From: Evan Sawyer - NOAA Federal <evan.sawyer@noaa.gov>
Sent: Wednesday, May 8, 2019 3:52 PM
To: Brittany Cunningham - NOAA Affiliate
Subject: Re: ROCON: American River Division Effects
Attachments: image.png; ROConLTO_NOD_CVP_Deliveries_for_NOAA.xlsx

Hey Brittany,

I don't think there's much going on in the American River. You can dig around in the attached excel file from Derek Hilts but there isn't much there aside from slightly higher deliveries being made in BN WYTs under the PA compared to the COS. Although small this point is supported by the Folsom storage modeling (below).

Table 5-3. Folsom Lake Storage, End of Month Storage

Current Operations 011319

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	592	542	567	567	567	659	792	967	967	913	792	681
20%	534	489	567	564	566	656	792	967	967	849	755	618
30%	492	457	521	557	558	652	792	967	955	755	683	570
40%	452	425	484	525	553	646	792	967	910	663	574	516
50%	403	413	447	482	530	632	792	960	842	599	532	474
60%	358	392	414	436	491	621	787	852	767	522	460	408
70%	327	347	382	412	457	599	731	751	667	460	399	380
80%	282	304	345	369	408	524	598	613	533	412	350	303
90%	256	240	257	294	368	409	488	481	433	360	305	262
Long Term												
Full Simulation Period[a]	411	396	437	457	486	586	709	816	763	606	531	465
Water Year Types[b,c]												
Wet (32%)	500	439	477	517	515	632	784	950	935	795	698	583
Above Normal (16%)	416	412	455	506	527	640	786	944	873	607	540	475
Below Normal (13%)	420	411	447	484	531	617	754	834	771	549	483	451
Dry (24%)	389	407	433	419	475	568	682	751	665	531	462	429
Critical (15%)	242	250	331	314	358	430	463	477	428	374	318	271

Proposed Action 011519

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	697	567	567	567	567	659	792	967	967	915	792	745
20%	635	565	567	567	567	656	792	967	967	851	747	670
30%	573	538	567	566	564	652	792	967	952	773	692	633
40%	495	521	541	558	558	642	792	967	883	669	587	531
50%	417	461	508	543	553	631	792	959	825	597	524	472
60%	390	423	470	502	528	621	788	880	766	551	488	437
70%	369	382	423	453	477	606	729	751	657	515	452	398
80%	341	353	385	417	448	556	653	649	577	435	373	349
90%	250	283	305	348	394	467	534	547	483	371	304	269
Long Term												
Full Simulation Period[a]	459	444	472	488	503	594	716	824	765	623	544	496
Water Year Types[b,c]												
Wet (32%)	612	533	527	523	515	632	786	954	930	809	712	663
Above Normal (16%)	451	449	487	538	539	640	789	948	867	628	558	505
Below Normal (13%)	397	405	447	544	548	623	756	828	754	547	461	415
Dry (24%)	418	446	463	442	498	581	697	769	680	562	489	442
Critical (15%)	261	282	373	383	405	460	484	496	447	382	331	283

Proposed Action 011519 minus Current Operations 011319

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	105	25	0	0	0	0	0	0	0	2	0	64
20%	101	76	0	3	1	0	0	0	0	2	-8	52
30%	81	81	46	9	6	0	0	0	-3	18	9	63
40%	43	96	57	33	5	-4	0	0	-28	6	13	15
50%	14	47	60	62	23	-2	0	0	-17	-2	-7	-2
60%	32	32	56	66	37	0	1	28	-1	29	28	29
70%	42	34	41	41	20	7	-2	-1	-11	65	53	18
80%	59	49	40	48	40	31	55	36	44	22	23	47
90%	-6	43	48	54	26	57	46	65	50	20	-1	7
Long Term												
Full Simulation Period[a]	48	49	35	31	17	8	8	8	2	17	13	30
Water Year Types[b,c]												
Wet (32%)	113	94	50	6	0	0	2	4	-4	15	14	80
Above Normal (16%)	36	37	32	32	13	0	3	4	-8	21	18	30
Below Normal (13%)	-22	-8	0	60	17	6	2	-8	-16	-2	-22	-36
Dry (24%)	29	39	31	23	23	13	15	18	15	31	28	13
Critical (15%)	20	31	43	69	47	30	20	19	19	8	14	12

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.
d All scenarios are simulated at ELT (Early Long-Term) CS with 2025 climate change and 15 cm sea level rise.
e These are draft results meant for qualitative analysis and are subject to revision.

On Wed, May 8, 2019 at 3:26 PM Brittany Cunningham - NOAA Affiliate <brittany.cunningham@noaa.gov> wrote:

> Hi Evan,

I'm making edits to the American River Division Effects Section. I'm trying to track down updated data on **annual water deliveries from the American River** Division. We currently only have 2000-2006. Garwin suggested that you may be able to help me with this?

If not, do you have any recommendations for who I could ask about this.

Thanks,
Brittany

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