

General Assumptions		
Model Configuration		
Model Scenario:	Base Case	L092313
Water Balance/Operations Model Version:	1.17	1.17
Scenario Run Date:	10/1/2013	10/1/2013
Level of Development?	Present Level of Development	Present Level of Development
Narrows 1/2 Preference?	Narrows 1	Narrows 1
Slate Creek Operations?	Historical Flows	Historical Flows
Basis of Hydrologic Index Calculation?	Perfect Foresight	Perfect Foresight
Groundwater Substitution Transfers?	No	No
Use Weekly Power Generation Factors?	No	No
Temperature Model Run Date?	4/10/2014	
Date printed:	10/10/2014	10/10/2014

Minimum Flow Requirement Assumptions		
Water-Year Classification below Our House Dam:	Existing FERC License	Smartsville Index
Water-Year Classification below Log Cabin Dam:	Existing FERC License	Smartsville Index
Water-Year Classification below New Bullards Bar Dam:	Existing FERC License	Smartsville Index
Water-Year Classification below Englebright Dam:	North Yuba Index	North Yuba Index
Flow Requirements below Our House Dam:	Existing FERC License	L060813
Flow Requirements below Log Cabin Dam:	Existing FERC License	L060813
Flow Requirements below New Bullards Bar Dam:	Existing FERC License	L092313
Flow Requirements below Englebright Dam:	Yuba River Accord	Yuba River Accord
Our House Dam Release Buffer:	3 cfs	3 cfs
Log Cabin Dam Release Buffer:	1 cfs	1 cfs
Minimum Flow Powerhouse Release Buffer:	2 cfs	2 cfs

New Bullards Bar Reservoir Storage Assumptions		
New Bullards Bar Reservoir Target Operating Line:	Yuba River Accord	Yuba River Accord
New Bullards Bar Reservoir Carryover Storage Protection Level:	99% Exceedance Drought (294,000 AF)	99% Exceedance Drought (294,000 AF)
Agricultural Delivery Deficiency for Carryover Storage Calculation:	50%	50%
Maximum Agricultural Delivery Deficiency for Carryover Storage:	50%	50%

Other Operational Requirements		
Englebright Release Flow Fluctuation Criteria:	Existing FERC License	Existing FERC License
New Bullards Bar Reservoir Flood Operations:	1972 Flood Control Manual	1972 Flood Control Manual
Englebright Reservoir Low-Storage Restriction:	PG&E Agreement with Marina Operator	PG&E Agreement with Marina Operator

**Notes:**

Timeseries Assumptions														
Flow Requirements below Our House Dam (cfs)														
Base Case														
WY Classification	Oct	Nov	Dec	Jan	Feb	Mar	Apr 1-Apr 15	Apr 16-30	May	Jun 1-15	Jun 16-30	July	August	Sep
100% Unimp	30	30	30	30	30	30	30	50	50	50	30	30	30	30
50% Unimp	25.5	25.5	25.5	25.5	25.5	25.5	25.5	42.5	42.5	42.5	25.5	25.5	25.5	25.5
45% Unimp	24	24	24	24	24	24	24	40	40	40	24	24	24	24
40% Unimp	21	21	21	21	21	21	21	35	35	35	21	21	21	21

  

L060813														
WY Classification	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
Extremely Critical	21	21	21	21	21	21	21	21	21	21	21	21		
Critical	35	35	35	35	35	35	21	21	21	35	35	35		
Dry	49	49	49	49	49	49	49	49	49	49	49	49		
Below Normal	57	57	57	57	57	57	57	57	57	57	57	57		
Above Normal	57	57	57	57	57	66	66	66	66	66	66	66		
Wet	57	57	57	57	57	80	80	80	80	80	80	80		

Flow Requirements below Log Cabin Dam (cfs)														
Base Case														
WY Classification	Oct	Nov	Dec	Jan	Feb	Mar	Apr 1-Apr 15	Apr 16-30	May	Jun 1-15	Jun 16-30	July	August	Sep
100% Unimp	8	8	8	8	8	8	8	12	12	12	8	8	8	8
50% Unimp	6.8	6.8	6.8	6.8	6.8	6.8	6.8	10.2	10.2	10.2	6.8	6.8	6.8	6.8
45% Unimp	6.4	6.4	6.4	6.4	6.4	6.4	6.4	9.6	9.6	9.6	6.4	6.4	6.4	6.4
40% Unimp	5.6	5.6	5.6	5.6	5.6	5.6	5.6	8.4	8.4	8.4	5.6	5.6	5.6	5.6

  

L060813														
WY Classification	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
Extremely Critical	6	6	6	6	6	6	6	6	6	6	6	6		
Critical	6	6	6	6	6	6	12	12	12	6	6	6		
Dry	6	6	6	6	6	6	18	18	18	6	6	6		
Below Normal	8	8	8	8	8	8	21	21	21	8	8	8		
Above Normal	8	8	8	8	8	10	26	26	26	10	10	10		
Wet	8	8	8	8	8	13	31	31	31	13	13	13		

