Nueces BBEST Preliminary HEFR Outputs

August 9, 2011

Overbank Events	Qp: 2,220 cfs with Average Frequency 1 per year Regressed Volume is 8,106 to 41,594 (18,362) Regressed Duration is 7 to 46 (18)										

Overbank Events

Qp: 2,220 cfs with Average Frequency 1 per year
Regressed Volume is 8,106 to 41,594 (18,362)
Regressed Duration is 7 to 46 (18)

Qp: 587 cfs with Average Frequency 2 per year
Regressed Volume is 2,209 to 11,315 (4,999)
Regressed Duration is 4 to 26 (10)

High Flow Pulses

Qp: 393 cfs with Average Frequency 1 per season
Regressed Volume is 1,570 to 6,070 (3,087)
Regressed Duration is 4 to 17 (8)

Qp: 171 cfs with Average Frequency 1 per season
Regressed Volume is 599 to 3,099 (1,362)
Regressed Duration is 2 to 14 (6)

Qp: 99 cfs with Average Frequency 2 per season
Regressed Volume is 401 to 1,556 (790)
Regressed Duration is 2 to 9 (4)

Base Flows (cfs)

	Winter	Spring	Summer	Fall
High (75th)	94 (42.5%)	86 (47.1%)	76 (41.5%)	97 (48.9%)
Medium (50th)	69 (61.2%)	63 (64.9%)	48 (56.8%)	62 (64.4%)
Low (25th)	51 (78.9%)	44 (81.5%)	32 (71.2%)	41 (78.1%)
Subsistence Flows (cfs)	14 (98.1%)	18 (99.0%)	16 (92.5%)	13 (95.7%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1924 to 12/31/2009.

NRL19242009

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

Overbank Events

Qp: 1,910 cfs with Average Frequency 1 per year
Regressed Volume is 6,177 to 30,907 (13,818)
Regressed Duration is 6 to 35 (15)

Qp: 480 cfs with Average Frequency 2 per year
Regressed Volume is 1,627 to 8,112 (3,632)
Regressed Duration is 4 to 20 (8)

High Flow Pulses

Qp: 358 cfs with Average Frequency 1 per season
Regressed Volume is 1,298 to 5,182 (2,594)
Regressed Duration is 3 to 15 (7)

Qp: 145 cfs with Average Frequency 1 per season
Regressed Volume is 471 to 2,055 (983)
Regressed Duration is 2 to 11 (5)

Qp: 105 cfs with Average Frequency 2 per season
Regressed Volume is 399 to 1,597 (798)
Regressed Duration is 2 to 9 (4)

Base Flows (cfs)

Winter	Spring	Summer	Fall
86(36.5%)	80(42.3%)	66(37.1%)	87(43.5%)
61(56.9%)	59(61.3%)	40(54.7%)	46(59.8%)
40(76.5%)	37(80.2%)	26(70.1%)	32(74.0%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
9.6(97.3%)	15(99.3%)	13(93.4%)	8.5(94.9%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

- High (75th %ile)
- Medium (50th %ile)
- Low (25th %ile)
- Subsistence

Notes:
1. Period of Record used : 1/1/1924 to 12/31/1969.

NRL19241969

Overbank Events	Qp: 2,730 cfs with Average Frequency 1 per year Regressed Volume is 11,234 to 58,161 (25,562) Regressed Duration is 9 to 61 (24)		

High Flow Pulses				
	Qp: 838 cfs with Average Frequency 2 per year Regressed Volume is 3,558 to 18,353 (8,081) Regressed Duration is 5 to 36 (14)			
		Qp: 404 cfs with Average Frequency 1 per season Regressed Volume is 1,824 to 6,747 (3,508) Regressed Duration is 4 to 19 (9)	Qp: 311 cfs with Average Frequency 1 per season Regressed Volume is 1,209 to 7,131 (2,936) Regressed Duration is 3 to 22 (8)	Qp: 88 cfs with Average Frequency 1 per season Regressed Volume is 409 to 2,037 (913) Regressed Duration is 2 to 14 (5)
		Qp: 90 cfs with Average Frequency 2 per season Regressed Volume is 401 to 1,496 (775) Regressed Duration is 2 to 10 (4)		

Base Flows (cfs)			
100 (51.2%)	94 (52.2%)	92 (44.8%)	104 (55.2%)
77 (68.0%)	69 (68.4%)	64 (57.5%)	75 (69.5%)
62 (84.7%)	54 (82.9%)	45 (69.3%)	52 (83.4%)

Subsistence Flows (cfs)			
N/A	28 (98.8%)	22 (90.5%)	29 (97.8%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

NRL19702009

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Overbank Events	Qp: 1,020 cfs with Average Frequency 1 per year Regressed Volume is 2,492 to 9,265 (4,805) Regressed Duration is 6 to 31 (13)											
High Flow Pulses	Qp: 25 cfs with Average Frequency 2 per year Regressed Volume is 97 to 360 (187) Regressed Duration is 3 to 16 (7)											
					Qp: 5 cfs with Average Frequency 1 per season Regressed Volume is 19 to 76 (38) Regressed Duration is 2 to 10 (5)			Qp: 5 cfs with Average Frequency 1 per season Regressed Volume is 24 to 84 (45) Regressed Duration is 2 to 13 (5)				
Base Flows (cfs)	1.5(18.6%)				1.2(24.9%)			1.7(28.8%)			1.6(32.7%)	
	0.49(31.6%)				0.51(35.4%)			0.57(38.0%)			0.48(44.6%)	
	0.15(45.2%)				0.2(46.2%)			0.15(47.4%)			0.16(56.6%)	
Subsistence Flows (cfs)	0(100.0%)				0(100.0%)			0(100.0%)			0(100.0%)	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1946 to 12/31/2009.

WNRB19462009_LT3UT0.9MM1.25

	Overbank Events

Overbank Events

Qp: 585 cfs with Average Frequency 1 per year
Regressed Volume is 1,612 to 4,907 (2,813)
Regressed Duration is 4 to 26 (11)

High Flow Pulses

Qp: 8 cfs with Average Frequency 2 per year
Regressed Volume is 43 to 133 (76)
Regressed Duration is 3 to 16 (6)

Base Flows (cfs)

2.6 (5.7%)	1.5 (11.6%)	2.4 (15.9%)	3 (21.2%)
1.2 (7.9%)	0.7 (15.9%)	1.1 (18.2%)	1.3 (26.0%)
0.4 (10.3%)	0.3 (20.2%)	0.4 (20.9%)	0.4 (30.9%)

Subsistence Flows (cfs)

0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1946 to 12/31/1969.

WNRB19461969_LT3UT0.9MM1.25

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Overbank Events	Qp: 1,480 cfs with Average Frequency 1 per year Regressed Volume is 3,454 to 13,796 (6,903) Regressed Duration is 7 to 36 (16)											
High Flow Pulses	Qp: 80 cfs with Average Frequency 2 per year Regressed Volume is 260 to 1,036 (520) Regressed Duration is 4 to 20 (9)											
					Qp: 8 cfs with Average Frequency 1 per season Regressed Volume is 28 to 117 (58) Regressed Duration is 2 to 11 (5)			Qp: 6 cfs with Average Frequency 1 per season Regressed Volume is 27 to 110 (55) Regressed Duration is 2 to 13 (6)				
Base Flows (cfs)	1.3(27.1%)				1.2(32.1%)			1.6(36.4%)			1.3(39.6%)	
	0.46(45.5%)				0.5(47.1%)			0.48(49.9%)			0.4(56.4%)	
	0.15(65.6%)				0.19(61.8%)			0.14(63.3%)			0.15(73.4%)	
Subsistence Flows (cfs)	0(100.0%)				0(100.0%)			0(100.0%)			0(100.0%)	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

WNRB19702009_LT3UT0.9MM1.25

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct

Overbank Events

Qp: 2,550 cfs with Average Frequency 1 per year
Regressed Volume is 8,237 to 46,290 (19,527)
Regressed Duration is 7 to 49 (18)

High Flow Pulses

Qp: 512 cfs with Average Frequency 2 per year
Regressed Volume is 1,469 to 8,235 (3,478)
Regressed Duration is 4 to 26 (10)

Qp: 13 cfs with Average Frequency 1 per season
Regressed Volume is 24 to 252 (77)
Regressed Duration is 1 to 9 (3)

Qp: 110 cfs with Average Frequency 1 per season
Regressed Volume is 303 to 1,276 (622)
Regressed Duration is 2 to 11 (5)

Qp: 15 cfs with Average Frequency 1 per season
Regressed Volume is 37 to 142 (72)
Regressed Duration is 1 to 5 (2)

Qp: 50 cfs with Average Frequency 1 per season
Regressed Volume is 116 to 686 (282)
Regressed Duration is 1 to 11 (4)

Qp: 20 cfs with Average Frequency 2 per season
Regressed Volume is 47 to 201 (98)
Regressed Duration is 1 to 6 (3)

Base Flows (cfs)

Winter	Spring	Summer	Fall
35 (44.7%)	38 (41.1%)	32 (43.4%)	37 (45.0%)
22 (60.7%)	20 (59.3%)	17 (59.7%)	19 (62.0%)
12 (77.6%)	12 (77.3%)	8.8 (76.5%)	9.3 (78.6%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct

Winter	Spring	Summer	Fall

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1940 to 12/31/2009.

NRU19402009

Overbank Events	Qp: 1,730 cfs with Average Frequency 1 per year Regressed Volume is 4,662 to 19,745 (9,594) Regressed Duration is 5 to 26 (12)										
High Flow Pulses	Qp: 139 cfs with Average Frequency 2 per year Regressed Volume is 338 to 1,423 (694) Regressed Duration is 2 to 11 (5)										
						Qp: 64 cfs with Average Frequency 1 per season Regressed Volume is 152 to 554 (290) Regressed Duration is 2 to 7 (3)				Qp: 47 cfs with Average Frequency 1 per season Regressed Volume is 103 to 411 (205) Regressed Duration is 1 to 8 (3)	
						Qp: 24 cfs with Average Frequency 2 per season Regressed Volume is 55 to 202 (106) Regressed Duration is 1 to 5 (3)					
Base Flows (cfs)	22(32.5%)					26(29.0%)			23(32.5%)		24(37.9%)	
	14(50.4%)					14(53.6%)			12(52.5%)		13(58.4%)	
	7.2(67.1%)					9.1(67.4%)			7(68.5%)		7.1(72.2%)	
Subsistence Flows (cfs)	0(100.0%)					0(100.0%)			0(100.0%)		0(100.0%)	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	Winter					Spring			Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1940 to 12/31/1969.

NRU19401969

Overbank Events	Qp: 3,470 cfs with Average Frequency 1 per year Regressed Volume is 12,432 to 81,088 (31,751) Regressed Duration is 8 to 73 (25)											
High Flow Pulses	Qp: 825 cfs with Average Frequency 2 per year Regressed Volume is 2,697 to 17,519 (6,874) Regressed Duration is 5 to 40 (14)											
	Qp: 14 cfs with Average Frequency 1 per season Regressed Volume is 27 to 365 (98) Regressed Duration is 1 to 10 (3)					Qp: 234 cfs with Average Frequency 1 per season Regressed Volume is 838 to 3,676 (1,755) Regressed Duration is 3 to 20 (8)			Qp: 42 cfs with Average Frequency 1 per season Regressed Volume is 111 to 456 (224) Regressed Duration is 1 to 8 (3)		Qp: 51 cfs with Average Frequency 1 per season Regressed Volume is 133 to 980 (361) Regressed Duration is 1 to 13 (4)	
Base Flows (cfs)	41 (54.7%)					48 (48.4%)			42 (47.4%)		48 (49.6%)	
	28 (70.0%)					29 (64.9%)			29 (61.4%)		30 (64.4%)	
	21 (83.7%)					18 (80.7%)			17 (75.1%)		19 (77.0%)	
Subsistence Flows (cfs)	8.3 (98.8%)					6.4 (97.4%)			3.7 (94.0%)		5.2 (95.6%)	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	Winter					Spring			Summer		Fall	

Flow Levels	
	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

NRU19702009

	Nov – Dec – Jan – Feb – Mar (Winter)	Apr – May – Jun (Spring)	Jul – Aug (Summer)	Sep – Oct (Fall)
Overbank Events	Qp: 4,460 cfs with Average Frequency 1 per year — Regressed Volume is 22,779 to 73,993 (41,055) — Regressed Duration is 8 to 34 (17)			
	Qp: 1,560 cfs with Average Frequency 2 per year — Regressed Volume is 7,439 to 24,155 (13,405) — Regressed Duration is 7 to 28 (14)			
High Flow Pulses	Qp: 96 cfs with Average Frequency 1 per season — Regressed Volume is 438 to 1,572 (830) — Regressed Duration is 5 to 20 (10)	Qp: 1,180 cfs with Average Frequency 1 per season — Regressed Volume is 5,654 to 17,154 (9,848) — Regressed Duration is 7 to 24 (13)	Qp: 103 cfs with Average Frequency 1 per season — Regressed Volume is 376 to 1,027 (622) — Regressed Duration is 4 to 16 (8)	Qp: 644 cfs with Average Frequency 1 per season — Regressed Volume is 2,952 to 8,609 (5,041) — Regressed Duration is 6 to 26 (12)
	Qp: 8 cfs with Average Frequency 2 per season — Regressed Volume is 29 to 104 (55) — Regressed Duration is 3 to 13 (6)	Qp: 192 cfs with Average Frequency 2 per season — Regressed Volume is 782 to 2,370 (1,361) — Regressed Duration is 5 to 17 (9)		Qp: 35 cfs with Average Frequency 2 per season — Regressed Volume is 123 to 358 (210) — Regressed Duration is 3 to 14 (7)
	Qp: 1 cfs with Average Frequency 3 per season — Regressed Volume is 2 to 8 (4) — Regressed Duration is 2 to 9 (4)	Qp: 15 cfs with Average Frequency 3 per season — Regressed Volume is 49 to 147 (85) — Regressed Duration is 3 to 11 (6)		
	Qp: 0 cfs with Average Frequency 4 per season — Regressed Volume is 0 to 1 (0) — Regressed Duration is 1 to 6 (3)			
Base Flows (cfs)	38(29.9%)	30(36.4%)	32(30.5%)	42(38.7%)
	6.2(39.6%)	10(44.2%)	6.9(37.3%)	15(46.7%)
	0.33(52.2%)	1.3(53.3%)	0.49(43.5%)	1.3(56.2%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1927 to 12/31/2009.

