Water Management Plan

Appendix 3

Introduction to Timeline

The timeline given below shows the approximate starting and end times of actions and events included in this year's Water Management Plan. It is designed to give a sense of when various actions occur. Dates are approximate and subject to change. Also note actions shown may not occur.

Project Abbreviations

LIB – Libby HGH – Hungry Horse LWG - Lower Granite LGS – Little Goose LMN - Lower Monumental IHR – Ice Harbor MCN – McNary JDA – John Day TDA – The Dalles BON – Bonneville TMT - Technical Management Team DWR - Dworshak PRD - Priest Rapids ALF – Albeni Falls GCL – Grand Coulee RCC - Reservoir Control Center RFC – River Forecast Center USBR - US Bureau of Reclamation

ID	Task Name	Start	Finish
1	LIB Operate to Minimum Flows / Ramp Rates	10/1/18	9/30/19
2	HGH Operate to Minimum Flows / Ramp Rates	10/1/18	9/30/19
3	TMT Assess Potential of Providing Flow for Chinook Below BON	10/1/18	11/30/18
4	TMT Assess Potential of Providing Flow for Chum Below BON	10/1/18	11/30/18
5	TMT Preliminary Discussions of Flood Control / Refill	10/1/18	10/1/18
6	TMT Albeni Falls Fall / Winter Draw Down Discussions	10/1/18	10/1/18
7	Hanford Reach / Vernita Bar Flows Set (Non-BiOp)	10/1/18	10/1/18
8	DWR Operate at Minimum Outflow	10/1/18	12/31/18
9	PRD Vernita Bar Protection Flows (Non-BiOp)	10/1/18	5/9/19
10	MCN Waterfowl Hunting Enhancement (Non-BiOp)	10/1/18	1/31/19
11	LIB Storage May be Used to Support Chum Flows	11/2/18	2/23/19
12	HGH Storage May be Used to Support Chum Flows	11/2/18	2/23/19
13	ALF Storage May be Used to Support Chum Flows	11/2/18	2/23/19
14	GCL Storage May be Used to Support Chum Flows	11/2/18	2/23/19
15	DWR Storage May be Used to Support Chum Flows	11/2/18	2/23/19
16	BON Provide Chum Tailwater	11/1/18	4/10/19
18	TMT Determine Winter / Spring Chum Flow Levels	10/1/18	4/10/19
18	HEPB Determine Flood Control / Refill Strategies	12/1/18	4/16/19
19	HEPB Determine Flood Control Shifts	12/1/18	4/16/19
20	LIB Operate to Flood Control Curve	12/1/18	6/30/19
21	DWR Operate to Flood Control Curve	12/1/18	6/30/19
22	ALF Operate to Flood Control Curve	9/10/18	6/22/19
23	GCL Operate to Flood Control Curve	12/1/18	6/30/19
24	HGH Operate to Flood Control Curve	12/1/18	6/30/19
25	ARDB Whitefish Flows 45-55 kcfs (non-BiOp)	12/1/18	1/31/19
26	LIB Burbot Flows 6-8 kcfs (non-BiOp)	10/1/18	2/28/19

ID	Task Name	Start	Finish
27	ARDB 1 MAF Flow Augmentation Filling	1/1/19	4/25/19
28	RFC January Final Forecast	1/4/19	1/4/19
29	TMT Begin Spring Transport Discussions	3/1/19	3/1/19
30	TMT Hanford Reach Operations Discussions (non-BiOp)	2/1/19	2/1/19
31	RFC February Final Forecast	2/3/19	2/3/19
32	USBR Min. Flows from HGH and at Columbia Falls Set	3/1/19	3/1/19
33	BON Spring Creek Hatchery Release from Bon Hatch (non-BiOp)	4/1/19	4/30/19
34	RFC March Final Forecast	3/3/19	3/3/19
35	LWG Operate to 1% Peak Efficiency	4/1/19	10/31/19
36	LGS Operate to 1% Peak Efficiency	4/1/19	10/31/19
37	LMN Operate to 1% Peak Efficiency	4/1/19	10/31/19
38	IHR Operate to 1% Peak Efficiency	4/1/19	10/31/19
39	MCN Operate to 1% Peak Efficiency	4/1/19	10/31/19
40	JDA Operate to 1% Peak Efficiency	4/1/19	10/31/19
41	TDA Operate to 1% Peak Efficiency	4/1/19	10/31/19
42	BON Operate Units in Accordance with the Fish Passage Plan	4/1/19	10/31/19
43	MCN Protect Nesting Waterfowl (non-BiOp)	3/1/19	5/31/19
44	LIB Start Operational Plan	4/1/19	4/1/19
45	HGH Start Operational Plan	4/1/19	4/1/19
46	TDA Wasco Co. Sampling Tuesdays (non-BiOp)	4/1/19	8/29/19
47	USBR Upper Snake Augmentation Determined	4/1/19	4/1/19
48	PRD Hanford Reach Protection Flows (non-BiOp)	4/1/19	6/28/19
49	ARDB Trout Spawning Flows 15-25 kcfs (non-BiOp)	4/1/19	6/28/19
50	LWG Spring Flow Objective	4/3/19	6/20/19
51	LWG MOP Operation	4/3/19	8/31/19
52	LGS MOP Operation	4/3/19	8/31/19
53	LMN MOP Operation	4/3/19	8/31/19