Flow Requirements below New Bullards Bar Dam (cfs)														
Base Case														
WY Classification	Oct	Nov	Dec	Jan	Feb	Mar	Apr 1-Apr 15	Apr 16-30	May	Jun 1-15	Jun 16-30	July	August	Sep
100% Unimp	5	5	5	5	5	5	5	5	5	5	5	5	5	5
50% Unimp	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25
45% Unimp	4	4	4	4	4	4	4	4	4	4	4	4	4	4
40% Unimp	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

  

L092313														
WY Classification	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
Extremely Critical	5	5	5	5	5	5	5	5	5	5	5	5		
Critical	7	7	7	7	7	7	5	5	5	7	7	7		
Dry	13	13	13	13	13	13	5	5	5	13	13	13		
Below Normal	13	13	13	13	13	13	5	5	5	13	13	13		
Above Normal	13	13	13	13	13	12	5	5	5	12	12	12		
Wet	13	13	13	13	13	11	5	5	5	11	11	11		

**Timeseries Assumptions**  
**Flow Requirements at Smartsville (cfs)**

<b>Base Case</b>																
WY Classification	Oct 1-15	Oct 16-31	Nov	Dec	Jan	Feb	Mar	Apr 1-15	Apr 16-30	May 1-15	May 16-31	June 1-15	June 16-30	Jul	Aug	Sep
1	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
2	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
3	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
4	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
5	600	600	600	550	550	550	550	600	0	0	0	0	0	0	0	500
6	600	600	600	550	550	550	550	600	0	0	0	0	0	0	0	500
Conference	600	600	600	600	600	600	600	0	0	0	0	0	0	0	0	0
<b>Yuba River Accord</b>																
WY Classification	Oct 1-15	Oct 16-31	Nov	Dec	Jan	Feb	Mar	Apr 1-15	Apr 16-30	May 1-15	May 16-31	June 1-15	June 16-30	Jul	Aug	Sep
1	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
2	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
3	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
4	700	700	700	700	700	700	700	700	0	0	0	0	0	0	0	700
5	600	600	600	550	550	550	550	600	0	0	0	0	0	0	0	500
6	600	600	600	550	550	550	550	600	0	0	0	0	0	0	0	500
Conference	600	600	600	600	600	600	600	0	0	0	0	0	0	0	0	0

**Yuba Accord Flow Requirements at Marysville (cfs)**

<b>Base Case</b>																
WY Classification	Oct 1-15	Oct 16-31	Nov	Dec	Jan	Feb	Mar	Apr 1-15	Apr 16-30	May 1-15	May 16-31	June 1-15	June 16-30	Jul	Aug	Sep
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350
Conference	400	400	400	400	245	245	245	245	245	245	245	245	245	70	70	70
<b>Yuba River Accord</b>																
WY Classification	Oct 1-15	Oct 16-31	Nov	Dec	Jan	Feb	Mar	Apr 1-15	Apr 16-30	May 1-15	May 16-31	June 1-15	June 16-30	Jul	Aug	Sep
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350
Conference	400	400	400	400	245	245	245	245	245	245	245	245	245	70	70	70

**New Bullards Bar Reservoir Storage Targets**

<b>Base Case</b>																
Operating Line	31-Oct	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr	31-May	30-Jun	15-Jul	31-Jul	15-Aug	31-Aug	15-Sep	30-Sep	
Upper Buffer	20,000	30,000	30,000	80,000	30,000	30,000	30,000	26,000	0	5,000	10,000	10,000	10,000	90,000	200,000	
Target Line	660,000	660,000	650,000	600,000	650,000	750,000	850,000	940,000	920,000	875,000	825,000	770,000	715,000	682,500	650,000	
Lower Buffer	10,000	30,000	30,000	30,000	30,000	30,000	30,000	100,000	80,000	60,000	40,000	35,000	15,000	5,000	2,000	
<b>L092313</b>																
Operating Line	31-Oct	30-Nov	31-Dec	31-Jan	28-Feb	31-Mar	30-Apr	31-May	30-Jun	15-Jul	31-Jul	15-Aug	31-Aug	15-Sep	30-Sep	
Upper Buffer	20,000	30,000	30,000	80,000	30,000	30,000	30,000	26,000	0	5,000	10,000	10,000	10,000	90,000	200,000	
Target Line	660,000	660,000	650,000	600,000	650,000	750,000	850,000	940,000	920,000	875,000	825,000	770,000	715,000	682,500	650,000	
Lower Buffer	10,000	30,000	30,000	30,000	30,000	30,000	30,000	100,000	80,000	60,000	40,000	35,000	15,000	5,000	2,000	