NRC19272009

Overbank Events	Qp: 4,920 cfs with Average Frequency 1 per year Regressed Volume is 22,911 to 66,626 (39,070) Regressed Duration is 8 to 29 (15)			
High Flow Pulses	Qp: 2,090 cfs with Average Frequency 2 per year Regressed Volume is 9,277 to 26,964 (15,816) Regressed Duration is 7 to 25 (13)			
	Qp: 116 cfs with Average Frequency 1 per season Regressed Volume is 454 to 1,519 (831) Regressed Duration is 5 to 17 (9)	Qp: 1,620 cfs with Average Frequency 1 per season Regressed Volume is 7,210 to 19,696 (11,917) Regressed Duration is 6 to 21 (12)	Qp: 117 cfs with Average Frequency 1 per season Regressed Volume is 445 to 1,034 (679) Regressed Duration is 4 to 14 (7)	Qp: 1,090 cfs with Average Frequency 1 per season Regressed Volume is 5,037 to 13,096 (8,122) Regressed Duration is 6 to 25 (13)
	Qp: 11 cfs with Average Frequency 2 per season Regressed Volume is 39 to 129 (71) Regressed Duration is 3 to 12 (6)	Qp: 420 cfs with Average Frequency 2 per season Regressed Volume is 1,674 to 4,566 (2,765) Regressed Duration is 5 to 17 (9)	Qp: 0 cfs with Average Frequency 2 per season Regressed Volume is 1 to 2 (2) Regressed Duration is 1 to 5 (2)	Qp: 110 cfs with Average Frequency 2 per season Regressed Volume is 417 to 1,083 (672) Regressed Duration is 4 to 16 (8)
	Qp: 1 cfs with Average Frequency 3 per season Regressed Volume is 4 to 13 (7) Regressed Duration is 2 to 8 (4)	Qp: 89 cfs with Average Frequency 3 per season Regressed Volume is 312 to 851 (516) Regressed Duration is 4 to 12 (7)		
	Qp: 0 cfs with Average Frequency 4 per season Regressed Volume is 1 to 4 (2) Regressed Duration is 2 to 7 (4)	Qp: 2 cfs with Average Frequency 4 per season Regressed Volume is 4 to 10 (6) Regressed Duration is 2 to 6 (3)		
Base Flows (cfs)	22(21.5%) 0.84(34.7%) 0.3(46.6%)	18(38.1%) 4.4(46.5%) 0.6(54.5%)	20(27.8%) 1.7(36.8%) 0.3(42.3%)	12(45.0%) 1.5(53.7%) 0.3(61.5%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring		Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1927 to 12/31/1969.

NRC19271969

	Nov–Mar (Winter)	Apr–Jun (Spring)	Jul–Aug (Summer)	Sep–Oct (Fall)
Overbank Events	Qp: 2,970 cfs with Average Frequency 1 per year Regressed Volume is 17,696 to 62,855 (33,350) Regressed Duration is 9 to 40 (19)			
High Flow Pulses	Qp: 1,050 cfs with Average Frequency 2 per year Regressed Volume is 5,773 to 20,484 (10,875) Regressed Duration is 7 to 33 (15)			
	Qp: 88 cfs with Average Frequency 1 per season Regressed Volume is 520 to 1,892 (992) Regressed Duration is 5 to 26 (12)	Qp: 545 cfs with Average Frequency 1 per season Regressed Volume is 3,125 to 9,708 (5,508) Regressed Duration is 8 to 26 (14)	Qp: 53 cfs with Average Frequency 1 per season Regressed Volume is 152 to 551 (289) Regressed Duration is 2 to 15 (6)	Qp: 137 cfs with Average Frequency 1 per season Regressed Volume is 580 to 1,885 (1,046) Regressed Duration is 4 to 22 (10)
	Qp: 6 cfs with Average Frequency 2 per season Regressed Volume is 29 to 106 (56) Regressed Duration is 3 to 16 (7)	Qp: 36 cfs with Average Frequency 2 per season Regressed Volume is 150 to 466 (265) Regressed Duration is 4 to 15 (8)		Qp: 11 cfs with Average Frequency 2 per season Regressed Volume is 35 to 115 (64) Regressed Duration is 2 to 13 (6)
	Qp: 0 cfs with Average Frequency 3 per season Regressed Volume is 0 to 1 (1) Regressed Duration is 2 to 8 (4)	Qp: 0 cfs with Average Frequency 3 per season Regressed Volume is 1 to 2 (1) Regressed Duration is 2 to 6 (3)		
Base Flows (cfs)	49(39.2%) 18(48.4%) 0.95(58.5%)	35(36.9%) 18(43.4%) 2.5(52.2%)	38(34.7%) 13(40.8%) 1.2(46.3%)	56(37.2%) 35(43.7%) 14(50.9%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Winter					Spring			Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

NRC19702009

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct

Overbank Events

Qp: 4,610 cfs with Average Frequency 1 per year
Regressed Volume is 24,227 to 77,142 (43,231)
Regressed Duration is 9 to 33 (17)

Qp: 1,640 cfs with Average Frequency 2 per year
Regressed Volume is 7,964 to 25,348 (14,208)
Regressed Duration is 7 to 27 (14)

High Flow Pulses

Qp: 298 cfs with Average Frequency 1 per season
Regressed Volume is 1,408 to 4,606 (2,547)
Regressed Duration is 6 to 22 (12)

Qp: 881 cfs with Average Frequency 1 per season
Regressed Volume is 4,285 to 12,219 (7,236)
Regressed Duration is 6 to 22 (12)

Qp: 322 cfs with Average Frequency 1 per season
Regressed Volume is 1,396 to 4,392 (2,476)
Regressed Duration is 6 to 21 (11)

Qp: 836 cfs with Average Frequency 1 per season
Regressed Volume is 3,877 to 10,884 (6,496)
Regressed Duration is 6 to 23 (12)

Qp: 87 cfs with Average Frequency 2 per season
Regressed Volume is 384 to 1,255 (694)
Regressed Duration is 5 to 18 (9)

Qp: 279 cfs with Average Frequency 2 per season
Regressed Volume is 1,180 to 3,362 (1,992)
Regressed Duration is 5 to 18 (9)

Qp: 11 cfs with Average Frequency 2 per season
Regressed Volume is 30 to 96 (54)
Regressed Duration is 3 to 10 (5)

Qp: 218 cfs with Average Frequency 2 per season
Regressed Volume is 851 to 2,386 (1,425)
Regressed Duration is 4 to 16 (8)

Qp: 9 cfs with Average Frequency 3 per season
Regressed Volume is 34 to 110 (61)
Regressed Duration is 3 to 12 (6)

Qp: 89 cfs with Average Frequency 3 per season
Regressed Volume is 327 to 933 (553)
Regressed Duration is 4 to 14 (7)

Qp: 29 cfs with Average Frequency 3 per season
Regressed Volume is 87 to 245 (146)
Regressed Duration is 3 to 10 (5)

Qp: 1 cfs with Average Frequency 4 per season
Regressed Volume is 3 to 10 (6)
Regressed Duration is 2 to 8 (4)

Qp: 8 cfs with Average Frequency 4 per season
Regressed Volume is 21 to 60 (35)
Regressed Duration is 2 to 8 (5)

Base Flows (cfs)

	Winter	Spring	Summer	Fall
High (75th %ile)	42 (34.3%)	25 (45.0%)	14 (40.1%)	42 (47.9%)
Medium (50th %ile)	1.1 (55.8%)	3.3 (59.7%)	0.83 (56.1%)	12 (60.0%)
Low (25th %ile)	0.2 (74.4%)	0.1 (75.2%)	0.17 (64.4%)	0.34 (77.3%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

| High (75th %ile) |
| Medium (50th %ile) |
| Low (25th %ile) |
| Subsistence |

Notes:
1. Period of Record used : 1/1/1943 to 12/31/2009.

NRT19432009

	Winter (Nov–Mar)	Spring (Apr–Jun)	Summer (Jul–Aug)	Fall (Sep–Oct)
Overbank Events	Qp: 5,840 cfs with Average Frequency 1 per year Regressed Volume is 27,516 to 82,095 (47,528) Regressed Duration is 8 to 29 (15)			
Base Flows (cfs)	Qp: 1,940 cfs with Average Frequency 2 per year Regressed Volume is 8,594 to 25,615 (14,837) Regressed Duration is 7 to 24 (13)			
High Flow Pulses	Qp: 276 cfs with Average Frequency 1 per season Regressed Volume is 1,033 to 3,212 (1,821) Regressed Duration is 6 to 19 (10)	Qp: 1,760 cfs with Average Frequency 1 per season Regressed Volume is 9,288 to 22,488 (14,452) Regressed Duration is 7 to 23 (13)	Qp: 340 cfs with Average Frequency 1 per season Regressed Volume is 1,411 to 3,993 (2,374) Regressed Duration is 6 to 20 (11)	Qp: 1,010 cfs with Average Frequency 1 per season Regressed Volume is 5,068 to 12,251 (7,879) Regressed Duration is 6 to 22 (12)
	Qp: 108 cfs with Average Frequency 2 per season Regressed Volume is 402 to 1,250 (709) Regressed Duration is 5 to 16 (9)	Qp: 456 cfs with Average Frequency 2 per season Regressed Volume is 2,032 to 4,910 (3,159) Regressed Duration is 5 to 17 (10)	Qp: 11 cfs with Average Frequency 2 per season Regressed Volume is 26 to 74 (44) Regressed Duration is 2 to 8 (4)	Qp: 387 cfs with Average Frequency 2 per season Regressed Volume is 1,664 to 4,020 (2,587) Regressed Duration is 5 to 17 (9)
	Qp: 29 cfs with Average Frequency 3 per season Regressed Volume is 107 to 333 (189) Regressed Duration is 4 to 14 (7)	Qp: 200 cfs with Average Frequency 3 per season Regressed Volume is 804 to 1,941 (1,249) Regressed Duration is 4 to 15 (8)		Qp: 93 cfs with Average Frequency 3 per season Regressed Volume is 318 to 768 (494) Regressed Duration is 4 to 12 (6)
	Qp: 2 cfs with Average Frequency 4 per season Regressed Volume is 8 to 26 (15) Regressed Duration is 3 to 10 (5)	Qp: 55 cfs with Average Frequency 4 per season Regressed Volume is 188 to 454 (292) Regressed Duration is 3 to 11 (6)		Qp: 1 cfs with Average Frequency 4 per season Regressed Volume is 1 to 2 (1) Regressed Duration is 1 to 3 (2)
Base Flows (cfs)	4 (32.5%)	12 (48.1%)	3.5 (40.3%)	28 (50.9%)
	0.53 (51.7%)	0.28 (66.6%)	0.3 (54.1%)	6.6 (62.2%)
	0.13 (69.5%)	0.1 (73.1%)	0.1 (60.0%)	0.2 (78.5%)
Subsistence Flows (cfs)	0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Months	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Season	Winter					Spring			Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1943 to 12/31/1969.

