Table MCN-Z. McNary 2008 Spill Pattern for fish passage with SB 20 off. (Discharge at forebay elevation 339)

(11 June 2008)

SPILLWAY BAY (Gate Opening in feet)																						Total Stops	Total Spill
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		(kcfs)
																1	2	5.5		2	1	11.5	21.4
																2	2	5.5		2	1	12.5	23.3
														1		2	2	5.5		2	1	13.5	25.3
														1		2	2	5.5		2	2	14.5	27.2
														2		2	2	5.5		2	2	15.5	29.1
														2	1	2	2	5.5		2	2	16.5	31.1
														2	2	2	2	5.5		2	2	17.5	33.0
													1	2	2	2	2	5.5		2	2	18.5	35.0
													2	2	2	2	2	5.5		2	2	19.5	36.9
										1		2		2	2	2	2	5.5		2	2	20.5	38.9
										2		2		2	2	2	2	5.5		2	2	21.5	40.8
								1		2		2		2	2	2	2	5.5		2	2	22.5	42.8
								2		2		2		2	2	2	2	5.5		2	2	23.5	44.7
								2	1	2		2		2	2	2	2	5.5		2	2	24.5	46.7
								2	2	2		2		2	2	2	2	5.5		2	2	25.5	48.6
								2	2	2		2	1	2	2	2	2	5.5		2	2	26.5	50.6
								2	2	2		2	2	2	2	2	2	5.5		2	2	27.5	52.5
								2	2	2	1	2	2	2	2	2	2	5.5		2	2	28.5	54.5
								2	2	2	2	2	2	2	2	2	2	5.5		2	2	29.5	56.4
						1		2	2	2	2	2	2	2	2	2	2	5.5		2	2	30.5	58.4
						2		2	2	2	2	2	2	2	2	2	2	5.5		2	2	31.5	60.3
				1		2		**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**5.5**		**2**	**2**	32.5	62.3
				2		2		2	2	2	2	2	2	2	2	2	2	5.5		2	2	33.5	64.2
2.5	2	3.5		2		2		2		2		2	1	2		2	2	5.5		2	2	34.5	65.7
2.5	2	3.5		2		2		2		2		2	1	2	1	2	2	5.5		2	2	35.5	67.7

1) TSWs in bays 19 and 20 have flow equivalent to 5.5 and 5.2 stops at forebay elevation of 339, respectively.

2) Raise gates for TSWs approximately 3 to 5 feet above water surface to ensure free surface and debris passage.

Table MCN-Z. McNary 2008 Spill Pattern for fish passage with SB 20 off. (Discharge at forebay elevation 339)

(11 June 2008)