Overview - Model Output Generation Summary																						
Water Year Classification:	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years			
Model case:	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	
New Colgate Powerhouse Generation (Average MWh/yr)	1,718,243	1,696,434	-1.3%	1,335,665	1,314,857	-1.6%	1,193,149	1,177,461	-1.3%	848,513	830,837	-2.1%	784,804	778,244	-0.8%	491,895	492,384	0.1%	1,234,739	1,216,472	-18,266	-1.5%
Narrows 2 Powerhouse Generation (Average MWh/yr)	263,333	262,769	-0.2%	191,245	191,646	0.2%	162,909	164,092	0.7%	100,537	100,113	-0.4%	75,640	75,921	0.4%	83,846	83,786	0.0%	172,607	172,639	32	0.0%
Total YRDP Generation (Average MWh/yr)	1,981,576	1,959,203	-1.1%	1,526,910	1,506,504	-1.3%	1,356,058	1,341,553	-1.1%	949,050	930,949	-1.9%	860,444	854,165	-0.7%	575,742	576,170	0.1%	1,407,346	1,389,112	-18,234	-1.3%
Overview - Model Output Flows Summary																						
Water Year Classification:	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years			
Model case:	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	
Middle Yuba River																						
MYR below Our House Dam (Avg. AF/yr)	138,636	155,402	12.1%	50,773	65,586	29.2%	52,119	63,362	21.6%	62,765	70,831	12.9%	51,401	56,021	9.0%	45,949	44,228	-3.7%	73,689	85,791	12,102	16.4%
MYR Near Confluence with NYR (Avg. AF/yr)	263,826	283,169	7.3%	115,908	132,530	14.3%	126,059	138,382	9.8%	132,346	141,055	6.6%	105,417	110,147	4.5%	128,128	126,226	-1.5%	154,611	168,157	13,546	8.8%
Oregon Creek and North Yuba River																						
Oregon Creek below Log Cabin Dam (Avg. AF/yr)	34,871	37,447	7.4%	12,931	14,740	14.0%	16,530	17,610	6.5%	18,562	19,206	3.5%	15,903	16,014	0.7%	20,326	20,146	-0.9%	20,212	21,656	1,444	7.1%
NYR below New Bullards Bar Dam (Avg. AF/yr)	337,941	338,433	0.1%	71,138	73,553	3.4%	85,135	88,781	4.3%	124,063	129,039	4.0%	89,001	90,384	1.6%	4,087	5,173	26.6%	145,398	147,992	2,594	1.8%
Yuba River																						
Yuba River above New Colgate PH (Avg. AF/yr)	637,087	656,923	3.1%	207,461	226,498	9.2%	233,646	249,615	6.8%	276,360	290,045	5.0%	209,322	215,435	2.9%	156,403	155,587	-0.5%	323,751	339,891	16,140	5.0%
Yuba River near Smartsville (Avg. AF/yr)	2,823,795	2,824,374	0.0%	1,702,620	1,703,658	0.1%	1,611,000	1,612,510	0.1%	1,320,190	1,317,899	-0.2%	1,141,016	1,141,482	0.0%	959,722	959,474	0.0%	1,802,221	1,802,203	-18	0.0%
Yuba River near Marysville (Avg. AF/yr)	2,755,362	2,755,942	0.0%	1,516,796	1,517,834	0.1%	1,437,193	1,438,703	0.1%	1,133,048	1,130,757	-0.2%	936,949	937,415	0.0%	937,791	937,542	0.0%	1,647,467	1,647,448	-18	0.0%
Average Agricultural Water Supply																						
Water Year Classification:	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years			
Model case:	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	
Total (% of requested)	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%	0%	50%	50%	0%	50%	50%	0%	99%	99%	0%	
End of September Reservoir Storage																						
Water Year Classification:	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years			
Model case:	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	
Reservoir Storage (AF)	652,111	651,570	-0.1%	643,499	647,016	0.5%	647,577	654,962	1.1%	574,860	575,196	0.1%	242,087	241,814	-0.1%	242,087	241,814	-0.1%	610,312	612,392	2,080	0.3%

