

**MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS
RESERVOIR OPERATIONS COMMITTEE**

COMMITTEE MEMBERS

David Hart, Chair
Ken Ekelund
Fred Ledesma
Mark Nielsen
David Pozzi

John Baillie
Benny Jefferson
Paavo Ogren
Tom Shepherd (Parks)
Randy Korsgaard (CalParks)

TIME: 1:30 pm
DATE: Thursday, July 11, 2013
PLACE: Monterey County Water Resources Agency
Board Room
893 Blanco Circle
Salinas, CA 93901

AGENDA

1. **CALL TO ORDER**

2. **PUBLIC COMMENT**
(Limited to three (3) minutes per speaker on matters within the jurisdiction of the Agency not listed on this agenda. The public will have the opportunity to ask questions and make statements on agenda items as the Committee considers them.)

3. **APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE MEETINGS HELD ON JUNE 6, 2013**
The Committee will consider approval of the minutes of the above-mentioned meeting (Attachment 1).

4. **REVIEW THE STATUS OF BOTH RESERVOIRS; AND, REVIEW RELEASES AND RELEASE SCHEDULE / DISCUSS POSSIBLE RELEASE OPTIONS**
Howard Franklin, Senior Water Resources Hydrologist / Program Manager will present a summary of current conditions at both reservoirs, as well as provide a synopsis of the release changes that have occurred since the last meeting. The Committee will discuss possible reservoir release scenario options and a proposed Reservoir Release Schedule for this conservation period (Attachments 2, 2a, 3, 3a, 4).

5. RECEIVE REPORT REGARDING OPERATIONS AND MAINTENANCE ACTIVITIES AT THE RESERVOIRS

Brent Buche, Assistant General Manager / Chief of Operations and Maintenance will present a verbal report discussing the various Operations and Maintenance activities at both reservoirs that have occurred over the last month.

6. RECEIVE REPORTS ON STATUS OF:

- A. LAKE RECREATION BY CONCESSIONAIRE & PARKS DEPARTMENT**
- B. EASEMENTS AND AGENCY LEASES**
- C. QUAGGA / ZEBRA MUSSEL PLAN**
- D. UPDATE ON SLO COUNTY ACTIVITIES**

7. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS

The Committee will discuss and determine details for its next meeting.

8. ADJOURNMENT

**-MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS
RESERVOIR OPERATIONS COMMITTEE**

David Hart, Chair
Ken Ekelund
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John Baillie
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Tom Shepherd
Randy Korsgaard

TIME: 12:00 PM.
DATE: Thursday, June 6, 2013
PLACE: Dragon Lake Grill
Lake Nacimiento
Bradley, CA 93426

MINUTES

1. **CALL TO ORDER @ 12:05 p.m. by Chair David Hart.**
Members present: David Hart, Fred Ledesma, Mark Nielsen, John Baillie, Benny Jefferson, Dean Benedix (for Paavo Ogren), Tom Shepherd, Randy Korsgaard

Members absent: Ken Ekelund, David Pozzi

A quorum was established.
2. **PUBLIC COMMENT**
None.
3. **APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE MEETING HELD ON MAY 2, 2013**
Item 5 second paragraph - statement about gate malfunction should say "*gate over-rotated*", and not dropped open. Also item 6C quagga mussels – should state "*Mark Nielsen provided an update.*"

Committee Action: On motion and second of Committee members John Baillie and Benny Jefferson the Committee unanimously approved the minutes that will be corrected with the statements mentioned above.
4. **REVIEW STATUS OF BOTH RESERVOIRS; AND, REVIEW RELEASES AND RELEASE SCHEDULE**
German Criollo, Associate Water Resources Hydrologist, provided a status report. The Release Schedule was presented to the BOD in May for approval. The releases for the month of May were made for conservation purposes. Staff made assessments of the Nacimiento River for the expected low-flow conditions due to Hydroelectric Powerplant

repair efforts. At the end of May releases were decreased to 30 cfs for a day and staff assessed stream conditions below Nacimiento Dam. Releases were adjusted today from 560 cfs to 520 cfs at San Antonio and will continue at this amount through June.

