Appendix A

Stream Flow Tables

per the Proposed Licenses

(Draft) August 2020

Hydrograph Component	Timing	Flow Requirement	Ramping Rate		
Spring Baseflow	April 1 – April 30	40 cfs	Maximum: 10% or 10 cfs*		
Spring Ascension	May 1 – May 15	40 cfs ascending to 80 cfs	Target: 5% Maximum: 25%		
Spring Bench	May 16 – June 11	80 cfs	Maximum: 20%		
Snowmelt Ascension	June 12 – June 22	80 cfs ascending to 220 cfs	Target: 10% Maximum: 20%		
Snowmelt Bench	June 23 – August 10	ine 23 – August 10 220 cfs			
Snowmelt Flood and Snowmelt Peak	Starting between June 23 and July 19 with the 5-day peak between June 29 and July 29	and July 19 with the 5-day peak between June 29 and 750 cfs descending to 750 cfs days, 750 cfs descending to			
Medium Recession (Node)	August 11 – August 25	220 cfs descending to 87 cfs	Target: 6% Maximum: 10% or 10 cfs*		
Slow Recession	August 26 – September 30	87 cfs descending to 30 cfs	Target: 3% Maximum: 10% or 10 cfs*		
Fall and Winter Baseflow	October 1 – March 31	27 cfs target (25 cfs minimum and 29 cfs maximum)	Maximum: 10% or 10 cfs*		
			* whichever is greater		

TABLE 1B: RUSH CREEK STREAM ECOSYSTEM FLOWS FOR WET YEARS

Hydrograph Component	Timing	Flow Requirement	Ramping Rate	
Spring Baseflow	April 1 – April 30	40 cfs	Maximum: 10% or 10 cfs*	
Spring Ascension	May 1 – May 15	40 cfs ascending to 80 cfs	Target: 5% Maximum: 25%	
Spring Bench	May 16 – June 11	80 cfs	Maximum: 20%	
Snowmelt Ascension	June 12 – June 19	80 cfs ascending to 170 cfs	Target: 10% Maximum: 20%	
Snowmelt Bench	June 20 – August 1	Maximum Ascending: 20% Maximum Descending: 10% or 10 cfs*		
Snowmelt Flood and Snowmelt Peak	Starting between June 20 and July 8 with the 5-day peak between June 27 and July 19170 cfs ascending to 650 cfs, 650 cfs for 5 days, 650 cfs descending to 170 cfs		Target Ascending: 20% Maximum Ascending: 40% Maximum Descending: 10% or 10 cfs*	
Medium Recession (Node)	August 2 – August 15	170 cfs descending to 71 cfs	Target: 6% Maximum: 10% or 10 cfs*	
Slow Recession	August 16 – September 13	st 16 – September 13 71 cfs descending to 30 cfs		
Summer Baseflow	September 14 – September 30	30 cfs target 28 cfs minimum	Maximum: 10% or 10 cfs*	
Fall and Winter Baseflow	October 1 – March 31	27 cfs target 25 cfs minimum and 29 cfs maximum	Maximum: 10% or 10 cfs*	
			* whichever is greater	

Hydrograph Component	Timing	Flow Requirement	Ramping Rate		
Spring Baseflow	April 1 – April 30	40 cfs	Maximum: 10% or 10 cfs*		
Spring Ascension	May 1 – May 15	40 cfs ascending to 80 cfs	Target: 5% Maximum: 25%		
Spring Bench	May 16 – June 11	80 cfs	Maximum: 20%		
Snowmelt Ascension	June 12 – June 18	80 cfs ascending to 145 cfs	Target: 10% Maximum: 20%		
Snowmelt Bench	June 19 – July 23	145 cfs	Maximum Ascending: 20% Maximum Descending: 10% or 10 cfs*		
Snowmelt Flood and Snowmelt Peak	Starting between June 19 and July 1 with the 3-day peak between June 26 and July 10	145 cfs ascending to 550 cfs, 550 cfs for 3 days, 550 cfs descending to 145 cfs	Target Ascending: 20% Maximum Ascending: 40% Maximum Descending: 10% or 10 cfs*		
Medium Recession (Node)	July 24 – August 4	145 cfs descending to 69 cfs	Target: 6% Maximum: 10% or 10 cfs*		
Slow Recession	August 5 – September 1	69 cfs descending to 30 cfs	Target: 3% Maximum: 10% or 10 cfs*		
Summer Baseflow	September 2 – September 30	30 cfs target 28 cfs minimum	Maximum: 10% or 10 cfs*		
Fall and Winter Baseflow	October 1 – March 31	27 cfs target 25 cfs minimum and 29 cfs maximum	Maximum: 10% or 10 cfs*		
			* whichever is greater		

