

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

COMMITTEE MEMBERS

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

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

TIME: 1:30 pm
DATE: Thursday, November 7, 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 MEETING HELD ON OCTOBER 3, 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 (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
Fred Ledesma
Mark Nielsen
David Pozzi
Mark Gonzales

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

TIME: 1:30 p.m.
DATE: **Thursday, October 3, 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, David Pozzi, Mark Gonzales, John Baillie, Paavo Ogren, Richard Riddle (*for Tom Shepherd*)

Members absent: Fred Ledesma, Benny Jefferson, Randy Korsgaard

A quorum was established.

2. PUBLIC COMMENT

John D'Ornellas, General Manager, Heritage Ranch Community Services District (HRCSD), inquired about new developments on the operation guidelines for the reservoirs. Howard Franklin, Senior Water Resources Hydrologist/Program Manager, mentioned there have been no updates since a concept memo was distributed last year and stated the guidelines need to be brought to the Committee for review and input.

Rob Johnson, Assistant General Manager and Chief of Water Resources Planning, mentioned that Randy Korsgaard, Managing Park Ranger, has retired from CalParks and will no longer be on the Committee. There was an introduction of Richard Riddle, Senior Park Ranger, Monterey County Parks Department, who was sitting in for Tom Shepherd; and new Committee member Mark Gonzales.

3. APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE HELD ON SEPTEMBER 12, 2013

Committee Action: On motion and second of Committee members Mark Gonzales and John Baillie, the Committee unanimously approved the minutes.

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, provided a status report. The amount being released from both reservoirs is currently 500 cfs and is meeting the Salinas River Diversion Facility (SRDF) demands. To date 6,009 acre feet has been diverted. As the end of the SRDF season nears and demands decrease, the releases from San Antonio will be gradually decreased over several weeks. The diversions last week were approximately 100 acre feet. A full impoundment is required at the end of the SRDF operational season. The Committee reviewed water deliveries from 2010 thru 2013.

Brent Buche, Assistant General Manager and Chief of Operations and Maintenance, reported that there were approximately 3000 dead fish discovered at San Antonio River by staff that was performing a river reconnaissance in support of a shutdown of flows as requested by the state Division of Safety of Dams (DSOD). It was necessary to shut down the flows so the inspecting divers could have immediate access to the intake structure to the outlet works. Prior to these actions occurring staff contacted NOAA Fisheries and biologists were present to monitor the activities. Elizabeth Krafft, Senior Hydrologist, discussed water quality test results from the San Antonio River. The Agency and NOAA Fisheries are investigating the situation. The fish, of varying species including eight steelhead, were in water and not stranded and proper procedures were followed. The Committee requested a copy of the water quality results.

Committee Action: On motion and second of Committee members John Baillie and Ken Ekelund, the Committee unanimously approved to continue releases from both reservoirs through the end of the SRDF season, then decrease to fish minimum releases from both reservoirs, Nacimiento minimum releases through the generator, and recommend approval by the BOD.

NACIMIENTO elevation is 736.10 feet and 108,275 acre-feet of storage, 29% of capacity, and current release is 350 cfs.

SAN ANTONIO elevation is 660.85 feet and 19,288 acre-feet of storage, 6% of capacity, and current release is 150 cfs.

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

Brent Buche, Assistant General Manager and Chief of Operations and Maintenance, provided an update on operations and maintenance activities at the reservoirs. The piezometers at San Antonio are currently being flushed out. The inlet structure of the

outlet was inspected and everything was found to be intact. The bulkhead was operated and the pin was replaced. There is erosion on the bulkhead which will be cleaned and coated when the reservoir elevation is lower and the bulkhead is fully exposed. Other planned maintenance includes replacing the staff gages at San Antonio.

At Nacimiento there are numerous items that will be repaired or replaced. An annual inspection of the dam and powerplant was conducted by the Federal Energy Regulatory Commission (FERC) on Monday. Agency staff is coordinating with SLO County for the installation of debris screens at the log boom at Nacimiento.

6. RECEIVE REPORTS ON STATUS OF:

A. LAKE RECREATION BY CONCESSIONAIRE & PARKS DEPARTMENT

Richard Riddle, Senior Park Ranger, Monterey County Parks Department provided a status report on lake recreation activities. A boil-water order was issued at San Antonio South Shore last week due to turbidity levels. The water is obtained from the reservoir near the lake bottom and processed through the treatment plan. It is uncertain if water can continue to be provided to South Shore. Also due to the decreasing lake levels, the last launch ramp at South Shore has recently been closed. A clean-up day was conducted at San Antonio and approximately 18 yards of trash was removed from the bottom of the lake including aluminum boats.

