



# FISH PASSAGE CENTER

1827 NE 44<sup>th</sup> Ave., Suite 240, Portland, OR 97213

Phone: (503) 230-4099 Fax: (503) 230-7559

<http://www.fpc.org/>

e-mail us at [fpcestaff@fpc.org](mailto:fpcestaff@fpc.org)

## MEMORANDUM

TO: Jay Hess, Nez Perce Tribe

*Margaret Filardo*

FROM: FPC Staff

DATE: April 15, 2008

RE: Data Request

We are providing you the following information in response to your data request. You asked us to provide you with an estimate of the spill levels (% and/or volume) at each dam that result in gas cap conditions. It is difficult to precisely estimate gas caps, since they change based on real time environmental and operational conditions. The table below describes the most recent information for gas cap spill levels based on the implementation of the Court Ordered spill amounts over the past few years. The 2008 planned gas caps are those estimated by the COE and included in the 2008 Water Management Plan. To show the actual variation that can occur, we provided you with the average of the actual gas caps that were in place during the month of May in 2006 and 2007.

Project	Current Court Ordered Spill (day/night)	2008 Gas Caps (Planned) To Meet 115%/120%	May Average of COE data	
			2007	2006
LGR	20Kcfs/20Kcfs	41	42	41
LGO	30%/30%	32	28	26
LMN	GC/GC	31	21	22
IHR	45Kcfs/GC v 30%/30%	95	95	83
MCN	40%/40%	145	124	169
JDA	0/60%	120	151	122
TDA	40%/40%	125	126	110
BVL	100Kcfs/100Kcfs	100	98	80

You also asked us to determine how often (number of year out 10) that involuntary spill conditions exist at the Snake River projects during May 7th to May 20<sup>th</sup>. Involuntary spill is spill that either occurs due to flows in excess of hydraulic capacity, or due to flow in excess of market needs (overgeneration spill). We are not able to determine overgeneration spill, since it is based on real-time market needs. In addition, it cannot be guaranteed to occur at a specific time and place. We determined the spill that occurred as excess to hydraulic capacity at each of the projects for the years 1996 to 2007. We assumed that at each project hydraulic capacity was equal to the operation of all turbine units. In the actual data, due to planned repairs and unforeseen breakdowns, not all turbine units were always available in any given year.

Year	Dates on Which Spill Occurred (Assuming Full Hydraulic Capacity)			
	LGR	LGO	LMN	IHR
1996	5/15-5/20	5/15-5/20	5/15-5/20	5/14-5/20
1997	5/7-5/20	5/7-5/20	5/7-5/20	5/7-5/20
1998	5/9	0	0	5/7-5/20
1999	0	0	0	0
2000	0	0	0	0
2001	0	0	0	
2002	0	0	0	
2003	0	0	0	
2004	0	0	0	
2005	0	0	0	5/17-5/20
2006	5/16-5/20	5/17-5/20	5/17-5/20	5/7-5/10;5/14-5/20
2007	0	0	0	0

The answer to your question is that forced spill would likely only occur in above average flow years like 1996, 1997 and 2006. This translates to about 3 out of the past 12 years. The volume of spill that occurs on each date also varies. We have attached a spreadsheet that calculates the amount of spill that would occur.