NRT19431969

	Winter (Nov–Mar)	Spring (Apr–Jun)	Summer (Jul–Aug)	Fall (Sep–Oct)
Overbank Events	Qp: 4,510 cfs with Average Frequency 1 per year Regressed Volume is 26,605 to 88,191 (48,439) Regressed Duration is 9 to 37 (19)			
	Qp: 1,340 cfs with Average Frequency 2 per year Regressed Volume is 7,051 to 23,352 (12,832) Regressed Duration is 7 to 29 (15)			
High Flow Pulses	Qp: 304 cfs with Average Frequency 1 per season Regressed Volume is 1,816 to 5,810 (3,248) Regressed Duration is 7 to 25 (13)	Qp: 665 cfs with Average Frequency 1 per season Regressed Volume is 3,249 to 10,312 (5,788) Regressed Duration is 7 to 24 (12)	Qp: 294 cfs with Average Frequency 1 per season Regressed Volume is 1,340 to 4,374 (2,421) Regressed Duration is 5 to 22 (11)	Qp: 730 cfs with Average Frequency 1 per season Regressed Volume is 3,253 to 10,008 (5,705) Regressed Duration is 6 to 23 (12)
	Qp: 70 cfs with Average Frequency 2 per season Regressed Volume is 362 to 1,156 (647) Regressed Duration is 5 to 19 (10)	Qp: 152 cfs with Average Frequency 2 per season Regressed Volume is 613 to 1,943 (1,092) Regressed Duration is 5 to 17 (9)	Qp: 9 cfs with Average Frequency 2 per season Regressed Volume is 28 to 93 (51) Regressed Duration is 3 to 11 (5)	Qp: 143 cfs with Average Frequency 2 per season Regressed Volume is 530 to 1,629 (929) Regressed Duration is 4 to 16 (8)
	Qp: 3 cfs with Average Frequency 3 per season Regressed Volume is 11 to 36 (20) Regressed Duration is 3 to 10 (5)	Qp: 25 cfs with Average Frequency 3 per season Regressed Volume is 80 to 253 (142) Regressed Duration is 3 to 12 (6)		Qp: 8 cfs with Average Frequency 3 per season Regressed Volume is 22 to 68 (39) Regressed Duration is 2 to 9 (4)
	Qp: 0 cfs with Average Frequency 4 per season Regressed Volume is 1 to 4 (2) Regressed Duration is 2 to 7 (4)	Qp: 0 cfs with Average Frequency 4 per season Regressed Volume is 1 to 3 (2) Regressed Duration is 1 to 5 (3)		
Base Flows (cfs)	53(40.5%)	31(45.1%)	22(42.9%)	50(47.2%)
	2.6(59.7%)	5.1(58.8%)	1(60.6%)	14(60.0%)
	0.25(77.5%)	0.27(73.5%)	0.26(68.5%)	0.42(77.3%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring		Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

NRT19702009

	Winter (Nov–Mar)	Spring (Apr–Jun)	Summer (Jul–Aug)	Fall (Sep–Oct)
Overbank Events	Qp: 9,130 cfs with Average Frequency 1 per year — Regressed Volume is 58,099 to 162,009 (97,018) — Regressed Duration is 9 to 28 (16)			
High Flow Pulses	Qp: 5,420 cfs with Average Frequency 2 per year — Regressed Volume is 31,662 to 88,266 (52,864) — Regressed Duration is 8 to 24 (14)			
	Qp: 2,050 cfs with Average Frequency 1 per season — Regressed Volume is 9,373 to 26,796 (15,848) — Regressed Duration is 6 to 18 (10)	Qp: 4,090 cfs with Average Frequency 1 per season — Regressed Volume is 23,932 to 64,594 (39,317) — Regressed Duration is 7 to 22 (12)	Qp: 1,100 cfs with Average Frequency 1 per season — Regressed Volume is 4,857 to 13,644 (8,141) — Regressed Duration is 5 to 15 (8)	Qp: 2,420 cfs with Average Frequency 1 per season — Regressed Volume is 12,885 to 34,214 (20,996) — Regressed Duration is 6
	Qp: 717 cfs with Average Frequency 2 per season — Regressed Volume is 2,963 to 8,463 (5,008) — Regressed Duration is 4 to 13 (8)	Qp: 1,660 cfs with Average Frequency 2 per season — Regressed Volume is 8,227 to 22,190 (13,511) — Regressed Duration is 5 to 16 (9)	Qp: 276 cfs with Average Frequency 2 per season — Regressed Volume is 897 to 2,520 (1,504) — Regressed Duration is 3 to 9 (5)	Qp: 706 cfs with Average Frequency 2 per season — Regressed Volume is 2,985 to 7,922 (4,863) — Regressed Duration is 4 to 13 (7)
	Qp: 315 cfs with Average Frequency 3 per season — Regressed Volume is 1,202 to 3,434 (2,032) — Regressed Duration is 4 to 11 (6)	Qp: 689 cfs with Average Frequency 3 per season — Regressed Volume is 2,904 to 7,830 (4,768) — Regressed Duration is 4 to 12 (7)	Qp: 34 cfs with Average Frequency 3 per season — Regressed Volume is 69 to 196 (116) — Regressed Duration is 1 to 4 (2)	Qp: 158 cfs with Average Frequency 3 per season — Regressed Volume is 505 to 1,340 (822) — Regressed Duration is 2 to 8 (4)
	Qp: 140 cfs with Average Frequency 4 per season — Regressed Volume is 494 to 1,411 (835) — Regressed Duration is 3 to 8 (5)	Qp: 323 cfs with Average Frequency 4 per season — Regressed Volume is 1,183 to 3,192 (1,944) — Regressed Duration is 3 to 10 (5)		Qp: 15 cfs with Average Frequency 4 per season — Regressed Volume is 31 to 82 (50) — Regressed Duration is 1 to 4 (2)
Base Flows (cfs)	104(38.9%)	83(56.9%)	57(51.4%)	68(59.0%)
	38(61.3%)	36(74.0%)	30(65.9%)	37(72.2%)
	12(81.9%)	10(88.0%)	6.3(78.6%)	9(85.2%)
Subsistence Flows (cfs)	0.1(98.6%)	0.1(98.3%)	0.1(94.3%)	0.2(96.7%)

Month	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Season	Winter					Spring			Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1916 to 12/31/2009.

NRTR19162009

Overbank Events	Qp: 11,000 cfs with Average Frequency 1 per year Regressed Volume is 70,629 to 177,323 (111,911) Regressed Duration is 9 to 27 (16)			
High Flow Pulses	Qp: 6,160 cfs with Average Frequency 2 per year Regressed Volume is 36,010 to 90,380 (57,049) Regressed Duration is 8 to 23 (13)			
	Qp: 2,190 cfs with Average Frequency 1 per season Regressed Volume is 9,749 to 23,711 (15,204) Regressed Duration is 6 to 16 (10)	Qp: 5,380 cfs with Average Frequency 1 per season Regressed Volume is 33,021 to 80,168 (51,451) Regressed Duration is 7 to 22 (12)	Qp: 1,660 cfs with Average Frequency 1 per season Regressed Volume is 7,745 to 20,714 (12,666) Regressed Duration is 5	Qp: 3,010 cfs with Average Frequency 1 per season Regressed Volume is 16,450 to 39,753 (25,572) Regressed Duration is 6
	Qp: 805 cfs with Average Frequency 2 per season Regressed Volume is 3,305 to 8,030 (5,151) Regressed Duration is 5 to 12 (7)	Qp: 2,530 cfs with Average Frequency 2 per season Regressed Volume is 13,457 to 32,646 (20,960) Regressed Duration is 6 to 17 (10)	Qp: 383 cfs with Average Frequency 2 per season Regressed Volume is 1,301 to 3,477 (2,127) Regressed Duration is 3 to 10 (5)	Qp: 1,050 cfs with Average Frequency 2 per season Regressed Volume is 4,707 to 11,366 (7,314) Regressed Duration is 4 to 13 (8)
	Qp: 344 cfs with Average Frequency 3 per season Regressed Volume is 1,318 to 3,202 (2,054) Regressed Duration is 4 to 10 (6)	Qp: 1,070 cfs with Average Frequency 3 per season Regressed Volume is 4,833 to 11,719 (7,526) Regressed Duration is 4 to 13 (8)	Qp: 81 cfs with Average Frequency 3 per season Regressed Volume is 196 to 526 (321) Regressed Duration is 2 to 5 (3)	Qp: 254 cfs with Average Frequency 3 per season Regressed Volume is 871 to 2,104 (1,354) Regressed Duration is 3 to 8 (5)
	Qp: 149 cfs with Average Frequency 4 per season Regressed Volume is 533 to 1,296 (831) Regressed Duration is 3 to 8 (5)	Qp: 526 cfs with Average Frequency 4 per season Regressed Volume is 2,075 to 5,033 (3,232) Regressed Duration is 3 to 10 (6)		Qp: 60 cfs with Average Frequency 4 per season Regressed Volume is 157 to 379 (244) Regressed Duration is 2 to 5 (3)
Base Flows (cfs)	66(40.0%) 20(63.5%) 9(81.0%)	52(64.2%) 18(80.1%) 5.5(89.1%)	39(53.9%) 8.2(70.4%) 3.1(79.3%)	44(64.5%) 12(79.5%) 4(86.7%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring		Summer		Fall	

Flow Levels

- High (75th %ile)
- Medium (50th %ile)
- Low (25th %ile)
- Subsistence

Notes:
1. Period of Record used : 1/1/1916 to 12/31/1981.

NRTR19161981

Overbank Events	Qp: 5,420 cfs with Average Frequency 1 per year Regressed Volume is 38,588 to 131,284 (71,176) Regressed Duration is 10 to 34 (18)			

High Flow Pulses	Qp: 2,690 cfs with Average Frequency 2 per year Regressed Volume is 16,788 to 57,007 (30,936) Regressed Duration is 8 to 27 (14)			
	Qp: 1,610 cfs with Average Frequency 1 per season Regressed Volume is 8,527 to 32,084 (16,540) Regressed Duration is 6 to 23 (12)	Qp: 1,740 cfs with Average Frequency 1 per season Regressed Volume is 10,291 to 34,272 (18,780) Regressed Duration is 7 to 24 (12)	Qp: 531 cfs with Average Frequency 1 per season Regressed Volume is 2,351 to 7,319 (4,148) Regressed Duration is 4 to 13 (7)	Qp: 925 cfs with Average Frequency 1 per season Regressed Volume is 4,732 to 15,213 (8,484) Regressed Duration is 6 to 17 (10)
	Qp: 470 cfs with Average Frequency 2 per season Regressed Volume is 2,142 to 8,029 (4,147) Regressed Duration is 4 to 16 (8)	Qp: 534 cfs with Average Frequency 2 per season Regressed Volume is 2,472 to 8,202 (4,503) Regressed Duration is 4 to 15 (8)	Qp: 61 cfs with Average Frequency 2 per season Regressed Volume is 156 to 494 (278) Regressed Duration is 2 to 6 (3)	Qp: 258 cfs with Average Frequency 2 per season Regressed Volume is 1,010 to 3,250 (1,812) Regressed Duration is 3 to 11 (6)
	Qp: 244 cfs with Average Frequency 3 per season Regressed Volume is 1,025 to 3,845 (1,985) Regressed Duration is 3 to 13 (7)	Qp: 231 cfs with Average Frequency 3 per season Regressed Volume is 897 to 2,980 (1,635) Regressed Duration is 3 to 11 (6)		
	Qp: 107 cfs with Average Frequency 4 per season Regressed Volume is 405 to 1,526 (786) Regressed Duration is 3 to 10 (5)	Qp: 53 cfs with Average Frequency 4 per season Regressed Volume is 151 to 505 (276) Regressed Duration is 2 to 6 (3)		

Base Flows (cfs)	162(39.4%) 83(59.4%) 42(78.2%)	127(47.2%) 55(66.1%) 35(82.5%)	79(50.8%) 40(66.4%) 32(82.9%)	99(51.1%) 50(68.9%) 39(82.0%)
Subsistence Flows (cfs)	9.5(97.5%)	5.1(97.2%)	3.1(95.4%)	1.5(97.4%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring		Summer		Fall	

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1982 to 12/31/2009.