\*Water Year Classifications based on Smartsville Index

Model Output Summary - Generation

New Colgate Powerhouse Generation (Average Monthly MWh)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	53,916	52,393	-2.8%	51,558	51,002	-1.1%	50,800	50,841	0.1%	47,417	46,553	-1.8%	45,398	45,105	-0.6%	29,498	29,404	-0.3%	50,143	49,387	-1.5%
November	63,447	61,834	-2.5%	54,834	53,682	-2.1%	40,423	45,831	13.4%	49,436	48,600	-1.7%	44,120	43,452	-1.5%	25,167	25,072	-0.4%	52,485	52,151	-0.6%
December	97,951	96,444	-1.5%	64,466	62,901	-2.4%	57,032	57,133	0.2%	52,662	51,459	-2.3%	29,393	28,667	-2.5%	14,076	14,005	-0.5%	65,340	64,170	-1.8%
January	138,548	137,223	-1.0%	97,118	97,579	0.5%	129,125	127,480	-1.3%	63,964	62,001	-3.1%	59,241	58,778	-0.8%	6,477	6,440	-0.6%	98,866	98,023	-0.9%
February	164,112	163,104	-0.6%	92,947	92,188	-0.8%	140,590	139,166	-1.0%	72,050	70,689	-1.9%	87,525	87,034	-0.6%	79,594	79,129	-0.6%	110,774	109,768	-0.9%
March	166,946	164,524	-1.5%	98,303	96,439	-1.9%	111,039	108,917	-1.9%	119,988	118,340	-1.4%	95,227	94,598	-0.7%	207,997	207,817	-0.1%	123,809	121,957	-1.5%
April	189,607	186,704	-1.5%	131,458	128,340	-2.4%	75,505	72,659	-3.8%	41,264	39,365	-4.6%	51,568	50,578	-1.9%	15,475	15,859	2.5%	107,561	105,039	-2.3%
May	216,735	215,544	-0.5%	199,130	195,783	-1.7%	165,206	158,235	-4.2%	93,706	92,532	-1.3%	91,713	91,312	-0.4%	23,210	24,123	3.9%	162,738	160,130	-1.6%
June	218,175	216,279	-0.9%	204,643	200,233	-2.2%	150,482	144,111	-4.2%	89,685	86,852	-3.2%	80,585	79,844	-0.9%	33,481	33,889	1.2%	161,200	157,788	-2.1%
July	193,163	191,033	-1.1%	165,190	161,647	-2.1%	124,480	120,670	-3.1%	95,047	93,808	-1.3%	89,798	89,290	-0.6%	28,902	28,805	-0.3%	141,135	138,675	-1.7%
August	155,620	152,799	-1.8%	120,459	119,231	-1.0%	95,085	97,274	2.3%	76,947	75,576	-1.8%	68,378	68,012	-0.5%	20,381	20,288	-0.5%	108,661	107,643	-0.9%
September	60,023	58,552	-2.5%	55,561	55,832	0.5%	53,383	55,144	3.3%	46,346	45,061	-2.8%	41,858	41,573	-0.7%	7,637	7,553	-1.1%	52,027	51,743	-0.5%
Average MWh/	1,718,243	1,696,434	-1.3%	1,335,665	1,314,857	-1.6%	1,193,149	1,177,461	-1.3%	848,513	830,837	-2.1%	784,804	778,244	-0.8%	491,895	492,384	0.1%	1,234,739	1,216,472	-1.5%

Narrows 2 Powerhouse Generation (Average Monthly MWh)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	4,803	4,749	-1.1%	3,674	3,989	8.6%	2,893	3,657	26.4%	1,425	1,395	-2.1%	0	0	0.0%	0	0	0.0%	3,002	3,175	5.8%
November	5,080	5,083	0.1%	4,092	4,223	3.2%	382	1,683	340.5%	2,338	2,300	-1.6%	0	0	0.0%	0	0	0.0%	3,096	3,289	6.2%
December	15,428	15,421	0.0%	7,791	7,935	1.8%	7,735	8,641	11.7%	5,572	5,611	0.7%	1,847	1,849	0.1%	4,115	4,118	0.1%	8,635	8,799	1.9%
January	23,957	23,938	-0.1%	15,371	15,710	2.2%	24,880	24,932	0.2%	10,543	10,496	-0.5%	11,525	11,712	1.6%	21,086	21,089	0.0%	17,423	17,536	0.6%
February	28,802	28,822	0.1%	16,275	16,202	-0.5%	23,340	23,198	-0.6%	14,685	14,718	0.2%	11,473	11,475	0.0%	22,726	22,669	-0.3%	19,641	19,611	-0.2%
March	30,074	30,017	-0.2%	18,722	18,814	0.5%	20,904	20,802	-0.5%	23,946	24,019	0.3%	13,018	13,109	0.7%	35,919	35,910	0.0%	22,906	22,931	0.1%
April	33,770	33,738	-0.1%	24,219	24,348	0.5%	13,295	13,147	-1.1%	6,553	6,279	-4.2%	5,095	5,095	0.0%	0	0	0.0%	18,849	18,801	-0.3%
May	36,478	36,464	0.0%	34,083	33,734	-1.0%	26,259	24,986	-4.8%	9,640	9,617	-0.2%	8,662	8,662	0.0%	0	0	0.0%	25,407	25,102	-1.2%
June	33,745	33,738	0.0%	30,823	30,380	-1.4%	18,836	17,908	-4.9%	8,458	8,422	-0.4%	8,188	8,188	0.0%	0	0	0.0%	22,393	22,107	-1.3%
July	26,103	25,939	-0.6%	19,658	19,523	-0.7%	12,131	12,032	-0.8%	8,461	8,461	0.0%	8,461	8,461	0.0%	0	0	0.0%	16,215	16,121	-0.6%
August	18,531	18,313	-1.2%	11,539	11,415	-1.1%	9,206	9,192	-0.1%	7,976	7,976	0.0%	7,369	7,369	0.0%	0	0	0.0%	11,364	11,275	-0.8%
September	6,561	6,548	-0.2%	4,997	5,375	7.6%	3,048	3,912	28.4%	940	819	-12.9%	0	0	0.0%	0	0	0.0%	3,677	3,894	5.9%
Average MWh/	263,333	262,769	-0.2%	191,245	191,646	0.2%	162,909	164,092	0.7%	100,537	100,113	-0.4%	75,640	75,921	0.4%	83,846	83,786	-0.1%	172,607	172,639	0.0%

