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Subject: Monthly Water Balance Information

Les,

Attached is the Monthly Water Balance information for June 2015. This includes projected hydrology for the current year and 2105 observed conditions February through May. The projected data is based on project operation forecasts and information prepared in June.

We did not complete a full 99% exceedence forecast for June and this information includes the available data for a June 1, 99% exceedence scenario. These forecasts include an assumed 160 TAF of water transfers from the Sacramento River diverters over the months of May, June, and July.

Thanks,
Paul

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(916) 979-2197

Observed 2015 Hydrological Data

Accretions / Depletions

Values in TAF

Sacramento Valley

Net Delta Consumptive Use

February	March	April	May	June	July	August	September
714	188	55	262				
24	70	41	148				

Deliveries

Values in TAF

SWP - North of Delta M&I Contract Deliveries

SWP - North of Delta Agricultural Contract Deliveries

SWP - South of Delta Sontract Deliveries

CVP - Sacramento River Deliveries

CVP - Tehama-Colusa Canal Deliveries

CVP - Contra Costa Canal

CVP - San Joaquin and Mendota Pool

CVP - Exchange Contractors - Pool Delivery

CVP - Refuges - Pool Delivery

CVP - Delta Mendota Canal Delivery

CVP - Refuges - DMC

CVP - San Luis Canal Delivery

CVP - San Felipe Division

CVP - Friant Kern Canal Delivery

CVP - Madera Canal Delivery

CVP - Millerton Lake Delivery

CVP - Folsom South Canal

CVP - Folsom Pumping Plant

February	March	April	May	June	July	August	September
0	0	0	3.4				
0	12	23	115				
39	66	76	93				
NA	NA	77	253				
1.3	6	11	18				
2	15 est.	7	4				
3	3	2	5				
18	36	26	36				
15	3	2	1				
2	6	7	15				
1	1	1	<1				
12	17	25	35				
3	4	7	8				
1	5	6	9				
<1	<1	<1	<1				
<1	<1	<1	<1				
1	1	1	2				
3	5	6	6				

Delta Flows

Delta Inflow at Freeport (cfs)

Net Delta Outflow Index (cfs)

SJR at Vernalis Flow (cfs)

CVP Export (TAF)

SWP Export (TAF)

February	March	April	May	June	July	August	September
18,000	8042	6281	7088				
15,800	4980	5360	5165				
870	636	845	399				
58	120	63	30				
221	71	30	24				

Transfers

Values in TAF

NOD to SOD

February	March	April	May	June	July	August	September

Reservoir Inflow

Values in TAF

Trinity

Whiskeytown

Shasta

Folsom

New Melones

Oroville

February	March	April	May	June	July	August	September
289	66	55	39				
63	9	7	4				
720	262	221	185				
168	65	50	52				
55	19	17	24				
338	123	83	56				

Reservoir Releases

Values in TAF

Trinity

Whiskeytown

Shasta

Folsom

New Melones

Oroville

Carr Powerplant Release

February	March	April	May	June	July	August	September
15	20	59	195				
62	14	12	20				
106	180	240	434				
51	56	43	91				
12	69	77	59				
53	50	74	165				
1	3	37	21				

Reservoir End of Month Storage

Values in TAF

Trinity

Whiskeytown

Shasta

Folsom

New Melones

Oroville

February	March	April	May	June	July	August	September
1147	1191	1184	1024				
207	205	236	239				
2613	2689	2662	2404				
564	572	576	535				
606	554	491	453				
1736	1794	1782	1565				

Notes: 1. CVP Sacramento River Deliveries not reported November through March

2. CVP deliveries represent total turnout delivery regardless of source

3. Additional details on CVP deliveries may be found on : <http://www.usbr.gov/mp/cvo/deliv.html>

90% Exceedence Forecast - Input Data

Inflows (TAF)

	Trinity	Whiskeytown	Shasta	Folsom	New Melones (1)	Oroville	Millerton	
Oct	9		2	200	50	8	74	7.8
Nov	14		2	230	50	7	83	10.1
Dec	22		4	260	60	8	100	14.6
2016 Jan								
Feb								
Mar								
Apr								
May								
2015 Jun	13		4	125	53	19	72	6.3
Jul	7		2	116	50	18	76	65.7
Aug	4		1	112	44	17	76	79.3
Sep	2		1	109	30	16	69	3.7

River Releases

	Trinity (cfs)	Clear Creek (cfs)	Goodwin (cfs)	Oroville (cfs)
Oct	373	175	577	950
Nov	300	175	200	950
Dec	300	175	206	950
2016 Jan				
Feb				
Mar				
Apr				
May				
2015 Jun	783	150	150	2390
Jul	450	120	150	2765
Aug	450	85	150	1300
Sep	450	150	150	800

