

Assumptions:

- * Streamflows were adjusted to the May Final Water Supply Forecast for the period of May thru August of 51.3 MAF at The Dalles (65% of average) and shaped 69 different ways based on observed historical runoff.
- * Starting elevations are actual April 30, 2005 elevations.
- * Grand Coulee tries to meet 135,000 cfs in May while not drafting below 1240 ft. In June the project refills to 1288 ft in all years, and fills above 1288 ft if Priest Rapids flows are above 130,000 cfs. Summer lake targets are 1285.0 ft in July and 1278 ft in August (per the BiOp).
- * Hungry Horse operates in May for a controlled refill by 30 June and meets minimum flow of 3250 cfs at Columbia Falls. The project drafts to 3540 ft by 31 Aug.
- * Brownlee operates to flood control elevations, which is elevation 2077 ft (or full pool) and drafts some in July - August.
- * Dworshak targets an upper limit of 1597.9 ft by May 31 **with a minimum outflow of 7.7 kcfs for the month (assumes actual releases through May 16, 12,000 cfs through May 18, and minimum flow of 1,500 cfs for the remainder of the month)**. Dworshak targets full in June and drafts to 1534 ft by 31 Aug.
- * Libby targets full in June while maintaining a minimum flow in May of 11,000 cfs and 10,200 cfs out in June for sturgeon, based on a Tier 2 sturgeon pulse. Libby drafts to 2439 ft by 31 Aug, with a minimum bull trout flow of 7,000 cfs.

Results:

Priest Rapids Meets the Following Flow Objectives:

Month	Occurrences out of 69 Years	Average Flow for 69 Years (kcfs)	Flow Objective* (kcfs)
May	63	140	135
Jun	59	140	130

** Note: Flow objectives listed may be less than what is prescribed in the BiOp but were used for modeling.*

Lower Granite Meets the Following Flow Objectives:

Month	Occurrences out of 69 Years	Average Flow for 69 Years (kcfs)	Flow Objective* (kcfs)
May	2	66	85
Jun	3	57	73
Jul	0	32	50
Aug 15	0	25	50
Aug 31	0	23	50

McNary Meets the Following Flow Objectives:

Month	Occurrences out of 69 Years	Average Flow for 69 Years (kcfs)	Flow Objective* (kcfs)
May	9	201	220
Jun	2	188	220
Jul	0	156	200
Aug 15	0	132	200
Aug 31	0	124	200