SPILLWAY BAY (Gate Opening in feet)																						Total Stops	Total Spill
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		(kcfs)
2.5	2	3.5		2	1	2		2		2		2	1	2	1	2	2	5.5		2	2	36.5	69.7
2.5	2	3.5		2	1	2		2	1	2		2	1	2	1	2	2	5.5		2	2	37.5	71.7
2.5	2	3.5		2	1	2		2	1	2	1	2	1	2	1	2	2	5.5		2	2	38.5	73.7
2.5	2	3.5		2	1	2	1	2	1	2	1	2	1	2	1	2	2	5.5		2	2	39.5	75.7
2.5	2	3.5	1	2	1	2	1	2	1	2	1	2	1	2	1	2	2	5.5		2	2	40.5	77.7
2.5	2	3.5	1	2	1	2	1	2	1	2	1	2	1	2	1	2	2	5.5		2.5	2.5	41.5	79.4
2.5	2	3.5	1	2	1	2	1	2	1	2	1	2	2	2	1	2	2	5.5		2.5	2.5	42.5	81.3
2.5	2	3.5	1	2	1	2	1	2	1	2	1	2	2	2	2	2	2	5.5		2.5	2.5	43.5	83.2
2.5	2	3.5	1	2	2	2	1	2	1	2	1	2	2	2	2	2	2	5.5		2.5	2.5	44.5	85.1
2.5	2	3.5	1	2	2	2	1	2	2	2	1	2	2	2	2	2	2	5.5		2.5	2.5	45.5	87.0
2.5	2	3.5	1	2	2	2	1	2	2	2	2	2	2	2	2	2	2	5.5		2.5	2.5	46.5	88.9
2.5	2	3.5	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5.5		2.5	2.5	47.5	90.8
2.5	2	3.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5.5		2.5	2.5	48.5	92.7
2.5	2.5	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5.5		2.5	2.5	49.5	94.3
2.5	2.5	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5.5		3.5	2.5	50.5	96.0
2.5	2.5	4	2	2	2	2	2	2	2	2	2	2	2	2	2.5	2.5	3	5.5		2.5	2.5	51.5	97.7
2.5	2.5	4	2	2	2	2.5	2	2	2	2.5	2	2	2	2	2.5	2.5	3	5.5		2.5	2.5	52.5	99.4
2.5	2.5	4	2	2.5	2	2.5	2	2	2	2.5	2	2	2	2.5	2.5	2.5	3	5.5		2.5	2.5	53.5	101.1
2.5	2.5	4	2	2.5	2	2.5	2	2.5	2	2.5	2	2.5	2	2.5	2.5	2.5	3	5.5		2.5	2.5	54.5	102.8
2.5	2.5	4	2	2.5	2.5	2.5	2	2.5	2.5	2.5	2	2.5	2	2.5	2.5	2.5	3	5.5		2.5	2.5	55.5	104.5
2.5	2.5	4	2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2	2.5	2.5	2.5	3	5.5		2.5	2.5	56.5	106.2
2.5	2.5	4	3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2	2.5	2.5	2.5	3	5.5		2.5	2.5	57.5	107.9
2.5	2.5	4	3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3	5.5		3	2.5	58.5	109.6
2.5	2.5	4	3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3	3	3	5.5		3	2.5	59.5	111.3
2.5	2.5	4.5	3	2.5	2.5	2.5	2.5	2.5	2.5	3	2.5	2.5	2.5	2.5	3	3	3	5.5		3	2.5	60.5	113.0

1) TSWs in bays 19 and 20 have flow equivalent to 5.5 and 5.2 stops at forebay elevation of 339, respectively.

2) Raise gates for TSWs approximately 3 to 5 feet above water surface to ensure free surface and debris passage.

Table MCN-Z. McNary 2008 Spill Pattern for fish passage with SB 20 off. (Discharge at forebay elevation 339)

(11 June 2008)

