

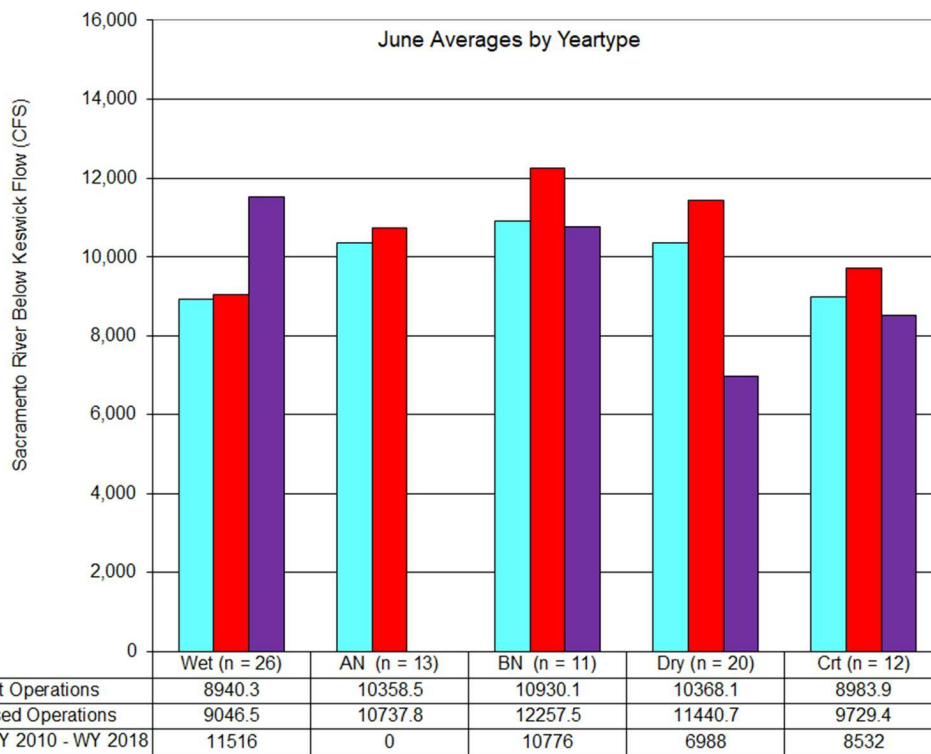
From: Hilts, Derek <derek_hilts@fws.gov>
Sent: Friday, April 12, 2019 10:23 AM
To: Cathy.Marcinkevage@noaa.gov; Evan.Sawyer@noaa.gov; Garwin.Yip@noaa.gov;
Howard.Brown@noaa.gov
Subject: ROC on LTO simulation of Keswick Jun, Jul, Aug releases

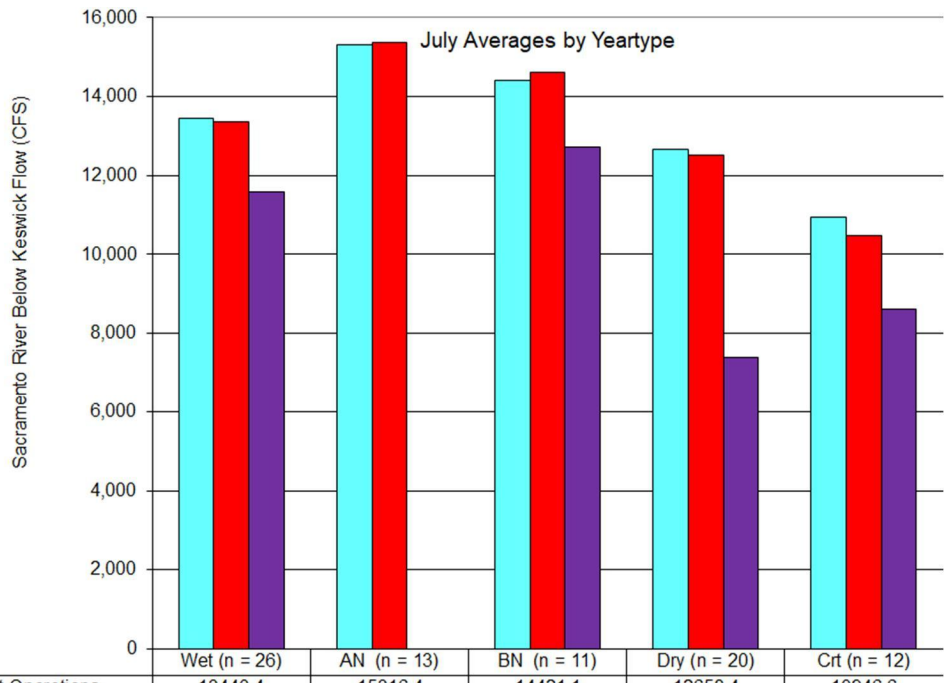
You've probably already looked at this. I looked at it with an eye towards Maria's question of does the COS mimic actual actions (lower Keswick releases) since the 2009 BiOp was promulgated?

