

### Introduction to Time line

The time line 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 happen.

### 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

Project	Task Name	Start	Finish	Qtr 4, 2003				Qtr 1, 2004			Qtr 2, 2004			Qtr 3, 2004			Qtr 4		
				Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		
LIB	Operate to Minimum Flows / Ramp Rates	Wed 10/1/03	Wed 9/29/04	[Gantt bar spanning from Sep 2003 to Oct 2004]															
HGH	Operate to Minimum Flows / Ramp Rates	Wed 10/1/03	Wed 9/29/04	[Gantt bar spanning from Sep 2003 to Oct 2004]															
LWG	Operate to 1% peak Efficiency	Wed 10/1/03	Sun 11/30/03	[Gantt bar from Sep to Nov 2003]															
LMN	Operate to 1% peak Efficiency	Wed 10/1/03	Sun 11/30/03	[Gantt bar from Sep to Nov 2003]															
LGS	Operate to 1% peak Efficiency	Wed 10/1/03	Sun 11/30/03	[Gantt bar from Sep to Nov 2003]															
IHR	Operate to 1% peak Efficiency	Wed 10/1/03	Sun 11/30/03	[Gantt bar from Sep to Nov 2003]															
MCN	Operate to 1% peak Efficiency	Wed 10/1/03	Fri 10/31/03	[Gantt bar from Sep to Oct 2003]															
JDA	Operate to 1% peak Efficiency	Wed 10/1/03	Fri 10/31/03	[Gantt bar from Sep to Oct 2003]															
TDA	Operate to 1% peak Efficiency	Wed 10/1/03	Fri 10/31/03	[Gantt bar from Sep to Oct 2003]															
BON	Operate to 1% peak Efficiency	Wed 10/1/03	Fri 10/31/03	[Gantt bar from Sep to Oct 2003]															
TMT	Assess Potential of Providing Flow for Chinook Below BON	Wed 10/1/03	Wed 10/1/03	◆ 10/1															
TMT	Assess Potential of Providing Flow for Chum Below BON	Wed 10/1/03	Wed 10/1/03	◆ 10/1															
TMT	Preliminary discussions of flood control / refill	Wed 10/1/03	Wed 10/1/03	◆ 10/1															
TMT	Albeni Falls fall/winter Draw down Discussions	Wed 10/1/03	Wed 10/1/03	◆ 10/1															
	Hanford Reach / Vernita Bar flows set (non-BiOp)	Wed 10/1/03	Wed 10/1/03	◆ 10/1															
TMT	Develop fall / winter update	Wed 10/1/03	Wed 10/1/03	◆ 10/1															
DWR	Operate at minimum outflow	Wed 10/1/03	Tue 6/29/04	[Gantt bar from Sep 2003 to Jun 2004]															
PRD	Vernita Bar Protection Flows (non-BiOP)	Wed 10/1/03	Fri 5/14/04	[Gantt bar from Sep 2003 to May 2004]															
GCL	Kokanne Forebay Elevation 1283-1285 ft. (non- BiOP)	Wed 10/1/03	Fri 10/31/03	[Gantt bar from Sep to Oct 2003]															
JDA	Waterfowl hunting enhancement (non-BiOP)	Tue 10/7/03	Tue 1/20/04	[Gantt bar from Oct 2003 to Jan 2004]															
MCN	Waterfowl hunting enhancement (non-BiOP)	Tue 10/7/03	Tue 1/20/04	[Gantt bar from Oct 2003 to Jan 2004]															
LIB	Storage May be used to Support Chum Flows	Sat 11/1/03	Sat 2/28/04	[Gantt bar from Nov 2003 to Feb 2004]															
HGH	Storage May be used to Support Chum Flows	Sat 11/1/03	Sat 2/28/04	[Gantt bar from Nov 2003 to Feb 2004]															
ALF	Storage May be used to Support Chum Flows	Sat 11/1/03	Sat 2/28/04	[Gantt bar from Nov 2003 to Feb 2004]															
GCL	Storage May be used to Support Chum Flows	Sat 11/1/03	Sat 2/28/04	[Gantt bar from Nov 2003 to Feb 2004]															
DWR	Storage May be used to Support Chum Flows	Sat 11/1/03	Sat 2/28/04	[Gantt bar from Nov 2003 to Feb 2004]															
BON	Provide Chum Flows	Sat 11/1/03	Thu 4/29/04	[Gantt bar from Nov 2003 to Apr 2004]															
TMT	Determine winter / spring chum flow levels	Sat 11/1/03	Sat 11/1/03	◆ 11/1															
RCC	Determine Flood Control / Refill Strategies	Mon 12/1/03	Mon 12/1/03	◆ 12/1															
RCC	Determine any Flood control shifts	Mon 12/1/03	Mon 12/1/03	◆ 12/1															
LIB	Operate to Flood Control Curve	Mon 12/1/03	Tue 6/29/04	[Gantt bar from Dec 2003 to Jun 2004]															
DWR	Operate to Flood Control Curve	Mon 12/1/03	Tue 6/29/04	[Gantt bar from Dec 2003 to Jun 2004]															
ALB	Operate to Flood Control Curve	Mon 12/1/03	Tue 6/29/04	[Gantt bar from Dec 2003 to Jun 2004]															
GCL	Operate to Flood Control Curve	Mon 12/1/03	Tue 6/29/04	[Gantt bar from Dec 2003 to Jun 2004]															