SPILLWAY BAY (Gate Opening in feet)																						Total Stops	Total Spill
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		(kcfs)
2.5	2.5	4.5	3	2.5	2.5	3	2.5	2.5	2.5	3	2.5	3	2.5	2.5	3	3	3	5.5		3	2.5	61.5	114.7
2.5	2.5	4.5	3	3	2.5	3	2.5	3	2.5	3	2.5	3	2.5	2.5	3	3	3	5.5		3	2.5	62.5	116.4
2.5	2.5	4.5	3	3	3	3	2.5	3	2.5	3	2.5	3	2.5	3	3	3	3	5.5		3	2.5	63.5	118.1
2.5	2.5	5	3	3	3	3	2.5	3	3	3	2.5	3	2.5	3	3	3	3	5.5		3	2.5	64.5	119.7
2.5	2.5	5	3	3	3	3	3	3	3	3	3	3	2.5	3	3	3	3	5.5		3	2.5	65.5	121.4
3	3	5	3	3	3	3	3	3	3	3	3	3	2.5	3	3	3	3	5.5		3	2.5	66.5	123.1
3	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5.5		3	3	67.5	124.8
3	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	5.5		3	3	68.5	126.4
3	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	5.5		3	3	69.5	128.0
3	4	5	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	5.5		3	3	70.5	129.6
4	4	5	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	5.5		3	3	71.5	131.2
4	4	5	3	3	3	4	3	3	3	3	3	3	3	3	3	4	4	5.5		3	3	72.5	132.8
4	4	5	3	3	3	4	3	3	3	4	3	3	3	3	3	4	4	5.5		3	3	73.5	134.4
4	4	5	3	4	3	4	3	3	3	4	3	3	3	3	3	4	4	5.5		3	3	74.5	136.0
4	4	5	3	4	3	4	3	3	3	4	3	3	3	4	3	4	4	5.5		3	3	75.5	137.6
4	4	5	3	4	3	4	3	4	3	4	3	3	3	4	3	4	4	5.5		3	3	76.5	139.2
4	4	5	3	4	3	4	3	4	3	4	3	4	3	4	3	4	4	5.5		3	3	77.5	140.8
4	4	5	3	4	4	4	3	4	3	4	3	4	3	4	3	4	4	5.5		3	3	78.5	142.4
4	4	5	3	4	4	4	3	4	4	4	3	4	3	4	3	4	4	5.5		3	3	79.5	144.0
4	4	5	3	4	4	4	3	4	4	4	4	4	3	4	3	4	4	5.5		3	3	80.5	145.6
4	4	5	3	4	4	4	4	4	4	4	4	4	3	4	3	4	4	5.5		3	3	81.5	147.2
4	4	5	3	4	4	4	4	4	4	4	4	4	3	4	4	4	4	5.5		3	3	82.5	148.8
4	4	5	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	5.5		3	3	83.5	150.4
4	4	5	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	5.5		4	3	84.5	152.0
4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5.5		4	3	85.5	153.6

1) TSWs in bays 19 and 20 have flow equivalent to 5.5 and 5.2 stops at forebay elevation of 339, respectively.

2) Raise gates for TSWs approximately 3 to 5 feet above water surface to ensure free surface and debris passage.

Table MCN-Z. McNary 2008 Spill Pattern for fish passage with SB 20 off. (Discharge at forebay elevation 339)

(11 June 2008)

SPILLWAY BAY (Gate Opening in feet)																						Total Stops	Total Spill
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		(kcfs)
4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5.5		4	3	86.5	155.2
4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5.5		4	3	87.5	156.8
4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5.5		4	3	88.5	158.4
5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5.5		4	3	89.5	160.0
5	5	5	4	4	4	5	4	4	4	4	4	4	4	4	4	5	5	5.5		4	3	90.5	161.6
5	5	5	4	4	4	5	4	4	4	5	4	4	4	4	4	5	5	5.5		4	3	91.5	163.2
5	5	5	4	5	4	5	4	4	4	5	4	4	4	4	4	5	5	5.5		4	3	92.5	164.8
5	5	5	4	5	4	5	4	4	4	5	4	4	4	5	4	5	5	5.5		4	3	93.5	166.4
5	5	5	4	5	4	5	4	5	4	5	4	4	4	5	4	5	5	5.5		4	3	94.5	168.0
5	5	5	4	5	4	5	4	5	4	5	4	5	4	5	4	5	5	5.5		4	3	95.5	169.6
5	5	5	4	5	4	5	4	5	4	5	4	5	4	5	4	5	5	5.5		5	3	96.5	171.2
5	5	5	4	5	5	5	4	5	4	5	4	5	4	5	4	5	5	5.5		5	3	97.5	172.8
5	5	5	4	5	5	5	4	5	5	5	4	5	4	5	4	5	5	5.5		5	3	98.5	174.4
5	5	5	4	5	5	5	4	5	5	5	5	5	4	5	4	5	5	5.5		5	3	99.5	176.0
5	5	5	4	5	5	5	5	5	5	5	5	5	4	5	4	5	5	5.5		5	3	100.5	177.6
5	5	5	4	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5.5		5	3	101.5	179.2
5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5.5		5	3	102.5	180.8
5	5	6	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5.5		5	3	103.5	182.4
5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.5		5	3	104.5	184.0
5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5.5		5	3	105.5	185.6
5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	5.5		5	3	106.5	187.2
5	5	6	5	5	5	5	5	5	5	5	5	5	5	6	5	6	6	5.5		5	3	107.5	188.8
5	5	6	5	5	5	5	5	5	5	5	5	6	5	6	5	6	6	5.5		5	3	108.5	190.4
5	5	6	5	5	5	5	5	5	5	5	5	6	5	6	6	6	6	5.5		5	3	109.5	192.0
5	5	6	6	5	5	5	5	5	5	5	5	6	5	6	6	6	6	5.5		5	3	110.5	193.6

