

**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)

NOTE: Time and Place of Meeting has changed, see attached maps for directions

{Car Pool from Agency Office (893 Blanco Circle) will leave at 8:15 AM, Thursday June 6.
Committee Members - please call Robert Johnson at 831.755.4860 by
noon on Tuesday, June 4 to RSVP a seat in the car pool.}

AGENCY FACILITY TOUR – June 6, 2013

10:00 AM – Committee Members arrive at Green Gate on Vista Road (see attached map). Committee Members will tour the outlet tunnel within San Antonio Dam. Due to Security Procedures, gate will be locked after Committee Members go through. **Gate will be locked by 10:15 AM.**

11:30 AM – Committee Members leave San Antonio Dam en route to Nacimiento Administration Building.

RESERVOIR OPERATIONS COMMITTEE MEETING

TIME: 12:00 PM
DATE: Thursday, June 6, 2013
PLACE: Nacimiento Administration Building – Conference Room
10625 Nacimiento Lake Drive
Bradley, CA 93426

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 MEETING HELD ON MAY 2, 2013**
The Committee will consider approval of the minutes of the above-mentioned meeting (Page 4).
4. **REVIEW THE STATUS OF BOTH RESERVOIRS; AND, REVIEW RELEASES AND RELEASE SCHEDULE**
Staff 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. (Page 6)
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 ACTIVITIES
7. **SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS**
The Committee will discuss and determine details for its next meeting.
8. **ADJOURN MEETING TO TOUR LAKE NACIMIENTO**
The Committee will adjourn meeting for a boat tour of portions of Lake Nacimiento.
9. **ADJOURNMENT**

AGENCY FACILITY TOUR

Directions from Salinas to the Green Gate at Vista Rd (San Antonio Reservoir)

- Take US-101 South go 70 miles
- Take the Jolon Rd exit toward Fort Hunter Liggett go 0.2 miles
- Turn right onto County Rd G18/Jolon Rd go 0.1 miles
- Turn left onto County Rd G19/Nacimiento Lake Dr go 6.9 miles
- Continue onto Vista Rd



MEETING PLACE

Directions from Vista Rd to the Nacimiento Administration Building

- Drive east on Vista Rd toward County Rd G19/Nacimiento Lake Dr
- Turn right onto County Rd G19/Nacimiento Lake Dr go 3.5 miles
- Continue on Nacimiento lake Dr across Nacimiento Dam
- As you cross the Dam, Turn right onto Resort Dr go 1.0 miles
- Nacimiento Administration Building on left



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

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

John Baillie
Benny Jefferson
Paavo Ogren
Tom Shepherd
Randy Korsgaard

TIME: 1:30 p.m.
DATE: **Thursday, May 2, 2013**
PLACE: Monterey County Water Resources Agency
Board Room
893 Blanco Circle
Salinas, CA 93901
(831) 755-4860

MINUTES

1. **CALL TO ORDER @ 1:30 p.m. by Chair David Hart.**
Members present: David Hart, Ken Ekelund, Mark Nielsen, John Baillie,
Paavo Ogren, Tom Shepherd, Randy Korsgaard
Members absent: Fred Ledesma David Pozzi, Benny Jefferson

A quorum was established.
2. **PUBLIC COMMENT**
None.
3. **APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE HELD ON APRIL 11, 2013**

Committee Action: On motion and second of Committee members Ken Ekelund and John Baillie the Committee unanimously approved the minutes.

4. **REVIEW STATUS OF BOTH RESERVOIRS; AND, REVIEW RELEASES AND RELEASE SCHEDULE / DISCUSS POSSIBLE RELEASE OPTIONS**
Howard Franklin, Senior Water Resources Hydrologist/Program Manager, provided a status report. At Nacimiento the high level gates are closed and 60 cfs is being released from the Low Level Outlet Works (LLOW). Releases from Nacimiento were minimized in order to have water available in the approach channel in case pumping water is necessary to maintain fish flows in the Nacimiento River during the Nacimiento Hydroelectric Powerplant component installation. The contractor has requested that there be double containment as a safety precaution during the installation. This involves shutting the intake valves, draining the penstock and shutting the valves at the powerplant. With the penstock being dry, if a

failure were to occur there would be containment before water would enter the powerplant. Once the penstock is shut down and drained, water would have to be pumped over the spillway. *(Staff reported on Agenda Item 5 – O & M activities, before returning to Item 4.)*

NACIMIENTO elevation is 756.50 feet and 173,935 acre-feet of storage, 46% of capacity, and current release is 60 cfs.