NACIMIENTO elevation is 754.10 feet and 165,271 acre-feet of storage, 44% of capacity, and current release is 48 cfs.

SAN ANTONIO elevation is 727.10 feet and 122,225 acre-feet of storage, 36% of capacity, and current release is 533 cfs.

5. RECEIVE REPORT REGARDING OPERATIONS AND MAINTENANCE ACTIVITIES AT THE RESERVOIRS

Brent Buche, Assistant General Manager / Chief of Operations and Maintenance, provided a report. There has been routine maintenance occurring at both Nacimiento and San Antonio. At Nacimiento there are also repairs taking place at the Nacimiento Hydroelectric Powerplant. The components from Allied Engineering have been delivered and were installed Monday. As reported previously, the penstock needs to be drained when workers are installing parts inside the Powerplant. The penstock will be drained again for the installation of the generator which is due to arrive soon from the Los Angeles service center and will be installed at the Powerplant next Monday. Everything is expected to be installed and reassembled by the end of July.

There was a question about the repairs on the valve actuators. The actuators were damaged and have been rebuilt and reinstalled. Staff will be ordering new actuators but were unable to locate the exact type. There is an adapter for a new actuator but it's uncertain if that will work.

6. RECEIVE REPORTS ON STATUS OF:

A. LAKE RECREATION BY CONCESSIONAIRE & PARKS DEPARTMENT

Randy Korsgaard, Managing Park Ranger, CalParks, reported there is still water in the reservoirs, and staff is finishing up projects, and preparing for the summer season. Tom Shepherd, Monterey County Parks Department, reported on lake recreation activities. Tom also introduced Richard Riddle, Managing Park Ranger and Casey Nielsen, Managing Park Ranger from his staff. The Memorial Day weekend had a good turnout.

Randy Korsgaard, Cal Parks, will be developing a marketing strategy to draw visitors to the lakes. There was a fatality on Memorial Day weekend due to carbon monoxide poisoning. Parks staff is planning on utilizing staff from the other County parks as needed for the upcoming holidays.

There were also questions about safety at the lakes. Personnel from the Sheriff's Department have been patrolling and there will be personnel from the Probation Department present on the Fourth of July holiday. The vessel inspections for mussels are going well; it seems most of the visitors are now familiar with the inspection process.

B. EASEMENTS AND AGENCY LEASES

Chris Keehn, Right-Of-Way Specialist, provided an update. The Agency has been contacted by Cantinas Camp with a possible request to build a bridge in the floodage easement. The Agency also received another request for a possible easement. There was a question whether an encroachment issue (a house built on Agency property), had been resolved. County Counsel continues to review this issue.

C. QUAGGA/ZEBRA MUSSEL PLAN

Elizabeth Krafft, Senior Water Resources Hydrologist, provided a report. Elizabeth recently attended a Mussel Summit in Folsom in May, along with Casey Nielsen and Richard Riddle. The summit was presented by the California Department of Fish & Wildlife. One of the things they discussed was the problem with the statewide tracking program, mainly because of the uncontrollability of people boating in the Colorado River system, and then boating in uninfected water bodies.

In May 2013 Agency staff did a plankton tow on both Nacimiento and San Antonio reservoirs; the results are still being analyzed. The Department of Fish & Game is conducting more tows in June, July, and August, and Agency staff will do this again in September.

Mark Nielsen, NRWMAC, reported that additional people have recently completed training to be Level 2 Inspectors, in addition to Casey Nelsen and Richard Riddle. This has allowed the ability to provide more certification training classes this season; two classes were held on May 18, two classes on June 1, and a Resident Vessel Program class is scheduled for this weekend. There has been support towards this effort by everyone, by providing locations and training materials.

