2019 Lower Monumental Early Start (March 1-31)

Date	Activity					
2/26	Primary bypass operational					
By 3/1	U1, U2, & U3 Screened					
	JFF watered up					
	Condition sampling delayed due to cold temperatures (19LMN02 MFR)					
3/7 @ 1200	(see table below)					
3/8-3/9	1st Condition sample (sampling every other day)					
3/11	LYFE release of ~150,000 yearling FACH					
3/14-3/15	LYFE release of ~60,000 steelhead					
3/27-3/28	U4, U5, & U6 Screened					

Daily minimum air temperatures (°F) during late February and early March 2019.

Date	Pasco	Walla Walla
26-Feb	4	17
27-Feb	24	21
28-Feb	7	17
1-Mar	3	13
2-Mar	19	14
3-Mar	0	20
4-Mar	-1	11
5-Mar	-1	7
6-Mar	21	20
7-Mar	19	27
8-Mar	18	25
9-Mar	18	24

Estimated LMN Smolt Bypass Passage March 9-31, 2019.

Smolt passage was significantly influenced by Lyons Ferry early releases of yearling fall Chinook on March 11th and steelhead on March 14th and 15th.

101,722 Chinook (93%) and 7,846 juvenile steelhead (7%) of which < 1% were from other than Lyons Ferry Hatchery early releases based on PIT-tag detections.

	Smolt Passage (based on every other day sampling)					Adult Fallback		
	Chinook Stee		Sockeye/Kokanee	Total		Chinook	Steelhead	
9-Mar	0	0	0	0		0	2	
11-Mar	30	0	0	30		0	0	
13-Mar	20	10	4	34		1	1	
15-Mar	1,492	6	4	1,502		0	0	
17-Mar	3,300	100	0	3,400		0	0	
19-Mar	1,760	2,600	0	4,360		0	4	
21-Mar	5,320	1,980	0	7,300		0	14	
23-Mar	13,800	600	0	14,400		0	15	
25-Mar	35,100	1,000	0	36,100		0	20	
27-Mar	24,200	200	0	24,400		0	10	
29-Mar	8,800	300	0	9,100		0	9	
31-Mar	7,900	1,050	0	8,950		1	13	
Total	101,722	7,846	8	109,576		2	88	
%	93%	7%	0%					
Min/day	0	0	0	0				
Max/day	35,100	2,600	4	36,100				
Average/day	8,477	654	1	9,131				

88 Adult steelhead fallbacks mainly during later third of March (96% > March 18th).

LMN PIT-tag Detections March 1-31

4,259 Chinook smolts detected (99% from Lyons Ferry Hatchery early release) – Forty-five PIT-tagged Chinook smolts were detected in the Lower Monumental bypass in March 2019 which were not from the early Lyons Ferry Hatchery release. Of these, 93% originated out of the Clearwater watershed (14 spring Chinook and 28 fall Chinook). Passage timing did not indicate a temporal trend.

1,806 Steelhead smolts detected (99% from Lyons Ferry Hatchery early release) – Seventeen PITtagged juvenile steelhead were detected in the Lower Monumental bypass in March 2019 which were not from the early Lyons Ferry Hatchery release. Of these, 9 originated out of Asotin Creek, 4 out of the Tucannon, 3 out of the Clearwater, and 1 was a Lyons Ferry holdover. Eighty-eight percent passed after the 26th of March.

	LYFE	not-LYFE	LYFE	not-LYFE		Smolt	Adult
Date	Chinook	Chinook	Steelhead	Steelhead	Orphans	Total	Steelhead
3/1/2019		1		0		1	0
3/3/2019		2		0		2	0
3/11/2019		1		0		1	0
3/12/2019		2		0		2	0
3/13/2019		1		0		1	0
3/14/2019	2	0		0		2	0
3/15/2019	10	0		0		10	0
3/16/2019	7	0	13	0		20	0
3/17/2019	14	2	280	0		296	0
3/18/2019	11	0	330	0	1	342	0
3/19/2019	26	1	326	1	1	355	0
3/20/2019	64	1	186	0		251	0
3/21/2019	115	0	142	1		258	0
3/22/2019	283	1	63	0		347	0
3/23/2019	387	1	71	0		459	2
3/24/2019	609	0	65	0	1	675	1
3/25/2019	1426	0	84	2		1,512	1
3/26/2019	391	0	32	0		423	0
3/27/2019	263	3	44	2		312	1
3/28/2019	165	4	22	0		191	0
3/29/2019	185	9	36	2		232	2
3/30/2019	132	3	35	3	1	174	1
3/31/2019	124	13	60	6		203	2
Total	4,214	45	1,789	17	4	6,069	10
Percent	70%	1%	30%	0%	0%		

10 Adult Steelhead detected – All after March 22nd. (5 from Granite Trap, 2 from South Fork John Day River, 1 Granite kelt sampling, 1 from Priest Rapids ladder, and 1 from the east fork Salmon River.