TABLE 1C: RUSH CREEK STREAM ECOSYSTEM FLOWS FOR WET/NORMAL YEARS

Hydrograph Component	Timing	Flow Requirement	Ramping Rate		
Spring Baseflow	April 1 – April 30	40 cfs	Maximum: 10% or 10 cfs*		
Spring Ascension	May 1 – May 15	40 cfs ascending to 80 cfs	Target: 5% Maximum: 25%		
Spring Bench	May 16 – June 11	80 cfs	Maximum: 20%		
Snowmelt Ascension	June 12 – June 16	80 cfs ascending to 120 cfs	Target: 10% Maximum: 20%		
Snowmelt Bench	June 17 – July 14	120 cfs	Maximum Ascending: 20% Maximum Descending: 10% or 10 cfs*		
Snowmelt Flood and Snowmelt Peak	Starting between June 17 and June 25 with the 3-day peak between June 23 and July 3	120 cfs ascending to 380 cfs, 380 cfs for 3 days, 380 cfs descending to 120 cfs	Target Ascending: 20% Maximum Ascending: 40% Maximum Descending: 10% or 10 cfs*		
Medium Recession (Node)	July 15 – July 26	120 cfs descending to 58 cfs	Target: 6% Maximum: 10% or 10 cfs*		
Slow Recession	low Recession July 27 – August 17		Target: 3% Maximum: 10% or 10 cfs*		
Summer Baseflow	August 18 – September 30	30 cfs target 28 cfs minimum	Maximum: 10% or 10 cfs*		
Fall and Winter Baseflow	October 1 – March 31	27 cfs target 25 cfs minimum and 29 cfs maximum	Maximum: 10% or 10 cfs*		
			* whichever is greater		

Hydrograph Component	Timing	Flow Requirement	Ramping Rate	
Spring Baseflow	April 1 – May 18	40 cfs	Maximum: 10% or 10 cfs*	
Spring Ascension	May 19 – June 2	40 cfs ascending to 80 cfs	Target: 5% Maximum: 25%	
Snowmelt Bench	June 3 – June 30	80 cfs	Maximum Ascending: 20% Maximum Descending: 10% or 10 cfs*	
Snowmelt Flood and Snowmelt Peak	Starting between June 2 and June 15 with the 3- day peak between June 6 and June 21 coinciding with Parker and Walker Creek peaks	80 cfs ascending to 200 cfs, 200 cfs for 3 days, 200 cfs descending to 80 cfs	Target Ascending: 20% Maximum Ascending: 40% Maximum Descending: 10% or 10 cfs*	
Medium Recession (Node)	July 1 – July 8	80 cfs descending to 48 cfs	Target: 6% Maximum: 10% or 10 cfs*	
Slow Recession	July 9 – July 24	48 cfs descending to 30 cfs	Target: 3% Maximum: 10% or 10 cfs*	
Summer Baseflow	July 25 – September 30	30 cfs target 28 cfs minimum	Maximum: 10% or 10 cfs*	
Fall and Winter Baseflow	October 1 – March 31	27 cfs target 25 cfs minimum and 29 cfs maximum	Maximum: 10% or 10 cfs*	
			* whichever is greater	

TABLE 1E: RUSH CREEK STREAM ECOSYSTEM FLOWS FOR DRY/NORMAL II YEARS

TABLE 1F: RUSH CREEK STREAM ECOSYSTEM FLOWS FOR DRY/NORMAL I YEARS

Hydrograph Component	Timing	Flow Requirement	Ramping Rate	
Spring Baseflow	April 1 – April 30	40 cfs	Maximum: 10% or 10 cfs*	
Spring Ascension	May 1 – May 15	40 cfs ascending to 80 cfs	Target: 5% Maximum: 25%	
Snowmelt Bench	May 16 – July 3	80 cfs	Maximum Ascending: 20% Maximum Descending: 10% or 10 cfs*	
Medium Recession (Node)	July 4 – July 9	80 cfs descending to 55 cfs	Target: 6% Maximum: 10% or 10 cfs	
Slow Recession	July 10 – July 30	55 cfs descending to 30 cfs	Target: 3% Maximum: 10% or 10 cfs*	
Summer Baseflow	July 31 – September 30	30 cfs target 28 cfs minimum	Maximum: 10% or 10 cfs*	
Fall and Winter Baseflow	October 1 – March 31	27 cfs target 25 cfs minimum and 29 cfs maximum	Maximum: 10% or 10 cfs*	
			* whichever is greater	

Hydrograph Component	Timing	Flow Requirement	Ramping Rate	
Spring Baseflow	April 1 – April 30	30 cfs	Maximum: 10% or 10 cfs*	
Spring Ascension	May 1 – May 18	30 cfs ascending	Target: 5%	
		to 70 cfs	Maximum: 25%	
Snowmelt Bench	May 19 – July 6	70 cfs	Maximum Ascending: 20% Maximum Descending: 10% or 10 cfs*	
Medium Recession		70 ()	Target: 6%	
(Node)	July 7 – July 12	70 cfs descending to 48 cfs	Maximum: 10% or 10 cfs*	
		48 cfs descending	Target: 3%	
Slow Recession	July 13 – July 28	to 30 cfs	Maximum: 10% or 10 cfs*	
Summer Baseflow	July 29 – September 30	30 cfs target 28 cfs minimum	Maximum: 10% or 10 cfs*	
Fall and Winter Baseflow	October 1 – March 31	27 cfs target 25 cfs minimum and 29 cfs maximum	Maximum: 10% or 10 cfs*	
			* whichever is greater	