Model Output Summary - Miscellaneous Values

End of September New Bullards Bar Reservoir Storage (AF)			
WY Classification	Base	Alt	Change
Wet	652,111	651,570	-0.1%
Above Normal	643,499	647,016	0.5%
Below Normal	647,577	654,962	1.1%
Dry	574,860	575,196	0.1%
Critical	495,674	494,792	-0.2%
Extremely Critical	242,087	241,814	-0.1%
Average All Years	610,312	612,392	0.3%

Average Agricultural Water Supply Allocation for April through September (%)			
WY Classification	Base	Alt	Change
Wet	100%	100%	0.0%
Above Normal	100%	100%	0.0%
Below Normal	100%	100%	0.0%
Dry	100%	100%	0.0%
Critical	100%	100%	0.0%
Extremely Critical	50%	50%	0.0%
Average All Years	99%	99%	0.0%

Number of Days Narrows 2 PH Releases Controlled by Flow Fluctuation Criteria			
WY Classification	Base	Alt	Change
Wet	14	20	42.9%
Above Normal	162	186	14.8%
Below Normal	0	0	0.0%
Dry	148	147	-0.7%
Critical	97	97	0.0%
Extremely Critical	9	9	0.0%
Total All Years	430	459	6.7%

Recurrence of North Yuba Index Year Types (Years)			
Flow Sched.	Base	Alt	Change
Sched. 1	23	21	-2
Sched. 2	8	10	2
Sched. 3	2	2	0
Sched. 4	6	6	0
Sched. 5	1	1	0
Sched. 6	0	0	0
Conference	1	1	0

Average New Bullards Bar Reservoir Water-Surface Elevation on Sept. 10 (ft)			
WY Classification	Base	Alt	Change
Wet	1,887	1,887	0.0%
Above Normal	1,885	1,886	0.1%
Below Normal	1,887	1,889	0.1%
Dry	1,866	1,866	0.0%
Critical	1,842	1,842	0.0%
Extremely Critical	1,737	1,737	0.0%
Average All Years	1,875	1,876	0.0%

Average Number of Days per Year Dark Day Boat Ramp is Available (Water Level >= 1,758 ft) (days)			
WY Classification	Base	Alt	Change
Wet	365	365	0
Above Normal	365	365	0
Below Normal	365	365	0
Dry	365	365	0
Critical	365	365	0
Extremely Critical	182	182	0
Average All Years	361	361	0

Average Number of Days per Year Cottage Creek Boat Ramp is Available (Water Level >= 1,853 ft) (Days)			
WY Classification	Base	Alt	Change
Wet	347	347	0
Above Normal	355	354	-1
Below Normal	365	365	0
Dry	290	288	-2
Critical	188	187	-1
Extremely Critical	59	59	0
Average All Years	321	320	-1

\*Water Year (WY) Classifications based on Smartsville Index

Model Output Summary - Flows

Middle Yuba River below Our House Dam (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	34	46	37.3%	33	42	28.1%	31	41	33.5%	27	31	14.5%	24	26	9.5%	17	17	0.0%	30	39	27.1%
November	70	87	24.4%	57	74	30.5%	33	52	58.2%	86	97	13.5%	24	32	34.7%	22	22	0.0%	60	75	25.1%
December	259	278	7.6%	106	130	22.8%	48	71	46.3%	142	159	12.1%	32	41	29.5%	38	38	0.0%	137	157	14.3%
January	472	491	4.1%	111	135	21.5%	273	296	8.5%	63	83	31.4%	230	240	4.4%	302	302	0.0%	222	242	9.1%
February	179	200	11.7%	84	109	30.4%	148	172	16.3%	312	331	6.0%	26	38	46.1%	57	57	0.0%	160	181	13.2%
March	157	198	26.6%	98	131	33.2%	48	73	51.0%	222	239	7.8%	336	347	3.3%	173	173	0.0%	153	181	18.4%
April	374	396	5.8%	57	81	42.5%	47	63	36.0%	38	52	37.6%	31	38	22.6%	31	24	-22.6%	118	137	15.5%
May	457	470	3.0%	129	143	10.4%	99	106	6.6%	47	53	12.1%	38	38	0.0%	38	24	-36.8%	170	179	5.3%
June	189	220	16.5%	68	91	34.0%	44	60	36.6%	38	51	33.0%	31	38	19.9%	31	24	-23.7%	81	100	24.2%
July	38	79	108.1%	33	63	91.4%	33	51	53.4%	29	40	37.0%	24	31	28.2%	17	17	0.0%	32	56	74.6%
August	33	57	73.4%	33	48	45.0%	32	37	14.4%	27	29	6.7%	23	26	10.8%	13	13	0.0%	30	42	37.1%
September	33	47	43.9%	33	41	23.7%	30	32	4.8%	26	27	3.3%	23	24	6.2%	15	15	0.0%	30	36	20.5%
Average AF/yr	138,636	155,402	12.1%	50,773	65,586	29.2%	52,119	63,362	21.6%	62,765	70,831	12.9%	51,401	56,021	9.0%	45,949	44,228	-3.7%	73,689	85,791	16.4%

