Summary of 10/21/15 Stanislaus Operation Group Meeting 1-3pm

Participants

Reclamation: Liz Kiteck, Amanda Bahls, Carolyn Bragg, Kristin White
NMFS: Barb Byrne
FWS: J.D. Wikert, Craig Anderson
DFW: Par Brantley, Dom Giudice, Tim Heyne
DWR: Chris Carr, James Edwards

Operations

- Reclamation is currently meeting the 200 cfs required flow.
- Current New Melones elevation is 801' (276 TAF).
    - The New Melones elevation gauge has had some issues, numbers are being manually corrected
    - There has been some storage gained in the past month. The gain is mostly because upper reservoirs are drawing down to their winter operating range. Current inflows count towards the Districts' 2016 formula water.
    - 250 cfs is being released from the LLO
        - Reclamation is watching to see if this flow is damaging the bank
    - There is still small power generation occurring
    - Reclamation continues to watch for vortexes that would shut down power generation
    - New Melones' main outlet cannot be used below 785'or after vortex formation, whichever comes first. After the main outlet becomes inoperable, all water will come from the LLO
        - Pulling air through the pipes will damage the structures
- Tulloch is at winter operating levels, and no further drawdown is expected.
- Irrigation season has finished.

Temperatures

- River temperatures have been getting close to the goal of 65° 7DADM below Goodwin.
- Future temperature goals:
    - November 1-25th: 60° at Orange Blossom Bridge
    - November 25-December 31st: 56° at Orange Blossom Bridge

October Pulse Flow

- The Fall Pulse Flow began on October 20th and will continue through November 10th.
- Through a plan developed by Districts and in coordination with Reclamation, water has been made available for the fall pulse flow.
- Heavy use of the LLO (up to 750 cfs) may be needed to reach the peak next week.
- Contrary to the September meeting, the Merced River is releasing a pulse. The Tuolumne is still not releasing a pulse. The Merced pulse will be 12,500 AF made up of 600 cfs for a week. After the pulse is completed, the Merced will return to a baseflow of 60 cfs.

Fish

- 263 fish have been counted on the Stanislaus River Weir Count. This is lower than any other year except for 2007.
- A few fish were also seen on last week's carcass survey.
- Murky water created by pulse flows prevents accurate fish and redd counts.

Restoration

- The Knights Ferry restoration project is dead due to permitting issues
- The Button Bush restoration project is moving along the permitting process with the U.S. Army Corps of Engineers.
- J.D. Wikert (FWS) reminded the group that gravel augmentation targets are not being met. Reclamation has received NMFS approval to submit a revised plan for gravel augmentation. These projects have been heavily funded by CVPIA, but that money may be more difficult to attain as it goes under reform. J.D. recommended Reclamation consult with John Hannon (Reclamation) about the costs to reach augmentation targets and maintain the projects.

