

TABLE 1

SW-LO CREST CONFIGURATION (Crest Elev. = 618 ft)

					Powerhouse Flow (kcfs) [Notes 1 & 3]							Spillway Flow (stops) [Note 3]									
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	7	2	3	4	5	6	7	8	Total Stops Ts	Notes	
26.1	11.2	37.3	30.0%	633.5	14.8	11.3					SW-LO								0	Lowest Qr w/ SW-LO (Note 5)	
27.3	11.2	38.5	29.1%	633.5	16.0	11.3					SW-LO								0		
30.2	13.0	43.2	30.0%	633.5	16.0	14.2					SW-LO	1							1		
34.3	14.7	49.0	30.0%	633.5	17.2	17.1					SW-LO	1	1						2		
38.6	16.5	55.1	29.9%	633.5	16.0	11.3	11.3				SW-LO	1	1	1					3		
42.5	18.2	60.7	30.0%	633.5	16.0	13.3	13.2				SW-LO	1	1	1	1				4		
46.6	20.0	66.6	30.0%	633.5	16.0	15.3	15.3				SW-LO	1	1	1	1	1			5		
50.6	21.7	72.3	30.0%	633.5	16.9	16.9	16.8				SW-LO	1	1	1	1	1	1		6		
54.7	23.5	78.2	30.0%	633.5	16.0	12.4	12.4	13.9			SW-LO	1	1	1	1	1	1	1	7	Likely lowest Qr w/ SW-LO (Note 6)	
59.1	25.3	84.4	30.0%	633.5	16.0	14.4	14.4	14.3			SW-LO	2	1	1	1	1	1	1	8		
63.5	27.2	90.7	30.0%	633.5	16.0	15.9	15.8	15.8			SW-LO	2	1	2	1	1	1	1	9		
67.9	29.1	97.0	30.0%	633.5	17.0	17.0	17.0	16.9			SW-LO	2	1	2	1	2	1	1	10		
72.4	31.0	103.4	30.0%	633.5	16.0	14.1	14.1	14.1	14.1		SW-LO	2	1	2	1	2	1	2	11		
76.8	32.9	109.7	30.0%	633.5	16.0	15.2	15.2	15.2	15.2		SW-LO	2	2	2	1	2	1	2	12		
81.2	34.8	116.0	30.0%	633.5	16.3	16.3	16.2	16.2	16.2		SW-LO	2	2	2	2	2	1	2	13		
85.6	36.7	122.3	30.0%	633.5	17.2	17.1	17.1	17.1	17.1		SW-LO	2	2	2	2	2	2	2	14		
90.2	38.7	128.9	30.0%	633.5	16.0	14.9	14.9	14.8	14.8	14.8	SW-LO	3	2	2	2	2	2	2	15		
94.9	40.7	135.6	30.0%	633.5	16.0	15.8	15.8	15.8	15.8	15.7	SW-LO	3	3	2	2	2	2	2	16		
99.5	42.7	142.2	30.0%	633.5	16.6	16.6	16.6	16.6	16.6	16.5	SW-LO	3	3	3	2	2	2	2	17		
104.2	44.6	148.8	30.0%	633.5	17.4	17.4	17.4	17.4	17.3	17.3	SW-LO	3	3	3	3	2	2	2	18		
108.8	46.6	155.4	30.0%	633.5	17.5	17.5	17.5	18.8	18.8	18.7	SW-LO	3	3	3	3	3	2	2	19	Max. PH capacity w/ Qs=30% (Note 7)	
109.2	48.6	157.8	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	3	3	3	3	3	3	2	20		
109.2	50.6	159.8	31.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	3	3	3	3	3	3	3	21		
109.2	52.6	161.8	32.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	3	3	3	3	3	3	22		
109.2	54.5	163.7	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	4	3	3	3	3	3	23		
109.2	56.5	165.7	34.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	4	4	4	3	3	3	24		
109.2	58.5	167.7	34.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	4	4	4	3	3	3	25		
109.2	60.4	169.6	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	4	4	4	4	3	3	26		
109.2	62.4	171.6	36.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	4	4	4	4	4	3	27		
109.2	64.3	173.5	37.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	4	4	4	4	4	4	4	28		
109.2	66.3	175.5	37.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	4	4	4	4	4	4	29		
109.2	68.2	177.4	38.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	5	4	4	4	4	4	30		
109.2	70.2	179.4	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	5	5	4	4	4	4	31		
109.2	72.1	181.3	39.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	5	5	5	4	4	4	32		
109.2	74.1	183.3	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	5	5	5	5	4	4	33		
109.2	76.0	185.2	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	5	5	5	5	5	4	34		
109.2	78.0	187.2	41.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	5	5	5	5	5	5	5	35		
109.2	79.9	189.1	42.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	5	5	5	5	5	5	36		
109.2	81.9	191.1	42.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	6	5	5	5	5	5	37		
109.2	83.8	193.0	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	6	6	5	5	5	5	38		
109.2	85.8	195.0	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	6	6	6	5	5	5	39		
109.2	87.7	196.9	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	6	6	6	6	5	5	40		
109.2	89.7	198.9	45.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	6	6	6	6	6	5	41		
109.2	91.6	200.8	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	6	6	6	6	6	6	6	42		
109.2	93.6	202.8	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	6	6	6	6	6	6	43		

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc. River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
109.2	95.5	204.7	46.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	7	6	6	6	6	6	44	
109.2	97.5	206.7	47.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	7	7	6	6	6	6	45	
109.2	99.4	208.6	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	7	7	7	6	6	6	46	
109.2	101.3	210.5	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	7	7	7	7	6	6	47	
109.2	103.3	212.5	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	7	7	7	7	7	6	48	
109.2	105.2	214.4	49.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	7	7	7	7	7	7	7	49	
109.2	107.2	216.4	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	7	7	7	7	7	7	50	
109.2	109.1	218.3	50.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	8	7	7	7	7	7	51	
109.2	111.1	220.3	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	8	8	7	7	7	7	52	
109.2	113.0	222.2	50.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	8	8	8	7	7	7	53	
109.2	115.0	224.2	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	8	8	8	8	7	7	54	
109.2	116.9	226.1	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	8	8	8	8	8	7	55	
109.2	118.9	228.1	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	8	8	8	8	8	8	8	56	
109.2	120.8	230.0	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	8	8	8	8	8	8	57	
109.2	122.7	231.9	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	9	8	8	8	8	8	58	
109.2	124.6	233.8	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	9	9	8	8	8	8	59	
109.2	126.5	235.7	53.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	9	9	9	8	8	8	60	
109.2	128.5	237.7	54.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	9	9	9	9	8	8	61	
109.2	130.4	239.6	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	9	9	9	9	9	8	62	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	9	9	9	9	9	9	9	63	
109.2	134.3	243.5	55.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	9	9	9	9	9	9	64	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	10	9	9	9	9	9	65	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	10	10	9	9	9	9	66	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	10	10	10	9	9	9	67	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	10	10	10	10	9	9	68	
109.2	144.3	253.5	56.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	10	10	10	10	10	9	69	
109.2	146.3	255.5	57.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-LO	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The spring fish passage season will start with SW-LO in place, even if river discharges are less than 75 kcfs. After the spring freshet has passed, and river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, the SW-HI will be installed for the remainder of the summer fish passage season, even if river discharges subsequently increase above 75 kcfs, unless coordinated differently with regional fish managers. The change to SW-HI will take place within three normal crew working days after the third day with \geq 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 2