Middle Yuba River Near Confluence with North Yuba River (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	50	60	19.8%	46	53	15.1%	43	52	21.6%	38	41	8.2%	30	30	2.2%	21	21	0.0%	43	50	15.0%
November	135	150	11.4%	117	133	13.0%	64	82	27.3%	141	151	6.9%	37	44	18.7%	38	38	0.5%	113	126	11.9%
December	531	550	3.6%	216	240	10.9%	132	153	16.5%	275	291	5.9%	93	102	10.0%	138	139	0.2%	285	304	6.7%
January	906	925	2.1%	259	283	9.1%	653	676	3.5%	192	211	9.8%	554	563	1.7%	840	840	0.0%	486	506	4.1%
February	546	566	3.7%	249	274	10.0%	403	426	5.8%	657	674	2.7%	105	117	11.2%	303	303	0.1%	420	441	4.9%
March	451	496	9.9%	334	367	9.9%	224	248	10.8%	526	542	3.1%	625	636	1.8%	557	558	0.1%	418	447	6.9%
April	721	758	5.1%	215	254	18.5%	182	210	15.2%	131	155	17.9%	82	94	14.6%	49	41	-16.2%	289	320	10.6%
May	645	675	4.7%	239	266	11.3%	198	214	7.8%	97	110	13.6%	69	73	5.2%	72	56	-22.7%	274	294	7.4%
June	244	295	20.5%	110	148	35.0%	77	102	33.5%	65	82	27.4%	47	55	19.0%	44	36	-19.0%	118	150	26.4%
July	59	102	71.9%	50	79	58.8%	48	62	30.5%	41	49	19.3%	33	36	9.9%	20	20	0.0%	48	70	47.7%
August	47	68	44.6%	46	56	22.5%	41	43	5.3%	33	34	1.8%	29	30	5.3%	15	15	0.0%	41	49	20.8%
September	46	58	24.0%	44	48	8.5%	36	37	1.7%	32	32	1.1%	28	28	2.3%	19	19	0.1%	39	43	9.9%
Average AF/yr	263,826	283,169	7.3%	115,908	132,530	14.3%	126,059	138,382	9.8%	132,346	141,055	6.6%	105,417	110,147	4.5%	128,128	126,226	-1.5%	154,611	168,157	8.8%

Oregon Creek below Log Cabin Dam (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	9	6	-32.3%	7	5	-30.8%	6	5	-20.1%	4	4	-18.3%	4	2	-42.3%	2	2	0.0%	6	4	-28.5%
November	19	18	-9.6%	17	15	-11.6%	8	7	-18.6%	18	17	-9.5%	6	5	-24.2%	4	5	3.9%	16	14	-11.1%
December	91	91	-0.7%	29	28	-1.6%	16	15	-4.4%	44	43	-2.0%	11	11	-1.0%	11	12	2.9%	44	43	-1.3%
January	153	153	-0.3%	32	32	-1.2%	118	118	-0.3%	25	24	-3.6%	103	102	-0.8%	157	157	0.2%	79	78	-0.7%
February	93	93	-1.0%	29	28	-1.2%	55	55	-1.4%	108	107	-1.0%	7	7	-2.0%	36	37	0.9%	64	63	-1.0%
March	63	66	4.9%	35	36	1.6%	17	17	-2.0%	69	68	-1.8%	92	92	0.2%	94	95	0.3%	53	54	1.2%
April	83	98	18.0%	13	28	120.0%	11	22	97.8%	10	20	90.4%	8	13	62.5%	8	7	-12.5%	27	39	45.2%
May	31	48	54.5%	16	30	82.4%	15	24	58.6%	12	19	64.4%	9	13	38.3%	9	7	-25.5%	18	29	63.0%
June	11	30	170.8%	11	27	138.2%	11	21	85.8%	10	15	52.3%	8	11	32.2%	8	7	-13.0%	11	22	111.5%
July	9	11	20.1%	9	8	-11.0%	9	6	-35.1%	7	4	-39.3%	6	3	-57.1%	2	2	0.0%	8	7	-15.1%
August	9	6	-36.2%	9	4	-53.7%	5	3	-46.6%	4	2	-34.5%	3	2	-33.3%	1	1	0.0%	6	4	-44.4%
September	8	5	-40.6%	7	3	-53.6%	3	2	-25.9%	3	2	-18.7%	3	2	-29.4%	2	2	1.4%	5	3	-41.7%
Average AF/yr	34,871	37,447	7.4%	12,931	14,740	14.0%	16,530	17,610	6.5%	18,562	19,206	3.5%	15,903	16,014	0.7%	20,326	20,146	-0.9%	20,212	21,656	7.1%