River Forum

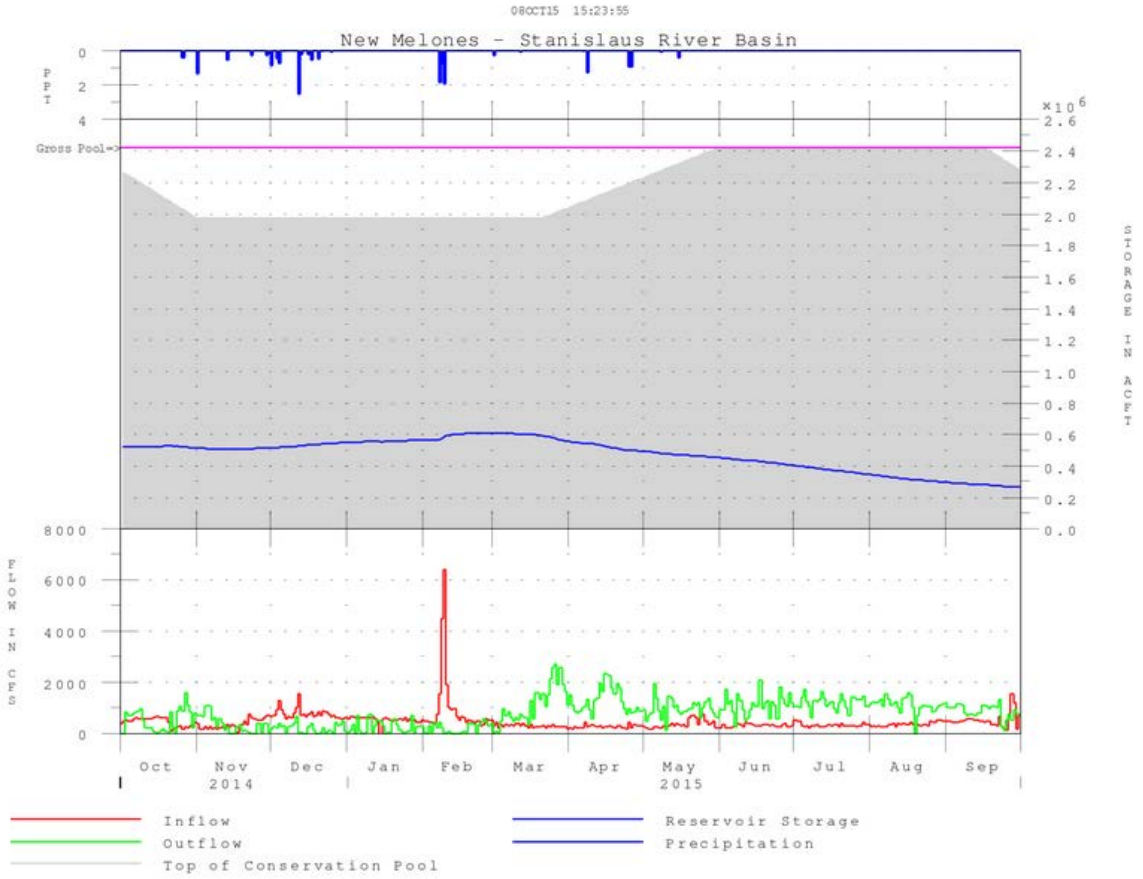
- Information was provided on some Tuolomne projects:
    - Funds have been raised to look into the removal of Dennet Dam, a small dam that impacts the salmon run on the Tuolumne.
    - La Grange Dam is undergoing FERC re-licensing. A part of this process involves the irrigation districts looking into fish passage above the dam, most likely by trucking. The next workshop for this will be held November 19th at Modesto Irrigation District.
- Notes will be compiled and sent out to the group

Drought Planning

- The approved Temporary Urgency Change Petition (TUCP) on modifying the dissolved oxygen requirement on the Stanislaus River is under petition to be reconsidered.