1) TSWs in bays 19 and 20 have flow equivalent to 5.5 and 5.2 stops at forebay elevation of 339, respectively.

2) Raise gates for TSWs approximately 3 to 5 feet above water surface to ensure free surface and debris passage.

Table MCN-Z. McNary 2008 Spill Pattern for fish passage with SB 20 off. (Discharge at forebay elevation 339)

(11 June 2008)

SPILLWAY BAY (Gate Opening in feet)																						Total Stops	Total Spill
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		(kcfs)
5	5	6	6	5	5	5	5	5	5	5	5	6	5	6	6	6	6	5.5		6	3	111.5	195.2
5	5	6	6	5	5	5	5	5	5	5	6	6	5	6	6	6	6	5.5		6	3	112.5	196.8
5	5	6	6	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5.5		6	4	113.5	198.4
5	5	6	6	5	5	5	5	5	5	5	5	6	6	6	6	6	6	5.5		6	4	113.5	198.4
5	5	6	6	6	5	5	5	5	5	5	6	6	6	6	6	6	6	5.5		6	4	115.5	201.6
5	5	6	6	6	5	5	5	5	5	5	6	6	6	6	6	6	6	5.5		6	4	115.5	201.6
5	5	6	6	6	5	6	5	5	5	6	6	6	6	6	6	6	6	5.5		6	4	117.5	204.8
5	5	6	6	6	5	6	5	5	5	6	6	6	6	6	6	6	6	5.5		6	4	117.5	204.8
5	5	6	6	6	6	6	5	6	5	6	6	6	6	6	6	6	6	5.5		6	4	119.5	208.0
5	5	6	6	6	6	6	5	6	5	6	6	6	6	6	6	6	6	5.5		6	4	119.5	208.0
5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5.5		6	4	121.5	211.2
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5.5		6	4	123.5	214.4
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5.5		6	4	123.5	214.4
6	6	6	6	6	6	6	6	6	6	7	6	7	6	7	6	7	6	5.5		6	4	127.5	220.8
6	6	6	6	6	6	7	6	7	6	7	6	7	6	7	6	7	6	5.5		6	4	129.5	224.0
6	6	7	6	7	6	7	6	7	6	7	6	7	6	7	6	7	6	5.5		6	4	131.5	227.2
7	6	7	6	7	6	7	6	7	6	7	6	7	6	7	6	7	7	5.5		6	4	133.5	230.4
7	6	7	6	7	6	7	6	7	6	7	6	7	7	7	7	7	7	5.5		6	4	135.5	233.6
7	6	7	6	7	6	7	6	7	7	7	7	7	7	7	7	7	7	5.5		6	4	137.5	236.8
7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5.5		6	4	139.5	240.0
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5.5		6	4	141.5	243.2
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5.5		6	6	143.5	246.4
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5.5		6	6	143.5	246.4
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5.5		6	6	143.5	246.4

1) TSWs in bays 19 and 20 have flow equivalent to 5.5 and 5.2 stops at forebay elevation of 339, respectively.

2) Raise gates for TSWs approximately 3 to 5 feet above water surface to ensure free surface and debris passage.