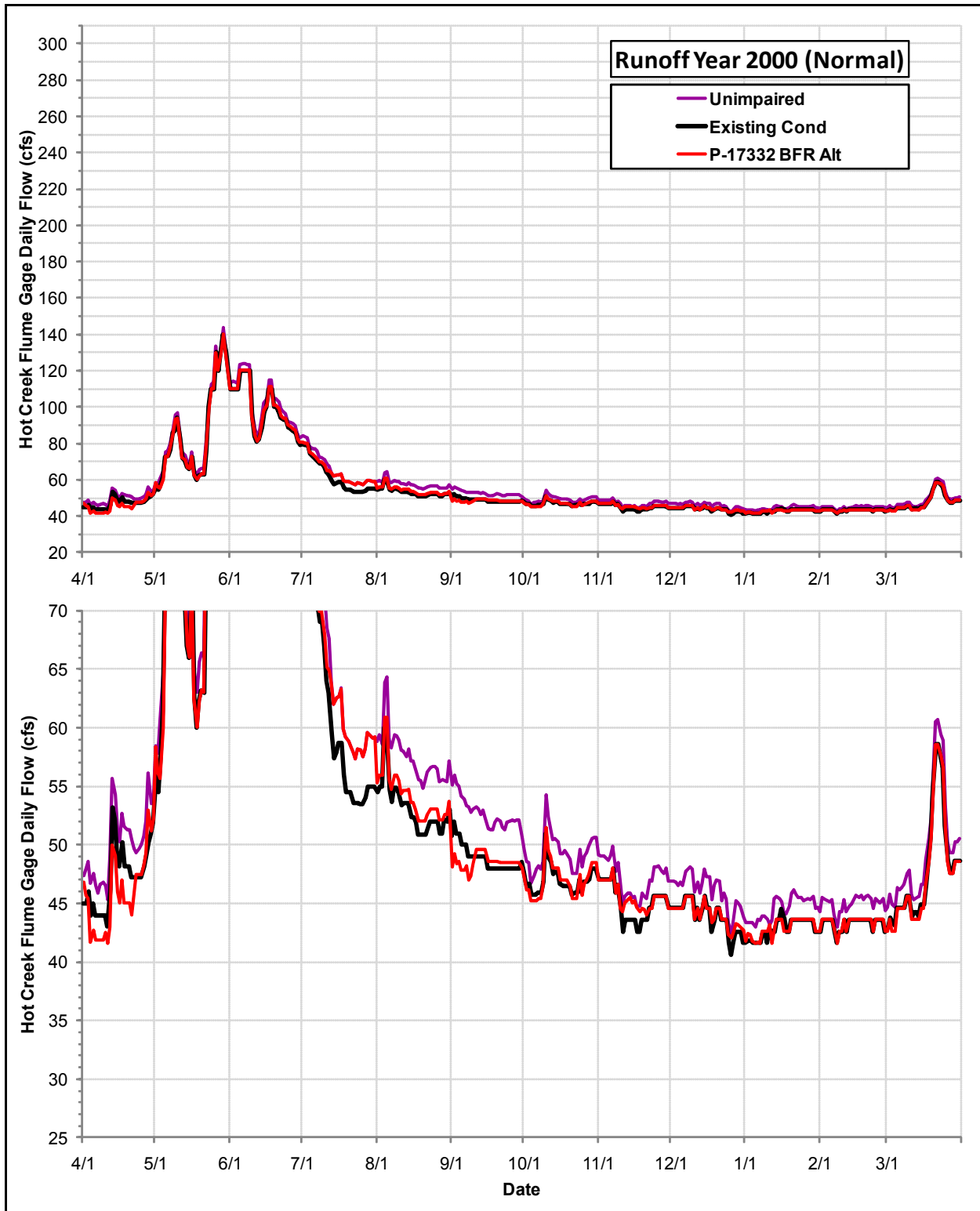
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1997



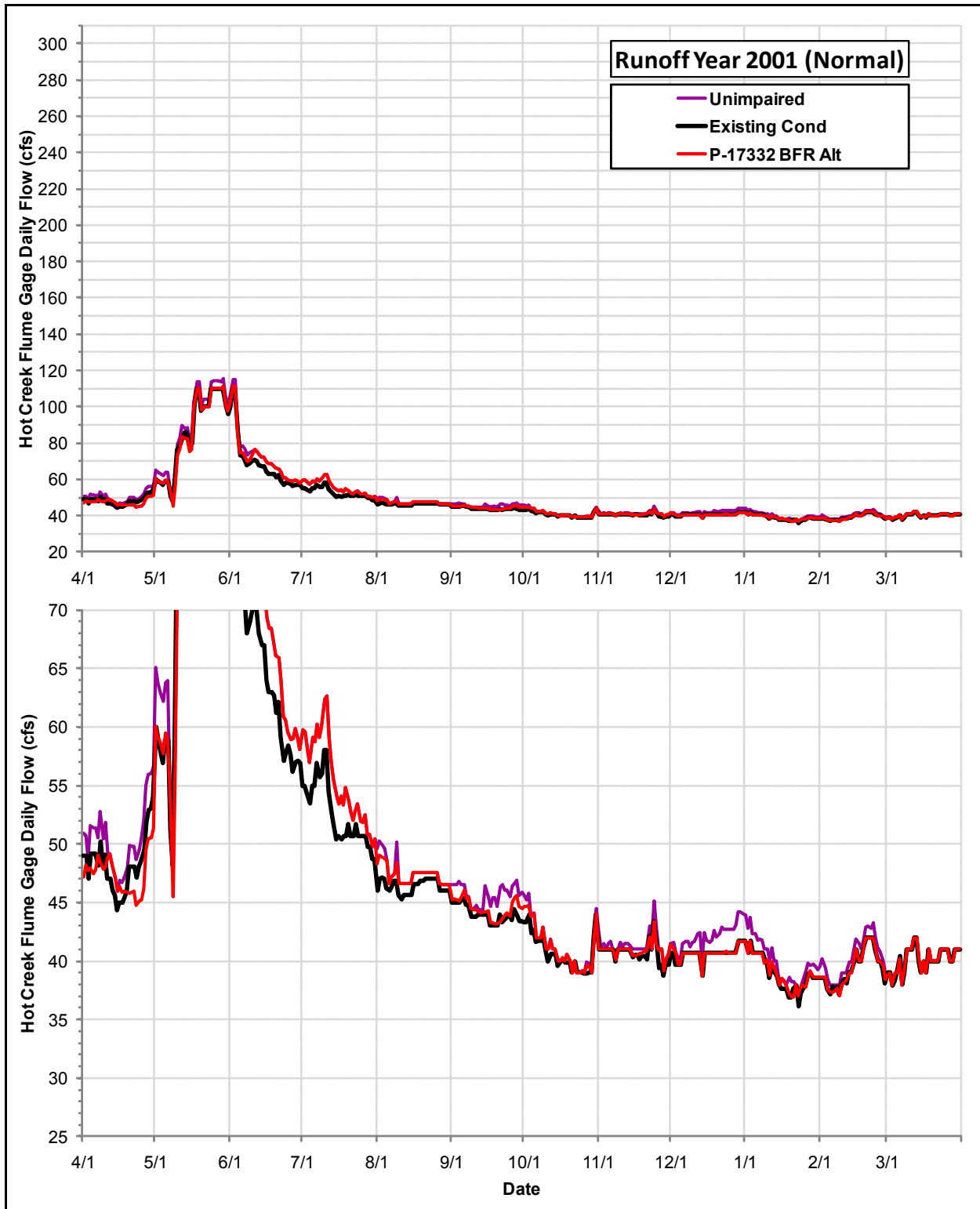
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1998



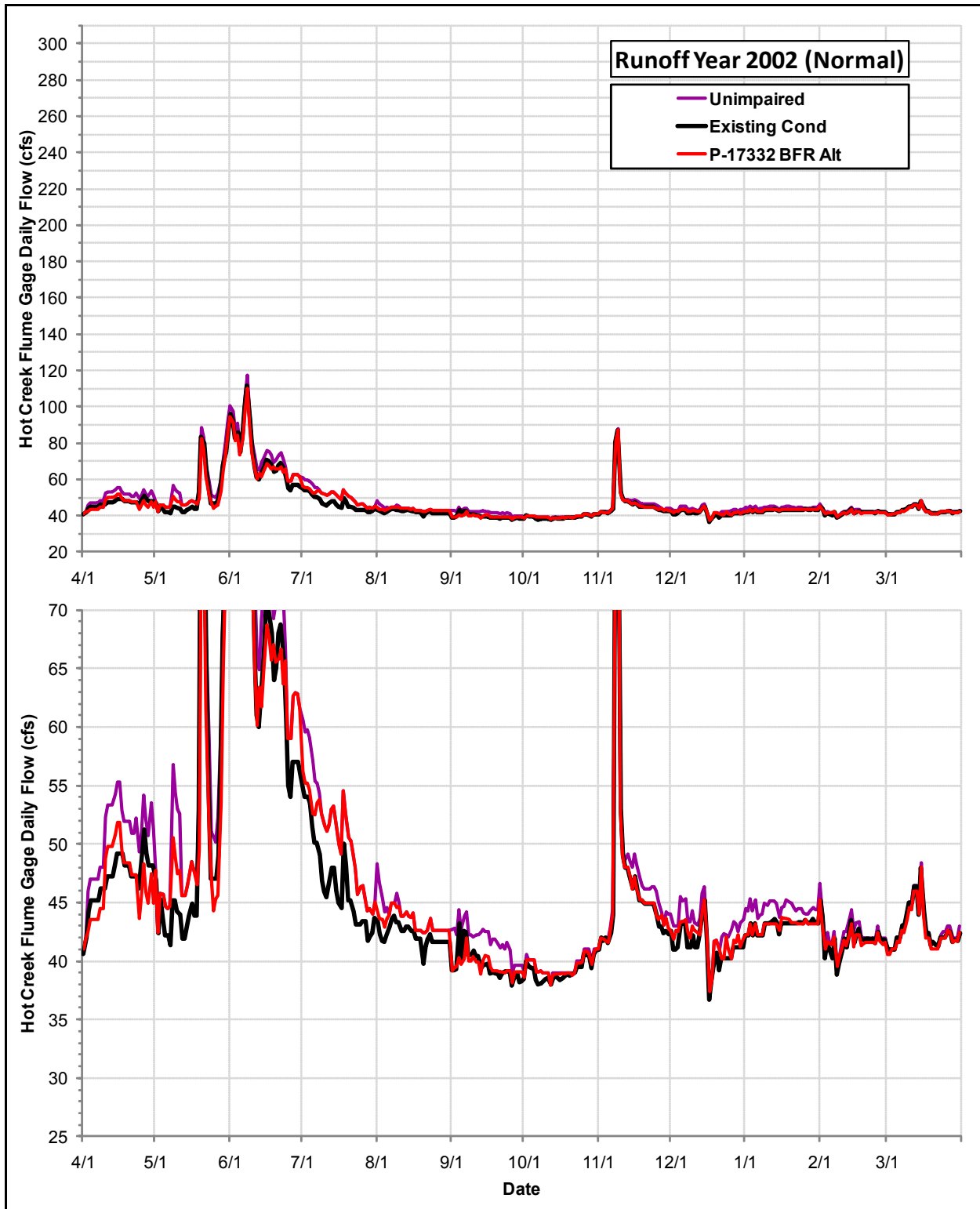
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 1999