TABLE 1G: RUSH CREEK STREAM ECOSYSTEM FLOWS FOR DRY YEARS

Timing: April 1 – September 30					[`	Year-type: Extreme/Wet, Wet, Wet/Normal, Normal, Dry/Normal II				
Maximum ra	Maximum ramping at the beginning and end of this period is 20%.									
Inflow		Flow Requirement								
30 cfs or less	Licensee shall bypass inflow.									
31 – 250 cfs	blocks		s (left-han			correspond) and 1 cfs				
	0	1	2	3	4	5	6	7	8	9
30		30	30	30	30	30	31	32	33	34
40	30	31	32	33	34	35	36	37	38	39
50	35	36	37	38	39	40	41	42	43	44
60	45	46	47	48	49	50	51	52	53	54
70	55	56	57	58	59	60	61	62	63	64
80	60	61	62	63	64	65	66	67	68	69
90	70	71	72	73	74	75	76	77	78	79
100	75	76	77	78	79	80	81	82	83	84
110	85	86	87	88	89	90	91	92	93	94
120	95	96	97	98	99	100	101	102	103	104
130	100	101	102	103	104	105	106	107	108	109
140	110	111	112	113	114	115	116	117	118	119
150	120	121	122	123	124	125	126	127	128	129
160	130	131	132	133	134	135	136	137	138	139
170	135	136	137	138	139	140	141	142	143	144
180	145	146	147	148	149	150	151	152	153	154
190	155	156	157	158	159	160	161	162	163	164
200	160	161	162	163	164	165	166	167	168	169
210	170	171	172	173	174	175	176	177	178	179
220	180	181	182	183	184	185	186	187	188	189
230	190	191	192	193	194	195	196	197	198	199
240	195	196	197	198	199	200	201	202	203	204
250	200									
251 cfs and greater	Licensee shall bypass inflow.									

TABLE 2A LEE VINING CREEK STREAM ECOSYSTEM FLOWS

Timing: Ap						Year-type: Dry/Normal I, Dry					
Maximum	ramping a	at the beg	inning an	d end of t	his period	is 20%.					
Inflow	Flow Requirement										
30 cfs or less	Licensee shall bypass inflow.										
31 – 250	Licensee shall bypass flow in the amount corresponding to inflow which is displayed as blocks										
cfs	of 10 cfs (left-hand vertical column) and 1 cfs increments within such blocks (top horizontal ro									izontal row).	
	0	1	2	3	4	5	6	7	8	9	
30		30	30	30	30	30	30	30	30	30	
40	30	30	30	30	30	30	30	30	30	30	
50	30	30	30	30	30	30	30	30	31	32	
60	32	33	34	34	35	36	36	37	38	38	
70	39	40	41	41	42	43	43	44	45	45	
80	46	47	47	48	49	49	50	51	52	52	
90	53	54	54	55	56	56	57	58	59	59	
100	60	61	61	62	63	64	64	65	66	66	
110	67	68	69	69	70	71	72	72	73	74	
120	74	75	76	77	77	78	79	80	80	81	
130	82	82	83	84	85	85	86	87	88	88	
140	89	90	91	91	92	93	94	94	95	96	
150	97	97	98	99	100	100	101	102	103	103	
160	104	105	106	106	107	108	109	109	110	111	
170	112	112	113	114	115	115	116	117	118	118	
180	119	120	121	121	122	123	124	124	125	126	
190	127	128	128	129	130	131	131	132	133	134	
200	134	135	136	137	138	138	139	140	141	141	
210	142	143	144	144	145	146	147	148	148	149	
220	150	151	151	152	153	154	155	155	156	157	
230	158	158	159	160	161	162	162	163	164	165	
240	165	166	167	168	169	169	170	171	172	172	
250	173										
251 cfs		1					1		1	1	
and											
greater	Licensee	e shall by	bass inflo	W.							

TABLE 2B: LEE VINING CREEK STREAM ECOSYSTEM FLOWS

TABLE 2C: LEE VINING CREEK STREAM ECOSYSTEM FLOWS

Timing: October 1 – March 31	Year-t	Year-type: All								
Maximum ramping at the beginning and end of this period and at all times is 20%.										
Timing	Flow Requirement									
	Extreme/Wet, Wet	Wet/Normal	Normal	Dry/Normal II, Dry/Normal I, Dry						
October 1 – October 15	30 cfs	28 cfs	20 cfs							
October 16 – October 31	28 cfs	24 cfs		16 cfs						
November 1 – November 15	24 cfs	22 cfs	18 cfs							
November 16 – March 31	20 cfs	20 cfs								