D. UPDATE ON SLO COUNTY ACTIVITIES

Dean Benedix, San Luis Obispo County, provided a report. The repairs of the intake Nacimiento Water Project were completed in May. Water is now being delivered to the city of San Luis Obispo. A risk assessment study is being conducted by SLO County regarding the interceptor pipe at Oak Shores.

7. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS

The next meeting is scheduled for Thursday, July 11, 2013 at 1:30 pm at the Agency. Chairman David Hart requested updates about Monterey and SLO County legislature.

8. ADJOURN MEETING TO TOUR LAKE NACIMIENTO

The Committee adjourned the meeting at 1:00 pm for a boat tour of Lake Nacimiento.

SUBMITTED BY: TERESA CAMPA

**MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS – RESERVOIR OPERATIONS COMMITTEE**

MEETING DATE:	July 11, 2013	AGENDA ITEM:	
AGENDA TITLE:	RESERVOIR RELEASE UPDATE		
Consent ()		Action ()	
Information (X)			
SUBMITTED BY:	Howard Franklin	PREPARED BY:	Howard Franklin
PHONE:	(831) 755-8902	PHONE:	(831) 755-8902
DEADLINE FOR BOARD ACTION:	July 11, 2013		

RECOMMENDED BOARD ACTION:

None – item presented for informational purposes

PRIOR RELEVANT BOARD ACTION:

None – the Board of Directors receives monthly updates on the Agency’s reservoir status

DISCUSSION/ANALYSIS:

RESERVOIR ELEVATION / STORAGE: As of July 2, 2013, San Antonio Reservoir is at approximately 715.3 feet mean sea level (msl), 92,875 acre-feet of storage. Nacimiento Reservoir is at elevation 752.55 feet msl, 159,748 acre-feet of storage. San Antonio Reservoir is currently at 28% of storage capacity and Nacimiento Reservoir is at 42% of capacity.

RESERVOIR RELEASES: Conservation releases to the Salinas River continued during the month of June for aquifer recharge and Salinas River Diversion Facility operations. Maintenance at the Nacimiento Hydroelectric Plant has governed the operation of releases from both reservoirs. Minimum fisheries releases of 60 cfs are being made from the Low Level Outlet Works when possible. During actual maintenance activities, releases are temporarily constrained to bypass pumping directly from the reservoir (approximately 12 cfs). When personnel are not performing activities within the Plant, releases are increased to a flow between 30 to 60 cfs. Nacimiento releases will fluctuate between approximately 12 cfs and 60 cfs while construction work is being performed on the Hydroelectric Plant.

Current releases are as follows:

- Nacimiento Reservoir: 30 cfs
- San Antonio Reservoir: 590 cfs

Total releases from both reservoirs to the Salinas River are approximately 620 cfs. As July 2, 2013 the following “provisional” flows have been recorded by the USGS and/or Agency:

- Salinas River near Spreckels: 37 cfs (steady)
- Salinas River near Chualar: 94 cfs (steady)
- Salinas River near Soledad: 260 cfs (steady)
- Salinas River near Bradley: 606 cfs (steady)