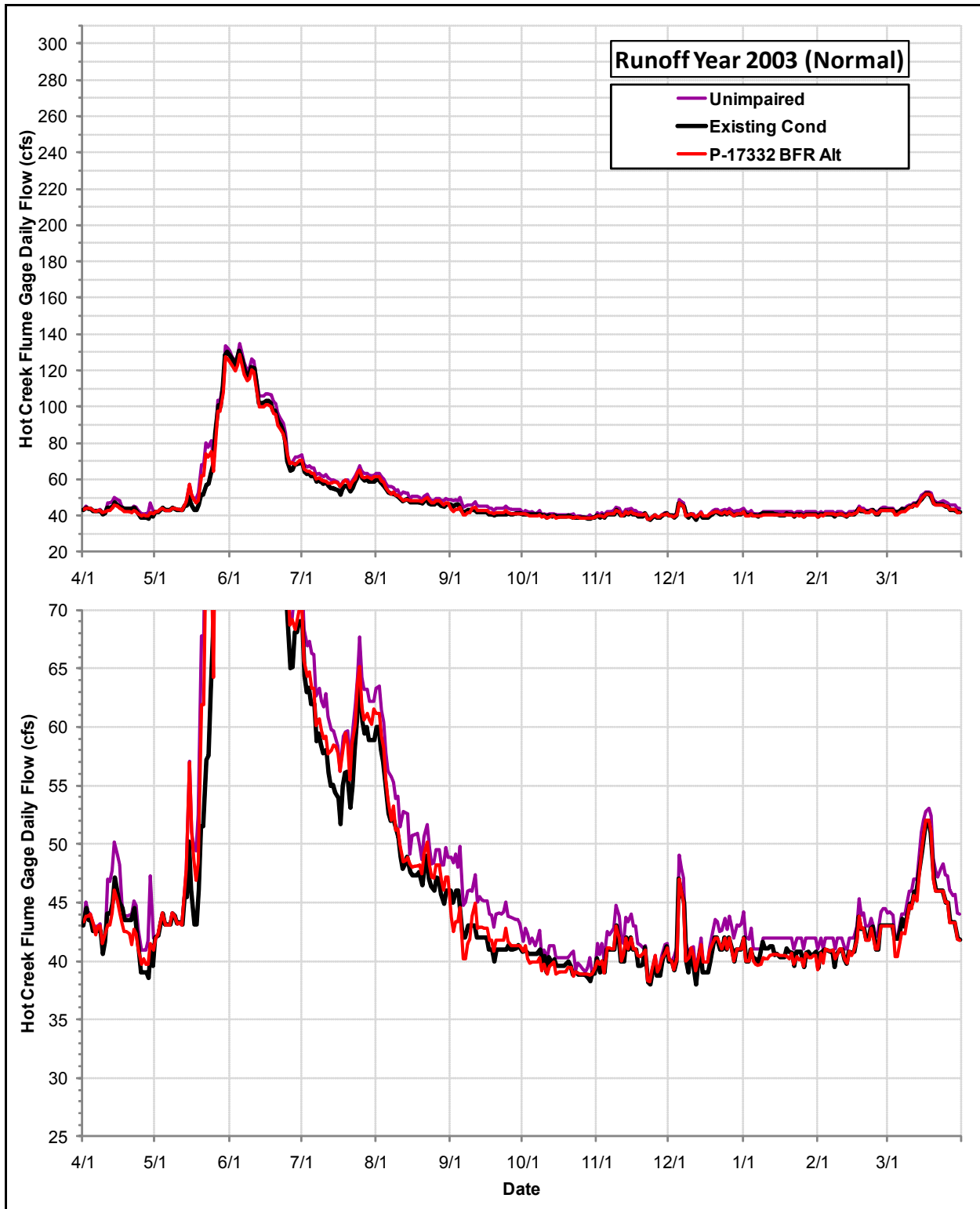
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2000



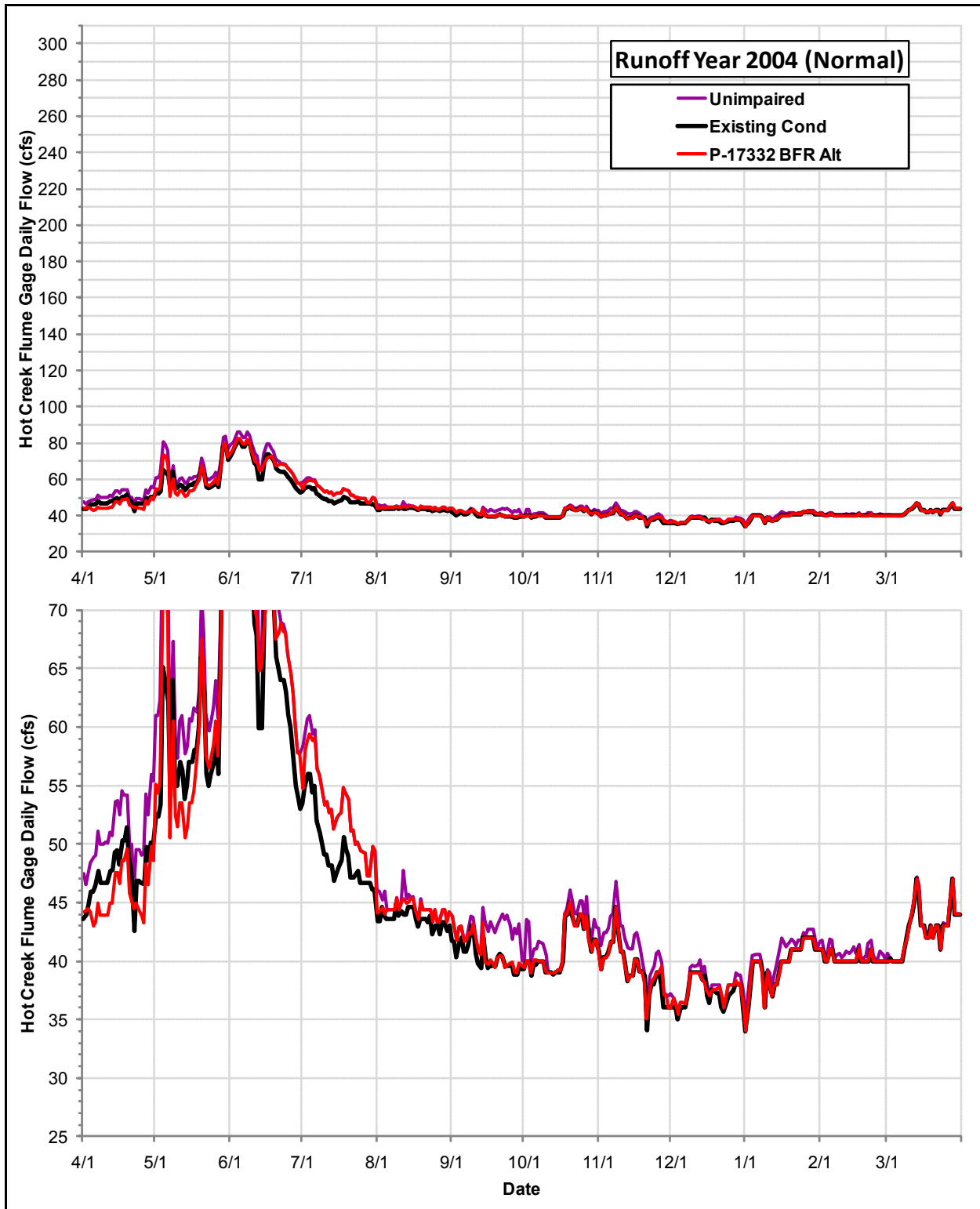
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2001



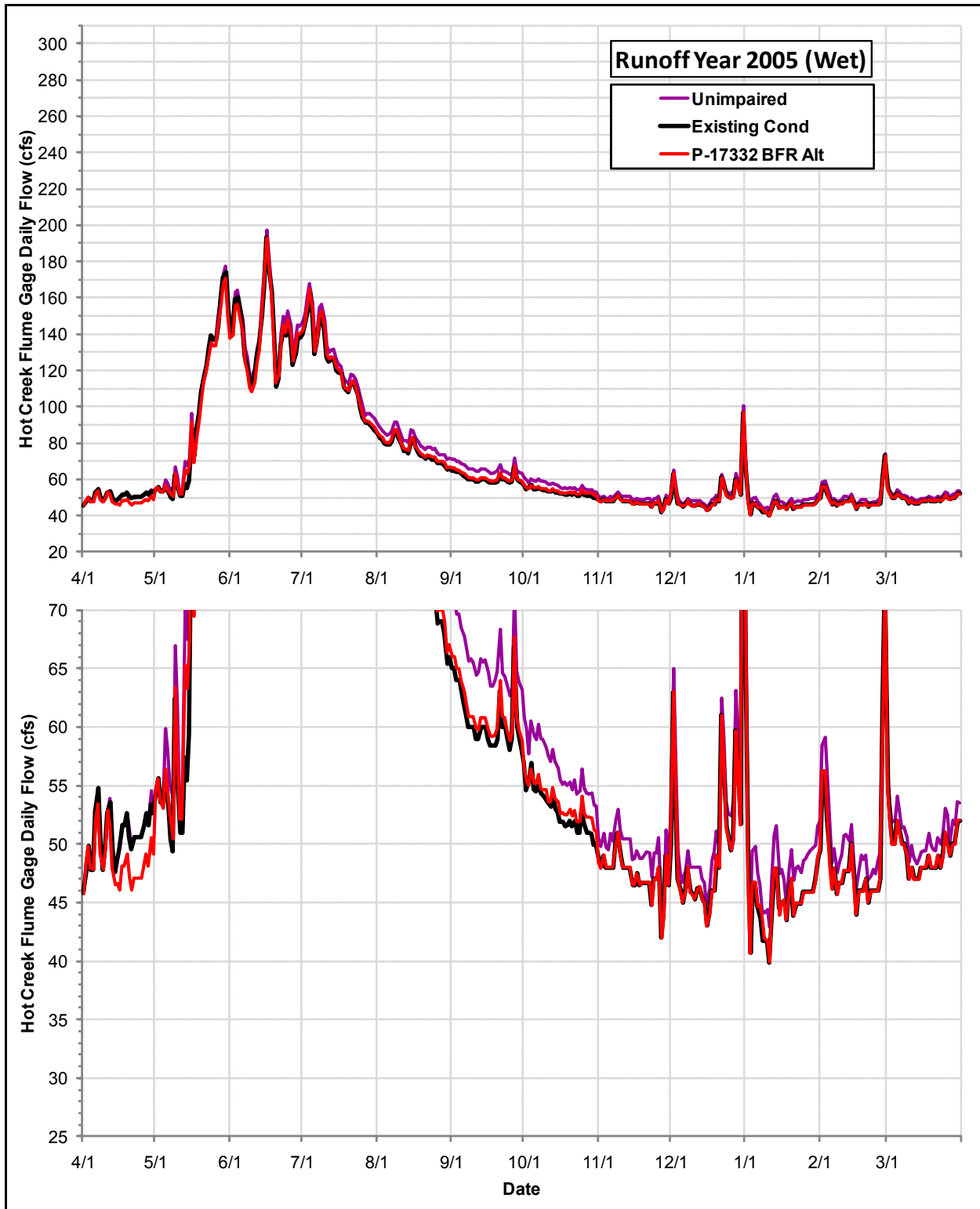
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2002



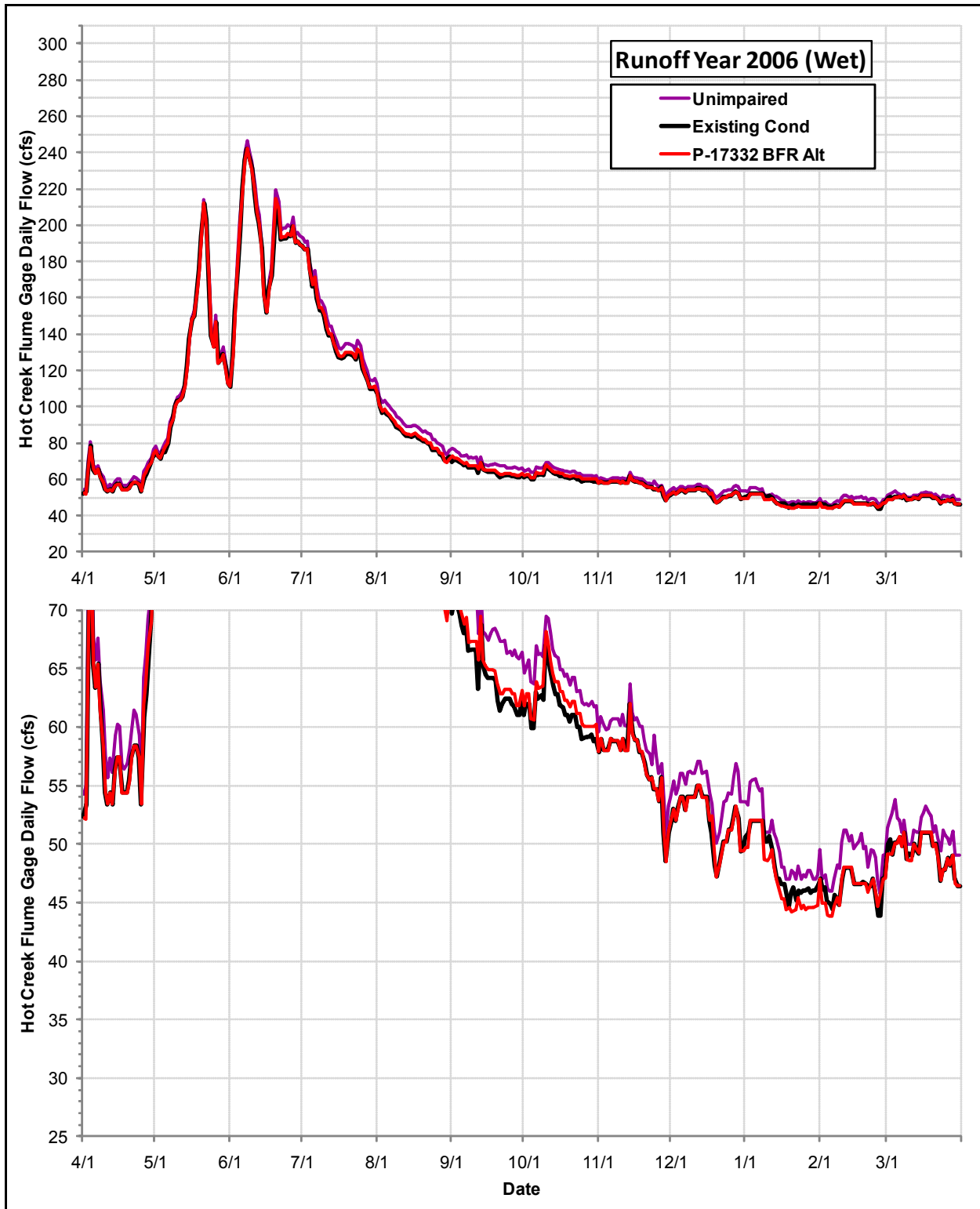