SW-HI CREST CONFIGURATION (Crest Elev. = 622 ft) -- Recommended Table

PH (kcf/s)	Spill (kcf/s)	Calc River (kcf/s)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	Powerhouse Flow (kcf/s) [Notes 1 & 3]						Spillway Flow (stops) [Note 3]								Total Stops TS	Notes	
					1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8			
27.3	10.7	38.0	28.1%	633.5	16.0	11.3						SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
28.9	12.4	41.3	30.0%	633.5	16.0	12.9						SW-HI	1	1	1					3	
33.0	14.2	47.2	30.0%	633.5	17.5	15.5						SW-HI	1	1	1	1				4	
35.0	15.9	50.9	31.2%	633.5	17.5	17.5						SW-HI	1	1	1	1	1			5	2 units, 5 stops, Qs~31%
38.6	15.9	54.5	29.2%	633.5	16.0	11.3	11.3					SW-HI	1	1	1	1	1			5	3 units, 5 stops, Qs~29%
41.2	17.7	58.9	30.0%	633.5	16.0	12.6	12.6					SW-HI	1	1	1	1	1	1		6	
45.3	19.4	64.7	30.0%	633.5	16.0	14.7	14.6					SW-HI	1	1	1	1	1	1	1	7	
49.7	21.3	71.0	30.0%	633.5	16.6	16.6	16.5					SW-HI	2	1	1	1	1	1	1	8	
54.1	23.2	77.3	30.0%	633.5	16.0	12.1	12.1	13.9				SW-HI	2	1	2	1	1	1	1	9	Likely highest Qr w/ SW-HI (Note 6)
58.5	25.1	83.6	30.0%	633.5	16.0	14.2	14.2	14.1				SW-HI	2	1	2	1	2	1	1	10	
62.9	27.0	89.9	30.0%	633.5	16.0	15.7	15.6	15.6				SW-HI	2	1	2	1	2	1	2	11	
67.3	28.9	96.2	30.0%	633.5	16.9	16.8	16.8	16.8				SW-HI	2	2	2	1	2	1	2	12	
71.7	30.7	102.4	30.0%	633.5	16.0	14.0	13.9	13.9	13.9			SW-HI	2	2	2	2	2	1	2	13	
76.1	32.6	108.7	30.0%	633.5	16.0	15.1	15.0	15.0	15.0			SW-HI	2	2	2	2	2	2	2	14	
80.8	34.6	115.4	30.0%	633.5	16.2	16.2	16.2	16.1	16.1			SW-HI	3	2	2	2	2	2	2	15	
85.4	36.6	122.0	30.0%	633.5	17.1	17.1	17.1	17.1	17.0			SW-HI	3	3	2	2	2	2	2	16	
90.1	38.6	128.7	30.0%	633.5	16.0	14.9	14.8	14.8	14.8	14.8		SW-HI	3	3	3	2	2	2	2	17	
94.7	40.6	135.3	30.0%	633.5	16.0	15.8	15.8	15.7	15.7	15.7		SW-HI	3	3	3	3	2	2	2	18	
99.4	42.6	142.0	30.0%	633.5	16.6	16.6	16.6	16.6	16.5	16.5		SW-HI	3	3	3	3	3	2	2	19	
104.0	44.6	148.6	30.0%	633.5	17.4	17.4	17.3	17.3	17.3	17.3		SW-HI	3	3	3	3	3	3	2	20	
108.6	46.6	155.2	30.0%	633.5	17.5	17.5	17.5	18.7	18.7	18.7		SW-HI	3	3	3	3	3	3	3	21	Max. PH capacity w/ Qs=30% (Note 7)
109.2	48.5	157.7	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	3	3	3	3	3	3	22	
109.2	50.5	159.7	31.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	4	3	3	3	3	3	23	
109.2	52.4	161.6	32.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	4	4	3	3	3	3	24	
109.2	54.4	163.6	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	4	4	4	3	3	3	25	
109.2	56.4	165.6	34.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	4	4	4	4	3	3	26	
109.2	58.3	167.5	34.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	4	4	4	4	4	3	27	
109.2	60.3	169.5	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	4	4	4	4	4	4	4	28	
109.2	62.2	171.4	36.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	4	4	4	4	4	4	29	
109.2	64.2	173.4	37.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	5	4	4	4	4	4	30	
109.2	66.1	175.3	37.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	5	5	4	4	4	4	31	
109.2	68.1	177.3	38.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	5	5	5	4	4	4	32	
109.2	70.0	179.2	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	5	5	5	5	4	4	33	
109.2	72.0	181.2	39.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	5	5	5	5	5	4	34	
109.2	73.9	183.1	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	5	5	5	5	5	5	5	35	
109.2	75.9	185.1	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	5	5	5	5	5	5	36	
109.2	77.8	187.0	41.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	6	5	5	5	5	5	37	
109.2	79.8	189.0	42.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	6	6	5	5	5	5	38	
109.2	81.7	190.9	42.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	6	6	6	5	5	5	39	
109.2	83.7	192.9	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	6	6	6	6	5	5	40	
109.2	85.6	194.8	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	6	6	6	6	6	5	41	
109.2	87.6	196.8	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	6	6	6	6	6	6	6	42	
109.2	89.5	198.7	45.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	7	6	6	6	6	6	6	43	
109.2	91.5	200.7	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		SW-HI	7	7	6	6	6	6	6	44	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	7	8	9	10	11	12	13	14		
109.2	93.4	202.6	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	6	6	6	6	45	
109.2	95.3	204.5	46.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	6	6	6	46	
109.2	97.3	206.5	47.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	6	6	47	
109.2	99.2	208.4	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	6	48	
109.2	101.2	210.4	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	7	49	
109.2	103.1	212.3	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	7	7	7	7	7	7	50	
109.2	105.1	214.3	49.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	7	7	7	7	7	51	
109.2	107.0	216.2	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	7	7	7	7	52	
109.2	109.0	218.2	49.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	7	7	7	53	
109.2	110.9	220.1	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	7	7	54	
109.2	112.9	222.1	50.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	7	55	
109.2	114.8	224.0	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	8	56	
109.2	116.7	225.9	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	8	8	8	8	8	8	57	
109.2	118.7	227.9	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	8	8	8	8	8	58	
109.2	120.6	229.8	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	8	8	8	8	59	
109.2	122.5	231.7	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	8	8	8	60	
109.2	124.4	233.6	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	8	8	61	
109.2	126.3	235.5	53.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	8	62	
109.2	128.3	237.5	54.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	9	63	
109.2	130.3	239.5	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	9	9	9	9	9	9	64	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	9	9	9	9	9	65	
109.2	134.3	243.5	55.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	9	9	9	9	66	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	9	9	9	67	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	9	9	68	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	9	69	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The SW-HI will be installed after river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, or as coordinated with regional fish managers, and will remain in place for the rest of the season, even if river discharges subsequently increase above 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 2A

SW-HI CREST CONFIGURATION (Crest Elev. = 622 ft) -- Change in Qs due to MOP vs MOP+1 rules

PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	Powerhouse Flow (kcfs) [Notes 1 & 3]						Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
					1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
27.3	11.6	38.9	29.9%	634.5	16.0	11.3					SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
28.9	12.4	41.3	30.0%	633.5	16.0	12.9					SW-HI	1	1	1					3	
33.0	14.2	47.2	30.0%	633.5	17.5	15.5					SW-HI	1	1	1	1				4	
35.0	15.9	50.9	31.2%	633.5	17.5	17.5					SW-HI	1	1	1	1	1			5	2 units, 5 stops, Qs~31%
38.6	15.9	54.5	29.2%	633.5	16.0	11.3	11.3				SW-HI	1	1	1	1	1			5	3 units, 5 stops, Qs~29%
41.2	17.7	58.9	30.0%	633.5	16.0	12.6	12.6				SW-HI	1	1	1	1	1	1		6	
45.3	19.4	64.7	30.0%	633.5	16.0	14.7	14.6				SW-HI	1	1	1	1	1	1	1	7	
49.7	21.3	71.0	30.0%	633.5	16.6	16.6	16.5				SW-HI	2	1	1	1	1	1	1	8	
54.1	23.2	77.3	30.0%	633.5	16.0	12.1	12.1	13.9			SW-HI	2	1	2	1	1	1	1	9	Likely highest Qr w/ SW-HI (Note 6)
58.5	25.1	83.6	30.0%	633.5	16.0	14.2	14.2	14.1			SW-HI	2	1	2	1	2	1	1	10	
62.9	27.0	89.9	30.0%	633.5	16.0	15.7	15.6	15.6			SW-HI	2	1	2	1	2	1	2	11	
67.3	28.9	96.2	30.0%	633.5	16.9	16.8	16.8	16.8			SW-HI	2	2	2	1	2	1	2	12	
71.7	30.7	102.4	30.0%	633.5	16.0	14.0	13.9	13.9	13.9		SW-HI	2	2	2	2	2	1	2	13	
76.1	32.6	108.7	30.0%	633.5	16.0	15.1	15.0	15.0	15.0		SW-HI	2	2	2	2	2	2	2	14	
80.8	34.6	115.4	30.0%	633.5	16.2	16.2	16.2	16.1	16.1		SW-HI	3	2	2	2	2	2	2	15	
85.4	36.6	122.0	30.0%	633.5	17.1	17.1	17.1	17.1	17.0		SW-HI	3	3	2	2	2	2	2	16	
90.1	38.6	128.7	30.0%	633.5	16.0	14.9	14.8	14.8	14.8	14.8	SW-HI	3	3	3	2	2	2	2	17	
94.7	40.6	135.3	30.0%	633.5	16.0	15.8	15.8	15.7	15.7	15.7	SW-HI	3	3	3	3	2	2	2	18	
99.4	42.6	142.0	30.0%	633.5	16.6	16.6	16.6	16.6	16.5	16.5	SW-HI	3	3	3	3	3	2	2	19	
104.0	44.6	148.6	30.0%	633.5	17.4	17.4	17.3	17.3	17.3	17.3	SW-HI	3	3	3	3	3	3	2	20	
108.6	46.6	155.2	30.0%	633.5	17.5	17.5	17.5	18.7	18.7	18.7	SW-HI	3	3	3	3	3	3	3	21	Max. PH capacity w/ Qs=30% (Note 7)
109.2	48.5	157.7	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	3	3	3	3	3	3	22	
109.2	50.5	159.7	31.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	3	3	3	3	3	23	
109.2	52.4	161.6	32.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	3	3	3	3	24	
109.2	54.4	163.6	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	3	3	3	25	
109.2	56.4	165.6	34.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	3	3	26	
109.2	58.3	167.5	34.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	3	27	
109.2	60.3	169.5	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	4	28	
109.2	62.2	171.4	36.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	4	4	4	4	4	4	29	
109.2	64.2	173.4	37.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	4	4	4	4	4	30	
109.2	66.1	175.3	37.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	4	4	4	4	31	
109.2	68.1	177.3	38.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	4	4	4	32	
109.2	70.0	179.2	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	4	4	33	
109.2	72.0	181.2	39.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	4	34	
109.2	73.9	183.1	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	5	35	
109.2	75.9	185.1	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	5	5	5	5	5	5	36	
109.2	77.8	187.0	41.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	5	5	5	5	5	37	
109.2	79.8	189.0	42.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	5	5	5	5	38	
109.2	81.7	190.9	42.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	5	5	5	39	
109.2	83.7	192.9	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	5	5	40	
109.2	85.6	194.8	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	5	41	
109.2	87.6	196.8	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	6	42	
109.2	89.5	198.7	45.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	6	6	6	6	6	6	43	
109.2	91.5	200.7	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	6	6	6	6	6	44	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	7	8	9	10	11	12	13	14		
109.2	93.4	202.6	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	6	6	6	6	45	
109.2	95.3	204.5	46.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	6	6	6	46	
109.2	97.3	206.5	47.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	6	6	47	
109.2	99.2	208.4	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	6	48	
109.2	101.2	210.4	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	7	49	
109.2	103.1	212.3	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	7	7	7	7	7	7	50	
109.2	105.1	214.3	49.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	7	7	7	7	7	51	
109.2	107.0	216.2	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	7	7	7	7	52	
109.2	109.0	218.2	49.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	7	7	7	53	
109.2	110.9	220.1	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	7	7	54	
109.2	112.9	222.1	50.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	7	55	
109.2	114.8	224.0	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	8	56	
109.2	116.7	225.9	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	8	8	8	8	8	8	57	
109.2	118.7	227.9	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	8	8	8	8	8	58	
109.2	120.6	229.8	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	8	8	8	8	59	
109.2	122.5	231.7	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	8	8	8	60	
109.2	124.4	233.6	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	8	8	61	
109.2	126.3	235.5	53.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	8	62	
109.2	128.3	237.5	54.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	9	63	
109.2	130.3	239.5	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	9	9	9	9	9	9	64	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	9	9	9	9	9	65	
109.2	134.3	243.5	55.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	9	9	9	9	66	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	9	9	9	67	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	9	9	68	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	9	69	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The SW-HI will be installed after river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, or as coordinated with regional fish managers, and will remain in place for the rest of the season, even if river discharges subsequently increase above 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 2B

SW-HI CREST CONFIGURATION (Crest Elev. = 622 ft) -- Constant Qs = 10.7 kcfs for Qr≤40 kcfs