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				Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct		
HGH	Operate to Flood Control Curve	Mon 12/1/03	Tue 6/29/04																
ARDB	Whitefish Flows 45-55 Kcfs (non-BiOP)	Sat 12/20/03	Tue 3/30/04																
LIB	Burbot Flows 6-8 Kcfs (non-BiOp)	Thu 1/1/04	Sat 3/6/04																
ARDB	1 MAF Flow Augmentation Filling	Thu 1/1/04	Thu 4/29/04																
RFC	January Final Forecast	Thu 1/8/04	Thu 1/8/04																
TMT	Preliminary Work on Spring/ Summer Update	Thu 1/15/04	Thu 1/15/04																
TMT	Begin discussing spring Operations	Sun 2/1/04	Sun 2/1/04																
TMT	Begin Spring transport Discussions	Sun 2/1/04	Sun 2/1/04																
TMT	Hanford Reach Operations Discussions (non-BiOp)	Sun 2/1/04	Sun 2/1/04																
RFC	February Final Forecast	Sat 2/7/04	Sat 2/7/04																
USBR	Min Flows from HGH and at Columbia Falls	Mon 3/1/04	Mon 3/1/04																
BON	Spring Creek Hatchery Release (non-BiOP)	Mon 3/1/04	Wed 3/10/04																
RCC	Outlook for Meeting Flow objectives prepared	Mon 3/1/04	Mon 3/1/04																
RFC	March Final Forecast	Sun 3/7/04	Sun 3/7/04																
LWG	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
LMN	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
LGS	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
IHR	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
MCN	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
JDA	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
TDA	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
BON	Operate to 1% peak Efficiency	Mon 3/15/04	Thu 9/30/04																
JDA	Goose Nesting Enhancement (non-BiOp)	Mon 3/15/04	Tue 6/1/04																
MCN	Protect Nesting Waterfowl (non-BiOp)	Mon 3/15/04	Thu 7/15/04																
	Juvenile Fish collection	Thu 3/25/04	Thu 9/30/04																
TMT	Determine start dates for spring spill	Thu 4/1/04	Thu 4/1/04																
TMT	Determine Start dates for Mop Operations	Thu 4/1/04	Thu 4/1/04																
RCC	Determine JDA elevations	Thu 4/1/04	Thu 4/1/04																
LIB	Start Operational Plan	Thu 4/1/04	Thu 4/1/04																
HGH	Start Operational Plan	Thu 4/1/04	Thu 4/1/04																
	Finish Spring/ summer update	Thu 4/1/04	Thu 4/1/04																
TDA	Wasco Co sampling Tuesdays (non-BiOp)	Thu 4/1/04	Tue 8/31/04																
USBR	Upper Snake Augmentation determined	Thu 4/1/04	Thu 4/1/04																
PRD	Hanford Reach Protection flows (non-BiOp)	Thu 4/1/04	Wed 6/30/04																