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2003



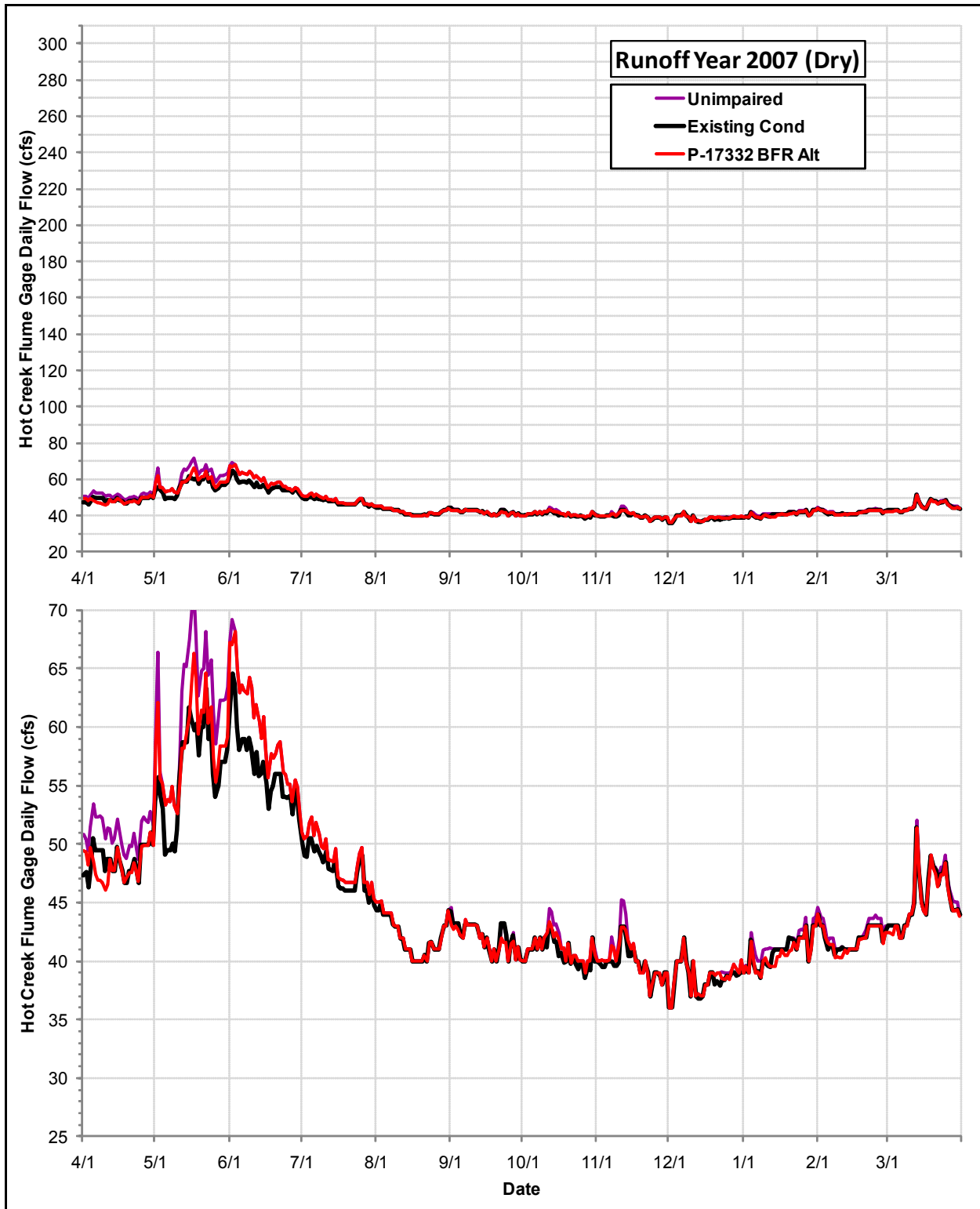
Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2004



Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2005



Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2006