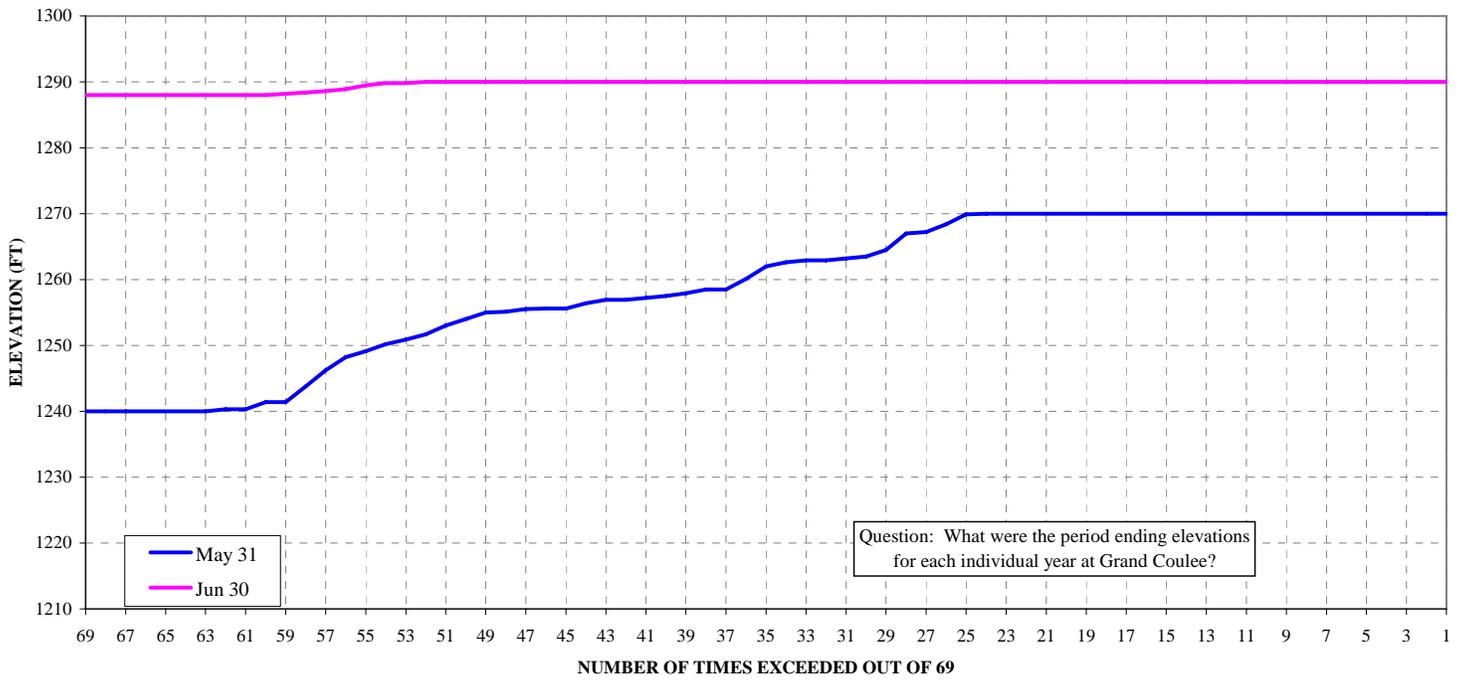
Projects Refill by 30 June:

Month	Occurrences out of 69 Years	Average Elevation on 30 Jun for 69 Years