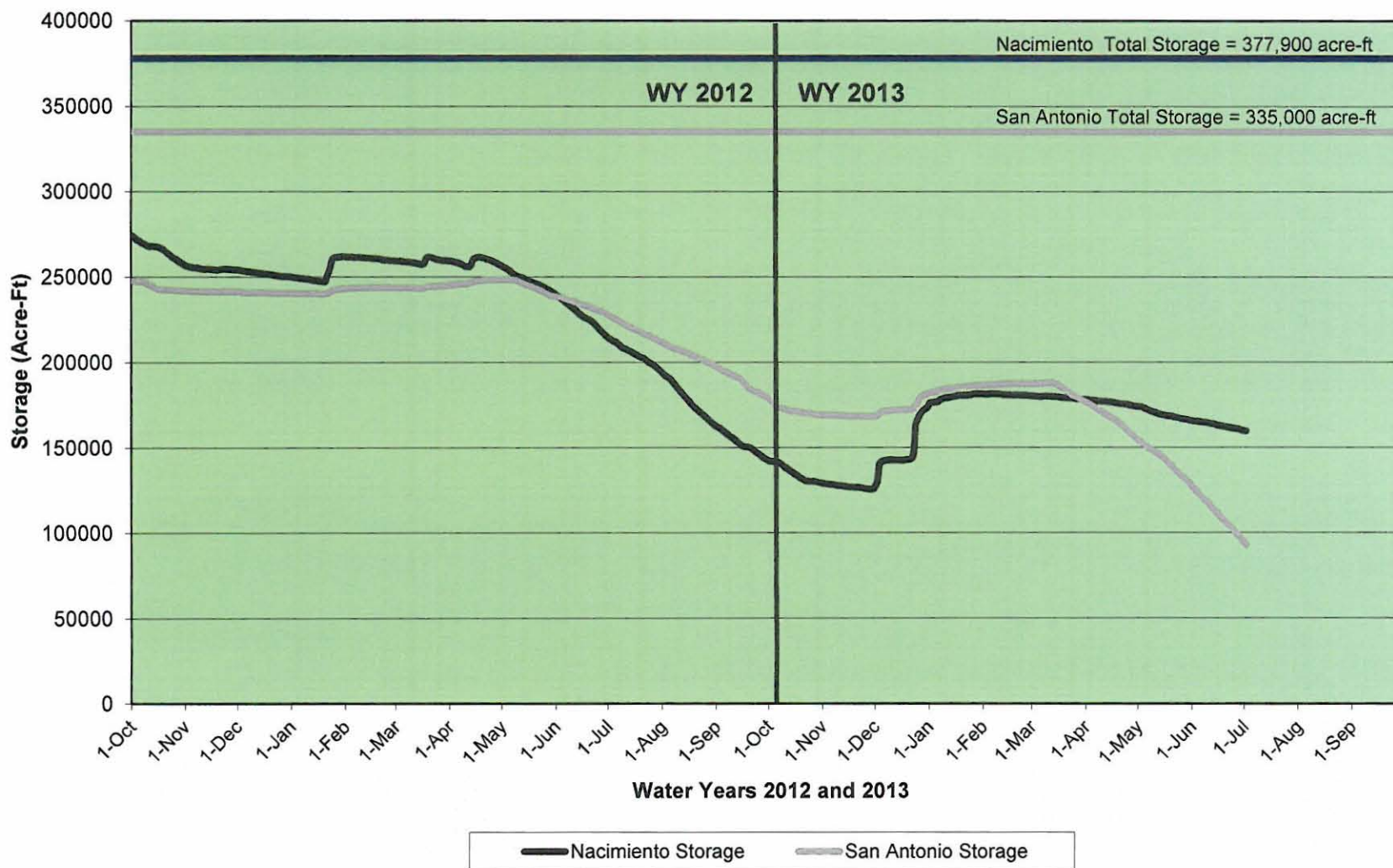
Synopsis of Reservoir Release Changes from April 2, 2013 to June 24, 2013

Date	San Antonio Reservoir		Nacimiento Reservoir		Total Releases
	Starting Flow	Ending Flow	Starting Flow	Ending Flow	
April 2, 2013*	275	325	60	60	385
April 18, 2013*	325	365	60	60	425
April 19, 2013*	365	440	60	60	500
April 23, 2013*	440	465	60	60	525
April 29, 2013*	465	440	60	60	500
May 3, 2013	440	265	60	260	525
May 6, 2013	265	350	260	175	525
May 8, 2013	350	325	175	175	500
May 14, 2013	325	425	175	115	540
May 15, 2013	425	480	115	60	540
May 28, 2013	480	510	60	30	540
May 29, 2013	510	480	30	60	540
June 3, 2013	480	520	**	31	551
June 4, 2013	520	560	**	31	591
June 6, 2013	560	520	**	48	568
June 7, 2013	520	550	**	62	612
June 24, 2013	550	590	**	40	630