Daily Flows (cfs) at the USGS Hot Creek Flume Gage under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions during Runoff Year 2007

Total Number of Channel Maintenance and Flushing Flow Events (Daily Flows $\geq Q_{1.75}$) at the USGS Hot Creek Flume Gage by Runoff Year and Runoff Year Type under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions Over the 20-Year Evaluation Period

Runoff Year	Runoff Year Type	Number of Events (Consecutive days) with Hot Creek Daily Flow $\geq Q_{1.75}$ ($Q_{1.75} = 129.4$ cfs)		
		P-17332 BFR Alt	Existing Cond	Unimpaired
1988	D	0	0	0
1989	N	0	0	0
1990	D	0	0	0
1991	N	0	0	0
1992	N	0	0	0
1993	W	6	5	4
1994	D	0	0	0
1995	W	4	5	4
1996	N	3	4	3
1997	N	4	4	5
1998	N	3	3	2
1999	N	2	2	2
2000	N	2	2	2
2001	N	0	0	0
2002	N	0	0	0
2003	N	0	2	2
2004	N	0	0	0
2005	W	4	5	3
2006	W	4	3	3
2007	D	0	0	0
Total		32	35	30

Total Number of Days with a Recurrence Interval of Daily Flows $\geq Q_{1.75}$ at the USGS Hot Creek Flume Gage by Runoff Year and Runoff Year Type under the Permit 17332 Bypass Flow Requirements Alternative, the Existing Condition and the Index of Unimpaired Conditions Over the 20-Year Evaluation Period

Runoff Year	Runoff Year Type	Number of Days with Hot Creek Daily Flow $\geq Q_{1.75}$ ($Q_{1.75} = 129.4$ cfs)		
		P-17332 BFR Alt	Existing Cond	Unimpaired
1988	D	0	0	0
1989	N	0	0	0
1990	D	0	0	0
1991	N	0	0	0
1992	N	0	0	0
1993	W	12	12	22
1994	D	0	0	0
1995	W	68	68	74
1996	N	32	31	32
1997	N	12	12	16
1998	N	50	49	52
1999	N	14	14	17
2000	N	4	4	4
2001	N	0	0	0
2002	N	0	0	0
2003	N	0	2	5
2004	N	0	0	0
2005	W	39	38	47
2006	W	59	56	67
2007	D	0	0	0
Total		290	286	336