NRTR19822009

Overbank Events	Qp: 7,690 cfs with Average Frequency 1 per year Regressed Volume is 56,116 to 184,549 (101,766) Regressed Duration is 9 to 31 (17)			
High Flow Pulses	Qp: 4,090 cfs with Average Frequency 2 per year Regressed Volume is 25,252 to 82,986 (45,777) Regressed Duration is 7 to 23 (13)			
	Qp: 1,120 cfs with Average Frequency 1 per season Regressed Volume is 4,466 to 14,165 (7,954) Regressed Duration is 4 to 12 (7)	Qp: 2,540 cfs with Average Frequency 1 per season Regressed Volume is 15,558 to 49,395 (27,721) Regressed Duration is 6 to 19 (10)	Qp: 371 cfs with Average Frequency 1 per season Regressed Volume is 1,525 to 4,967 (2,752) Regressed Duration is 3 to 10 (5)	Qp: 1,550 cfs with Average Frequency 1 per season Regressed Volume is 7,571 to 24,681 (13,670) Regressed Duration is 4
	Qp: 591 cfs with Average Frequency 2 per season Regressed Volume is 1,979 to 6,271 (3,523) Regressed Duration is 3 to 9 (5)	Qp: 422 cfs with Average Frequency 2 per season Regressed Volume is 1,605 to 5,087 (2,857) Regressed Duration is 3 to 9 (5)	Qp: 150 cfs with Average Frequency 2 per season Regressed Volume is 506 to 1,650 (913) Regressed Duration is 2 to 6 (4)	Qp: 239 cfs with Average Frequency 2 per season Regressed Volume is 819 to 2,670 (1,478) Regressed Duration is 2 to 7 (4)
	Qp: 377 cfs with Average Frequency 3 per season Regressed Volume is 1,117 to 3,536 (1,987) Regressed Duration is 2 to 7 (4)	Qp: 188 cfs with Average Frequency 3 per season Regressed Volume is 577 to 1,828 (1,027) Regressed Duration is 2 to 6 (3)		Qp: 111 cfs with Average Frequency 3 per season Regressed Volume is 328 to 1,073 (594) Regressed Duration is 2 to 5 (3)
	Qp: 288 cfs with Average Frequency 4 per season Regressed Volume is 792 to 2,509 (1,410) Regressed Duration is 2 to 6 (3)	Qp: 145 cfs with Average Frequency 4 per season Regressed Volume is 415 to 1,316 (739) Regressed Duration is 2 to 5 (3)		
Base Flows (cfs)	122(39.9%) 96(58.8%) 70(76.2%)	148(47.9%) 119(64.8%) 89(81.8%)	170(44.1%) 136(62.5%) 101(80.6%)	142(50.2%) 114(66.0%) 88(82.8%)
Subsistence Flows (cfs)	36(95.1%)	36(98.2%)	39(98.9%)	37(98.1%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring		Summer		Fall	

Flow Levels	
	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1940 to 12/31/2009.

NRM19402009

	Winter	Spring	Summer	Fall
Overbank Events	Qp: 10,800 cfs with Average Frequency 1 per year — Regressed Volume is 87,389 to 259,053 (150,460) — Regressed Duration is 11 to 34 (19)			
	Qp: 5,240 cfs with Average Frequency 2 per year — Regressed Volume is 34,550 to 102,309 (59,454) — Regressed Duration is 8 to 24 (14)			
High Flow Pulses	Qp: 1,360 cfs with Average Frequency 1 per season — Regressed Volume is 5,745 to 16,465 (9,726) — Regressed Duration is 4 to 13 (7)	Qp: 4,080 cfs with Average Frequency 1 per season — Regressed Volume is 30,074 to 82,215 (49,725) — Regressed Duration is 7 to 22 (13)	Qp: 492 cfs with Average Frequency 1 per season — Regressed Volume is 2,097 to 6,262 (3,624) — Regressed Duration is 3 to 10 (6)	Qp: 2,280 cfs with Average Frequency 1 per season — Regressed Volume is 11,442 to 33,484 (19,574) — Regressed Duration is 5
	Qp: 699 cfs with Average Frequency 2 per season — Regressed Volume is 2,408 to 6,891 (4,074) — Regressed Duration is 3 to 9 (5)	Qp: 742 cfs with Average Frequency 2 per season — Regressed Volume is 3,268 to 8,906 (5,395) — Regressed Duration is 3 to 10 (6)	Qp: 147 cfs with Average Frequency 2 per season — Regressed Volume is 496 to 1,485 (858) — Regressed Duration is 2 to 6 (3)	Qp: 439 cfs with Average Frequency 2 per season — Regressed Volume is 1,589 to 4,648 (2,718) — Regressed Duration is 3 to 8 (5)
	Qp: 405 cfs with Average Frequency 3 per season — Regressed Volume is 1,180 to 3,375 (1,996) — Regressed Duration is 2 to 6 (4)	Qp: 184 cfs with Average Frequency 3 per season — Regressed Volume is 531 to 1,448 (877) — Regressed Duration is 2 to 5 (3)		Qp: 130 cfs with Average Frequency 3 per season — Regressed Volume is 369 to 1,083 (632) — Regressed Duration is 2 to 5 (3)
	Qp: 290 cfs with Average Frequency 4 per season — Regressed Volume is 763 to 2,181 (1,290) — Regressed Duration is 2 to 5 (3)	Qp: 140 cfs with Average Frequency 4 per season — Regressed Volume is 372 to 1,014 (614) — Regressed Duration is 1 to 4 (3)		
Base Flows (cfs)	102 (41.5%) / 80 (60.6%) / 56 (75.8%)	132 (49.5%) / 100 (67.0%) / 70 (83.4%)	143 (45.8%) / 112 (64.2%) / 79 (82.4%)	118 (55.6%) / 99 (70.6%) / 74 (85.0%)
Subsistence Flows (cfs)	32 (94.8%)	33 (98.1%)	38 (98.7%)	31 (98.4%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Winter					Spring			Summer		Fall	

Flow Levels

- High (75th %ile)
- Medium (50th %ile)
- Low (25th %ile)
- Subsistence

Notes:
1. Period of Record used : 1/1/1940 to 12/31/1981.

NRM19401981

	Winter (Nov–Mar)	Spring (Apr–Jun)	Summer (Jul–Aug)	Fall (Sep–Oct)
Overbank Events	Qp: 4,970 cfs with Average Frequency 1 per year Regressed Volume is 33,219 to 120,150 (63,176) Regressed Duration is 8 to 28 (15)			
High Flow Pulses	Qp: 2,130 cfs with Average Frequency 2 per year Regressed Volume is 11,746 to 42,339 (22,300) Regressed Duration is 5 to 19 (10)			
	Qp: 908 cfs with Average Frequency 1 per season Regressed Volume is 3,470 to 11,851 (6,413) Regressed Duration is 3 to 12 (6)	Qp: 1,070 cfs with Average Frequency 1 per season Regressed Volume is 5,192 to 19,174 (9,977) Regressed Duration is 4 to 15 (8)	Qp: 280 cfs with Average Frequency 1 per season Regressed Volume is 1,112 to 4,087 (2,132) Regressed Duration is 2 to 9 (5)	Qp: 477 cfs with Average Frequency 1 per season Regressed Volume is 2,182 to 7,837 (4,135) Regressed Duration is 3 to 11 (6)
	Qp: 484 cfs with Average Frequency 2 per season Regressed Volume is 1,667 to 5,676 (3,076) Regressed Duration is 3 to 9 (5)	Qp: 281 cfs with Average Frequency 2 per season Regressed Volume is 1,076 to 3,967 (2,066) Regressed Duration is 2 to 9 (5)	Qp: 163 cfs with Average Frequency 2 per season Regressed Volume is 551 to 2,037 (1,060) Regressed Duration is 2 to 7 (4)	Qp: 184 cfs with Average Frequency 2 per season Regressed Volume is 663 to 2,388 (1,259) Regressed Duration is 2 to 7 (4)
	Qp: 351 cfs with Average Frequency 3 per season Regressed Volume is 1,146 to 3,899 (2,113) Regressed Duration is 2 to 8 (4)	Qp: 200 cfs with Average Frequency 3 per season Regressed Volume is 721 to 2,660 (1,385) Regressed Duration is 2 to 8 (4)		
	Qp: 286 cfs with Average Frequency 4 per season Regressed Volume is 902 to 3,069 (1,664) Regressed Duration is 2 to 7 (4)	Qp: 154 cfs with Average Frequency 4 per season Regressed Volume is 529 to 1,957 (1,018) Regressed Duration is 2 to 7 (4)		
Base Flows (cfs)	140 (38.7%) 122 (55.2%) 102 (71.7%)	164 (46.3%) 136 (63.8%) 115 (81.0%)	191 (44.7%) 166 (63.0%) 137 (80.3%)	164 (44.2%) 139 (60.2%) 113 (77.3%)
Subsistence Flows (cfs)	60 (94.2%)	68 (99.0%)	62 (99.4%)	57 (97.8%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Winter					Spring			Summer		Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1982 to 12/31/2009.

NRM19822009

	High Flow Pulses											

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Base Flows (cfs)	33(21.0%)				31(21.5%)			32(20.3%)			35(20.5%)	
	25(42.0%)				20(43.0%)			18(40.7%)			22(40.9%)	
	11(62.9%)				9.9(64.5%)			11(61.0%)			11(61.3%)	
Subsistence Flows (cfs)	0(100.0%)				0(100.0%)			0(100.0%)			0(100.0%)	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	Winter				Spring			Summer			Fall	

Flow Levels	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
 1. Period of Record used : 1/1/1930 to 12/31/2009.

LS19302009

High Flow Pulses

Base Flows (cfs)	Winter	Spring	Summer	Fall
High (75th %ile)	25 (17.3%)	22 (18.3%)	19 (17.7%)	22 (17.3%)
Medium (50th %ile)	13 (34.6%)	12 (36.6%)	14 (35.4%)	14 (34.7%)
Low (25th %ile)	6.7 (51.9%)	6.9 (54.9%)	6.4 (53.0%)	8.2 (52.0%)
Subsistence Flows (cfs)	0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
  1. Period of Record used : 1/1/1930 to 12/31/1969.

LS19301969

	High Flow Pulses			

	Winter	Spring	Summer	Fall
Base Flows (cfs)	46 (23.4%)	43 (22.6%)	41 (21.2%)	45 (22.4%)
	31 (46.9%)	28 (45.1%)	30 (42.5%)	31 (44.8%)
	24 (70.4%)	19 (67.7%)	16 (63.7%)	21 (67.3%)
Subsistence Flows (cfs)	4.3 (96.9%)	3.7 (95.2%)	0 (100.0%)	0 (100.0%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
	Winter				Spring			Summer			Fall

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
 1. Period of Record used : 1/1/1970 to 12/31/2009.

LS19702009

	Dec / Jan / Feb / Mar (Winter)	Apr / May / Jun (Spring)	Jul / Aug / Sep (Summer)	Oct / Nov (Fall)
Overbank Events	Qp: 1,780 cfs with Average Frequency 1 per year — Regressed Volume is 6,102 to 33,426 (14,282) — Regressed Duration is 7 to 45 (18)			
High Flow Pulses	Qp: 543 cfs with Average Frequency 2 per year — Regressed Volume is 1,724 to 9,425 (4,031) — Regressed Duration is 4 to 24 (10)			
	Qp: 89 cfs with Average Frequency 1 per season — Regressed Volume is 260 to 2,096 (739) — Regressed Duration is 2 to 12 (5)	Qp: 296 cfs with Average Frequency 1 per season — Regressed Volume is 1,020 to 3,554 (1,904) — Regressed Duration is 3 to 12 (6)	Qp: 237 cfs with Average Frequency 1 per season — Regressed Volume is 622 to 2,986 (1,363) — Regressed Duration is 2 to 13 (5)	Qp: 79 cfs with Average Frequency 1 per season — Regressed Volume is 226 to 1,952 (664) — Regressed Duration is 1 to 13 (4)
		Qp: 118 cfs with Average Frequency 2 per season — Regressed Volume is 379 to 1,322 (708) — Regressed Duration is 2 to 8 (4)		
Base Flows (cfs)	83(43.5%)	81(45.2%)	73(41.1%)	80(49.5%)
	63(62.9%)	59(62.4%)	47(56.5%)	55(64.2%)
	46(80.2%)	40(80.3%)	31(70.8%)	34(78.6%)
Subsistence Flows (cfs)	11(98.5%)	9.4(98.0%)	9.6(92.5%)	9.5(96.3%)

Flow Levels	
	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1931 to 12/31/2009.

FRC19312009

Overbank Events	Qp: 1,010 cfs with Average Frequency 1 per year Regressed Volume is 3,135 to 14,356 (6,709) Regressed Duration is 5 to 26 (11)			

	Qp: 405 cfs with Average Frequency 2 per year Regressed Volume is 1,170 to 5,344 (2,501) Regressed Duration is 3 to 16 (7)

High Flow Pulses

Qp: 90 cfs with Average Frequency 1 per season Regressed Volume is 228 to 1,589 (602) Regressed Duration is 1 to 10 (4)	Qp: 260 cfs with Average Frequency 1 per season Regressed Volume is 823 to 2,356 (1,392) Regressed Duration is 3 to 9 (5)	Qp: 237 cfs with Average Frequency 1 per season Regressed Volume is 575 to 2,533 (1,206) Regressed Duration is 2 to 10 (5)
	Qp: 118 cfs with Average Frequency 2 per season Regressed Volume is 355 to 1,016 (600) Regressed Duration is 2 to 6 (3)	
	Qp: 52 cfs with Average Frequency 3 per season Regressed Volume is 148 to 426 (251) Regressed Duration is 1 to 4 (2)	

Base Flows (cfs)			
72 (38.4%)	78 (38.3%)	55 (36.6%)	66 (43.0%)
52 (58.6%)	55 (58.4%)	36 (53.8%)	41 (59.4%)
34 (78.0%)	35 (77.1%)	20 (69.1%)	23 (75.9%)

Subsistence Flows (cfs)			
7.9 (98.5%)	7.9 (97.4%)	6.8 (92.4%)	4 (95.6%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1931 to 12/31/1969.