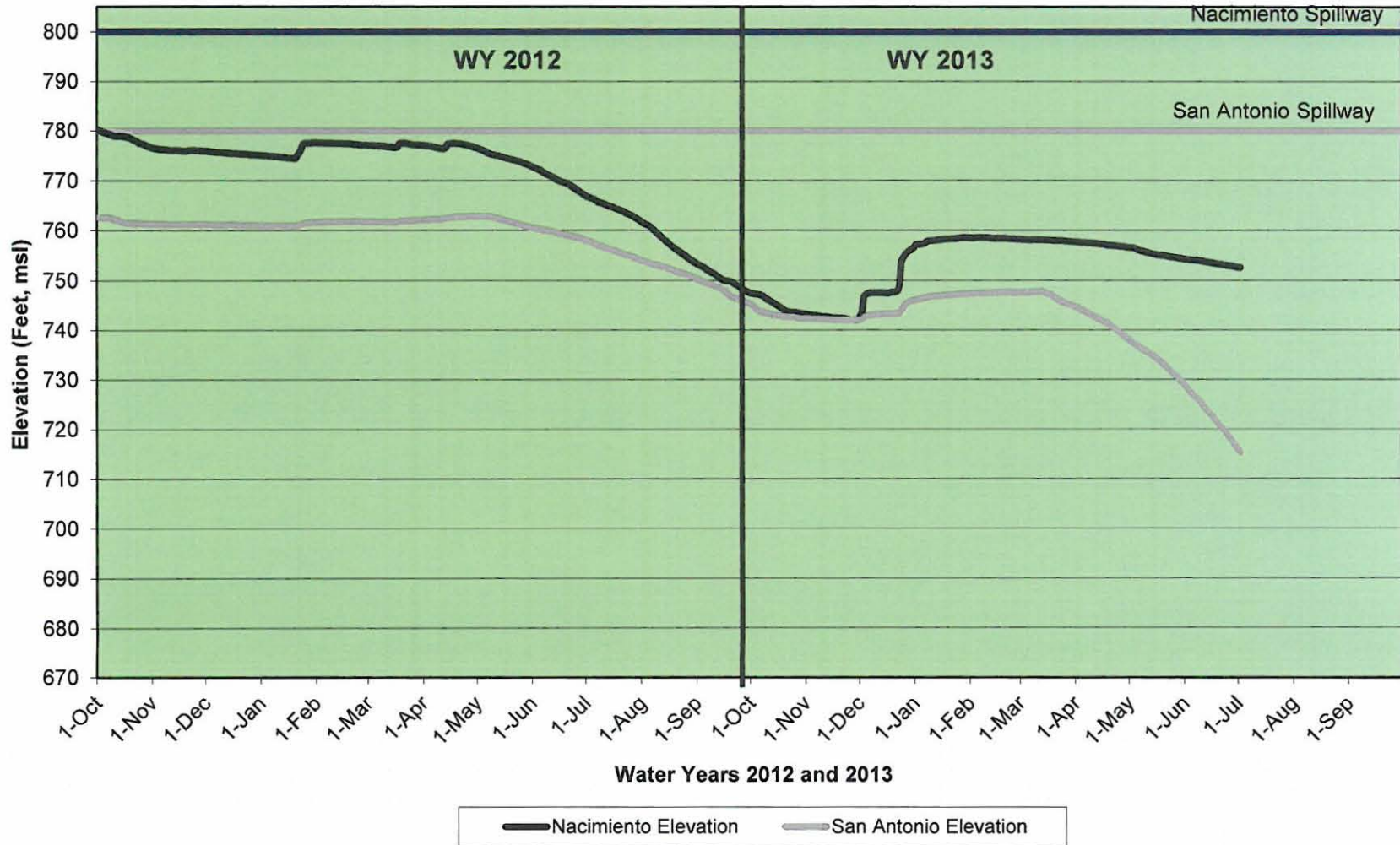
*Operation of Nacimiento Releases through high level gates result in minor discharge variations; as noted in the reported Provisional Mean Daily Flow at the USGS Gage, Nacimiento River below Nacimiento Dam near Bradley. These variations will be recorded by the Agency but not reported in this document unless the magnitude of the change is greater than +/- 10% of target release (currently 60 cfs).