\*Water Year Classifications based on Smartsville Index

Model Output Summary - Flows

North Yuba River below New Bullards Bar Dam (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	7	15	114.3%	7	15	114.3%	7	15	114.3%	6	15	136.8%	6	9	63.6%	6	7	27.3%	7	14	114.2%
November	7	15	111.5%	7	15	113.0%	7	15	114.3%	6	15	135.1%	6	9	63.6%	6	7	27.3%	7	14	112.7%
December	535	538	0.6%	76	82	7.4%	7	15	114.2%	408	436	7.0%	6	9	63.6%	6	7	27.3%	245	255	4.1%
January	1,509	1,514	0.3%	400	405	1.3%	744	750	0.8%	70	78	11.6%	6	9	60.0%	6	7	27.3%	601	607	0.9%
February	244	242	-1.0%	60	65	8.8%	481	483	0.4%	1,015	1,018	0.3%	35	31	-9.8%	6	7	27.3%	362	364	0.5%
March	624	617	-1.1%	236	235	-0.2%	120	126	5.0%	574	570	-0.6%	1,362	1,359	-0.2%	7	9	20.8%	467	465	-0.4%
April	683	689	0.8%	32	31	-2.5%	7	7	0.0%	6	7	10.5%	6	7	27.3%	6	7	27.3%	163	164	0.8%
May	1,176	1,165	-1.0%	190	187	-1.2%	7	7	0.0%	6	7	10.5%	6	7	27.3%	6	7	27.3%	321	318	-0.9%
June	737	719	-2.4%	141	131	-6.8%	31	29	-6.0%	6	7	10.5%	6	7	27.3%	6	7	27.3%	213	206	-3.3%
July	28	33	17.6%	8	15	90.0%	7	15	108.5%	6	15	136.8%	6	9	63.6%	6	7	27.3%	12	18	57.0%
August	8	14	74.1%	7	14	100.0%	7	15	114.3%	6	15	136.8%	6	9	63.6%	6	7	27.3%	7	14	99.5%
September	7	13	85.7%	7	14	100.0%	7	15	114.3%	6	15	136.8%	6	9	63.6%	6	7	27.3%	7	14	102.9%
Average AF/yr	337,941	338,433	0.1%	71,138	73,553	3.4%	85,135	88,781	4.3%	124,063	129,039	4.0%	89,001	90,384	1.6%	4,087	5,173	26.6%	145,398	147,992	1.8%

Yuba River above New Colgate Power House (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	60	78	30.0%	56	71	26.8%	52	70	33.0%	47	59	25.0%	36	40	11.5%	27	28	5.6%	52	66	27.1%
November	159	183	14.6%	142	165	16.4%	80	106	31.8%	162	181	11.4%	45	55	23.1%	48	50	3.5%	134	155	15.7%
December	1,136	1,159	2.0%	324	354	9.0%	165	195	18.0%	717	762	6.3%	118	131	10.8%	178	180	1.0%	571	600	5.1%
January	2,524	2,548	0.9%	704	733	4.1%	1,500	1,529	1.9%	303	330	8.9%	646	659	2.0%	995	996	0.2%	1,160	1,185	2.2%
February	897	914	2.0%	362	392	8.4%	962	988	2.6%	1,765	1,785	1.2%	167	176	5.0%	391	393	0.5%	859	881	2.6%
March	1,165	1,204	3.3%	648	681	5.0%	406	436	7.4%	1,191	1,204	1.1%	2,064	2,072	0.4%	678	679	0.3%	968	995	2.8%
April	1,508	1,550	2.8%	303	342	12.8%	238	265	11.7%	170	194	14.2%	105	118	12.9%	59	52	-11.0%	508	540	6.3%
May	1,882	1,901	1.0%	464	489	5.3%	238	254	6.5%	118	132	11.8%	83	88	6.2%	88	73	-17.0%	629	647	2.8%
June	999	1,031	3.2%	263	292	11.0%	116	140	20.5%	77	96	23.8%	55	65	18.9%	52	45	-13.4%	342	366	7.1%
July	93	140	51.4%	60	96	59.9%	58	80	39.2%	49	66	33.6%	40	46	17.1%	26	28	5.7%	62	92	47.2%
August	57	84	47.0%	54	71	31.8%	49	59	20.8%	41	50	22.8%	35	40	14.3%	21	23	7.0%	49	64	31.3%
September	56	73	30.8%	52	63	20.5%	44	53	19.4%	39	48	23.1%	34	38	12.1%	25	27	6.1%	47	58	22.9%
Average AF/yr	637,087	656,923	3.1%	207,461	226,498	9.2%	233,646	249,615	6.8%	276,360	290,045	5.0%	209,322	215,435	2.9%	156,403	155,587	-0.5%	323,751	339,891	5.0%