ID	Task Name	Start	Finish
54	IHR MOP Operation	4/3/19	8/31/19
55	LWG Spill for Juvenile Fish Operation	4/3/19	8/31/19
56	LGS Spill for Juvenile Fish Operation	4/3/19	8/31/19
57	LMN Spill for Juvenile Fish Operation	4/3/19	8/31/19
58	IHR Spill for Juvenile Fish Operation	4/3/19	8/31/19
59	RFC April Final Forecast	4/3/19	4/3/19
60	TMT Set Flow Objectives / Refill Strategy	4/7/19	4/7/19
61	LIB at April 10 Flood Control Elevation	4/10/19	4/10/19
62	GCL at April 10 Flood Control Elevation	4/10/19	4/10/19
63	DWR at April 10 Flood Control Elevation	4/10/19	4/10/19
64	HGH at April 10 Flood Control Elevation	4/10/19	4/10/19
65	ALB at April 10 Flood Control Elevation	4/10/19	4/10/19
66	MCN Spring Flow Objective	4/10/19	6/30/19
67	PRD Spring Flow Objective	4/10/19	6/30/19
68	JDA Minimum Irrigation Pool	4/10/19	9/30/19
69	MCN Spill for Juvenile Fish Passage	4/10/19	8/31/19
70	JDA Spill for Juvenile Fish Passage	4/10/19	8/31/19
71	TDA Spill for Juvenile Fish Passage	4/10/19	8/31/19
72	BON Spill for Juvenile Fish Passage	4/10/19	8/31/19
73	HGH Operational Plan Due	11/17/19	11/17/19
74	LIB Operational Plan Due	5/3/19	5/3/19
75	LIB Sturgeon Pulse	5/16/19	6/30/19
76	ARDB 1MAF Flow Augmentation Drafting (non-BiOp)	5/3/19	7/29/19
77	RFC May Final Forecast	5/3/19	5/3/19
78	TMT Determine Volume of Water Available for Sturgeon Pulse	5/1/19	5/1/19
79	RFC June Final Forecast	6/5/19	6/5/19
80	TMT Determine Summer Flow Objective	6/7/19	6/7/19

ID	Task Name	Start	Finish
81	DWR Temperature Modeling and Release Strategy	6/15/19	6/15/19
82	Start Work on Next Year's Water Management Plan	6/15/19	6/15/19
83	LWG Summer Flow Objective	6/21/19	8/31/19
84	LIB Refill by June 30	6/30/19	6/30/19
85	GCL Refill by June 30	6/30/19	6/30/19
86	DWR Refill by June 30	6/30/19	6/30/19
87	HGH Refill by June 30	6/30/19	6/30/19
88	ALF Refill by June 30	6/30/19	6/30/19
89	LIB Operate to Meet Summer Flow Objectives	7/1/19	8/31/19
90	GCL Operate to Meet Summer Flow Objectives	7/1/19	8/31/19
91	HGH Operate to Meet Summer Flow Objectives	7/1/19	8/31/19
92	ALF Operate to Meet Summer Flow Objectives	7/1/19	8/31/19
93	DWR Operate to Meet Summer Flow Objectives	7/1/19	8/31/19
94	MCN Summer Flow Objective	7/1/19	8/31/19
95	GCL Operate Banks Lake 5 ft. from Full	7/1/19	8/31/19
96	LIB Bull Trout Releases	7/1/19	8/1/19
97	LIB Libby / Arrow Swap Considered	7/1/19	7/1/19
98	RFC July Final Forecast	7/3/19	7/3/19
99	DWR Draft to Elevation 1535 feet	8/31/19	8/31/19
100	GCL Summer Draft Limit 1280 or 1278 ft.	8/31/19	8/31/19
101	GCL Banks Lake Drafted to 1565 ft.	8/31/19	8/31/19
102	LIB Draft to 10 Feet from Full *except in lowest 20th percentile water years	9/30/19	9/30/19
103	HGH Summer Draft Limit 3540 ft.	9/30/19	9/30/19
104	DWR Draft to elevation 1520 feet	9/30/19	9/30/19
105	GCL Kokanee Forebay Elevation 1283 ft. (non-BiOp)	9/30/19	9/30/19