Next Steps

- November 5-6th-2015 Long Term Biological Opinion Annual Science Review
- November 14th - Salmon Festival at Knights Ferry
- March 2016- Pacific Coast Steelhead Management meeting
- Next SOG meeting is November 18th at 1:00 pm at the Central Valley Office.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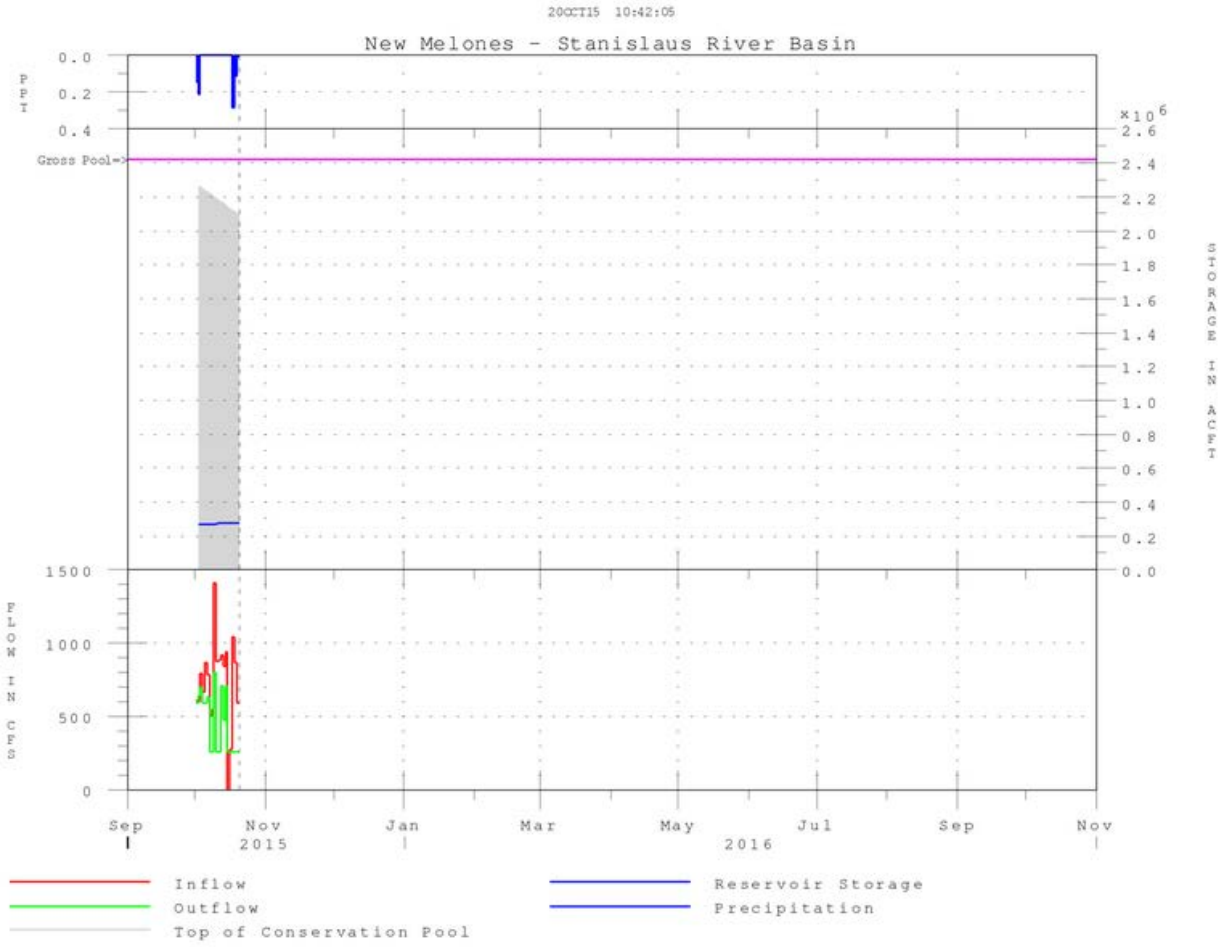
New Melones - Stanislaus River Basin
PPT
0
2
4
Gross Pool=>
x10^6
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
STORAGE IN ACFT
8000
6000
4000
2000
0
FLOW IN CFS
Oct
Nov
2014
Dec
Jan
Feb
Mar
Apr
May
2015
Jun
Jul
Aug
Sep
Inflow
Outflow
Top of Conservation Pool
Reservoir Storage
Precipitation


20OCT15 10:42:05
New Melones - Stanislaus River Basin
PPT
0.0
0.2
0.4
Gross Pool=>
x10^6
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
STORAGE IN ACFT
FLOW IN CFS
1500
1000
500
0
Sep
Nov
2015
Jan
Mar
May
2016
Jul
Sep
Nov
Inflow
Outflow
Top of Conservation Pool
Reservoir Storage
Precipitation

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

OCTOBER 2015 — NEW MELONES LAKE DAILY OPERATIONS

RUN DATE: October 19, 2015

DAY	ELEV	STORAGE 1000 ACRE-FEET IN LAKE	CHANGE	COMPUTED* INFLOW C.F.S.	RELEASE - C.F.S. POWER	SPILL	OUTLET	EVAPORATION C.F.S.	INCHES	PRECIP INCHES
		267.7								
1	798.44	267.7	+0.0	608	343	0	246	3	.03	.15
2	798.41	267.6	-0.1	596	395	0	246	3	.03	.22
3	798.45	267.8	+0.1	791	457	0	246	23	.22	.00
4	798.48	267.9	+0.1	664	342	0	246	27	.26	.00
5	798.64	268.4	+0.5	870	344	0	246	21	.20	.00
6	798.72	268.6	+0.3	785	391	0	246	18	.17	.00
7	798.86	269.1	+0.5	507	9	0	246	25	.24	.00
8	799.03	269.6	+0.5	552	9	0	248	19	.18	.00
9	799.39	270.8	+1.2	1,410	548	0	248	26	.25	.00
10	799.75	272.0	+1.2	871	10	0	248	25	.24	.00
11	800.10	273.1	+1.1	883	9	0	248	53	.50	.00
12	800.21	273.5	+0.4	915	457	0	248	29	.28	.00
13	800.42	274.1	+0.7	841	223	0	248	25	.24	.00
14	800.54	274.5	+0.4	939	463	0	248	30	.28	.00
15	800.38	274.0	-0.5	21	9	0	248	27	.26	.00
16	800.38	274.0	+0.0	278	10	0	248	20	.19	.00
17	800.84	275.5	+1.5	1,043	10	0	248	28	.26	.29
18	801.20	276.7	+1.2	863	8	0	248	13	.12	.12
TOTALS			**+9.1**	**13,437**	**4,037**	**0**	**4,450**	**415**	**3.95**	**.78**
ACRE-FEET			**+9,100**	**26,652**	**8,007**	**0**	**8,827**	**823**		