SAN ANTONIO elevation is 737.95 feet and 154,493 acre-feet of storage, 46% of capacity, and current release is 460 cfs.

Committee Action: On motion and second of Committee members Dave Hart and John Baillie the Committee accepted the recommendation from staff to minimize releases from Nacimiento Reservoir to reserve the ability to release from the High Level Gates during installation of the components at the Nacimiento Hydroelectric Powerplant, which is estimated to occur the week of May 20, 2013.

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

Chris Moss, Senior Water Resources Engineer, Operations and Maintenance, provided a report. The three actuators at the LLOW have been rebuilt and reinstalled. Repair work at Nacimiento is approximately 40% complete. Unit 1 is being repaired and is expected to arrive at Nacimiento on May 20. The wicket gates, runner, and weir rings are also out for repairs and delivery to Nacimiento is expected on May 20 also. Reinstallation of the components will begin May 20 and will take about approximately one month. Once installation is complete, a series of start-up tests will be conducted. The powerplant is estimated to resume operation in late June or early July.

In early April, the Division of Safety of Dams (DSOD) conducted inspections of both San Antonio and Nacimiento Dams and both passed inspection. DSOD is requesting additional information on the Obermeyer Gate operation at Nacimiento. There have been failures of Obermeyer Gates at other locations; including a restraining strap that pulled loose, and a gate that dropped open unintentionally. Staff is looking at alternative methods for operating the gates if such issues are ever encountered. Also, the CAISO meter has been installed and will be tested to ensure proper operation at the control center. The Committee requested future updates on the Obermeyer Gate.

6. RECEIVE REPORTS ON STATUS OF:

A. LAKE RECREATION BY CONCESSIONAIRE & PARKS DEPARTMENT

Randy Korsgaard, Managing Park Ranger and Tom Shepherd, Monterey County Parks Department, reported. Due to lower lake levels expected at San Antonio this year, it may be necessary to suspend hiring additional employees for the season. Other activities include preparations for the San Antonio Wildflower/Triathlon Festival scheduled for this weekend which is expected to draw approximately 18,000 participants/visitors. A Mud Run event was held last weekend and had approximately 270 participants/visitors.

B. EASEMENTS AND AGENCY LEASES

Chris Keehn, Right-Of-Way Specialist, stated there was nothing new to report.

C. QUAGGA / ZEBRA MUSSEL PLAN

Elizabeth Krafft, Senior Water Resources Hydrologist, and Tom Shepherd reported. Training sessions for Mussel Inspection Level 1 are scheduled to begin next week. Elizabeth Krafft from the Agency, and staff from Parks Department will be attending a Mussel Summit in Folsom, CA on May 15, 2013. Agency staff will be making plankton tows in the summer, and the Department of Fish & Game will be performing the lab analyses.

Robert Johnson, Assistant General Manager/Chief of Water Resources Management, provided an update on the State Technical Advisory Group (TAG), and the fees for mussel prevention that will be collected by the California Department of Boating & Waterways through the annual vessel registration program.

SLO was requested to provide an update on the Resident Vessel Program activities at the June meeting.

Mark Nielsen stated the NRWAC group will receive training to become certified and will provide an update at next month's Committee meeting.

D. UPDATE ON SLO COUNTY ACTIVITIES

Paavo Ogren, San Luis Obispo County, provided an update. The repairs on the Nacimiento Water Project are expected to be completed on May 20 with water deliveries to begin soon thereafter.

E. UPDATE ON THE BOAT DOCK ORDINANCE REVAMP

Howard Franklin stated Agency staff are currently working on updating the Boat Dock Ordinance, and are working with Parks Department, and County Counsel for input.

7. DISCUSS LOGISTICS FOR THE JUNE COMMITTEE MEETING

The Committee discussed logistics for the June meeting. The Committee will first tour the San Antonio tunnel, then have lunch during the meeting in the Nacimiento Admin Room, and then possibly tour Nacimiento Reservoir from 1:00-3:00 pm. The Agency will provide transportation from Salinas. The van will depart from the Agency at 8:15 a.m. on June 6, 2013.

8. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS

The next meeting is scheduled for Thursday, June 6, 2013, beginning at San Antonio. Items for discussion include an update on construction activity at Nacimiento, and resident vessel inspection training.

9. ADJOURNMENT BY CHAIR DAVID HART @ 3:10 P.M.

SUBMITTED BY: TERESA CAMPA



WATER RESOURCES AGENCY

MEMORANDUM

Monterey County

DATE: May 29, 2013

TO: Reservoir Operations Committee

FROM: Robert Johnson

SUBJECT: Reservoir Release Update

RESERVOIR ELEVATION / STORAGE: As of the date of this memorandum, San Antonio Reservoir is at approximately 730.00 feet mean sea level (msl), 130,400 acre-feet of storage. Nacimiento Reservoir is at elevation 754.40 feet msl, 166,354 acre-feet of storage. San Antonio Reservoir is currently at 39% of storage capacity and Nacimiento Reservoir is at 44% of capacity.

RESERVOIR RELEASES: Conservation releases to the Salinas River continued during the month of May for aquifer recharge and Salinas River Diversion Facility operations. Maintenance activities at Nacimiento Dam reached a point where releases were no longer constrained to the High Level Gates. As of May 1st, the High Level Gates at Nacimiento have been closed. Minimum fisheries releases of 60 cfs are being made from the Low Level Outlet Works since the middle of May. On May 28th, releases were temporarily decreased to 30 cfs for approximately 24 hours to assess low-flow conditions on the Nacimiento River.

Current releases are as follows:

Nacimiento Reservoir:	60 cfs
San Antonio Reservoir:	480 cfs

Total releases from both reservoirs to the Salinas River are approximately 540 cfs. As of the date of this memorandum the following "provisional" flows have been recorded by the USGS and/or Agency:

- Salinas River near Spreckels: 39 cfs (steady)
- Salinas River near Chualar: 97 cfs (steady)
- Salinas River near Soledad: 239 cfs (steady)
- Salinas River near Bradley: 501 cfs (steady)

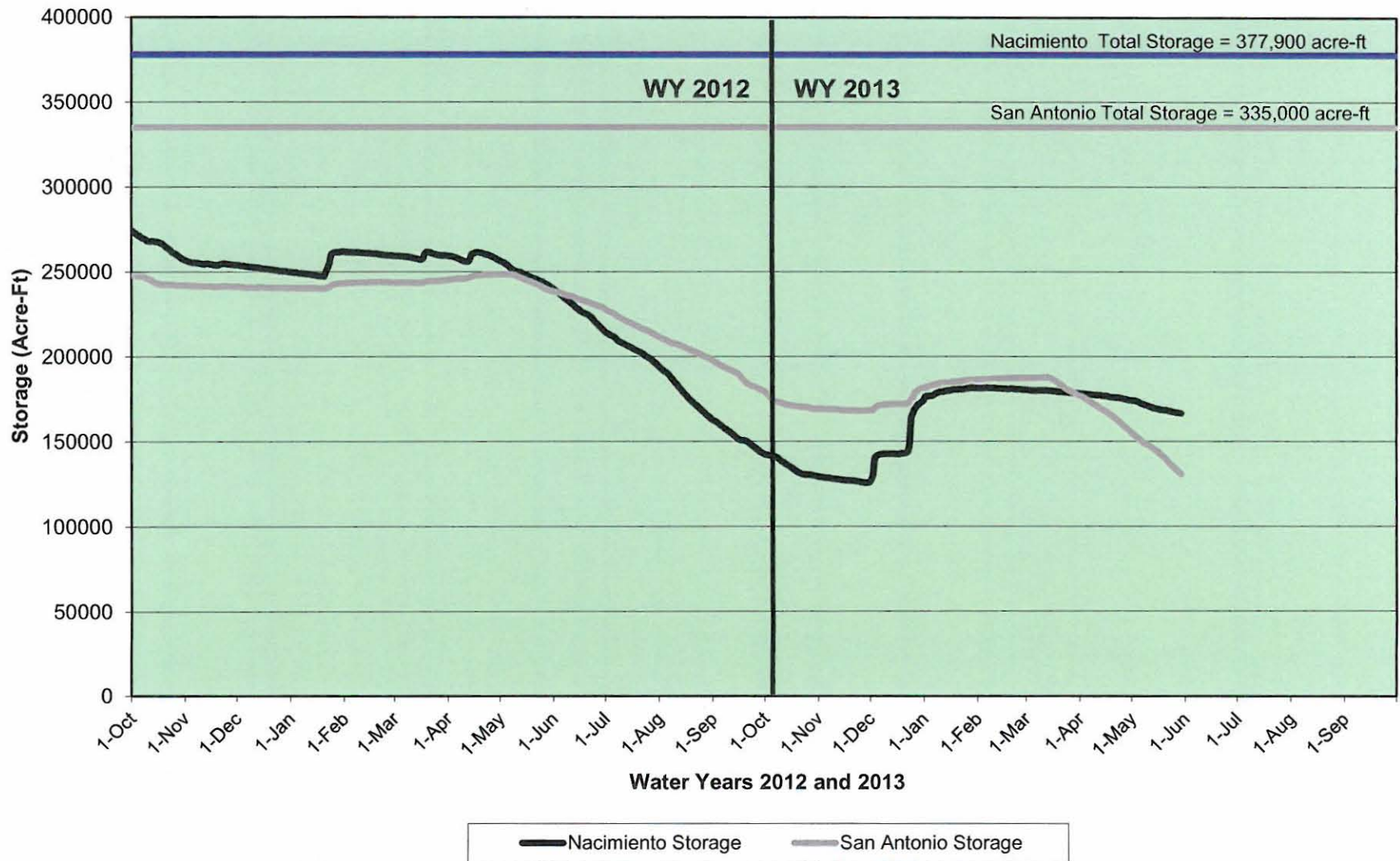
Synopsis of Reservoir Release Changes from March 13, 2013 to May 29, 2013