PH (kcfs)	Spill (kcfs)	Powerhouse Flow (kcfs) [Notes 1 & 3]						Spillway Flow (stops) [Note 3]								Total Stops TS	Notes			
		Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	1	2	3	4	5			6	7	8
22.6	10.7	33.3	32.0%	633.5	11.3	11.3					SW-HI	1	1						2	Lowest Qr w/ SW-HI & constant Qs = 10.7 kcfs (Note 5)
24.8	10.7	35.5	30.0%	633.5	13.5	11.3					SW-HI	1	1						2	
27.3	10.7	38.0	28.1%	633.5	16.0	11.3					SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
28.9	12.4	41.3	30.0%	633.5	16.0	12.9					SW-HI	1	1	1					3	
33.0	14.2	47.2	30.0%	633.5	17.5	15.5					SW-HI	1	1	1	1				4	
35.0	15.9	50.9	31.2%	633.5	17.5	17.5					SW-HI	1	1	1	1	1			5	2 units, 5 stops, Qs~31%
38.6	15.9	54.5	29.2%	633.5	16.0	11.3	11.3				SW-HI	1	1	1	1	1			5	3 units, 5 stops, Qs~29%
41.2	17.7	58.9	30.0%	633.5	16.0	12.6	12.6				SW-HI	1	1	1	1	1	1		6	
45.3	19.4	64.7	30.0%	633.5	16.0	14.7	14.6				SW-HI	1	1	1	1	1	1	1	7	
49.7	21.3	71.0	30.0%	633.5	16.6	16.6	16.5				SW-HI	2	1	1	1	1	1	1	8	
54.1	23.2	77.3	30.0%	633.5	16.0	12.1	12.1	13.9			SW-HI	2	1	2	1	1	1	1	9	Likely highest Qr w/ SW-HI (Note 6)
58.5	25.1	83.6	30.0%	633.5	16.0	14.2	14.2	14.1			SW-HI	2	1	2	1	2	1	1	10	
62.9	27.0	89.9	30.0%	633.5	16.0	15.7	15.6	15.6			SW-HI	2	1	2	1	2	1	2	11	
67.3	28.9	96.2	30.0%	633.5	16.9	16.8	16.8	16.8			SW-HI	2	2	2	1	2	1	2	12	
71.7	30.7	102.4	30.0%	633.5	16.0	14.0	13.9	13.9	13.9		SW-HI	2	2	2	2	2	1	2	13	
76.1	32.6	108.7	30.0%	633.5	16.0	15.1	15.0	15.0	15.0		SW-HI	2	2	2	2	2	2	2	14	
80.8	34.6	115.4	30.0%	633.5	16.2	16.2	16.2	16.1	16.1		SW-HI	3	2	2	2	2	2	2	15	
85.4	36.6	122.0	30.0%	633.5	17.1	17.1	17.1	17.1	17.0		SW-HI	3	3	2	2	2	2	2	16	
90.1	38.6	128.7	30.0%	633.5	16.0	14.9	14.8	14.8	14.8	14.8	SW-HI	3	3	3	2	2	2	2	17	
94.7	40.6	135.3	30.0%	633.5	16.0	15.8	15.8	15.7	15.7	15.7	SW-HI	3	3	3	3	2	2	2	18	
99.4	42.6	142.0	30.0%	633.5	16.6	16.6	16.6	16.6	16.5	16.5	SW-HI	3	3	3	3	3	2	2	19	
104.0	44.6	148.6	30.0%	633.5	17.4	17.4	17.3	17.3	17.3	17.3	SW-HI	3	3	3	3	3	3	2	20	
108.6	46.6	155.2	30.0%	633.5	17.5	17.5	17.5	18.7	18.7	18.7	SW-HI	3	3	3	3	3	3	3	21	Max. PH capacity w/ Qs=30% (Note 7)
109.2	48.5	157.7	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	3	3	3	3	3	3	22	
109.2	50.5	159.7	31.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	3	3	3	3	3	23	
109.2	52.4	161.6	32.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	3	3	3	3	24	
109.2	54.4	163.6	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	3	3	3	25	
109.2	56.4	165.6	34.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	3	3	26	
109.2	58.3	167.5	34.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	3	27	
109.2	60.3	169.5	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	4	28	
109.2	62.2	171.4	36.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	4	4	4	4	4	4	29	
109.2	64.2	173.4	37.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	4	4	4	4	4	30	
109.2	66.1	175.3	37.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	4	4	4	4	31	
109.2	68.1	177.3	38.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	4	4	4	32	
109.2	70.0	179.2	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	4	4	33	
109.2	72.0	181.2	39.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	4	34	
109.2	73.9	183.1	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	5	35	
109.2	75.9	185.1	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	5	5	5	5	5	5	36	
109.2	77.8	187.0	41.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	5	5	5	5	5	37	
109.2	79.8	189.0	42.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	5	5	5	5	38	
109.2	81.7	190.9	42.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	5	5	5	39	
109.2	83.7	192.9	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	5	5	40	
109.2	85.6	194.8	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	5	41	
109.2	87.6	196.8	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	6	42	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
109.2	89.5	198.7	45.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	6	6	6	6	6	6	43	
109.2	91.5	200.7	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	6	6	6	6	6	44	
109.2	93.4	202.6	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	6	6	6	6	45	
109.2	95.3	204.5	46.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	6	6	6	46	
109.2	97.3	206.5	47.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	6	6	47	
109.2	99.2	208.4	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	6	48	
109.2	101.2	210.4	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	7	49	
109.2	103.1	212.3	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	7	7	7	7	7	7	50	
109.2	105.1	214.3	49.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	7	7	7	7	7	51	
109.2	107.0	216.2	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	7	7	7	7	52	
109.2	109.0	218.2	49.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	7	7	7	53	
109.2	110.9	220.1	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	7	7	54	
109.2	112.9	222.1	50.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	7	55	
109.2	114.8	224.0	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	8	56	
109.2	116.7	225.9	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	8	8	8	8	8	8	57	
109.2	118.7	227.9	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	8	8	8	8	8	58	
109.2	120.6	229.8	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	8	8	8	8	59	
109.2	122.5	231.7	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	8	8	8	60	
109.2	124.4	233.6	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	8	8	61	
109.2	126.3	235.5	53.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	8	62	
109.2	128.3	237.5	54.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	9	63	
109.2	130.3	239.5	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	9	9	9	9	9	9	64	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	9	9	9	9	9	65	
109.2	134.3	243.5	55.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	9	9	9	9	66	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	9	9	9	67	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	9	9	68	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	9	69	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The SW-HI will be installed after river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, or as coordinated with regional fish managers, and will remain in place for the rest of the season, even if river discharges subsequently increase above 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 2C

SW-HI CREST CONFIGURATION (Crest Elev. = 622 ft) -- 1 stop TS w/ 2 turbines ==> Qs ~25%