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				Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
ARDB	Trout Spawning Flows 15-25 KCFS (non-BiOp)	Thu 4/1/04	Wed 6/30/04														
LWG	Spring Flow Objective	Sat 4/3/04	Sun 6/20/04														
LWG	Mop Operation	Sat 4/3/04	Thu 9/30/04														
LGS	Mop Operation	Sat 4/3/04	Tue 8/31/04														
LMN	Mop Operation	Sat 4/3/04	Tue 8/31/04														
LGS	Mop Operation	Sat 4/3/04	Tue 8/31/04														
LWG	Spill For Juvenile Fish Passage	Sat 4/3/04	Sun 6/20/04														
LGS	Spill For Juvenile Fish Passage	Sat 4/3/04	Sun 6/20/04														
LMN	Spill For Juvenile Fish Passage	Sat 4/3/04	Sun 6/20/04														
IHR	Spill For Juvenile Fish Passage	Sat 4/3/04	Tue 8/31/04														
RFC	April Final Forecast	Wed 4/7/04	Wed 4/7/04														
TMT	Set Flow Objectives / refill strategy	Wed 4/7/04	Wed 4/7/04														
LIB	Be at April 10 Flood Control Elevation	Sat 4/10/04	Sat 4/10/04														
GCL	Be at April 10 Flood Control Elevation	Sat 4/10/04	Sat 4/10/04														
DWR	Be at April 10 Flood Control Elevation	Sat 4/10/04	Sat 4/10/04														
HGH	Be at April 10 Flood Control Elevation	Sat 4/10/04	Sat 4/10/04														
ALB	Be at April 10 Flood Control Elevation	Sat 4/10/04	Sat 4/10/04														
MCN	Spring Flow Objective	Sat 4/10/04	Wed 6/30/04														
PRD	Spring Flow Objective	Sat 4/10/04	Wed 6/30/04														
JDA	Minimum Irrigation Pool	Sat 4/10/04	Thu 9/30/04														
MCN	Spill For Juvenile Fish Passage	Sat 4/10/04	Wed 6/30/04														
JDA	Spill For Juvenile Fish Passage	Sat 4/10/04	Tue 8/31/04														
TDA	Spill For Juvenile Fish Passage	Sat 4/10/04	Tue 8/31/04														
TDA	Spill For Juvenile Fish Passage	Sat 4/10/04	Tue 8/31/04														
HGH	Operational Plan Due	Sat 5/1/04	Sat 5/1/04														
LIB	Operational Plan Due	Sat 5/1/04	Sat 5/1/04														
LIB	Sturgeon pulse	Sat 5/1/04	Wed 6/30/04														
ARDB	1 MAF Flow Augmentation Drafting (non-BiOp)	Sat 5/1/04	Sat 7/31/04														
RFC	May Final Forecast	Fri 5/7/04	Fri 5/7/04														
TMT	Determine Volume of Water Available for Sturgeon pulse	Fri 5/7/04	Fri 5/7/04														
RFC	June Final Forecast	Mon 6/7/04	Mon 6/7/04														
TMT	Determine Summer Flow objective	Mon 6/7/04	Mon 6/7/04														
DWR	Temperature Modeling and release strategy	Tue 6/15/04	Tue 6/15/04														
	Start work on next year's Water Management Plan	Tue 6/15/04	Tue 6/15/04														

Project	Task Name	Start	Finish	Qtr 4, 2003				Qtr 1, 2004			Qtr 2, 2004			Qtr 3, 2004			Qtr 4
				Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
LWG	Summer Flow Objective	Mon 6/21/04	Tue 8/31/04														
MCN	Determine Summer Transport Date	Fri 6/25/04	Fri 6/25/04														
LIB	Refill By June 30	Wed 6/30/04	Wed 6/30/04														
GCL	Refill By June 30	Wed 6/30/04	Wed 6/30/04														
DWR	Refill By June 30	Wed 6/30/04	Wed 6/30/04														
HGH	Refill By June 30	Wed 6/30/04	Wed 6/30/04														
ALF	Refill By June 30	Wed 6/30/04	Wed 6/30/04														
LIB	Operate to meet Summer Flow objectives	Thu 7/1/04	Tue 8/31/04														
GCL	Operate to meet Summer Flow objectives	Thu 7/1/04	Tue 8/31/04														
HGH	Operate to meet Summer Flow objectives	Thu 7/1/04	Tue 8/31/04														
ALF	Operate to meet Summer Flow objectives	Thu 7/1/04	Tue 8/31/04														
DWR	Operate to meet Summer Flow objectives	Thu 7/1/04	Tue 8/31/04														
MCN	Summer Flow Objective	Thu 7/1/04	Tue 8/31/04														
GCL	Operate Bank Lake 5 ft. from full	Thu 7/1/04	Tue 8/31/04														
LIB	Bull trout Releases	Thu 7/1/04	Sat 7/31/04														
LIB	Libby / Arrow Swap Considered	Thu 7/1/04	Thu 7/1/04														
LIB	Summer draft Limit 2439 ft.	Tue 8/31/04	Tue 8/31/04														
HGH	Summer draft Limit 3540 ft.	Tue 8/31/04	Tue 8/31/04														
GCL	Summer draft Limit 1280 or 1278 ft.	Tue 8/31/04	Tue 8/31/04														
DWR	Summer draft Limit 1520 ft.	Tue 8/31/04	Tue 8/31/04														
GCL	Banks Lake Drafted to 1565 ft.	Tue 8/31/04	Tue 8/31/04														
DWR	Operate at minimum outflow	Wed 9/1/04	Thu 9/30/04														
	Completion of Next year's Water Management Plan	Mon 9/20/04	Mon 9/20/04														
GCL	Kokanee Forebay Elevation 1283 ft. (non-BiOp)	Thu 9/30/04	Thu 9/30/04														