Date	San Antonio Reservoir		Nacimiento Reservoir		Total Releases
	Starting Flow	Ending Flow	Starting Flow	Ending Flow	
March 13, 2013*	10	200	60	60	260
March 14, 2013*	200	300	60	60	360
March 18, 2013*	300	400	60	60	460
March 19, 2013*	400	500	60	60	560
March 19, 2013**	500	400	60	60	460
March 25, 2013*	400	200	60	60	260
March 26, 2013*	200	160	60	60	220
March 27, 2013*	160	250	60	60	310
March 29, 2013*	250	275	60	60	335
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	175	260	350	525
May 8, 2013	175	175	350	325	500
May 14, 2013	175	115	325	425	540
May 15, 2013	115	60	425	480	540
May 28, 2013	60	30	480	510	540
May 29, 2013	30	60	510	480	540

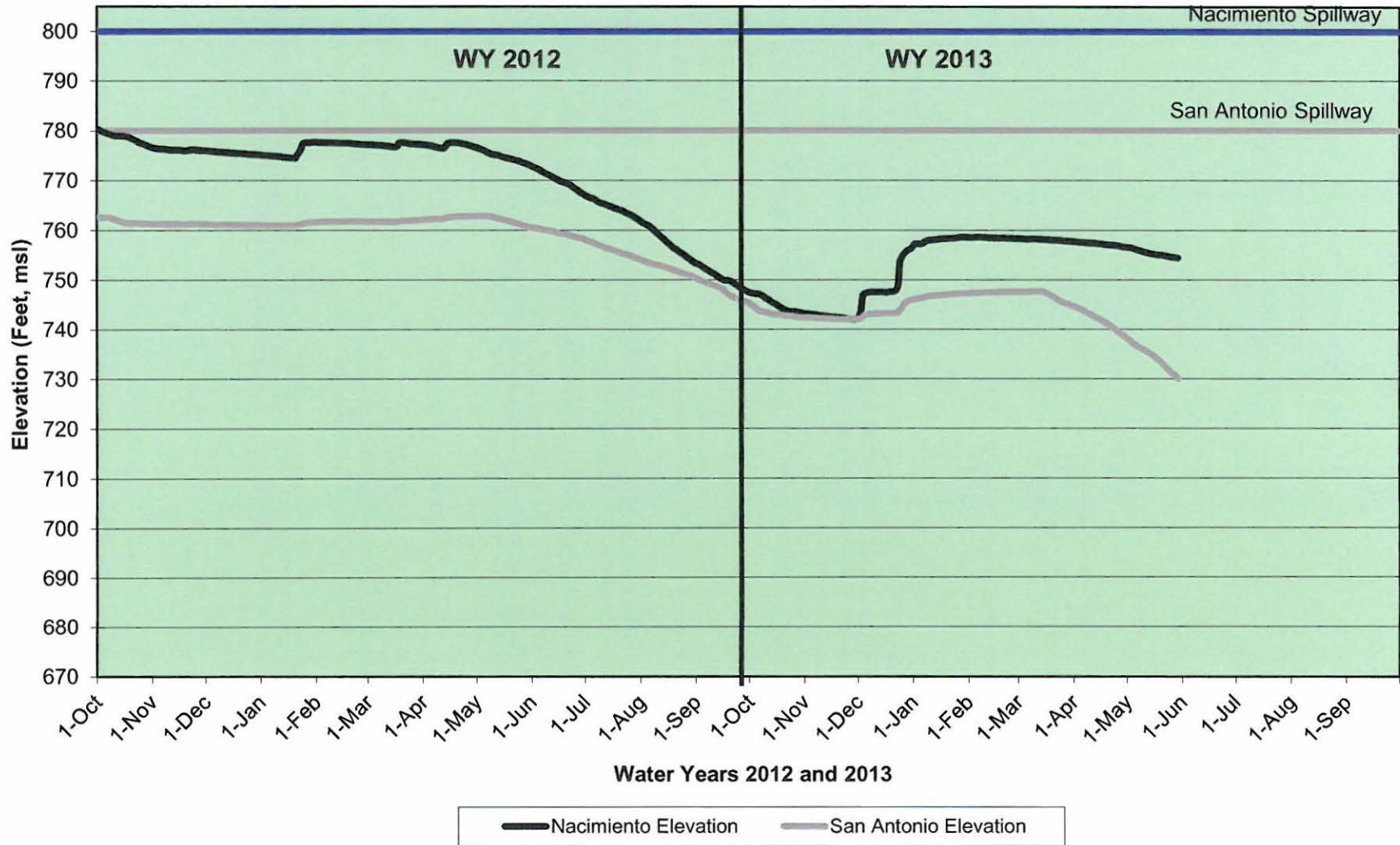
*Operation of Nacimiento Releases through high level gates result in minor discharge variations; as noted in the reported Provisional Mean Daily Flow at the USGS Gage, Nacimiento River below Nacimiento Dam near Bradley, and as indicated in this table. These variations will be recorded by the Agency but no longer reported in this document unless the magnitude of the change is greater than +/- 10% of target release (currently 60 cfs).

