

Assumptions:

- * Streamflows were adjusted to the March Final Water Supply Forecast for the period of March thru August of 90.6 MAF at The Dalles and shaped 59 different ways based on observed historical runoff.
- * Starting elevations were observed data from February 29, 2004.
- * Grand Coulee helps meet Vernita Bar minimum flow objective of 70 kcfs in Mar. Operate to meet McNary flow objective of 228.3 kcfs. Minimum draft elevations are based on a GCL/Dworshak shifted flood control and VECC/AER requirements.
- * Hungry Horse operates to VARQ flood control or minimum flow from Mar - May and meets minimum flow of 3500 cfs at Columbia Falls, targets full in June, and drafts to 3540 ft by 31 Aug.
- * Brownlee operates to flood control elevations.
- * Dworshak targets elevation 1547.2 ft in Mar, 1557.5 ft by 15 Apr, and 1534.8 ft by 30 Apr, based on a GCL/DWR shifted flood control operation and maximum releases of 12.5 kcfs in April and 13 kcfs May-Jun. DWR targets full in June with a minimum flow of 1.5 kcfs, releases a maximum of 13 kcfs in July - August to meet LWG flow objectives, and targets 1520 ft by 31 Aug.
- * Libby operates on minimum flow or VARQ flood control Mar - Apr. Targets 13.9 kcfs in May and 9.4 kcfs in June for Sturgeon, based on an Apr-Aug forecast of 5.359 MAF and a Tier 2 required pulse of 0.80 MAF. Targets full in July with a minimum flow of 7,000 cfs for bull trout. Drafts to 2439 ft by 31 Aug.

Results:

Priest Rapids Meets Flow Objectives of 70 kcfs in Mar - Apr 15 and 135 kcfs in Apr 16 - Jun.

Month	Occurrences out of 59 Years	Average Flow for 59 Years (kcfs)
Mar	59	74
Apr 15	59	82
Apr 30	39	149
May	45	148
Jun	48	132

Lower Granite Meets Flow Objectives of 100 kcfs in Apr - May, 84 kcfs in June and 52 kcfs in Jul - Aug:

Month	Occurrences out of 59 Years	Average Flow for 59 Years (kcfs)
Apr 30	17	86
May	32	104
Jun	43	96
Jul	27	49
Aug 15	0	41
Aug 31	0	31

Bonneville Meets Flow Objectives of 125 kcfs in Mar - Apr:

Month	Occurrences out of 59 Years	Average Flow for 59 Years (kcfs)
Mar	54	140
Apr 15	59	166
Apr 30	59	254

McNary Meets Flow Objectives of 228.3 kcfs in Apr 15 - Jun and 200 kcfs in Jul - Aug:

Month	Occurrences out of 59 Years	Average Flow for 59 Years (kcfs)
Apr 30	33	231
May	53	246
Jun	39	244
Jul	16	182
Aug 15	0	143
Aug 31	0	129

Projects Refill by 30 June:

Month	Occurrences out of 59 Years	Average Elevation on 30 Jun for 59 Years
Libby	14	2452
Hungry Horse	59	3560
Grand Coulee	59	1290
Dworshak	56	1600

Period Average Flows (kcfs)

	MAR 1-31	APR 1-15	APR 16-30	MAY 1-31	JUN 1-30	JUL 1-31	AUG 1-15	AUG 16-31
LIB	4	4	4	14	10	19	16	14
HGH	2	1	1	2	6	7	5	4
GCL	68	75	137	125	120	118	92	91
PRD	74	82	149	148	151	132	100	96
DWR	2	2	13	6	6	11	13	11
BRN	17	22	23	21	17	13	17	12
LWG	42	63	86	104	96	49	41	31
MCN	121	151	231	246	244	182	143	129
TDA	133	160	247	254	254	188	148	133
BON	140	166	254	257	256	191	150	135