FRC19311969

Overbank Events	Qp: 2,640 cfs with Average Frequency 1 per year Regressed Volume is 9,557 to 59,519 (23,850) Regressed Duration is 9 to 66 (24)				
High Flow Pulses	Qp: 763 cfs with Average Frequency 2 per year Regressed Volume is 2,692 to 16,682 (6,701) Regressed Duration is 5 to 35 (13)				
	Qp: 86 cfs with Average Frequency 1 per season Regressed Volume is 360 to 3,596 (1,137) Regressed Duration is 2 to 20 (7)	Qp: 368 cfs with Average Frequency 1 per season Regressed Volume is 1,483 to 5,730 (2,915) Regressed Duration is 4 to 17 (8)	Qp: 239 cfs with Average Frequency 1 per season Regressed Volume is 673 to 3,497 (1,534) Regressed Duration is 2 to 15 (6)	Qp: 121 cfs with Average Frequency 1 per season Regressed Volume is 417 to 4,080 (1,304) Regressed Duration is 2 to 21 (6)	
		Qp: 120 cfs with Average Frequency 2 per season Regressed Volume is 457 to 1,772 (900) Regressed Duration is 2 to 10 (5)			
Base Flows (cfs)	89 (48.9%)	89 (50.5%)	81 (46.2%)	94 (55.2%)	
	72 (67.1%)	65 (66.0%)	61 (59.1%)	67 (70.1%)	
	58 (84.0%)	47 (81.1%)	46 (72.4%)	50 (84.8%)	
Subsistence Flows (cfs)	28 (99.7%)	25 (98.1%)	18 (92.4%)	25 (98.2%)	

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
 1. Period of Record used : 1/1/1970 to 12/31/2009.

FRC19702009

	Dec–Mar (Winter)	Apr–Jun (Spring)	Jul–Sep (Summer)	Oct–Nov (Fall)
Overbank Events	Qp: 538 cfs with Average Frequency 1 per year Regressed Volume is 2,385 to 9,087 (4,655) Regressed Duration is 10 to 38 (19)			
High Flow Pulses	Qp: 214 cfs with Average Frequency 2 per year Regressed Volume is 921 to 3,504 (1,797) Regressed Duration is 6 to 26 (13)			
	Qp: 32 cfs with Average Frequency 1 per season Regressed Volume is 144 to 650 (306) Regressed Duration is 3 to 13 (7)	Qp: 117 cfs with Average Frequency 1 per season Regressed Volume is 467 to 1,473 (829) Regressed Duration is 4 to 16 (8)	Qp: 81 cfs with Average Frequency 1 per season Regressed Volume is 330 to 1,100 (602) Regressed Duration is 4 to 15 (8)	Qp: 35 cfs with Average Frequency 1 per season Regressed Volume is 151 to 617 (305) Regressed Duration is 3 to 13 (6)
		Qp: 30 cfs with Average Frequency 2 per season Regressed Volume is 118 to 372 (210) Regressed Duration is 2 to 9 (5)	Qp: 12 cfs with Average Frequency 2 per season Regressed Volume is 48 to 159 (87) Regressed Duration is 2 to 7 (4)	
		Qp: 9 cfs with Average Frequency 3 per season Regressed Volume is 33 to 106 (59) Regressed Duration is 1 to 6 (3)		
Base Flows (cfs)	17 (42.9%) 12 (62.0%) 7.2 (80.4%)	16 (47.5%) 9.3 (63.5%) 5 (80.0%)	14 (43.9%) 7.9 (58.1%) 4.1 (71.2%)	18 (50.6%) 11 (67.8%) 6.5 (80.1%)
Subsistence Flows (cfs)	0.65 (99.2%)	1.1 (97.7%)	0.6 (92.0%)	0.6 (97.2%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1953 to 12/31/2009.

DFRR19532009

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct

Overbank Events

Qp: 4,010 cfs with Average Frequency 1 per year
Regressed Volume is 12,756 to 44,691 (23,876)
Regressed Duration is 7 to 29 (14)

High Flow Pulses

Qp: 1,670 cfs with Average Frequency 2 per year
Regressed Volume is 5,356 to 18,758 (10,023)
Regressed Duration is 6 to 25 (12)

Qp: 87 cfs with Average Frequency 1 per season
Regressed Volume is 350 to 1,446 (711)
Regressed Duration is 4 to 20 (9)

Qp: 902 cfs with Average Frequency 1 per season
Regressed Volume is 3,061 to 7,936 (4,928)
Regressed Duration is 5 to 17 (9)

Qp: 58 cfs with Average Frequency 1 per season
Regressed Volume is 177 to 513 (301)
Regressed Duration is 3 to 13 (7)

Qp: 348 cfs with Average Frequency 1 per season
Regressed Volume is 1,072 to 4,340 (2,157)
Regressed Duration is 5 to 24 (11)

Qp: 12 cfs with Average Frequency 2 per season
Regressed Volume is 47 to 193 (95)
Regressed Duration is 3 to 15 (7)

Qp: 209 cfs with Average Frequency 2 per season
Regressed Volume is 699 to 1,812 (1,126)
Regressed Duration is 4 to 14 (7)

Qp: 7 cfs with Average Frequency 2 per season
Regressed Volume is 24 to 97 (48)
Regressed Duration is 2 to 12 (5)

Qp: 1 cfs with Average Frequency 3 per season
Regressed Volume is 4 to 17 (8)
Regressed Duration is 2 to 10 (5)

Qp: 49 cfs with Average Frequency 3 per season
Regressed Volume is 162 to 419 (260)
Regressed Duration is 3 to 11 (6)

Qp: 5 cfs with Average Frequency 4 per season
Regressed Volume is 16 to 41 (25)
Regressed Duration is 2 to 8 (4)

Base Flows (cfs)

Winter	Spring	Summer	Fall
26(34.8%)	22(38.3%)	16(30.7%)	24(34.9%)
17(43.9%)	11(49.2%)	6.8(38.0%)	12(43.2%)
7.9(53.1%)	2.8(59.7%)	2.2(46.2%)	5(51.1%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

- High (75th %ile)
- Medium (50th %ile)
- Low (25th %ile)
- Subsistence

Notes:
1. Period of Record used : 1/1/1916 to 12/31/2009.

FRD19162009

Overbank Events	Qp: 4,010 cfs with Average Frequency 1 per year Regressed Volume is 10,779 to 29,743 (17,905) Regressed Duration is 6 to 20 (11)			
High Flow Pulses	Qp: 1,600 cfs with Average Frequency 2 per year Regressed Volume is 4,462 to 12,306 (7,410) Regressed Duration is 5 to 18 (10)			
	Qp: 114 cfs with Average Frequency 1 per season Regressed Volume is 394 to 1,373 (735) Regressed Duration is 4 to 17 (9)	Qp: 937 cfs with Average Frequency 1 per season Regressed Volume is 2,910 to 6,051 (4,196) Regressed Duration is 5 to 14 (8)	Qp: 54 cfs with Average Frequency 1 per season Regressed Volume is 156 to 331 (227) Regressed Duration is 4 to 9 (6)	Qp: 364 cfs with Average Frequency 1 per season Regressed Volume is 1,122 to 2,956 (1,821) Regressed Duration is 5 to 16 (9)
	Qp: 9 cfs with Average Frequency 2 per season Regressed Volume is 36 to 124 (67) Regressed Duration is 3 to 13 (6)	Qp: 236 cfs with Average Frequency 2 per season Regressed Volume is 750 to 1,559 (1,082) Regressed Duration is 4 to 12 (7)		Qp: 10 cfs with Average Frequency 2 per season Regressed Volume is 34 to 91 (56) Regressed Duration is 3 to 9 (5)
	Qp: 1 cfs with Average Frequency 3 per season Regressed Volume is 6 to 20 (11) Regressed Duration is 3 to 10 (5)	Qp: 58 cfs with Average Frequency 3 per season Regressed Volume is 189 to 392 (272) Regressed Duration is 3 to 10 (6)		
		Qp: 8 cfs with Average Frequency 4 per season Regressed Volume is 28 to 57 (40) Regressed Duration is 3 to 8 (5)		
Base Flows (cfs)	20(19.5%) 13(27.4%) 5.3(37.1%)	15(31.3%) 7.1(40.9%) 1.4(52.2%)	11(20.6%) 4.1(28.3%) 1.4(35.7%)	11(27.1%) 4.6(34.3%) 1(42.4%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Winter					Spring			Summer		Fall	

Flow Levels	
	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1916 to 12/31/1969.

FRD19161969

	Nov - Mar (Winter)	Apr - Jun (Spring)	Jul - Aug (Summer)	Sep - Oct (Fall)
Overbank Events	Qp: 4,100 cfs with Average Frequency 1 per year — Regressed Volume is 18,023 to 72,390 (36,121) — Regressed Duration is 8 to 45 (19)			
High Flow Pulses	Qp: 1,790 cfs with Average Frequency 2 per year — Regressed Volume is 7,692 to 30,859 (15,406) — Regressed Duration is 7 to 38 (16)			
	Qp: 76 cfs with Average Frequency 1 per season — Regressed Volume is 388 to 1,737 (821) — Regressed Duration is 4 to 24 (10)	Qp: 878 cfs with Average Frequency 1 per season — Regressed Volume is 3,856 to 10,963 (6,502) — Regressed Duration is 5 to 23 (11)	Qp: 58 cfs with Average Frequency 1 per season — Regressed Volume is 242 to 770 (432) — Regressed Duration is 4 to 20 (9)	Qp: 287 cfs with Average Frequency 1 per season — Regressed Volume is 1,049 to 5,801 (2,467) — Regressed Duration is 5 to 38 (14)
	Qp: 16 cfs with Average Frequency 2 per season — Regressed Volume is 70 to 311 (147) — Regressed Duration is 3 to 16 (7)	Qp: 170 cfs with Average Frequency 2 per season — Regressed Volume is 685 to 1,945 (1,155) — Regressed Duration is 4 to 17 (8)		Qp: 0 cfs with Average Frequency 2 per season — Regressed Volume is 0 to 2 (1) — Regressed Duration is 1 to 7 (2)
	Qp: 0 cfs with Average Frequency 3 per season — Regressed Volume is 1 to 5 (2) — Regressed Duration is 1 to 6 (3)	Qp: 41 cfs with Average Frequency 3 per season — Regressed Volume is 153 to 435 (258) — Regressed Duration is 3 to 13 (6)		
		Qp: 2 cfs with Average Frequency 4 per season — Regressed Volume is 8 to 22 (13) — Regressed Duration is 2 to 8 (4)		
Base Flows (cfs)	32 (55.3%) / 23 (65.9%) / 13 (76.8%)	28 (51.7%) / 16 (62.1%) / 7.5 (71.0%)	28 (44.1%) / 13 (51.9%) / 4.3 (60.3%)	28 (49.8%) / 18 (58.5%) / 10 (68.5%)
Subsistence Flows (cfs)	0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Flow Levels	
High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

FRD19702009

Overbank Events	Qp: 4,140 cfs with Average Frequency 1 per year Regressed Volume is 17,953 to 51,369 (30,368) Regressed Duration is 7 to 27 (14)		
High Flow Pulses	Qp: 2,051 cfs with Average Frequency 2 per year Regressed Volume is 8,518 to 24,364 (14,406) Regressed Duration is 6 to 23 (12)		

High Flow Pulses

Winter	Spring	Summer	Fall
Qp: 385 cfs with Average Frequency 1 per season Regressed Volume is 1,502 to 5,322 (2,827) Regressed Duration is 5 to 20 (10)	Qp: 1,489 cfs with Average Frequency 1 per season Regressed Volume is 6,323 to 15,730 (9,973) Regressed Duration is 5 to 18 (10)	Qp: 271 cfs with Average Frequency 1 per season Regressed Volume is 981 to 2,440 (1,547) Regressed Duration is 4 to 14 (7)	Qp: 961 cfs with Average Frequency 1 per season Regressed Volume is 3,719 to 10,368 (6,209) Regressed Duration is 5 to 20 (10)
Qp: 86 cfs with Average Frequency 2 per season Regressed Volume is 302 to 1,070 (569) Regressed Duration is 3 to 13 (7)	Qp: 455 cfs with Average Frequency 2 per season Regressed Volume is 1,797 to 4,468 (2,834) Regressed Duration is 4 to 14 (8)	Qp: 36 cfs with Average Frequency 2 per season Regressed Volume is 111 to 276 (175) Regressed Duration is 2 to 9 (4)	Qp: 117 cfs with Average Frequency 2 per season Regressed Volume is 388 to 1,079 (647) Regressed Duration is 3 to 12 (6)
Qp: 25 cfs with Average Frequency 3 per season Regressed Volume is 82 to 289 (153) Regressed Duration is 2 to 9 (5)	Qp: 192 cfs with Average Frequency 3 per season Regressed Volume is 719 to 1,786 (1,133) Regressed Duration is 3 to 12 (6)		Qp: 13 cfs with Average Frequency 3 per season Regressed Volume is 37 to 103 (62) Regressed Duration is 2 to 7 (4)
Qp: 6 cfs with Average Frequency 4 per season Regressed Volume is 18 to 63 (33) Regressed Duration is 2 to 6 (3)	Qp: 83 cfs with Average Frequency 4 per season Regressed Volume is 295 to 732 (465) Regressed Duration is 3 to 10 (5)		

Base Flows (cfs)

Winter	Spring	Summer	Fall
29(41.9%)	25(49.9%)	14(42.5%)	21(48.2%)
12(60.6%)	7.3(68.6%)	2(61.5%)	3.2(67.7%)
1.1(81.7%)	1.1(83.1%)	0.26(71.4%)	0.62(79.9%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1933 to 12/31/2009.