COMMENTS:
* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

SUMMARY

RELEASE (ACRE-FEET)

POWER	8,007	OUTLET	8,827
SPILL	0	TOTAL	16,834

PRECIPITATION

THIS MONTH =	.78
JULY 1, 2015 TO DATE =	.80

UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

OCTOBER 2015 — TULLOCH RESERVOIR DAILY OPERATIONS

RUN DATE: 10/19/2015

DAY	ELEV	STORAGE ACRE-FEET RES.	STORAGE ACRE-FEET CHANGE	COMPUTED* INFLOW C.F.S.	NEW MELONES RELEASE	RELEASE - C.F.S. POWER	RELEASE - C.F.S. SPILL	RELEASE - C.F.S. OUTLET	EVAP C.F.S. (1)
		54,684							
1	499.46	54,727	+43	513	589	490	0	0	1
2	499.64	54,919	+192	544	641	446	0	0	1
3	499.97	55,271	+352	611	703	426	0	0	8
4	500.13	55,444	+173	492	588	396	0	0	9
5	500.32	55,650	+206	504	590	393	0	0	7
6	500.56	55,910	+260	546	637	409	0	0	6
7	500.05	55,357	-553	164	255	435	0	0	8
8	499.50	54,770	-587	155	257	445	0	0	6
9	500.06	55,368	+598	709	796	399	0	0	9
10	499.79	55,079	-289	158	258	296	0	0	8
11	499.67	54,951	-128	174	257	222	0	0	17
12	500.40	55,737	+786	628	705	222	0	0	10
13	500.68	56,040	+303	383	471	222	0	0	8
14	501.38	56,806	+766	620	711	224	0	0	10
15	501.26	56,674	-132	163	257	221	0	0	9
16	501.16	56,563	-111	172	258	221	0	0	7
17	501.05	56,442	-121	169	258	221	0	0	9
18	500.94	56,322	-120	165	256	221	0	0	4
TOTALS			**+1,638**	**6,870**	**8,487**	**5,909**	**0**	**0**	**137**
ACRE-FEET			**+1,638**	**13,627**	**16,834**	**11,721**	**0**	**0**	**272**

*COMPUTED INFLOW IS SUM OF CHANGE IN STORAGE, RELEASES, AND EVAPORATION.

SUMMARY
RELEASE (ACRE-FEET)

POWER	11,721	OUTLET	0
SPILL	0	TOTAL	11,721

OAKDALE IRRIGATION DISTRICT
SOUTH SAN JOAQUIN IRRIGATION DISTRICT
TRI DAMS PROJECT-CALIFORNIA

OCTOBER 2015 — GOODWIN RESERVOIR DAILY OPERATIONS

RUN DATE: October 19, 2015

DAY	ELEV	STORAGE ACRE-FEET RES.	STORAGE ACRE-FEET CHANGE	TULLOCH RELEASE	RELEASE - C.F.S. RIVER OUTLET	RIVER SPILL	CANALS JOINT MAIN	CANALS SOUTH MAIN
		524						
1	359.83	525	+1	490	0	181	132	195
2	359.83	525	+0	446	0	205	85	186
3	359.83	525	+0	426	0	204	73	176
4	359.83	525	+0	396	0	202	82	130
5	359.83	525	+0	393	0	203	94	108
6	359.86	527	+2	409	0	202	99	120
7	359.83	525	-2	435	0	205	100	143
8	359.83	525	+0	445	0	204	95	167
9	359.83	525	+0	399	0	202	62	167
10	359.83	525	+0	296	0	201	49	66
11	359.83	525	+0	222	0	201	32	0
12	359.83	525	+0	222	0	202	22	0
13	359.83	525	+0	222	0	202	17	0
14	359.83	525	+0	224	0	221	14	0
15	359.83	525	+0	221	0	202	12	0
16	359.86	527	+2	221	0	202	11	0
17	359.86	527	+0	221	0	202	11	0
18	359.86	527	+0	221	0	203	10	0
TOTALS			**+3**	**5,909**	**0**	**3,644**	**1,000**	**1,458**
ACRE-FEET			**+3**	**11,721**	**0**	**7,228**	**1,984**	**2,892**