Yuba River near Smartsville (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	914	911	-0.4%	873	879	0.7%	859	874	1.8%	805	804	-0.1%	769	769	0.0%	588	588	0.0%	852	855	0.3%
November	1,437	1,437	0.0%	1,229	1,235	0.4%	852	955	12.1%	1,205	1,211	0.5%	841	841	0.0%	607	608	0.0%	1,185	1,200	1.3%
December	3,532	3,533	0.0%	1,756	1,763	0.4%	1,410	1,442	2.3%	2,004	2,031	1.3%	879	882	0.3%	929	930	0.1%	2,117	2,129	0.6%
January	6,194	6,199	0.1%	2,748	2,783	1.3%	4,737	4,741	0.1%	1,838	1,837	-0.1%	2,701	2,707	0.2%	3,048	3,049	0.0%	3,635	3,648	0.3%
February	5,014	5,016	0.0%	2,584	2,602	0.7%	4,270	4,272	0.1%	4,282	4,283	0.0%	2,030	2,030	0.0%	2,800	2,794	-0.2%	3,718	3,725	0.2%
March	4,809	4,812	0.1%	3,017	3,024	0.2%	2,912	2,912	0.0%	4,317	4,291	-0.6%	4,671	4,669	0.0%	5,101	5,101	0.0%	3,899	3,896	-0.1%
April	6,168	6,167	0.0%	2,990	2,992	0.1%	1,917	1,906	-0.6%	1,172	1,169	-0.3%	1,071	1,071	0.0%	417	417	0.0%	2,928	2,927	-0.1%
May	6,893	6,895	0.0%	4,060	4,035	-0.6%	3,168	3,087	-2.6%	1,610	1,610	0.0%	1,479	1,479	0.0%	611	611	0.0%	3,741	3,721	-0.5%
June	5,510	5,525	0.3%	3,868	3,837	-0.8%	2,606	2,536	-2.7%	1,441	1,420	-1.4%	1,277	1,277	0.0%	681	681	0.0%	3,244	3,223	-0.6%
July	3,087	3,092	0.2%	2,420	2,403	-0.7%	1,815	1,780	-1.9%	1,416	1,416	0.0%	1,363	1,363	0.0%	549	549	0.0%	2,134	2,125	-0.4%
August	2,312	2,299	-0.6%	1,769	1,767	-0.1%	1,402	1,437	2.5%	1,168	1,158	-0.8%	1,079	1,079	0.0%	406	406	0.0%	1,619	1,618	0.0%
September	994	990	-0.4%	918	931	1.5%	866	898	3.7%	774	764	-1.3%	720	720	0.0%	203	203	0.0%	863	869	0.7%
Average AF/yr	2,823,795	2,824,374	0.0%	1,702,620	1,703,658	0.1%	1,611,000	1,612,510	0.1%	1,320,190	1,317,899	-0.2%	1,141,016	1,141,482	0.0%	959,722	959,474	0.0%	1,802,221	1,802,203	0.0%

\*Water Year Classifications based on Smartsville Index

Model Output Summary - Flows

Yuba River near Marysville (Average monthly flow, cfs)																					
Month	Wet			Above Normal			Below Normal			Dry			Critical			Extremely Critical			Average All Years		
	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change	Base	Alt	Change
October	588	585	-0.6%	539	545	1.2%	516	531	3.0%	469	468	-0.2%	412	412	0.0%	400	400	0.0%	520	523	0.5%
November	1,147	1,146	-0.1%	931	936	0.6%	534	637	19.2%	913	918	0.6%	500	500	0.0%	406	406	0.0%	887	902	1.7%
December	3,573	3,573	0.0%	1,670	1,677	0.4%	1,361	1,392	2.3%	1,927	1,954	1.4%	774	776	0.3%	877	877	0.1%	2,068	2,080	0.6%
January	6,837	6,841	0.1%	2,919	2,954	1.2%	5,172	5,176	0.1%	2,029	2,027	-0.1%	3,115	3,121	0.2%	4,065	4,066	0.0%	3,996	4,009	0.3%
February	5,884	5,886	0.0%	2,941	2,959	0.6%	4,827	4,830	0.1%	4,872	4,873	0.0%	2,167	2,168	0.0%	3,172	3,167	-0.2%	4,260	4,266	0.2%
March	5,491	5,494	0.1%	3,499	3,506	0.2%	3,428	3,428	0.0%	4,987	4,961	-0.5%	5,383	5,382	0.0%	5,714	5,713	0.0%	4,495	4,492	-0.1%
April	6,885	6,884	0.0%	3,195	3,197	0.1%	1,738	1,727	-0.7%	895	892	-0.3%	770	770	0.0%	256	256	0.0%	3,038	3,036	-0.1%
May	6,512	6,513	0.0%	3,553	3,528	-0.7%	2,498	2,417	-3.2%	883	883	0.0%	745	745	0.0%	245	245	0.0%	3,176	3,156	-0.6%
June	4,722	4,738	0.3%	3,051	3,020	-1.0%	1,737	1,667	-4.0%	567	546	-3.6%	400	400	0.0%	245	245	0.0%	2,418	2,397	-0.9%
July	2,074	2,079	0.3%	1,406	1,388	-1.2%	855	821	-4.0%	456	456	0.0%	400	400	0.0%	70	70	0.0%	1,157	1,148	-0.8%
August	1,425	1,411	-0.9%	897	895	-0.2%	725	760	4.8%	490	480	-2.0%	400	400	0.0%	70	70	0.0%	842	841	-0.1%
September	676	673	-0.6%	604	617	2.2%	598	630	5.3%	505	495	-2.0%	450	450	0.0%	70	70	0.0%	573	579	1.0%
Average AF/yr	2,755,362	2,755,942	0.0%	1,516,796	1,517,834	0.1%	1,437,193	1,438,703	0.1%	1,133,048	1,130,757	-0.2%	936,949	937,415	0.0%	937,791	937,542	0.0%	1,647,467	1,647,448	0.0%

\*Water Year Classifications based on Smartsville Index