FRT19332009

	Winter	Spring	Summer	Fall
Overbank Events	Qp: 4,845 cfs with Average Frequency 1 per year Regressed Volume is 19,360 to 43,239 (28,933) Regressed Duration is 6 to 20 (11)			
High Flow Pulses	Qp: 2,269 cfs with Average Frequency 2 per year Regressed Volume is 8,841 to 19,734 (13,209) Regressed Duration is 5 to 18 (10)			
	Qp: 500 cfs with Average Frequency 1 per season Regressed Volume is 1,903 to 4,433 (2,904) Regressed Duration is 5 to 15 (9)	Qp: 1,954 cfs with Average Frequency 1 per season Regressed Volume is 7,642 to 16,286 (11,156) Regressed Duration is 5 to 15 (9)	Qp: 271 cfs with Average Frequency 1 per season Regressed Volume is 914 to 2,020 (1,359) Regressed Duration is 4 to 11 (6)	Qp: 1,362 cfs with Average Frequency 1 per season Regressed Volume is 5,290 to 12,011 (7,971) Regressed Duration is 5 to 16 (9)
	Qp: 157 cfs with Average Frequency 2 per season Regressed Volume is 581 to 1,352 (887) Regressed Duration is 4 to 12 (7)	Qp: 686 cfs with Average Frequency 2 per season Regressed Volume is 2,606 to 5,547 (3,802) Regressed Duration is 4 to 13 (7)	Qp: 60 cfs with Average Frequency 2 per season Regressed Volume is 187 to 414 (278) Regressed Duration is 3 to 8 (5)	Qp: 173 cfs with Average Frequency 2 per season Regressed Volume is 603 to 1,366 (907) Regressed Duration is 3 to 11 (6)
	Qp: 67 cfs with Average Frequency 3 per season Regressed Volume is 245 to 569 (373) Regressed Duration is 3 to 10 (6)	Qp: 310 cfs with Average Frequency 3 per season Regressed Volume is 1,150 to 2,446 (1,677) Regressed Duration is 4 to 12 (7)	Qp: 5 cfs with Average Frequency 3 per season Regressed Volume is 12 to 28 (19) Regressed Duration is 1 to 4 (3)	Qp: 54 cfs with Average Frequency 3 per season Regressed Volume is 178 to 403 (267) Regressed Duration is 3 to 9 (5)
	Qp: 21 cfs with Average Frequency 4 per season Regressed Volume is 73 to 171 (112) Regressed Duration is 2 to 8 (4)	Qp: 167 cfs with Average Frequency 4 per season Regressed Volume is 609 to 1,294 (888) Regressed Duration is 3 to 11 (6)		Qp: 4 cfs with Average Frequency 4 per season Regressed Volume is 12 to 28 (18) Regressed Duration is 2 to 5 (3)
Base Flows (cfs)	17(34.6%)	14(51.0%)	7.7(39.2%)	5.9(51.0%)
	5.5(57.0%)	3.4(70.8%)	1.5(54.8%)	1.8(65.9%)
	0.62(77.3%)	0.83(81.3%)	0.4(63.0%)	0.46(72.4%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1933 to 12/31/1969.

FRT19331969

Overbank Events	Qp: 3,880 cfs with Average Frequency 1 per year Regressed Volume is 19,903 to 69,242 (37,124) Regressed Duration is 8 to 38 (18)			
High Flow Pulses	Qp: 1,817 cfs with Average Frequency 2 per year Regressed Volume is 8,677 to 30,153 (16,175) Regressed Duration is 7 to 31 (15)			
	Qp: 219 cfs with Average Frequency 1 per season Regressed Volume is 967 to 4,692 (2,130) Regressed Duration is 5 to 24 (11)	Qp: 1,124 cfs with Average Frequency 1 per season Regressed Volume is 5,653 to 15,466 (9,351) Regressed Duration is 6 to 22 (11)	Qp: 235 cfs with Average Frequency 1 per season Regressed Volume is 944 to 2,506 (1,539) Regressed Duration is 4 to 17 (8)	Qp: 544 cfs with Average Frequency 1 per season Regressed Volume is 2,119 to 7,134 (3,888) Regressed Duration is 5 to 23 (10)
	Qp: 44 cfs with Average Frequency 2 per season Regressed Volume is 155 to 752 (342) Regressed Duration is 3 to 14 (6)	Qp: 278 cfs with Average Frequency 2 per season Regressed Volume is 1,195 to 3,262 (1,974) Regressed Duration is 4 to 15 (8)	Qp: 6 cfs with Average Frequency 2 per season Regressed Volume is 18 to 48 (29) Regressed Duration is 2 to 8 (3)	Qp: 76 cfs with Average Frequency 2 per season Regressed Volume is 245 to 823 (449) Regressed Duration is 3 to 13 (6)
	Qp: 6 cfs with Average Frequency 3 per season Regressed Volume is 17 to 84 (38) Regressed Duration is 1 to 7 (3)	Qp: 89 cfs with Average Frequency 3 per season Regressed Volume is 335 to 916 (554) Regressed Duration is 3 to 11 (6)		Qp: 3 cfs with Average Frequency 3 per season Regressed Volume is 6 to 21 (12) Regressed Duration is 1 to 5 (2)
		Qp: 24 cfs with Average Frequency 4 per season Regressed Volume is 78 to 213 (129) Regressed Duration is 2 to 8 (4)		
Base Flows (cfs)	40(50.5%) 23(66.3%) 6.7(82.7%)	35(51.6%) 15(67.6%) 2.9(82.4%)	32(44.7%) 5.9(60.6%) 0.57(74.3%)	28(52.3%) 11(68.2%) 0.94(86.1%)
Subsistence Flows (cfs)	0.02(99.8%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring		Summer		Fall	

Flow Levels	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

FRT19702009

		Winter	Spring	Summer	Fall

Overbank Events

Qp: 1,020 cfs with Average Frequency 1 per year
Regressed Volume is 3,838 to 17,909 (8,291)
Regressed Duration is 7 to 38 (17)

High Flow Pulses

Qp: 329 cfs with Average Frequency 2 per year
Regressed Volume is 1,164 to 5,422 (2,513)
Regressed Duration is 5 to 24 (10)

Winter	Spring	Summer	Fall
Qp: 62 cfs with Average Frequency 1 per season Regressed Volume is 232 to 1,532 (596) Regressed Duration is 3 to 17 (7)	Qp: 177 cfs with Average Frequency 1 per season Regressed Volume is 644 to 2,207 (1,192) Regressed Duration is 4 to 15 (7)	Qp: 100 cfs with Average Frequency 1 per season Regressed Volume is 286 to 1,178 (581) Regressed Duration is 2 to 12 (5)	Qp: 53 cfs with Average Frequency 1 per season Regressed Volume is 177 to 840 (386) Regressed Duration is 2 to 12 (5)
	Qp: 64 cfs with Average Frequency 2 per season Regressed Volume is 219 to 750 (405) Regressed Duration is 2 to 10 (5)	Qp: 11 cfs with Average Frequency 2 per season Regressed Volume is 31 to 127 (62) Regressed Duration is 1 to 5 (2)	
	Qp: 22 cfs with Average Frequency 3 per season Regressed Volume is 70 to 242 (131) Regressed Duration is 2 to 6 (3)		

Base Flows (cfs)

Winter	Spring	Summer	Fall
35 (41.7%)	35 (46.4%)	29 (39.9%)	34 (44.2%)
22 (59.2%)	20 (63.3%)	13 (55.6%)	20 (59.4%)
11 (77.8%)	7.7 (79.9%)	3.2 (70.4%)	9.9 (73.7%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0 (100.0%)	0 (100.0%)	0 (100.0%)	0 (100.0%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

Flow Levels	
High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1943 to 12/31/2009.

SRS19432009

	Winter (Dec-Mar)	Spring (Apr-Jun)	Summer (Jul-Sep)	Fall (Oct-Nov)
Overbank Events	Qp: 758 cfs with Average Frequency 1 per year — Regressed Volume is 2,392 to 10,289 (4,961) — Regressed Duration is 6 to 27 (13)			
High Flow Pulses	Qp: 309 cfs with Average Frequency 2 per year — Regressed Volume is 949 to 4,063 (1,963) — Regressed Duration is 4 to 19 (9)			
	Qp: 63 cfs with Average Frequency 1 per season — Regressed Volume is 227 to 1,305 (544) — Regressed Duration is 3 to 15 (6)	Qp: 150 cfs with Average Frequency 1 per season — Regressed Volume is 457 to 1,376 (793) — Regressed Duration is 3 to 11 (6)	Qp: 91 cfs with Average Frequency 1 per season — Regressed Volume is 227 to 792 (424) — Regressed Duration is 2 to 8 (4)	Qp: 15 cfs with Average Frequency 1 per season — Regressed Volume is 48 to 263 (113) — Regressed Duration is 2 to 9 (4)
	Qp: 9 cfs with Average Frequency 2 per season — Regressed Volume is 25 to 150 (61) — Regressed Duration is 1 to 6 (2)	Qp: 50 cfs with Average Frequency 2 per season — Regressed Volume is 157 to 473 (272) — Regressed Duration is 2 to 8 (4)	Qp: 11 cfs with Average Frequency 2 per season — Regressed Volume is 23 to 83 (44) — Regressed Duration is 1 to 4 (2)	
		Qp: 22 cfs with Average Frequency 3 per season — Regressed Volume is 70 to 213 (123) — Regressed Duration is 2 to 6 (3)		
Base Flows (cfs)	26(35.4%)	29(37.0%)	19(27.9%)	32(34.5%)
	15(52.5%)	17(54.0%)	7.8(41.7%)	16(47.1%)
	6.3(67.8%)	6.5(71.1%)	2.9(54.2%)	3(61.1%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1943 to 12/31/1969.

SRS19431969

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

Overbank Events

Qp: 1,310 cfs with Average Frequency 1 per year
Regressed Volume is 5,475 to 26,276 (11,994)
Regressed Duration is 9 to 47 (20)

High Flow Pulses

Qp: 355 cfs with Average Frequency 2 per year
Regressed Volume is 1,383 to 6,614 (3,025)
Regressed Duration is 5 to 27 (12)

Qp: 61 cfs with Average Frequency 1 per season
Regressed Volume is 236 to 1,769 (646)
Regressed Duration is 3 to 19 (7)

Qp: 257 cfs with Average Frequency 1 per season
Regressed Volume is 1,105 to 3,835 (2,058)
Regressed Duration is 4 to 19 (9)

Qp: 103 cfs with Average Frequency 1 per season
Regressed Volume is 344 to 1,476 (713)
Regressed Duration is 3 to 14 (6)

Qp: 61 cfs with Average Frequency 1 per season
Regressed Volume is 208 to 969 (449)
Regressed Duration is 2 to 12 (5)

Qp: 70 cfs with Average Frequency 2 per season
Regressed Volume is 268 to 929 (499)
Regressed Duration is 2 to 11 (5)

Qp: 11 cfs with Average Frequency 2 per season
Regressed Volume is 40 to 174 (83)
Regressed Duration is 1 to 7 (3)

Qp: 21 cfs with Average Frequency 3 per season
Regressed Volume is 72 to 251 (134)
Regressed Duration is 1 to 7 (3)

Base Flows (cfs)

Winter	Spring	Summer	Fall
39(46.9%)	40(52.8%)	34(45.0%)	35(49.5%)
25(64.5%)	24(68.2%)	24(58.2%)	23(64.5%)
16(83.2%)	11(83.7%)	13(71.8%)	14(79.5%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
1.9(99.7%)	1.8(98.3%)	0.7(92.6%)	0.28(96.1%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

SRS19702009

Overbank Events	Qp: 1,070 cfs with Average Frequency 1 per year Regressed Volume is 3,229 to 13,859 (6,690) Regressed Duration is 6 to 29 (13)										
High Flow Pulses	Qp: 233 cfs with Average Frequency 2 per year Regressed Volume is 627 to 2,684 (1,297) Regressed Duration is 4 to 17 (8)										
	Qp: 21 cfs with Average Frequency 1 per season Regressed Volume is 62 to 307 (138) Regressed Duration is 2 to 11 (5)				Qp: 56 cfs with Average Frequency 1 per season Regressed Volume is 133 to 425 (238) Regressed Duration is 2 to 9 (4)					Qp: 20 cfs with Average Frequency 1 per season Regressed Volume is 40 to 153 (79) Regressed Duration is 2 to 6 (3)	
Base Flows (cfs)	3.3(32.9%)				2.7(35.3%)			2.5(37.3%)		3.4(36.6%)	
	1.5(54.2%)				1.3(55.2%)			1.1(55.8%)		1.8(54.9%)	
	0.98(72.2%)				0.6(73.1%)			0.56(70.8%)		0.88(72.6%)	
Subsistence Flows (cfs)	0(100.0%)				0(100.0%)			0(100.0%)		0(100.0%)	
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	Winter					Spring			Summer		Fall	

Flow Levels	
	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1953 to 12/31/2009.