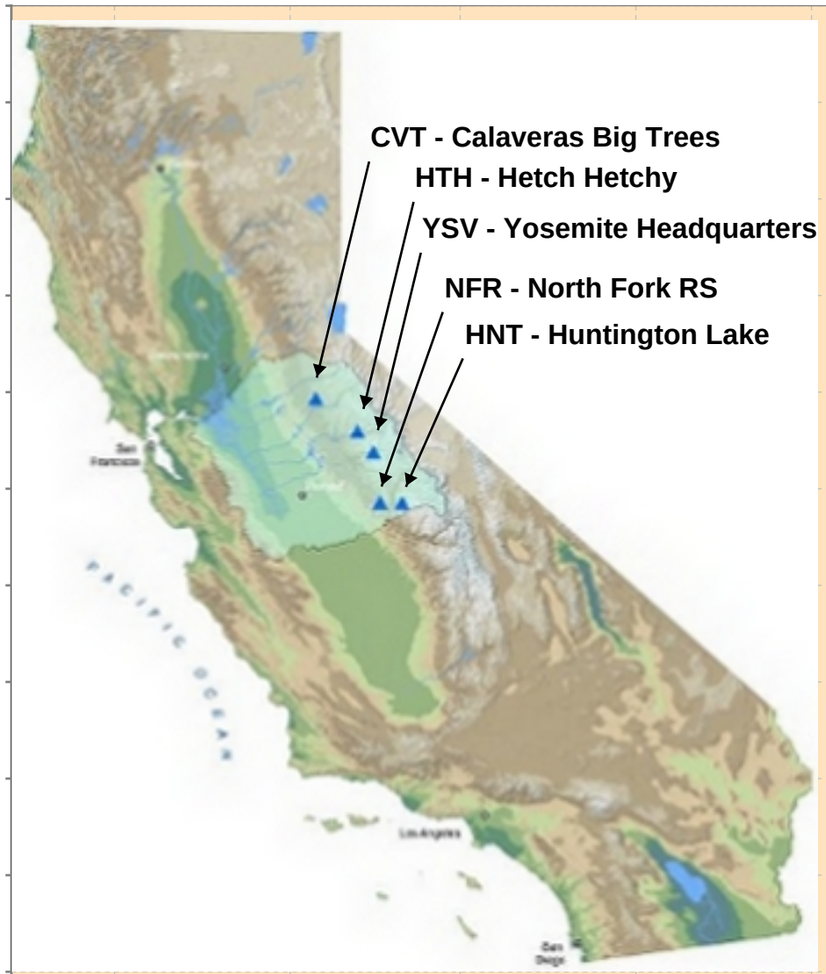
JOINT MAIN OPERATED BY SSJID AND OID.
SOUTH MAIN OPERATED BY OID.

SUMMARY

RELEASE (ACRE-FEET)

JOINT MAIN CANAL	1,984	OUTLET	0
SOUTH MAIN CANAL	2,892	SPILL	7,228
		TOTAL	12,104

San Joaquin Precipitation: 5-Station Index, October 20, 2015



Percent of Average for this Date: 117%

1982-1983 (wettest) 77.4

2005-2006 Daily Precip. 56.3

Average (1961-2010) 40.8

2013-2014 Daily Precip. 20.4

2014-2015 Daily Precip. 19.0

1923-1924 (driest) 15.4

1976-1977(2nd driest & driest thru Aug) 14.8

Precip: 1.5

Cumulative Daily/Monthly Precipitation (inches)