Libby	60	2458.6
Hungry Horse	69	3560.0
Grand Coulee	69	1289.6
Dworshak	69	1600.0

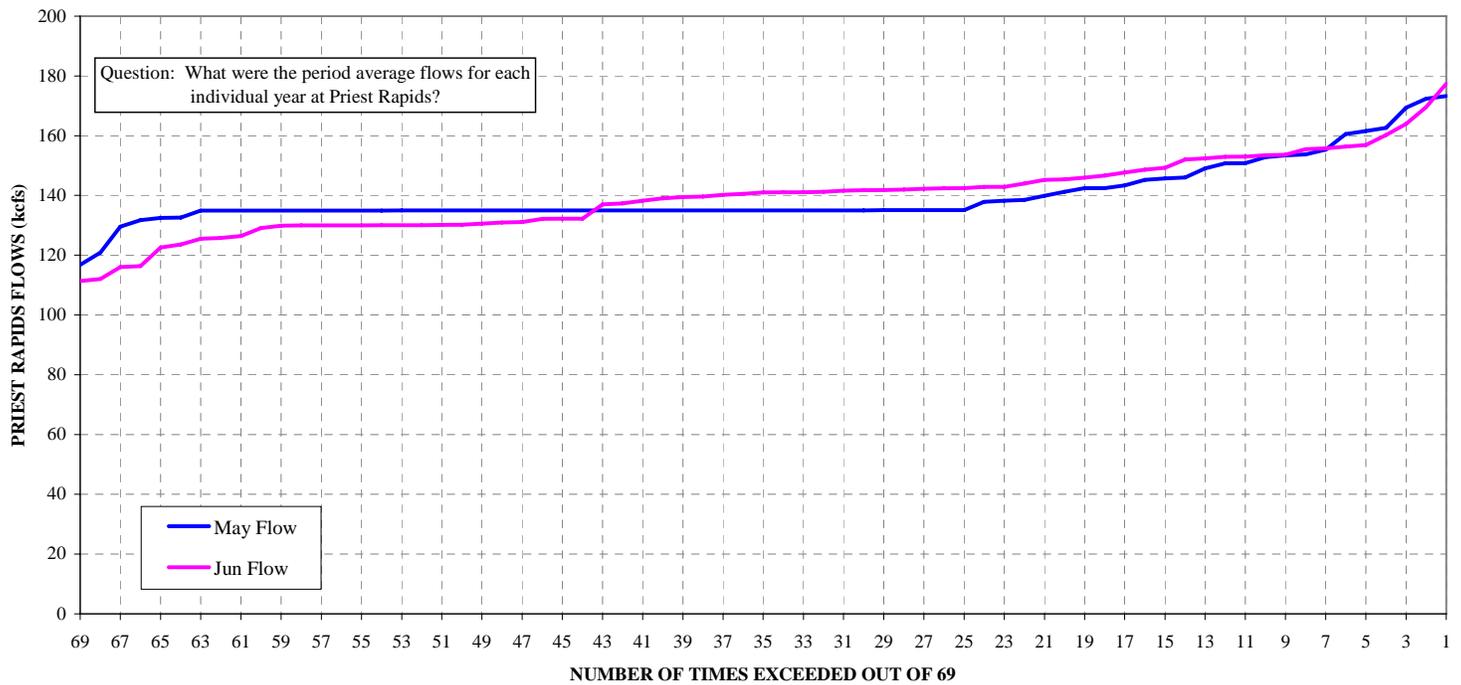
Period Average Outflows (kcfs):