PH (kcf)	Spill (kcf)	Calc River (kcf)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	Powerhouse Flow (kcf) [Notes 1 & 3]						Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
					1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
27.3	8.9	36.2	24.6%	633.5	16.0	11.3					SW-HI	1							1	Lowest Qr w/ SW-HI (Note 5)
27.3	10.7	38.0	28.1%	633.5	16.0	11.3					SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
28.9	12.4	41.3	30.0%	633.5	16.0	12.9					SW-HI	1	1	1					3	
33.0	14.2	47.2	30.0%	633.5	17.5	15.5					SW-HI	1	1	1	1				4	
35.0	15.9	50.9	31.2%	633.5	17.5	17.5					SW-HI	1	1	1	1	1			5	2 units, 5 stops, Qs~31%
38.6	15.9	54.5	29.2%	633.5	16.0	11.3	11.3				SW-HI	1	1	1	1	1			5	3 units, 5 stops, Qs~29%
41.2	17.7	58.9	30.0%	633.5	16.0	12.6	12.6				SW-HI	1	1	1	1	1	1		6	
45.3	19.4	64.7	30.0%	633.5	16.0	14.7	14.6				SW-HI	1	1	1	1	1	1	1	7	
49.7	21.3	71.0	30.0%	633.5	16.6	16.6	16.5				SW-HI	2	1	1	1	1	1	1	8	
54.1	23.2	77.3	30.0%	633.5	16.0	12.1	12.1	13.9			SW-HI	2	1	2	1	1	1	1	9	Likely highest Qr w/ SW-HI (Note 6)
58.5	25.1	83.6	30.0%	633.5	16.0	14.2	14.2	14.1			SW-HI	2	1	2	1	2	1	1	10	
62.9	27.0	89.9	30.0%	633.5	16.0	15.7	15.6	15.6			SW-HI	2	1	2	1	2	1	2	11	
67.3	28.9	96.2	30.0%	633.5	16.9	16.8	16.8	16.8			SW-HI	2	2	2	1	2	1	2	12	
71.7	30.7	102.4	30.0%	633.5	16.0	14.0	13.9	13.9	13.9		SW-HI	2	2	2	2	2	1	2	13	
76.1	32.6	108.7	30.0%	633.5	16.0	15.1	15.0	15.0	15.0		SW-HI	2	2	2	2	2	2	2	14	
80.8	34.6	115.4	30.0%	633.5	16.2	16.2	16.2	16.1	16.1		SW-HI	3	2	2	2	2	2	2	15	
85.4	36.6	122.0	30.0%	633.5	17.1	17.1	17.1	17.1	17.0		SW-HI	3	3	2	2	2	2	2	16	
90.1	38.6	128.7	30.0%	633.5	16.0	14.9	14.8	14.8	14.8	14.8	SW-HI	3	3	3	2	2	2	2	17	
94.7	40.6	135.3	30.0%	633.5	16.0	15.8	15.8	15.7	15.7	15.7	SW-HI	3	3	3	3	2	2	2	18	
99.4	42.6	142.0	30.0%	633.5	16.6	16.6	16.6	16.6	16.5	16.5	SW-HI	3	3	3	3	3	2	2	19	
104.0	44.6	148.6	30.0%	633.5	17.4	17.4	17.3	17.3	17.3	17.3	SW-HI	3	3	3	3	3	3	2	20	
108.6	46.6	155.2	30.0%	633.5	17.5	17.5	17.5	18.7	18.7	18.7	SW-HI	3	3	3	3	3	3	3	21	Max. PH capacity w/ Qs=30% (Note 7)
109.2	48.5	157.7	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	3	3	3	3	3	3	22	
109.2	50.5	159.7	31.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	3	3	3	3	3	23	
109.2	52.4	161.6	32.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	3	3	3	3	24	
109.2	54.4	163.6	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	3	3	3	25	
109.2	56.4	165.6	34.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	3	3	26	
109.2	58.3	167.5	34.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	3	27	
109.2	60.3	169.5	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	4	28	
109.2	62.2	171.4	36.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	4	4	4	4	4	4	29	
109.2	64.2	173.4	37.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	4	4	4	4	4	30	
109.2	66.1	175.3	37.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	4	4	4	4	31	
109.2	68.1	177.3	38.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	4	4	4	32	
109.2	70.0	179.2	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	4	4	33	
109.2	72.0	181.2	39.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	4	34	
109.2	73.9	183.1	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	5	35	
109.2	75.9	185.1	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	5	5	5	5	5	5	36	
109.2	77.8	187.0	41.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	5	5	5	5	5	37	
109.2	79.8	189.0	42.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	5	5	5	5	38	
109.2	81.7	190.9	42.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	5	5	5	39	
109.2	83.7	192.9	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	5	5	40	
109.2	85.6	194.8	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	5	41	
109.2	87.6	196.8	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	6	42	
109.2	89.5	198.7	45.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	6	6	6	6	6	6	43	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	7	8	9	10	11	12	13	14		
109.2	91.5	200.7	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	6	6	6	6	6	44	
109.2	93.4	202.6	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	6	6	6	6	45	
109.2	95.3	204.5	46.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	6	6	6	46	
109.2	97.3	206.5	47.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	6	6	47	
109.2	99.2	208.4	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	6	48	
109.2	101.2	210.4	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	7	49	
109.2	103.1	212.3	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	7	7	7	7	7	7	50	
109.2	105.1	214.3	49.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	7	7	7	7	7	51	
109.2	107.0	216.2	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	7	7	7	7	52	
109.2	109.0	218.2	49.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	7	7	7	53	
109.2	110.9	220.1	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	7	7	54	
109.2	112.9	222.1	50.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	7	55	
109.2	114.8	224.0	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	8	56	
109.2	116.7	225.9	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	8	8	8	8	8	8	57	
109.2	118.7	227.9	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	8	8	8	8	8	58	
109.2	120.6	229.8	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	8	8	8	8	59	
109.2	122.5	231.7	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	8	8	8	60	
109.2	124.4	233.6	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	8	8	61	
109.2	126.3	235.5	53.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	8	62	
109.2	128.3	237.5	54.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	9	63	
109.2	130.3	239.5	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	9	9	9	9	9	9	64	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	9	9	9	9	9	65	
109.2	134.3	243.5	55.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	9	9	9	9	66	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	9	9	9	67	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	9	9	68	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	9	69	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The SW-HI will be installed after river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, or as coordinated with regional fish managers, and will remain in place for the rest of the season, even if river discharges subsequently increase above 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 2D

SW-HI CREST CONFIGURATION (Crest Elev. = 622 ft) -- 1 stop TS w/ 1 turbine ==> % spill ~34%