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90

Oct 1 Nov 1 Dec 1 Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1

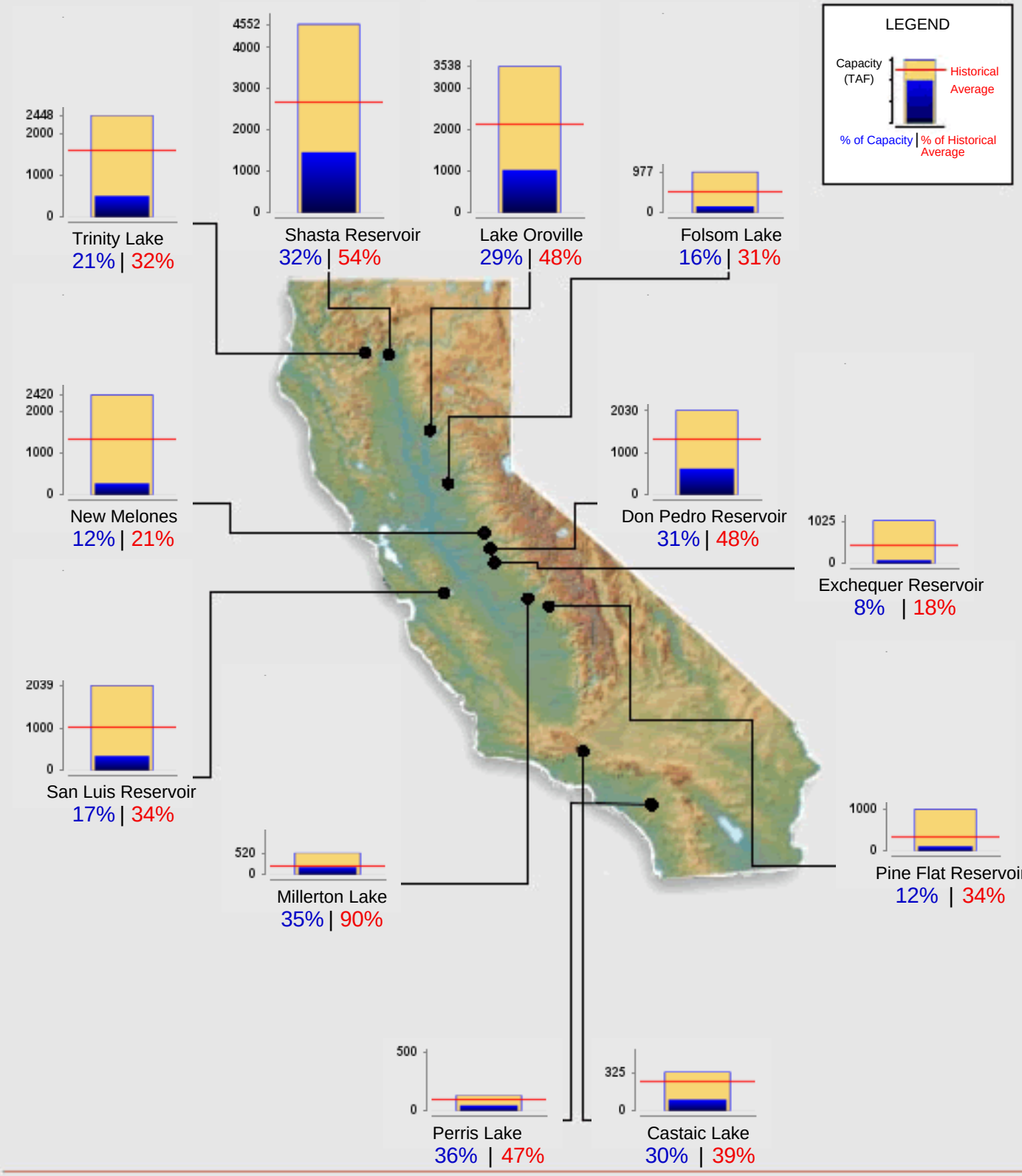
Water Year (October 1 - September 30)