SRSBEO19532009_LT3UT0.9MM1.25

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

Overbank Events

Qp: 313 cfs with Average Frequency 1 per year
Regressed Volume is 1,458 to 5,066 (2,718)
Regressed Duration is 8 to 31 (16)

High Flow Pulses

Qp: 121 cfs with Average Frequency 2 per year
Regressed Volume is 493 to 1,709 (918)
Regressed Duration is 6 to 21 (11)

Winter	Spring	Summer	Fall
Qp: 21 cfs with Average Frequency 1 per season Regressed Volume is 82 to 291 (155) Regressed Duration is 3 to 12 (6)	Qp: 91 cfs with Average Frequency 1 per season Regressed Volume is 347 to 1,137 (628) Regressed Duration is 4 to 17 (8)	Qp: 38 cfs with Average Frequency 1 per season Regressed Volume is 122 to 360 (210) Regressed Duration is 4 to 11 (6)	Qp: 23 cfs with Average Frequency 1 per season Regressed Volume is 69 to 270 (136) Regressed Duration is 3 to 11 (5)
Qp: 9 cfs with Average Frequency 2 per season Regressed Volume is 29 to 100 (54) Regressed Duration is 2 to 8 (4)	Qp: 33 cfs with Average Frequency 2 per season Regressed Volume is 111 to 364 (201) Regressed Duration is 3 to 12 (6)	Qp: 11 cfs with Average Frequency 2 per season Regressed Volume is 31 to 93 (54) Regressed Duration is 2 to 7 (4)	Qp: 7 cfs with Average Frequency 2 per season Regressed Volume is 17 to 65 (33) Regressed Duration is 2 to 6 (3)
Qp: 4 cfs with Average Frequency 3 per season Regressed Volume is 11 to 39 (21) Regressed Duration is 1 to 5 (3)	Qp: 13 cfs with Average Frequency 3 per season Regressed Volume is 39 to 128 (71) Regressed Duration is 2 to 8 (4)	Qp: 3 cfs with Average Frequency 3 per season Regressed Volume is 7 to 22 (13) Regressed Duration is 1 to 4 (2)	

Qp: 5 cfs with Average Frequency 4 per season
Regressed Volume is 12 to 40 (22)
Regressed Duration is 1 to 6 (3)

Base Flows (cfs)

Winter	Spring	Summer	Fall
6.1 (41.4%)	6.7 (50.7%)	6.4 (40.8%)	6.8 (44.9%)
3.6 (60.3%)	2.8 (68.2%)	2.8 (57.6%)	3.6 (64.1%)
2 (80.2%)	1.2 (83.6%)	1.3 (73.2%)	1.3 (81.7%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0.05 (98.7%)	0.06 (97.7%)	0.02 (92.9%)	0.05 (98.6%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1962 to 12/31/2009.

SCU19622009

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov

Overbank Events

Qp: 794 cfs with Average Frequency 1 per year
Regressed Volume is 3,162 to 12,144 (6,197)
Regressed Duration is 7 to 30 (15)

High Flow Pulses

Qp: 326 cfs with Average Frequency 2 per year
Regressed Volume is 1,182 to 4,534 (2,315)
Regressed Duration is 5 to 22 (10)

Winter	Spring	Summer	Fall
Qp: 61 cfs with Average Frequency 1 per season Regressed Volume is 245 to 1,023 (500) Regressed Duration is 3 to 15 (7)	Qp: 291 cfs with Average Frequency 1 per season Regressed Volume is 977 to 3,364 (1,813) Regressed Duration is 4 to 18 (9)	Qp: 90 cfs with Average Frequency 1 per season Regressed Volume is 262 to 889 (483) Regressed Duration is 3 to 12 (6)	Qp: 50 cfs with Average Frequency 1 per season Regressed Volume is 149 to 575 (293) Regressed Duration is 3 to 11 (5)
Qp: 16 cfs with Average Frequency 2 per season Regressed Volume is 47 to 197 (97) Regressed Duration is 2 to 8 (4)	Qp: 91 cfs with Average Frequency 2 per season Regressed Volume is 275 to 947 (510) Regressed Duration is 3 to 12 (6)	Qp: 24 cfs with Average Frequency 2 per season Regressed Volume is 65 to 220 (119) Regressed Duration is 2 to 7 (4)	Qp: 13 cfs with Average Frequency 2 per season Regressed Volume is 32 to 122 (62) Regressed Duration is 1 to 6 (3)
Qp: 6 cfs with Average Frequency 3 per season Regressed Volume is 13 to 54 (27) Regressed Duration is 1 to 5 (2)	Qp: 36 cfs with Average Frequency 3 per season Regressed Volume is 100 to 344 (186) Regressed Duration is 2 to 9 (4)	Qp: 4 cfs with Average Frequency 3 per season Regressed Volume is 10 to 34 (18) Regressed Duration is 1 to 4 (2)	

Qp: 6 cfs with Average Frequency 4 per season
Regressed Volume is 15 to 52 (28)
Regressed Duration is 1 to 5 (2)

Base Flows (cfs)

Winter	Spring	Summer	Fall
15(41.9%)	17(51.9%)	17(38.3%)	15(43.2%)
6.4(60.2%)	5.2(68.2%)	9(54.1%)	7.9(61.2%)
2.9(79.6%)	1.2(83.1%)	1.9(70.5%)	2.5(79.3%)

Subsistence Flows (cfs)

Winter	Spring	Summer	Fall
0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Winter				Spring			Summer			Fall	

Flow Levels

- High (75th %ile)
- Medium (50th %ile)
- Low (25th %ile)
- Subsistence

Notes:
1. Period of Record used : 1/1/1953 to 12/31/2009.

HCT19532009

Overbank Events	Qp: 2,210 cfs with Average Frequency 1 per year Regressed Volume is 5,627 to 15,868 (9,449) Regressed Duration is 5 to 20 (11)		
High Flow Pulses	Qp: 988 cfs with Average Frequency 2 per year Regressed Volume is 2,595 to 7,314 (4,356) Regressed Duration is 5 to 18 (10)		

	Winter	Spring	Summer	Fall
High Flow Pulses	Qp: 162 cfs with Average Frequency 1 per season Regressed Volume is 480 to 1,577 (870) Regressed Duration is 4 to 19 (9)	Qp: 685 cfs with Average Frequency 1 per season Regressed Volume is 2,058 to 4,940 (3,188) Regressed Duration is 5 to 16 (9)	Qp: 156 cfs with Average Frequency 1 per season Regressed Volume is 439 to 1,036 (675) Regressed Duration is 4 to 13 (7)	Qp: 303 cfs with Average Frequency 1 per season Regressed Volume is 802 to 2,006 (1,268) Regressed Duration is 5 to 15 (8)
	Qp: 45 cfs with Average Frequency 2 per season Regressed Volume is 145 to 474 (262) Regressed Duration is 4 to 16 (8)	Qp: 218 cfs with Average Frequency 2 per season Regressed Volume is 652 to 1,564 (1,010) Regressed Duration is 4 to 14 (8)	Qp: 16 cfs with Average Frequency 2 per season Regressed Volume is 48 to 112 (73) Regressed Duration is 3 to 10 (6)	Qp: 44 cfs with Average Frequency 2 per season Regressed Volume is 122 to 306 (193) Regressed Duration is 3 to 12 (6)
	Qp: 14 cfs with Average Frequency 3 per season Regressed Volume is 48 to 159 (88) Regressed Duration is 3 to 14 (7)	Qp: 103 cfs with Average Frequency 3 per season Regressed Volume is 307 to 736 (476) Regressed Duration is 4 to 13 (7)	Qp: 1 cfs with Average Frequency 3 per season Regressed Volume is 4 to 10 (7) Regressed Duration is 2 to 8 (4)	Qp: 5 cfs with Average Frequency 3 per season Regressed Volume is 14 to 35 (22) Regressed Duration is 3 to 8 (5)
	Qp: 7 cfs with Average Frequency 4 per season Regressed Volume is 26 to 86 (48) Regressed Duration is 3 to 13 (7)	Qp: 47 cfs with Average Frequency 4 per season Regressed Volume is 140 to 335 (216) Regressed Duration is 4 to 12 (7)		
Base Flows (cfs)	3.4(36.2%) 2(48.7%) 0.95(60.2%)	4.4(44.2%) 2(54.1%) 0.36(64.6%)	2.6(36.2%) 1.3(43.6%) 0.22(52.2%)	3.6(37.0%) 1.8(45.7%) 0.23(55.4%)
Subsistence Flows (cfs)	0(100.0%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1965 to 12/31/2009.

SMCT19652009

Overbank Events	Qp: 3,880 cfs with Average Frequency 1 per year Regressed Volume is 12,353 to 28,347 (18,713) Regressed Duration is 7 to 22 (13)			
High Flow Pulses	Qp: 1,990 cfs with Average Frequency 2 per year Regressed Volume is 6,437 to 14,767 (9,750) Regressed Duration is 6 to 19 (11)			
	Qp: 725 cfs with Average Frequency 1 per season Regressed Volume is 2,390 to 5,718 (3,697) Regressed Duration is 6 to 18 (11)	Qp: 1,770 cfs with Average Frequency 1 per season Regressed Volume is 6,156 to 12,451 (8,755) Regressed Duration is 6 to 16 (10)	Qp: 253 cfs with Average Frequency 1 per season Regressed Volume is 742 to 1,960 (1,206) Regressed Duration is 4 to 12 (7)	Qp: 620 cfs with Average Frequency 1 per season Regressed Volume is 2,144 to 4,323 (3,045) Regressed Duration is 5 to 14 (8)
	Qp: 228 cfs with Average Frequency 2 per season Regressed Volume is 818 to 1,955 (1,265) Regressed Duration is 5 to 14 (8)	Qp: 600 cfs with Average Frequency 2 per season Regressed Volume is 2,115 to 4,275 (3,007) Regressed Duration is 5 to 13 (8)	Qp: 37 cfs with Average Frequency 2 per season Regressed Volume is 104 to 275 (169) Regressed Duration is 2 to 7 (4)	Qp: 102 cfs with Average Frequency 2 per season Regressed Volume is 356 to 717 (505) Regressed Duration is 3 to 9 (6)
	Qp: 74 cfs with Average Frequency 3 per season Regressed Volume is 288 to 689 (445) Regressed Duration is 4 to 11 (6)	Qp: 215 cfs with Average Frequency 3 per season Regressed Volume is 767 to 1,551 (1,091) Regressed Duration is 4 to 11 (6)	Qp: 5 cfs with Average Frequency 3 per season Regressed Volume is 13 to 34 (21) Regressed Duration is 1 to 4 (2)	Qp: 21 cfs with Average Frequency 3 per season Regressed Volume is 74 to 149 (105) Regressed Duration is 2 to 6 (4)
	Qp: 28 cfs with Average Frequency 4 per season Regressed Volume is 117 to 280 (181) Regressed Duration is 3 to 9 (5)	Qp: 80 cfs with Average Frequency 4 per season Regressed Volume is 289 to 584 (411) Regressed Duration is 3 to 9 (5)		
Base Flows (cfs)	14(45.3%) 9(63.0%) 4.8(82.8%)	10(57.0%) 5.4(72.5%) 2.4(84.8%)	8(44.2%) 3.4(61.1%) 1.4(73.4%)	7.6(52.0%) 3.6(68.3%) 1.6(78.5%)
Subsistence Flows (cfs)	0.05(99.5%)	0(100.0%)	0(100.0%)	0(100.0%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

High (75th %ile)
Medium (50th %ile)
Low (25th %ile)
Subsistence

Notes:
1. Period of Record used : 1/1/1933 to 12/31/2009.