**Increased releases from San Antonio Reservoir to 500 cfs for approximately five hours then reduced releases back to 400 cfs.

Reservoir Storage



Reservoir Elevation



MONTEREY COUNTY WATER RESOURCES AGENCY

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

5/17/2013

RESERVOIR RELEASE SCHEDULE FOR 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	532	32,712	2,450	113	6,948	1,166	1,166	173,935	756.5	2,282	419	25,764	154,493	738.0
6/1/2013	582	34,632	2,930	60	3,570	1,258	1,258	163,371	753.6	2,388	522	31,062	126,447	728.6
7/1/2013	626	38,492	3,140	392	24,103	2,035	2,035	155,612	751.4	2,378	234	14,388	92,997	715.4
8/1/2013	650	39,968	2,622	393	24,165	2,094	2,094	126,333	742.3	1,886	257	15,803	76,232	707.2
9/1/2013	605	36,001	1,722	375	22,314	1,880	1,880	97,452	732.1	1,202	230	13,686	58,544	696.7
10/1/2013	361	22,197	1,043	242	14,880	1,240	1,240	71,535	721.2	706	119	7,317	43,655	686.1
11/1/2013	70	4,165	482	60	3,570	1,253	1,253	54,372	712.4	347	10	595	35,632	679.3
12/1/2013	70	4,304	302	60	3,689	844	844	49,067	709.3	210	10	615	34,690	678.5
1/1/2014								44,231	706.3				33,866	677.7
TOTALS:		262,366	17,891		117,927	15,750	11,778			14,340		144,439		

* 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.