** Release rates will fluctuate while repair work is being performed on the Nacimiento hydroelectric facility. Daily reservoir releases will be reported as mean daily flow at the USGS gage Nacimiento River below Nacimiento Dam during the repair period.

Reservoir Storage



Reservoir Elevation



MONTEREY COUNTY WATER RESOURCES AGENCY

PROPOSED RELEASE SCHEDULE - Estimated Elevation/Storage/NWP Diversions; after July 1st

7/2/2013

	NACIMIENTO								SAN ANTONIO					
	Combined Releases (cfs)*	Combined Releases (ac-ft)	Evap. Losses (ac-ft)**	Reservoir Releases (cfs)*	Reservoir Releases (ac-ft)	NWP Orders (ac-ft)	NWP Diversions (ac-ft)	Storage (ac-ft)	Elev. (ft)	Evap. Losses (ac-ft)**	Reservoir Releases (cfs)*	Reservoir Releases (ac-ft)	Storage (ac-ft)	Elev. (ft)
1/1/2013	70	4,304	446	60	3,689	776	8	176,101	757.1	397	10	615	181,623	746.0
2/1/2013	72	3,999	579	62	3,443	1,037	0	181,225	758.5	431	10	555	186,445	747.3
3/1/2013	255	15,658	974	63	3,874	1,033	0	180,288	758.3	830	192	11,784	187,358	747.6
4/1/2013	436	25,934	1,200	62	3,679	1,133	0	178,087	757.7	1,284	374	22,255	176,675	744.6
5/1/2013	529	32,522	2,450	112	6,867	1,166	99	173,935	756.5	2,282	417	25,655	154,493	738.0
6/1/2013	601	35,763	2,930	49	2,916	1,258	561	165,632	754.2	2,388	552	32,847	127,265	728.9
7/1/2013	635	39,045	3,242	105	6,456	2,035	2,035	159,748	752.6	2,191	530	32,589	94,000	715.8
8/1/2013	650	39,968	2,863	285	17,524	2,094	2,094	148,014	749.1	1,446	365	22,443	59,220	697.1
9/1/2013	589	35,048	1,953	389	23,147	1,880	1,880	125,533	742.0	794	200	11,901	35,331	679.1
10/1/2013	304	18,693	1,200	304	18,693	1,240	1,240	98,553	732.5	472	0	0	22,636	665.4
11/1/2013	60	3,570	560	60	3,570	1,253	1,253	77,420	723.9	248	0	0	22,164	664.8
12/1/2013	70	4,304	354	60	3,689	844	844	72,037	721.4	150	10	615	21,916	664.4
1/1/2014								67,150	719.1				21,151	663.4
TOTALS:		258,808	18,752		97,548	15,750	10,014			12,913		161,259		

* Mean daily flow for the month in cubic feet per second.

** Evap. Losses estimated from long term pan evaporation data at Nacimiento and San Antonio Reservoirs.

NOTES:

1. Nacimiento Reservoir storage capacity 377,900 acre feet.
2. San Antonio Reservoir storage capacity 335,000 acre feet.
3. Reservoir Operations Committee may make release considerations for fish spawn and holiday periods to benefit recreation.
4. Shaded areas represent periods when elevations are influenced by inflow/runoff; releases may include flood control releases.
5. Preliminary Schedule assumes no inflow to reservoirs after May 1st.
6. "NWP Diversions" are San Luis Obispo County - Nacimiento Water Project conveyance facilities diversions. Max. allowable diversions for water year (Oct. 1 - Sept. 30) are 15,750 ac-ft. To Be Reported (TBR)
7. NACIMIENTO "NWP Diversions" do not include lakeside water use which is estimated at approximately 1,750 acre feet per year.