ARW19332009

Overbank Events	Qp: 3,660 cfs with Average Frequency 1 per year Regressed Volume is 10,886 to 24,871 (16,454) Regressed Duration is 7 to 21 (12)			
	Qp: 1,990 cfs with Average Frequency 2 per year Regressed Volume is 6,022 to 13,752 (9,100) Regressed Duration is 6 to 18 (11)			
High Flow Pulses	Qp: 900 cfs with Average Frequency 1 per season Regressed Volume is 2,704 to 6,507 (4,195) Regressed Duration is 6 to 18 (11)	Qp: 1,860 cfs with Average Frequency 1 per season Regressed Volume is 6,165 to 11,998 (8,600) Regressed Duration is 5 to 15 (9)	Qp: 392 cfs with Average Frequency 1 per season Regressed Volume is 1,061 to 2,794 (1,722) Regressed Duration is 4 to 13 (7)	Qp: 632 cfs with Average Frequency 1 per season Regressed Volume is 2,061 to 3,958 (2,856) Regressed Duration is 5 to 13 (8)
	Qp: 289 cfs with Average Frequency 2 per season Regressed Volume is 960 to 2,305 (1,488) Regressed Duration is 5 to 14 (8)	Qp: 740 cfs with Average Frequency 2 per season Regressed Volume is 2,520 to 4,899 (3,513) Regressed Duration is 5 to 13 (8)	Qp: 55 cfs with Average Frequency 2 per season Regressed Volume is 145 to 382 (235) Regressed Duration is 2 to 8 (4)	Qp: 130 cfs with Average Frequency 2 per season Regressed Volume is 419 to 803 (580) Regressed Duration is 3 to 9 (5)
	Qp: 91 cfs with Average Frequency 3 per season Regressed Volume is 334 to 803 (518) Regressed Duration is 4 to 11 (6)	Qp: 319 cfs with Average Frequency 3 per season Regressed Volume is 1,113 to 2,163 (1,551) Regressed Duration is 4 to 11 (7)	Qp: 8 cfs with Average Frequency 3 per season Regressed Volume is 22 to 57 (35) Regressed Duration is 1 to 4 (2)	Qp: 27 cfs with Average Frequency 3 per season Regressed Volume is 86 to 165 (119) Regressed Duration is 2 to 6 (4)
	Qp: 42 cfs with Average Frequency 4 per season Regressed Volume is 165 to 396 (256) Regressed Duration is 3 to 9 (5)	Qp: 138 cfs with Average Frequency 4 per season Regressed Volume is 493 to 958 (687) Regressed Duration is 3 to 10 (6)		
Base Flows (cfs)	16(47.2%) 11(67.2%) 6.4(83.2%)	12(57.4%) 7.5(72.4%) 3.2(86.3%)	8.3(43.2%) 3.8(62.2%) 1.6(73.5%)	8.3(50.6%) 3.4(67.2%) 1.5(77.7%)
Subsistence Flows (cfs)	0.3(99.7%)	0(100.0%)	0(100.0%)	0.1(93.8%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Winter					Spring			Summer		Fall	

Flow Levels	
	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1933 to 12/31/1969.

ARW19331969

<table>
<tr><td>**Overbank Events**</td><td colspan="4">Qp: 4,040 cfs with Average Frequency 1 per year
Regressed Volume is 14,094 to 32,103 (21,271)
Regressed Duration is 8 to 24 (14)</td></tr>
<tr><td rowspan="6">**High Flow Pulses**</td><td colspan="4">Qp: 1,990 cfs with Average Frequency 2 per year
Regressed Volume is 7,022 to 15,984 (10,594)
Regressed Duration is 7 to 21 (12)</td></tr>
<tr><td>Qp: 536 cfs with Average Frequency 1 per season
Regressed Volume is 1,941 to 4,662 (3,008)
Regressed Duration is 6 to 18 (11)</td><td>Qp: 1,660 cfs with Average Frequency 1 per season
Regressed Volume is 6,127 to 12,813 (8,860)
Regressed Duration is 6 to 18 (10)</td><td>Qp: 136 cfs with Average Frequency 1 per season
Regressed Volume is 439 to 1,142 (708)
Regressed Duration is 4 to 11 (6)</td><td>Qp: 591 cfs with Average Frequency 1 per season
Regressed Volume is 2,231 to 4,485 (3,163)
Regressed Duration is 6 to 14 (9)</td></tr>
<tr><td>Qp: 181 cfs with Average Frequency 2 per season
Regressed Volume is 696 to 1,669 (1,078)
Regressed Duration is 5 to 15 (8)</td><td>Qp: 447 cfs with Average Frequency 2 per season
Regressed Volume is 1,639 to 3,421 (2,368)
Regressed Duration is 5 to 14 (8)</td><td>Qp: 21 cfs with Average Frequency 2 per season
Regressed Volume is 64 to 168 (104)
Regressed Duration is 2 to 7 (4)</td><td>Qp: 71 cfs with Average Frequency 2 per season
Regressed Volume is 275 to 551 (389)
Regressed Duration is 4 to 9 (6)</td></tr>
<tr><td>Qp: 51 cfs with Average Frequency 3 per season
Regressed Volume is 210 to 504 (325)
Regressed Duration is 4 to 11 (6)</td><td>Qp: 136 cfs with Average Frequency 3 per season
Regressed Volume is 495 to 1,034 (715)
Regressed Duration is 4 to 11 (6)</td><td></td><td>Qp: 18 cfs with Average Frequency 3 per season
Regressed Volume is 71 to 142 (100)
Regressed Duration is 3 to 7 (4)</td></tr>
<tr><td>Qp: 16 cfs with Average Frequency 4 per season
Regressed Volume is 70 to 169 (109)
Regressed Duration is 3 to 9 (5)</td><td>Qp: 44 cfs with Average Frequency 4 per season
Regressed Volume is 159 to 332 (230)
Regressed Duration is 3 to 9 (5)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">**Base Flows (cfs)**</td><td>11(46.2%)</td><td>8.6(55.5%)</td><td>7.6(45.0%)</td><td>7(53.1%)</td></tr>
<tr><td>6.9(62.9%)</td><td>3.8(73.5%)</td><td>3.2(60.0%)</td><td>3.8(68.9%)</td></tr>
<tr><td>3.8(82.1%)</td><td>1.9(83.7%)</td><td>1.2(73.6%)</td><td>1.6(79.9%)</td></tr>
<tr><td>**Subsistence Flows (cfs)**</td><td>0.02(99.3%)</td><td>0(100.0%)</td><td>0(100.0%)</td><td>0(100.0%)</td></tr>
<tr><td></td><td>Nov | Dec | Jan | Feb | Mar</td><td>Apr | May | Jun</td><td>Jul | Aug</td><td>Sep | Oct</td></tr>
<tr><td></td><td>Winter</td><td>Spring</td><td>Summer</td><td>Fall</td></tr>
</table>

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1970 to 12/31/2009.

ARW19702009

Overbank Events	Qp: 1,320 cfs with Average Frequency 1 per year Regressed Volume is 3,937 to 9,015 (5,958) Regressed Duration is 8 to 23 (13)			
High Flow Pulses	Qp: 663 cfs with Average Frequency 2 per year Regressed Volume is 2,005 to 4,588 (3,033) Regressed Duration is 7 to 19 (11)			
	Qp: 220 cfs with Average Frequency 1 per season Regressed Volume is 691 to 1,601 (1,052) Regressed Duration is 6 to 17 (10)	Qp: 227 cfs with Average Frequency 1 per season Regressed Volume is 676 to 1,479 (1,000) Regressed Duration is 5 to 13 (8)	Qp: 21 cfs with Average Frequency 1 per season Regressed Volume is 62 to 155 (98) Regressed Duration is 3 to 8 (5)	Qp: 364 cfs with Average Frequency 1 per season Regressed Volume is 1,148 to 2,450 (1,677) Regressed Duration is 5 to 15 (9)
	Qp: 59 cfs with Average Frequency 2 per season Regressed Volume is 196 to 453 (298) Regressed Duration is 4 to 13 (7)	Qp: 48 cfs with Average Frequency 2 per season Regressed Volume is 149 to 325 (220) Regressed Duration is 4 to 9 (6)	Qp: 6 cfs with Average Frequency 2 per season Regressed Volume is 15 to 39 (24) Regressed Duration is 2 to 6 (3)	Qp: 64 cfs with Average Frequency 2 per season Regressed Volume is 211 to 449 (308) Regressed Duration is 4 to 11 (6)
	Qp: 18 cfs with Average Frequency 3 per season Regressed Volume is 63 to 145 (95) Regressed Duration is 3 to 9 (6)	Qp: 12 cfs with Average Frequency 3 per season Regressed Volume is 39 to 84 (57) Regressed Duration is 3 to 7 (4)	Qp: 2 cfs with Average Frequency 3 per season Regressed Volume is 6 to 15 (9) Regressed Duration is 1 to 4 (3)	Qp: 17 cfs with Average Frequency 3 per season Regressed Volume is 58 to 123 (84) Regressed Duration is 3 to 9 (5)
	Qp: 6 cfs with Average Frequency 4 per season Regressed Volume is 23 to 53 (35) Regressed Duration is 3 to 7 (4)	Qp: 5 cfs with Average Frequency 4 per season Regressed Volume is 17 to 37 (25) Regressed Duration is 2 to 6 (4)		Qp: 5 cfs with Average Frequency 4 per season Regressed Volume is 17 to 36 (25) Regressed Duration is 2 to 7 (4)
Base Flows (cfs)	2.4 (46.9%) 1.8 (67.1%) 1.4 (85.5%)	2.3 (48.3%) 1.7 (64.3%) 1.3 (80.3%)	2.1 (42.1%) 1.5 (61.7%) 1.2 (76.5%)	2.1 (63.6%) 1.6 (79.0%) 1.3 (87.9%)
Subsistence Flows (cfs)	0.79 (99.1%)	0.74 (94.8%)	0.74 (93.9%)	0.8 (98.6%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels

High (75th %ile)	
Medium (50th %ile)	
Low (25th %ile)	
Subsistence	

Notes:
1. Period of Record used : 1/1/1973 to 12/31/2009.

OCC19732009

Overbank Events	Qp: 605 cfs with Average Frequency 1 per year Regressed Volume is 1,533 to 5,075 (2,790) Regressed Duration is 6 to 23 (12)		
High Flow Pulses	Qp: 173 cfs with Average Frequency 2 per year Regressed Volume is 450 to 1,485 (817) Regressed Duration is 5 to 17 (9)		

	Winter	Spring	Summer	Fall
High Flow Pulses	Qp: 14 cfs with Average Frequency 1 per season Regressed Volume is 47 to 171 (89) Regressed Duration is 3 to 12 (6)	Qp: 65 cfs with Average Frequency 1 per season Regressed Volume is 161 to 472 (275) Regressed Duration is 3 to 11 (6)	Qp: 17 cfs with Average Frequency 1 per season Regressed Volume is 46 to 142 (81) Regressed Duration is 3 to 9 (5)	Qp: 28 cfs with Average Frequency 1 per season Regressed Volume is 77 to 237 (135) Regressed Duration is 3 to 10 (5)
	Qp: 7 cfs with Average Frequency 2 per season Regressed Volume is 21 to 78 (41) Regressed Duration is 2 to 9 (5)	Qp: 14 cfs with Average Frequency 2 per season Regressed Volume is 36 to 104 (61) Regressed Duration is 2 to 7 (4)	Qp: 4 cfs with Average Frequency 2 per season Regressed Volume is 12 to 37 (21) Regressed Duration is 2 to 6 (3)	Qp: 8 cfs with Average Frequency 2 per season Regressed Volume is 22 to 69 (39) Regressed Duration is 2 to 8 (4)
	Qp: 4 cfs with Average Frequency 3 per season Regressed Volume is 11 to 40 (21) Regressed Duration is 2 to 7 (4)	Qp: 6 cfs with Average Frequency 3 per season Regressed Volume is 15 to 45 (26) Regressed Duration is 2 to 6 (3)	Qp: 2 cfs with Average Frequency 3 per season Regressed Volume is 6 to 19 (11) Regressed Duration is 2 to 5 (3)	Qp: 4 cfs with Average Frequency 3 per season Regressed Volume is 11 to 34 (19) Regressed Duration is 2 to 7 (3)
	Qp: 3 cfs with Average Frequency 4 per season Regressed Volume is 9 to 33 (17) Regressed Duration is 2 to 7 (3)	Qp: 3 cfs with Average Frequency 4 per season Regressed Volume is 9 to 25 (15) Regressed Duration is 2 to 5 (3)	Qp: 2 cfs with Average Frequency 4 per season Regressed Volume is 5 to 15 (8) Regressed Duration is 1 to 5 (3)	Qp: 2 cfs with Average Frequency 4 per season Regressed Volume is 7 to 20 (11) Regressed Duration is 2 to 6 (3)
Base Flows (cfs)	2.1(46.2%) 1.7(64.3%) 1.3(84.7%)	1.9(49.8%) 1.6(64.3%) 1.2(82.0%)	1.9(48.0%) 1.4(66.9%) 1.1(78.1%)	2.1(53.5%) 1.5(73.1%) 1.2(83.7%)
Subsistence Flows (cfs)	0.62(98.9%)	0.52(96.0%)	0.5(94.3%)	0.55(96.7%)

Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
		Winter				Spring			Summer		Fall

Flow Levels	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)
	Subsistence

Notes:
1. Period of Record used : 1/1/1965 to 12/31/1996.

SFCA19651996