Total Water Year Precipitation

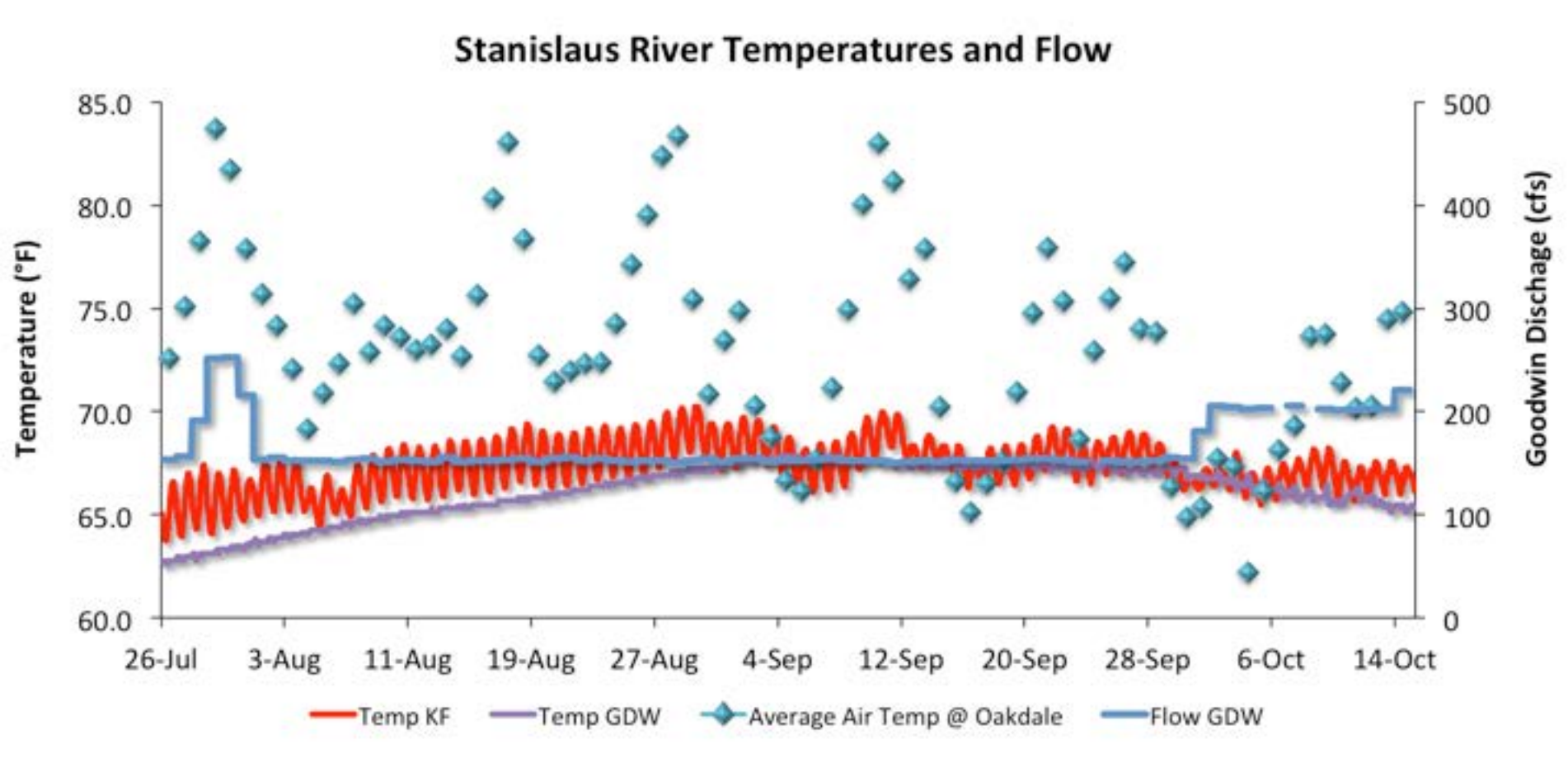
Reservoir Conditions

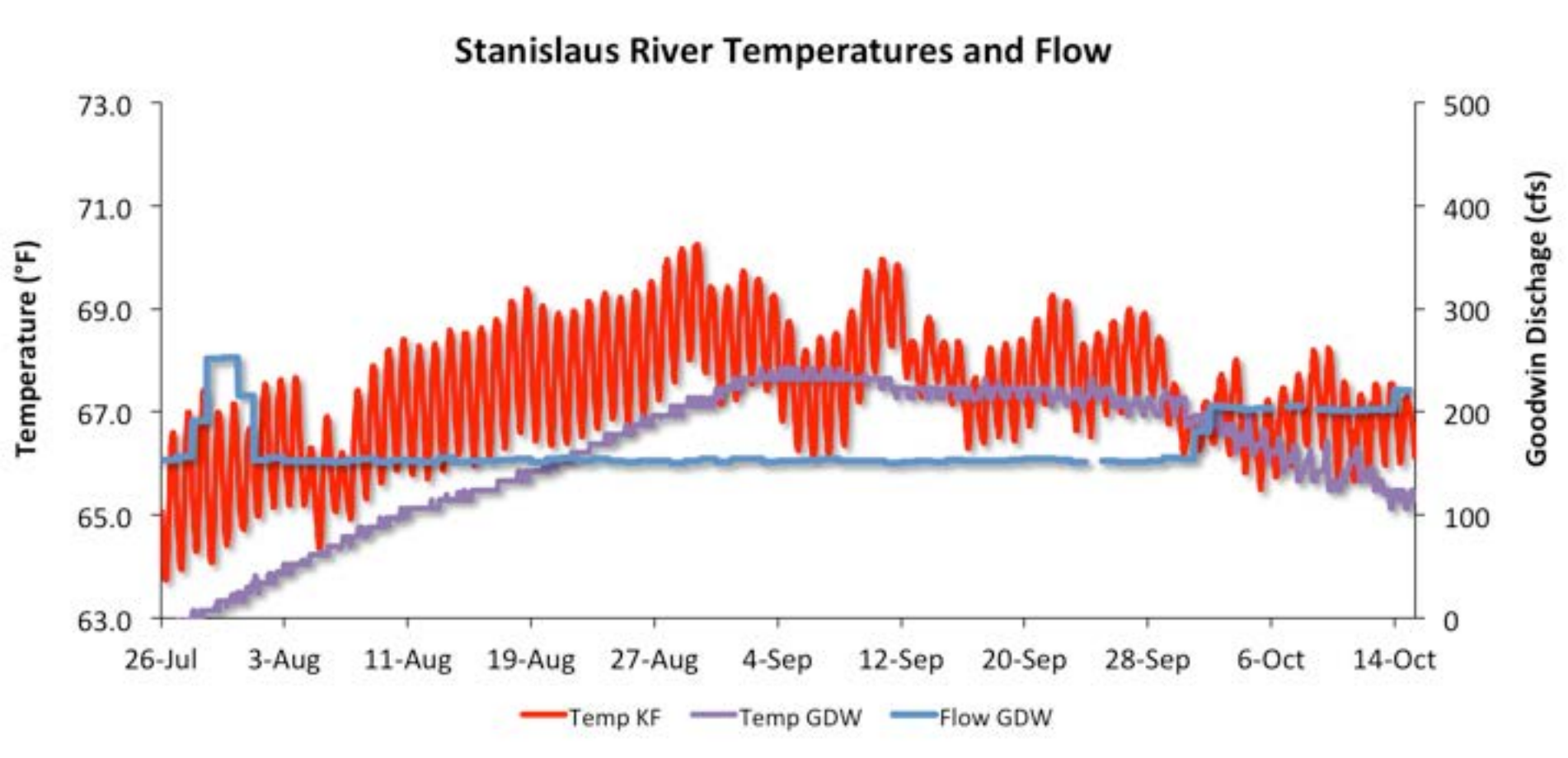
Ending At Midnight - October 19, 2015

CURRENT RESERVOIR CONDITIONS



Graph Updated 10/20/2015 07:45 AM


Stanislaus River Temperatures and Flow
Temperature (°F)
85.0
80.0
75.0
70.0
65.0
60.0
Goodwin Dischage (cfs)
500
400
300
200
100
0
26-Jul
3-Aug
11-Aug
19-Aug
27-Aug
4-Sep
12-Sep
20-Sep
28-Sep
6-Oct
14-Oct
Temp KF
Temp GDW
Average Air Temp @ Oakdale
Flow GDW


Stanislaus River Temperatures and Flow
Temperature (°F)
73.0
71.0
69.0
67.0
65.0
63.0
Goodwin Dischage (cfs)
500
400
300
200
100
0
26-Jul
3-Aug
11-Aug
19-Aug
27-Aug
4-Sep
12-Sep
20-Sep
28-Sep
6-Oct
14-Oct
Temp KF
Temp GDW
Flow GDW