Please use caution interpreting the results as the historical bars have very few years supporting them (zero years in the case of Above Normal).

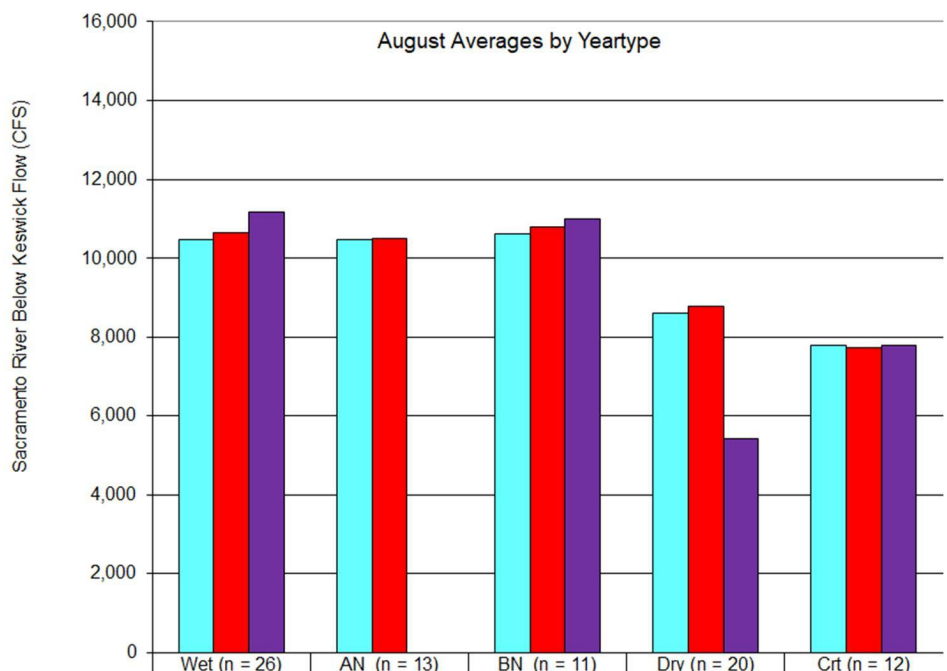
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	Wet (n = 26)	AN (n = 13)	BN (n = 11)	Dry (n = 20)	Crt (n = 12)
LTO-Current Operations	13440.4	15316.4	14421.1	12658.4	10946.6
LTO-Proposed Operations	13351.6	15382.2	14608.9	12525.0	10480.6
Historical WY 2010 - WY 2018	11590	0	12712	7384	8606



	Wet (n = 26)	AN (n = 13)	BN (n = 11)	Dry (n = 20)	Crt (n = 12)
LTO-Current Operations	10474.2	10493.5	10623.6	8607.5	7792.9
LTO-Proposed Operations	10647.2	10502.6	10806.9	8800.5	7736.8
Historical WY 2010 - WY 2018	11166	0	10998	5420	7787