Hydrology

	Wilkin's Target (cfs)	Kes-Wilkin's Acc/Dep (cfs)	SJR Above Stan (TAF)	Sac Gross Acc/Dep (TAF)	Freeport Treatment Plant (TAF)	East Side Streams (cfs)	Misc. Creeks (TAF)	Yolo Bypass (TAF)	Transfer Inflow (TAF)	Delta Consumptive Use (TAF)	Delta Outflow (TAF)	X-Channel Gate
Oct	3500	-750	34	40	13.3	210	29	0	0	-118	258	0
Nov	3500	-68	34	90	14	260	19	0	0	-55	303	0
Dec	3500	785	33	160	13.2	160	11.1	0	0	-2	307	1
2016 Jan												
Feb												
Mar												
Apr												
May												
2015 Jun	2500	-4350	9	-271	12.5	180	2	0	0	-191	238	0
Jul	2000	-4833	9	-405	12.3	120	2	0	0	-268	172	0
Aug	2000	-3745	9	-255	12.4	110	2	0	0	-252	172	0
Sep	3800	-1397	9	-30	12.4	160	2	0	0	-174	179	0

Demands (TAF)

	Folsom Pumping	Folsom South Canal	OID/SSJID	New Melones CVP Contractors	FRSA Demands	CCWD	SWP NOD Contractors	Delta Mendota Canal	Federal Dos Amigos	San Felipe	SWP SOD Contractors	San Joaquin Riparian	Friant Div. Ag/M&I
Oct	11	1.7	0.0	0	30	3.5	>1	80	8	0.5	58	10.2	0.4
Nov	5	1.5	0.0	0	131	4.3	>1	30	5	0.5	41	9.5	0.4
Dec	5	1.5	0.0	0	96	4.7	>1	10	5	0.5	36	9.4	0.4
2016 Jan	4	1.1	0.0	0		4.7		0	5	0.5			
Feb	4	0.8	0.0	0		3.5		20	1	0.5			
Mar	5	1.2	20.0	0		3.5		20	27	1			
Apr	7	1.3	55.0	0		8.7		20	32	1			
May	10	1.7	65.0	0		8.7		30	55	10.5			
2015 Jun	14	2.1	70.0	0	128	8.7	1.5	40	61	5	86	14.8	4.8
Jul	15	2.3	70.0	0	129	8.0	3.4	50	71	5.5	86	15.4	4.3
Aug	14	2.2	63.0	0	118	8.3	1.4	40	46	5	127	15.3	5.5
Sep	12	2.0	36.0	0	47	8.7	1.7	98	15	2.7	83	14.9	2.5

- NOTE: 1) New Melones Reservoir inflow adapted from OID/SSJID data
 2) Forecast input data includes water assumed to be made available for transfer by the Sacramento River Settlement Contractors in May, June, and July
 3) June forecast data for Friant still in draft; data shown for Friant Division is carried over from May Hydrology Report

50% Exceedence Forecast - Input Data

Inflows (TAF)

	Trinity	Whiskeytown	Shasta	Folsom	New Melones	Oroville	Millerton
Oct	14	3		240	90	35	120
Nov	32	7		300	100	35	170
Dec	58	16		380	120	40	220
2016 Jan							
Feb							
Mar							
Apr							
May							
2015 Jun	16	8		161	53	19	72
Jul	8	3		150	54	18	93
Aug	5	2		140	50	17	93
Sep	3	2		136	39	16	87

River Releases

	Trinity (cfs)	Clear Creek (cfs)	Goodwin (cfs)	Oroville (cfs)
Oct	373	200		577
Nov	300	200		950
Dec	300	175		950
2016 Jan				
Feb				
Mar				
Apr				
May				2390
2015 Jun	783	150	150	2350
Jul	450	120	150	1250
Aug	450	120	150	850
Sep	450	150	150	800

Hydrology

	Wilkin's Target (cfs)	Kes-Wilkin's Acc/Dep (cfs)	SJR Above Stan (TAF)	Sac Gross Acc/Dep (TAF)	Freeport Treatment Plant (TAF)	East Side Streams (cfs)	Misc. Creeks (TAF)	Yolo Bypass (TAF)	Transfer Inflow (TAF)	Delta Consumptive Use (TAF)	Delta Outflow (TAF)	X-Channel Gate
Oct	4000	-164	34	100	13.3	650	29	0	0	-118	184	0
Nov	4000	587	34	150	14	889	19	0	0	-55	208	1
Dec	4000	2615	33	330	13.2	1260	11.1	0	0	-2	215	1
2016 Jan												
Feb												
Mar												
Apr												
May												
2015 Jun	2500	-4350	16	-260	12.5	336	2	0	0	-191	238	0
Jul	2000	-4833	17	-405	12.3	325	2	0	0	-268	172	0
Aug	2000	-3745	14	-255	12.4	325	2	0	0	-252	172	0
Sep	3800	-1305	17	-30	12.4	336	2	0	0	-174	179	0