	Obs FEB 1-28	Obs MAR 1-28	Obs APR 1-15	Obs APR 16-30	MAY 1-31	JUN 1-30	JUL 1-31	AUG 1-15	AUG 16-31
LIB	4.0	4.0	4.0	4.0	11.1	14.2	20.2	18.8	16.1
HGH	1.0	0.9	2.1	7.2	4.9	5.8	5.8	5.4	4.2
GCL	101	91	76	82	123	118	120	104	99
PRD	111	100	85	95	140	140	131	110	103
DWR	1.6	1.6	3.6	5.4	8.1	4.3	10	10	9
BRN	10	11	13	12	13	12	9	9	9
LWG	21	22	39	45	66	57	32	25	23
MCN	134	123	132	147	201	188	156	132	124
TDA	140	125	136	143	200	180	152	130	123
BON	138	130	143	153	202	181	154	132	125

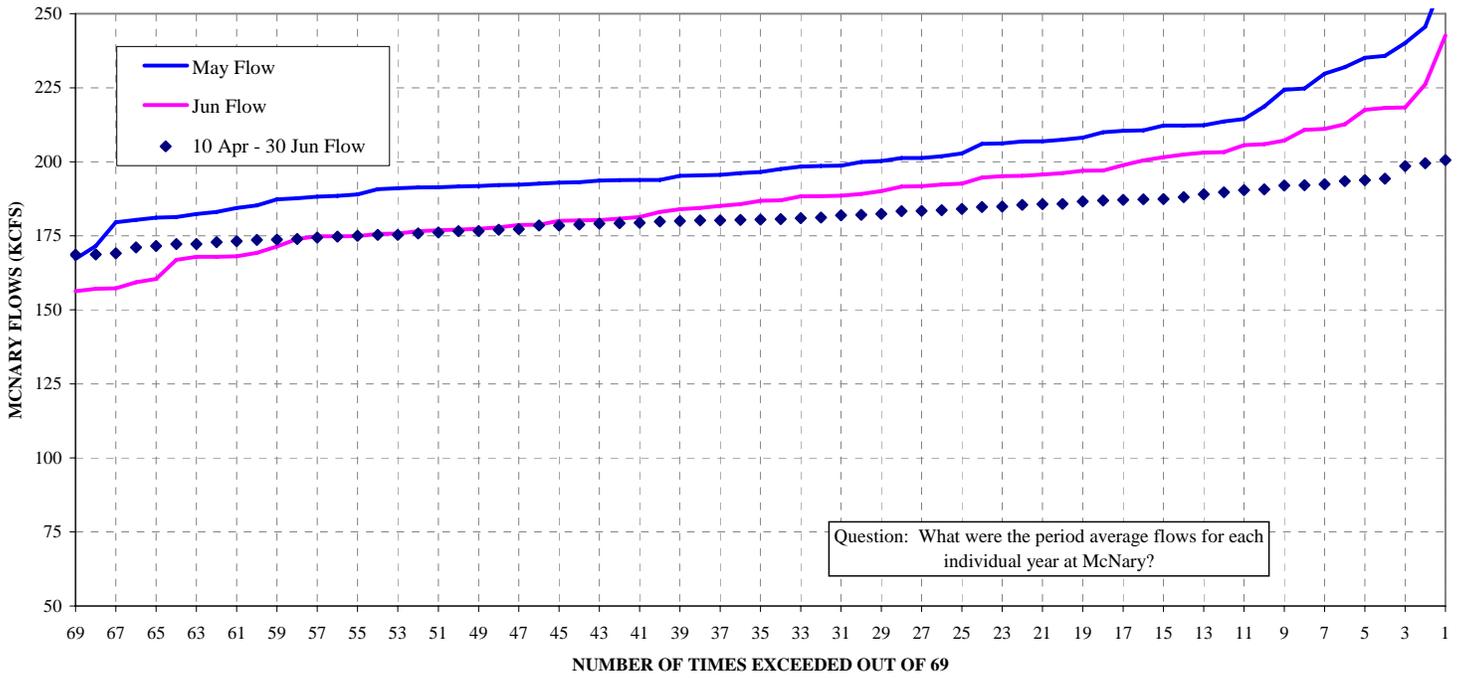
GRAND COULEE LAKE ROOSEVELT ELEVATIONS



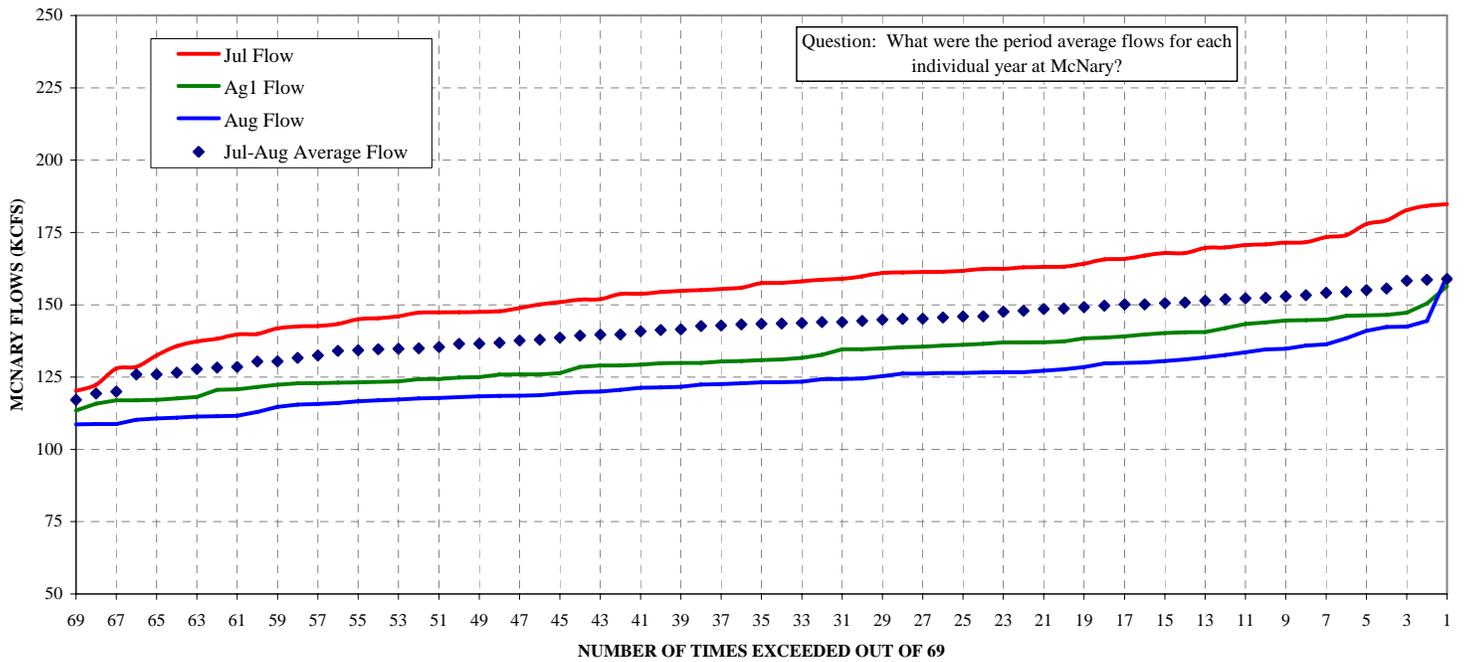