PH (kcf)	Spill (kcf)	Calc River (kcf)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	Powerhouse Flow (kcf) [Notes 1 & 3]						Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
					1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
17.5	8.9	26.4	33.7%	633.5	17.5						SW-HI	1							1	Lowest Qr w/ SW-HI (Note 5)
27.3	10.7	38.0	28.1%	633.5	16.0	11.3					SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
28.9	12.4	41.3	30.0%	633.5	16.0	12.9					SW-HI	1	1	1					3	
33.0	14.2	47.2	30.0%	633.5	17.5	15.5					SW-HI	1	1	1	1				4	
35.0	15.9	50.9	31.2%	633.5	17.5	17.5					SW-HI	1	1	1	1	1			5	2 units, 5 stops, Qs~31%
38.6	15.9	54.5	29.2%	633.5	16.0	11.3	11.3				SW-HI	1	1	1	1	1			5	3 units, 5 stops, Qs~29%
41.2	17.7	58.9	30.0%	633.5	16.0	12.6	12.6				SW-HI	1	1	1	1	1	1		6	
45.3	19.4	64.7	30.0%	633.5	16.0	14.7	14.6				SW-HI	1	1	1	1	1	1	1	7	
49.7	21.3	71.0	30.0%	633.5	16.6	16.6	16.5				SW-HI	2	1	1	1	1	1	1	8	
54.1	23.2	77.3	30.0%	633.5	16.0	12.1	12.1	13.9			SW-HI	2	1	2	1	1	1	1	9	Likely highest Qr w/ SW-HI (Note 6)
58.5	25.1	83.6	30.0%	633.5	16.0	14.2	14.2	14.1			SW-HI	2	1	2	1	2	1	1	10	
62.9	27.0	89.9	30.0%	633.5	16.0	15.7	15.6	15.6			SW-HI	2	1	2	1	2	1	2	11	
67.3	28.9	96.2	30.0%	633.5	16.9	16.8	16.8	16.8			SW-HI	2	2	2	1	2	1	2	12	
71.7	30.7	102.4	30.0%	633.5	16.0	14.0	13.9	13.9	13.9		SW-HI	2	2	2	2	2	1	2	13	
76.1	32.6	108.7	30.0%	633.5	16.0	15.1	15.0	15.0	15.0		SW-HI	2	2	2	2	2	2	2	14	
80.8	34.6	115.4	30.0%	633.5	16.2	16.2	16.2	16.1	16.1		SW-HI	3	2	2	2	2	2	2	15	
85.4	36.6	122.0	30.0%	633.5	17.1	17.1	17.1	17.1	17.0		SW-HI	3	3	2	2	2	2	2	16	
90.1	38.6	128.7	30.0%	633.5	16.0	14.9	14.8	14.8	14.8	14.8	SW-HI	3	3	3	2	2	2	2	17	
94.7	40.6	135.3	30.0%	633.5	16.0	15.8	15.8	15.7	15.7	15.7	SW-HI	3	3	3	3	2	2	2	18	
99.4	42.6	142.0	30.0%	633.5	16.6	16.6	16.6	16.6	16.5	16.5	SW-HI	3	3	3	3	3	2	2	19	
104.0	44.6	148.6	30.0%	633.5	17.4	17.4	17.3	17.3	17.3	17.3	SW-HI	3	3	3	3	3	3	2	20	
108.6	46.6	155.2	30.0%	633.5	17.5	17.5	17.5	18.7	18.7	18.7	SW-HI	3	3	3	3	3	3	3	21	Max. PH capacity w/ Qs=30% (Note 7)
109.2	48.5	157.7	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	3	3	3	3	3	3	22	
109.2	50.5	159.7	31.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	3	3	3	3	3	23	
109.2	52.4	161.6	32.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	3	3	3	3	24	
109.2	54.4	163.6	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	3	3	3	25	
109.2	56.4	165.6	34.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	3	3	26	
109.2	58.3	167.5	34.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	3	27	
109.2	60.3	169.5	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	4	28	
109.2	62.2	171.4	36.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	4	4	4	4	4	4	29	
109.2	64.2	173.4	37.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	4	4	4	4	4	30	
109.2	66.1	175.3	37.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	4	4	4	4	31	
109.2	68.1	177.3	38.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	4	4	4	32	
109.2	70.0	179.2	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	4	4	33	
109.2	72.0	181.2	39.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	4	34	
109.2	73.9	183.1	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	5	35	
109.2	75.9	185.1	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	5	5	5	5	5	5	36	
109.2	77.8	187.0	41.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	5	5	5	5	5	37	
109.2	79.8	189.0	42.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	5	5	5	5	38	
109.2	81.7	190.9	42.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	5	5	5	39	
109.2	83.7	192.9	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	5	5	40	
109.2	85.6	194.8	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	5	41	
109.2	87.6	196.8	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	6	42	
109.2	89.5	198.7	45.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	6	6	6	6	6	6	43	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes	
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	7	8	9	10	11	12	13	14			15
109.2	91.5	200.7	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	6	6	6	6	6	6	44	
109.2	93.4	202.6	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	6	6	6	6	6	45	
109.2	95.3	204.5	46.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	6	6	6	6	46	
109.2	97.3	206.5	47.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	6	6	6	47	
109.2	99.2	208.4	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	6	6	48	
109.2	101.2	210.4	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	7	7	49	
109.2	103.1	212.3	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	7	7	7	7	7	7	7	50	
109.2	105.1	214.3	49.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	7	7	7	7	7	7	51	
109.2	107.0	216.2	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	7	7	7	7	7	52	
109.2	109.0	218.2	49.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	7	7	7	7	53	
109.2	110.9	220.1	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	7	7	7	54	
109.2	112.9	222.1	50.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	7	7	55	
109.2	114.8	224.0	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	8	8	56	
109.2	116.7	225.9	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	8	8	8	8	8	8	8	57	
109.2	118.7	227.9	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	8	8	8	8	8	8	58	
109.2	120.6	229.8	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	8	8	8	8	8	59	
109.2	122.5	231.7	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	8	8	8	8	60	
109.2	124.4	233.6	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	8	8	8	61	
109.2	126.3	235.5	53.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	8	8	62	
109.2	128.3	237.5	54.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	9	9	63	
109.2	130.3	239.5	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	9	9	9	9	9	9	9	64	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	9	9	9	9	9	9	65	
109.2	134.3	243.5	55.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	9	9	9	9	9	66	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	9	9	9	9	67	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	9	9	9	68	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	9	9	69	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The SW-HI will be installed after river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, or as coordinated with regional fish managers, and will remain in place for the rest of the season, even if river discharges subsequently increase above 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 2E

SW-HI CREST CONFIGURATION (Crest Elev. = 622 ft) -- 2 stop TS w/ 1 turbine ==> % spill ~38%

PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	Powerhouse Flow (kcfs) [Notes 1 & 3]						Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
					1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
17.5	10.7	28.2	37.8%	633.5	17.5						SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
27.3	10.7	38.0	28.1%	633.5	16.0	11.3					SW-HI	1	1						2	Lowest Qr w/ SW-HI (Note 5)
28.9	12.4	41.3	30.0%	633.5	16.0	12.9					SW-HI	1	1	1					3	
33.0	14.2	47.2	30.0%	633.5	17.5	15.5					SW-HI	1	1	1	1				4	
35.0	15.9	50.9	31.2%	633.5	17.5	17.5					SW-HI	1	1	1	1	1			5	2 units, 5 stops, Qs~31%
38.6	15.9	54.5	29.2%	633.5	16.0	11.3	11.3				SW-HI	1	1	1	1	1			5	3 units, 5 stops, Qs~29%
41.2	17.7	58.9	30.0%	633.5	16.0	12.6	12.6				SW-HI	1	1	1	1	1	1		6	
45.3	19.4	64.7	30.0%	633.5	16.0	14.7	14.6				SW-HI	1	1	1	1	1	1	1	7	
49.7	21.3	71.0	30.0%	633.5	16.6	16.6	16.5				SW-HI	2	1	1	1	1	1	1	8	
54.1	23.2	77.3	30.0%	633.5	16.0	12.1	12.1	13.9			SW-HI	2	1	2	1	1	1	1	9	Likely highest Qr w/ SW-HI (Note 6)
58.5	25.1	83.6	30.0%	633.5	16.0	14.2	14.2	14.1			SW-HI	2	1	2	1	2	1	1	10	
62.9	27.0	89.9	30.0%	633.5	16.0	15.7	15.6	15.6			SW-HI	2	1	2	1	2	1	2	11	
67.3	28.9	96.2	30.0%	633.5	16.9	16.8	16.8	16.8			SW-HI	2	2	2	1	2	1	2	12	
71.7	30.7	102.4	30.0%	633.5	16.0	14.0	13.9	13.9	13.9		SW-HI	2	2	2	2	2	1	2	13	
76.1	32.6	108.7	30.0%	633.5	16.0	15.1	15.0	15.0	15.0		SW-HI	2	2	2	2	2	2	2	14	
80.8	34.6	115.4	30.0%	633.5	16.2	16.2	16.2	16.1	16.1		SW-HI	3	2	2	2	2	2	2	15	
85.4	36.6	122.0	30.0%	633.5	17.1	17.1	17.1	17.1	17.0		SW-HI	3	3	2	2	2	2	2	16	
90.1	38.6	128.7	30.0%	633.5	16.0	14.9	14.8	14.8	14.8	14.8	SW-HI	3	3	3	2	2	2	2	17	
94.7	40.6	135.3	30.0%	633.5	16.0	15.8	15.8	15.7	15.7	15.7	SW-HI	3	3	3	3	2	2	2	18	
99.4	42.6	142.0	30.0%	633.5	16.6	16.6	16.6	16.6	16.5	16.5	SW-HI	3	3	3	3	3	2	2	19	
104.0	44.6	148.6	30.0%	633.5	17.4	17.4	17.3	17.3	17.3	17.3	SW-HI	3	3	3	3	3	3	2	20	
108.6	46.6	155.2	30.0%	633.5	17.5	17.5	17.5	18.7	18.7	18.7	SW-HI	3	3	3	3	3	3	3	21	Max. PH capacity w/ Qs=30% (Note 7)
109.2	48.5	157.7	30.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	3	3	3	3	3	3	22	
109.2	50.5	159.7	31.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	3	3	3	3	3	23	
109.2	52.4	161.6	32.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	3	3	3	3	24	
109.2	54.4	163.6	33.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	3	3	3	25	
109.2	56.4	165.6	34.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	3	3	26	
109.2	58.3	167.5	34.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	3	27	
109.2	60.3	169.5	35.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	4	4	4	4	4	4	4	28	
109.2	62.2	171.4	36.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	4	4	4	4	4	4	29	
109.2	64.2	173.4	37.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	4	4	4	4	4	30	
109.2	66.1	175.3	37.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	4	4	4	4	31	
109.2	68.1	177.3	38.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	4	4	4	32	
109.2	70.0	179.2	39.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	4	4	33	
109.2	72.0	181.2	39.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	4	34	
109.2	73.9	183.1	40.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	5	5	5	5	5	5	5	35	
109.2	75.9	185.1	41.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	5	5	5	5	5	5	36	
109.2	77.8	187.0	41.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	5	5	5	5	5	37	
109.2	79.8	189.0	42.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	5	5	5	5	38	
109.2	81.7	190.9	42.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	5	5	5	39	
109.2	83.7	192.9	43.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	5	5	40	
109.2	85.6	194.8	44.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	5	41	
109.2	87.6	196.8	44.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	6	6	6	6	6	6	6	42	
109.2	89.5	198.7	45.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	6	6	6	6	6	6	43	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Note 3]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	7	8	9	10	11	12	13	14		
109.2	91.5	200.7	45.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	6	6	6	6	6	44	
109.2	93.4	202.6	46.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	6	6	6	6	45	
109.2	95.3	204.5	46.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	6	6	6	46	
109.2	97.3	206.5	47.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	6	6	47	
109.2	99.2	208.4	47.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	6	48	
109.2	101.2	210.4	48.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	7	7	7	7	7	7	7	49	
109.2	103.1	212.3	48.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	7	7	7	7	7	7	50	
109.2	105.1	214.3	49.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	7	7	7	7	7	51	
109.2	107.0	216.2	49.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	7	7	7	7	52	
109.2	109.0	218.2	49.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	7	7	7	53	
109.2	110.9	220.1	50.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	7	7	54	
109.2	112.9	222.1	50.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	7	55	
109.2	114.8	224.0	51.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	8	8	8	8	8	8	8	56	
109.2	116.7	225.9	51.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	8	8	8	8	8	8	57	
109.2	118.7	227.9	52.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	8	8	8	8	8	58	
109.2	120.6	229.8	52.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	8	8	8	8	59	
109.2	122.5	231.7	52.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	8	8	8	60	
109.2	124.4	233.6	53.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	8	8	61	
109.2	126.3	235.5	53.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	8	62	
109.2	128.3	237.5	54.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	9	9	9	9	9	9	9	63	
109.2	130.3	239.5	54.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	9	9	9	9	9	9	64	
109.2	132.3	241.5	54.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	9	9	9	9	9	65	
109.2	134.3	243.5	55.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	9	9	9	9	66	
109.2	136.3	245.5	55.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	9	9	9	67	
109.2	138.3	247.5	55.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	9	9	68	
109.2	140.3	249.5	56.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	9	69	
109.2	142.3	251.5	56.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	SW-HI	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, the SW will be closed, and the remaining spill bays will be used, following the uniform spill pattern (see separate table).
- Note 6: The SW-HI will be installed after river discharge falls below 75 kcfs for three days in a row, and forecasts indicate continuing lower river discharges, or as coordinated with regional fish managers, and will remain in place for the rest of the season, even if river discharges subsequently increase above 75 kcfs.
- Note 7: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.

TABLE 3

UNIFORM SPILL CONFIGURATION (NO SW)

PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	Powerhouse Flow (kcfs) [Notes 1 & 3]						Spillway Flow (stops) [Notes 3 & 7]								Total Stops TS	Notes	
					1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8			
11.3	0.0	11.3	0.0%	633.5	11.3							No SW								0	No spill
11.3	1.8	13.1	13.4%	633.5	11.3							No SW	1							1	
11.3	3.5	14.8	23.6%	633.5	11.3							No SW	1	1						2	
12.3	5.3	17.5	30.0%	633.5	12.3							No SW	1	1	1					3	Lowest Qr possible w/ 30% spill and no SW (Note 5)
16.3	7.0	23.3	30.0%	633.5	16.3							No SW	1	1	1	1				4	
17.5	8.8	26.3	33.3%	633.5	17.5							No SW	1	1	1	1	1			5	1 unit, 5 stops, Qs~33%
27.3	8.8	36.1	24.3%	633.5	16.0	11.3						No SW	1	1	1	1	1			5	2 units, 5 stops, Qs~24%
27.3	10.5	37.8	27.8%	633.5	16.0	11.3						No SW	1	1	1	1	1	1		6	
28.6	12.3	40.9	30.0%	633.5	16.0	12.6						No SW	1	1	1	1	1	1	1	7	
33.0	14.1	47.1	30.0%	633.5	16.5	16.5						No SW	2	1	1	1	1	1	1	8	
35.0	16.0	51.0	31.4%	633.5	17.5	17.5						No SW	2	1	2	1	1	1	1	9	2 units, 9 stops, Qs~31%
38.6	16.0	54.6	29.3%	633.5	16.0	11.3	11.3					No SW	2	1	2	1	1	1	1	9	3 units, 9 stops, Qs~29%
41.8	17.9	59.7	30.0%	633.5	16.0	12.9	12.9					No SW	2	1	2	1	2	1	1	10	
46.2	19.8	66.0	30.0%	633.5	16.0	15.1	15.1					No SW	2	1	2	1	2	1	2	11	
50.6	21.7	72.3	30.0%	633.5	16.9	16.9	16.8					No SW	2	2	2	1	2	1	2	12	
55.0	23.6	78.6	30.0%	633.5	16.0	12.6	12.5	13.9				No SW	2	2	2	2	2	1	2	13	
59.5	25.5	85.0	30.0%	633.5	16.0	14.5	14.5	14.5				No SW	2	2	2	2	2	2	2	14	
64.1	27.5	91.6	30.0%	633.5	16.1	16.0	16.0	16.0				No SW	3	2	2	2	2	2	2	15	
68.7	29.5	98.2	30.0%	633.5	17.2	17.2	17.2	17.1				No SW	3	3	2	2	2	2	2	16	
73.4	31.5	104.9	30.0%	633.5	16.0	14.4	14.4	14.3	14.3			No SW	3	3	3	2	2	2	2	17	
78.0	33.4	111.4	30.0%	633.5	16.0	15.5	15.5	15.5	15.5			No SW	3	3	3	3	2	2	2	18	
82.7	35.4	118.1	30.0%	633.5	16.6	16.6	16.5	16.5	16.5			No SW	3	3	3	3	3	2	2	19	
87.3	37.4	124.7	30.0%	633.5	17.5	17.5	17.5	17.4	17.4			No SW	3	3	3	3	3	3	2	20	
92.0	39.4	131.4	30.0%	633.5	16.0	15.2	15.2	15.2	15.2	15.2		No SW	3	3	3	3	3	3	3	21	
96.5	41.4	137.9	30.0%	633.5	16.1	16.1	16.1	16.1	16.1	16.0		No SW	4	3	3	3	3	3	3	22	
101.1	43.3	144.4	30.0%	633.5	16.9	16.9	16.9	16.8	16.8	16.8		No SW	4	4	3	3	3	3	3	23	
105.7	45.3	151.0	30.0%	633.5	17.5	17.5	17.5	17.8	17.7	17.7		No SW	4	4	4	3	3	3	3	24	
109.2	47.3	156.5	30.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	4	4	4	4	3	3	3	25	Max. PH capacity w/ Qs=30% (Note 6)
109.2	49.2	158.4	31.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	4	4	4	4	4	3	3	26	
109.2	51.2	160.4	31.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	4	4	4	4	4	4	3	27	
109.2	53.1	162.3	32.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	4	4	4	4	4	4	4	28	
109.2	55.1	164.3	33.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	4	4	4	4	4	4	29	
109.2	57.0	166.2	34.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	5	4	4	4	4	4	30	
109.2	59.0	168.2	35.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	5	5	4	4	4	4	31	
109.2	60.9	170.1	35.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	5	5	5	4	4	4	32	
109.2	62.9	172.1	36.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	5	5	5	5	4	4	33	
109.2	64.8	174.0	37.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	5	5	5	5	5	4	34	
109.2	66.8	176.0	37.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	5	5	5	5	5	5	5	35	
109.2	68.7	177.9	38.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	5	5	5	5	5	5	36	
109.2	70.7	179.9	39.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	6	5	5	5	5	5	37	
109.2	72.6	181.8	39.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	6	6	5	5	5	5	38	
109.2	74.6	183.8	40.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	6	6	6	5	5	5	39	
109.2	76.5	185.7	41.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	6	6	6	6	5	5	40	
109.2	78.5	187.7	41.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	6	6	6	6	6	5	41	
109.2	80.4	189.6	42.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9		No SW	6	6	6	6	6	6	6	42	

Powerhouse Flow (kcfs) [Notes 1 & 3]											Spillway Flow (stops) [Notes 3 & 7]								Total Stops TS	Notes
PH (kcfs)	Spill (kcfs)	Calc River (kcfs)	Percent Spill (Note 2)	Forebay WSE (ft) (Note 2)	1 (Note 4)	2	3	4	5	6	1	2	3	4	5	6	7	8		
109.2	82.4	191.6	43.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	6	6	6	6	6	6	43	
109.2	84.3	193.5	43.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	7	6	6	6	6	6	44	
109.2	86.3	195.5	44.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	7	7	6	6	6	6	45	
109.2	88.2	197.4	44.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	7	7	7	6	6	6	46	
109.2	90.1	199.3	45.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	7	7	7	7	6	6	47	
109.2	92.1	201.3	45.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	7	7	7	7	7	6	48	
109.2	94.0	203.2	46.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	7	7	7	7	7	7	7	49	
109.2	96.0	205.2	46.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	7	7	7	7	7	7	50	
109.2	97.9	207.1	47.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	8	7	7	7	7	7	51	
109.2	99.9	209.1	47.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	8	8	7	7	7	7	52	
109.2	101.8	211.0	48.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	8	8	8	7	7	7	53	
109.2	103.8	213.0	48.7%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	8	8	8	8	7	7	54	
109.2	105.7	214.9	49.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	8	8	8	8	8	7	55	
109.2	107.7	216.9	49.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	8	8	8	8	8	8	8	56	
109.2	109.6	218.8	50.1%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	8	8	8	8	8	8	57	
109.2	111.5	220.7	50.5%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	9	8	8	8	8	8	58	
109.2	113.4	222.6	50.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	9	9	8	8	8	8	59	
109.2	115.3	224.5	51.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	9	9	9	8	8	8	60	
109.2	117.3	226.5	51.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	9	9	9	9	8	8	61	
109.2	119.2	228.4	52.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	9	9	9	9	9	8	62	
109.2	121.1	230.3	52.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	9	9	9	9	9	9	9	63	
109.2	123.1	232.3	53.0%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	9	9	9	9	9	9	64	
109.2	125.1	234.3	53.4%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	10	9	9	9	9	9	65	
109.2	127.1	236.3	53.8%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	10	10	9	9	9	9	66	
109.2	129.1	238.3	54.2%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	10	10	10	9	9	9	67	
109.2	131.1	240.3	54.6%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	10	10	10	10	9	9	68	
109.2	133.1	242.3	54.9%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	10	10	10	10	10	9	69	
109.2	135.1	244.3	55.3%	633.5	17.5	17.5	17.5	18.9	18.9	18.9	No SW	10	10	10	10	10	10	10	70	

- Note 1: Powerhouse unit priority should be Unit 1 ==> 6. Unit 1 operation is especially important to maintain good tailrace conditions for juvenile fish egress and adult fish attraction.
- Note 2: Assume Minimum Operating Pool (MOP) rules apply (i.e. forebay elevation between 633.0 - 634.0 feet).
- Note 3: Discharges shown on this table are based on an average forebay elevation for the specified range (634.5 ft for MOP rules), and are approximate. Particularly the powerhouse discharges are shown as an indication of how the Unit 1 operating restriction will work, not as a precise requirement. Actual operation will change with changing inflow, forebay and tailwater elevations, and other operating constraints and demands.
- Note 4: Unit 1 operation is manually restricted to operate between 115 - 125 MW, which is approximately 16.0 - 17.5 kcfs. Assume Unit 1 will be at the lower end of this range if other units are operating at discharges lower than 16.0 kcfs. Assume other operating units will be operated approximately uniformly, within constraints of normal 1% operation (Units 4-6 are different than Units 1-3). When average unit discharge is higher than 16.0 kcfs, assume all units will operate uniformly, again given different 1% range for Units 4-6. For low river discharges, with only one unit operating, Unit 1 may operate at less than 16 kcfs.
- Note 5: For river discharges less than this value, additional spill bays will be closed, Unit 1 will operate at the lower end of the 1% efficiency range, and the spill ratio will be less than 30%.
- Note 6: Above this river discharge, involuntary spill will force a spill ratio higher than 30%.
- Note 7: This uniform spill pattern, with no SW operating, will be used when river discharges are less than ~38 kcfs, or as an alternate pattern when the SW must be closed for any reason, such as when switching from SW-LO to SW-HI.