Demands (TAF)

	Folsom Pumping	Folsom South Canal	OID/SSJID	New Melones CVP Contractors	FRSA Demand	CCWD	SWP NOD Demand	Delta Mendota Canal	Federal Dos Amigos	San Felipe	SWP SOD Contractors	San Joaquin Riparian	Friant Div. Ag/M&I
Oct	10	2.4	10.0	0	30	8.4	>1	40	8	3	59	10.2	3
Nov	8	1.8	0.0	0	131	9.2	>1	20	5	2	41	9.5	0
Dec	6	1.2	0.0	0	96	9.2	>1	10	5	2	36	9.4	0
2016 Jan	6	1.2	0.0	0		7.0		10	5	2			
Feb	6	1.2	0.0	0		7.0		20	1	2			
Mar	6	1.5	20.0	0		6.4		20	27	3			
Apr	13	1.8	55.0	0		11.9		30	32	3			
May	13	2.7	65.0	0		11.9		50	50	4			
2015 Jun	14	3.6	70.2	0	128	10.4	1.5	70	56	3	86	14.8	9.1
Jul	15	4.5	70.2	0	129	11.1	3.4	80	66	3	86	15.4	19.9
Aug	19	4.5	63.0	0	118	11.9	1.4	24	46	3	127	15.3	56.8
Sep	10	3.6	36.0	0	47	12.5	1.7	60	15	3	83	14.9	12.1

NOTE: 1) New Melones Reservoir inflow adapted from OID/SSJID data
 2) Forecast input data includes water assumed to be made available for transfer by the Sacramento River Settlement Contractors in May, June, and July
 3) June forecast data for Friant still in draft; data shown for Friant Division is carried over from May Hydrology Report

99% Exceedence Forecast - Input Data

Inflows (TAF)

	Trinity	Whiskeytown	Shasta	Folsom	New Melones	Oroville	Millerton
Oct				200	50	74	11.4
Nov				230	50	83	2.6
Dec				260	60	110	2.2
2016 Jan							
Feb							
Mar							
Apr							
May							
2015 Jun				184	52	70	6.3
Jul				100	50	64	35.8
Aug				100	44	64	38
Sep				95	30	54	37

River Releases

	Trinity (cfs)	Clear Creek (cfs)	Goodwin (cfs)	Oroville (cfs)
Oct				1150
Nov				950
Dec				950
2016 Jan				
Feb				
Mar				
Apr				
May				
2015 Jun				2390
Jul				2800
Aug				1300
Sep				800

Hydrology

	Wilkin's Target (cfs)	Kes-Wilkin's Acc/Dep (cfs)	SJR Above Stan (TAF)	Sac Gross Acc/Dep (TAF)	Freeport Treatment Plant (TAF)	East Side Streams (cfs)	Misc. Creeks (TAF)	Yolo Bypass (TAF)	Transfer Inflow (TAF)	Delta Consumptive Use (TAF)	Delta Outflow (cfs)	X-Channel Gate
Oct				-25		10					4200	
Nov				88		15					5500	
Dec				137		10					5000	
2016 Jan												
Feb												
Mar												
Apr												
May												
2015 Jun				-330		20					4500	
Jul				-405		20					3000	
Aug				-255		20					3000	
Sep				-30		20					3000	

Demands (TAF)

	Folsom Pumping	Folsom South Canal	OID/SSIID	New Melones CVP Contractors	FRSA Demand	CCWD	SWP NOD Demand	Delta Mendota Canal	Federal Dos Amigos	San Felipe	SWP SOD Contractors	San Joaquin Riparian	Friant Div. Ag/M&I
Oct						30	>1				59	10.2	0.4
Nov						131	>1				42	9.5	0.4
Dec						96	>1				36	9.4	0.4
2016 Jan													
Feb													
Mar													
Apr													
2015 May													
Jun						128	1.5				86	14.8	4.8
Jul						129	3.4				86	15.4	4.3
Aug						118	1.4				127	15.3	15.5
Sep						47	1.7				83	14.9	2.5

Note - June forecast data for Friant still in draft; data shown for Friant Division is carried over from May Hydrology Report