PRIEST RAPIDS MAY - JUNE FLOWS



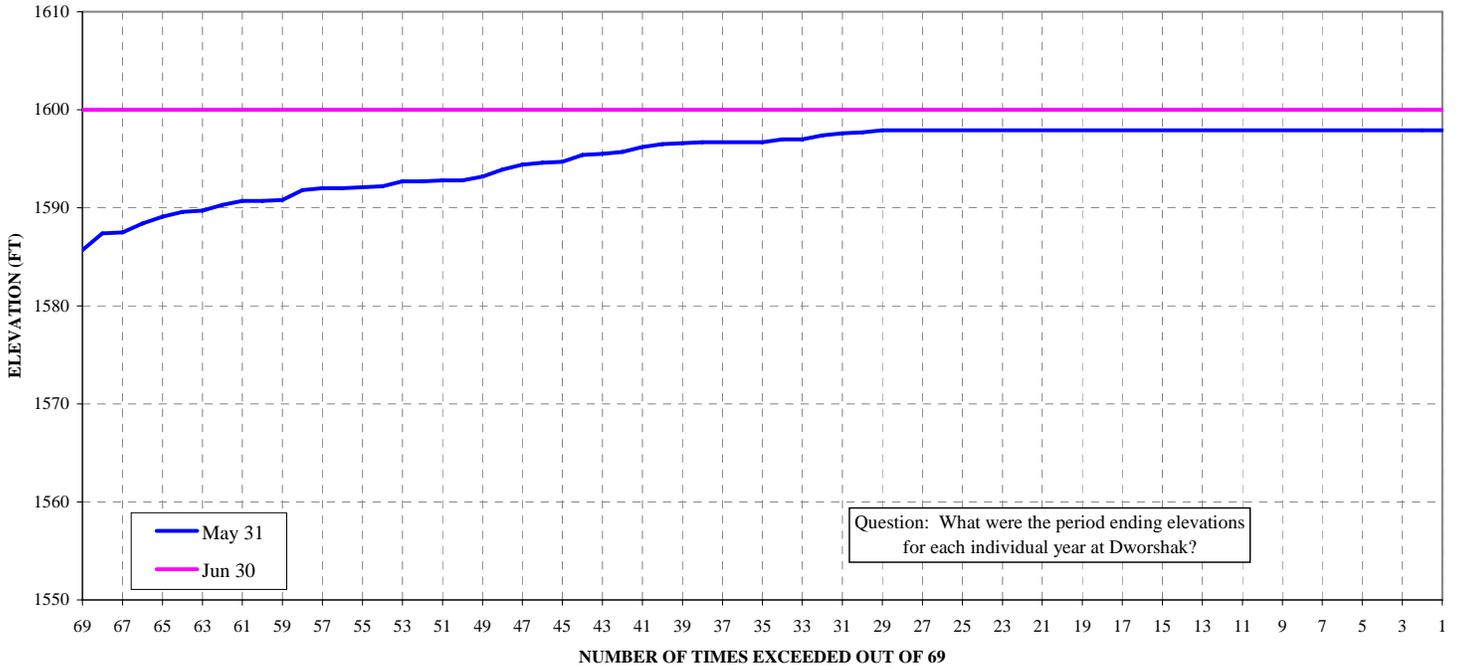
MCNARY OUTFLOW APRIL - JUNE AVERAGES



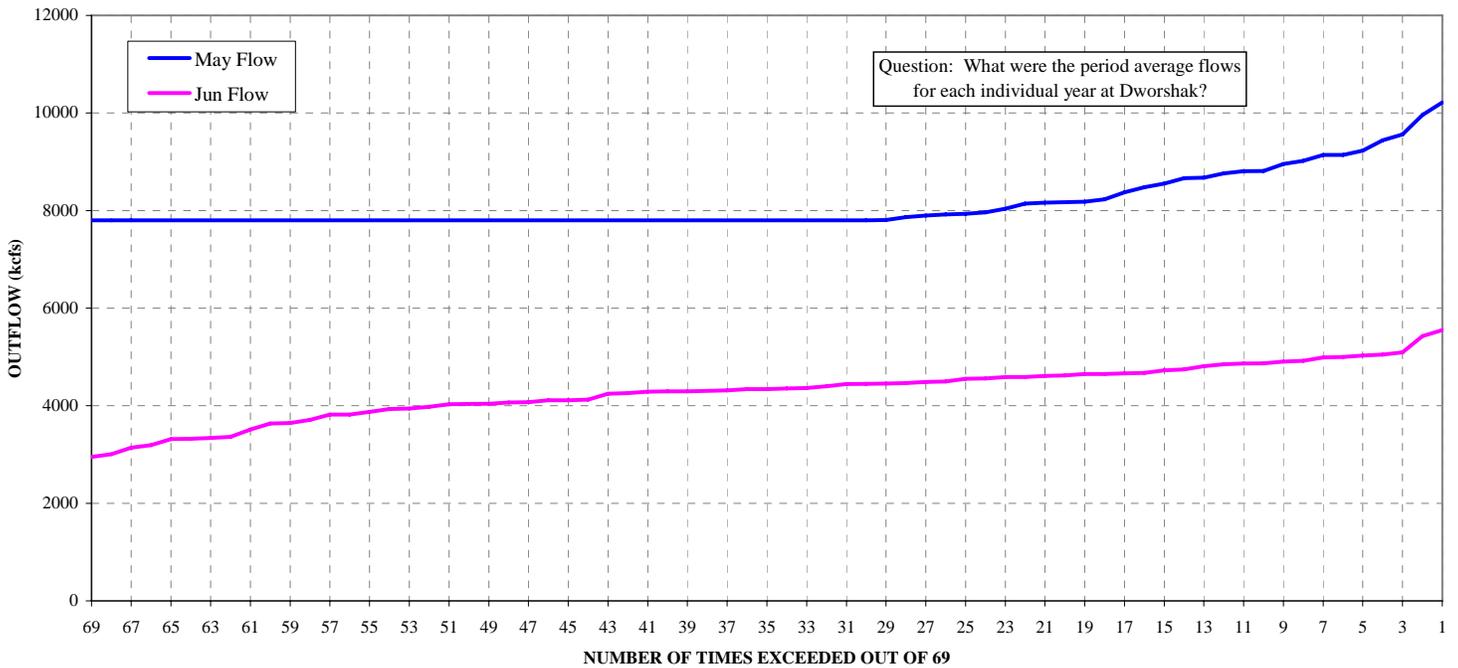
MCNARY OUTFLOW JUL-AUG AVERAGES



DWORSHAK LAKE ELEVATIONS



DWORSHAK OUTFLOWS



LOWER GRANITE APRIL - JUNE FLOWS