B. EASEMENTS AND AGENCY LEASES

Chris Keehn, Right-Of-Way Specialist, provided an update to the Committee. The lessee of Nacimiento Lease Area #3 has reported ongoing trespassing and property rights violations from the adjacent property owners, Tri County Boat Club. The Lessee has contacted the property owner about these issues. The Oak Shores Community Association will be requesting permission from the Agency's Personnel and Administration Committee to build a trolley at Nacimiento, and an easement for a log boom. The Agency has been contacted by an individual who is interested in leasing 40 acres of Agency land located next to Oak Shores. This area will be put out to bid sometime in the future.

C. QUAGGA / ZEBRA MUSSEL PLAN

Elizabeth Krafft, Senior Hydrologist, provided an update. Agency staff conducted the last plankton tow for this season at Nacimiento yesterday. State Fish & Wildlife Department also conducted mussel plankton tows in June, July and August and all results have been negative.

Mark Nielsen, NRWMAC, reported that the last mussel inspection class this season, for residents, is scheduled for October 5.

D. UPDATE ON SLO COUNTY ACTIVITIES

Paavo Ogren provided a report on San Luis Obispo County activities. SLO County Supervisor Meecham has expressed interest in touring the Agency's Salinas River Diversion Facility. Staff mentioned this should be scheduled soon, within two weeks time, before the diversion season ends. This will be coordinated with Mr. Brent Buche.

On August 27, 2013 the SLO County Board of Supervisors adopted an urgency ordinance that prohibits new development, including new irrigated agriculture, in the unincorporated areas of Paso Robles. Because the initial urgency ordinance is only effective for 45-days it is being presented again for adoption for an extended period.

Also on August 27, the SLO County Board of Supervisors issued a direction to conduct feasibility studies for additional water supply to the Paso Robles groundwater basin.

Rob Johnson was invited to participate in reviewing SLO water fees.

E. WINTER WEATHER OUTLOOK FOR 2013-2014

Rob Johnson, Assistant General Manager and Chief of Water Resources Planning, reported on the Winter Weather Outlook for the 2013-2014 season. There will be less rainfall and normal to above-normal temperatures. The long-range outlook from forecasters is 85% of normal rainfall for October-January, and 90-95% of normal during January-September. The daily mean temperatures will be warmer than normal from November-February and May-September.

7. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS

The next meeting is scheduled for Thursday, November 7, 2013 at 1:30 p.m. at the Agency. The Agenda will include water quality data results for San Antonio River. Howard Franklin will provide an update on reservoir operation protocols.

8. ADJOURNMENT BY CHAIR DAVID HART @ 3:15 P.M.

SUBMITTED BY: TERESA CAMPA

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

MEETING DATE:	November 7, 2013	AGENDA ITEM:	
AGENDA TITLE:	RESERVOIR RELEASE UPDATE		
Consent ()		Action ()	
Information (X)			
SUBMITTED BY:	Howard Franklin	PREPARED BY:	Howard Franklin
PHONE:	(831) 755-4860	PHONE:	(831) 755-4860
DEADLINE FOR BOARD ACTION:	November 7, 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 October 30, 2013 San Antonio Reservoir is at approximately 656 feet mean sea level (msl), 16,000 acre-feet of storage. Nacimiento Reservoir is at elevation 731.45 feet msl, 95,820 acre-feet of storage. San Antonio Reservoir is currently at 5% of storage capacity and Nacimiento Reservoir is at 25% of capacity.

RESERVOIR RELEASES: Diversions from the Salinas River Diversion Facility (SRDF) ended for the season on October 11th. Prior to October 11th, releases from the reservoirs were steadily decreased in anticipation of SRDF shutdown. The diversion dam will remain completely raised for 28 days, during which the impoundment will be gradually drained at a rate of no less than 2 cfs. The diversion dam will be completely lowered no later than November 8th. Releases from both reservoirs are currently at minimum fisheries flows requirements

Releases as of October 30, 2013:

- Nacimiento Reservoir: 60 cfs
- San Antonio Reservoir: 10 cfs

Total releases from both reservoirs to the Salinas River are approximately 70 cfs. The following “provisional” flows have been recorded by the USGS:

- Salinas River near Spreckels: 0 cfs
- Salinas River near Chualar: 0 cfs
- Salinas River near Soledad: 15 cfs (decreasing)
- Salinas River near Bradley: 84 cfs (steady)

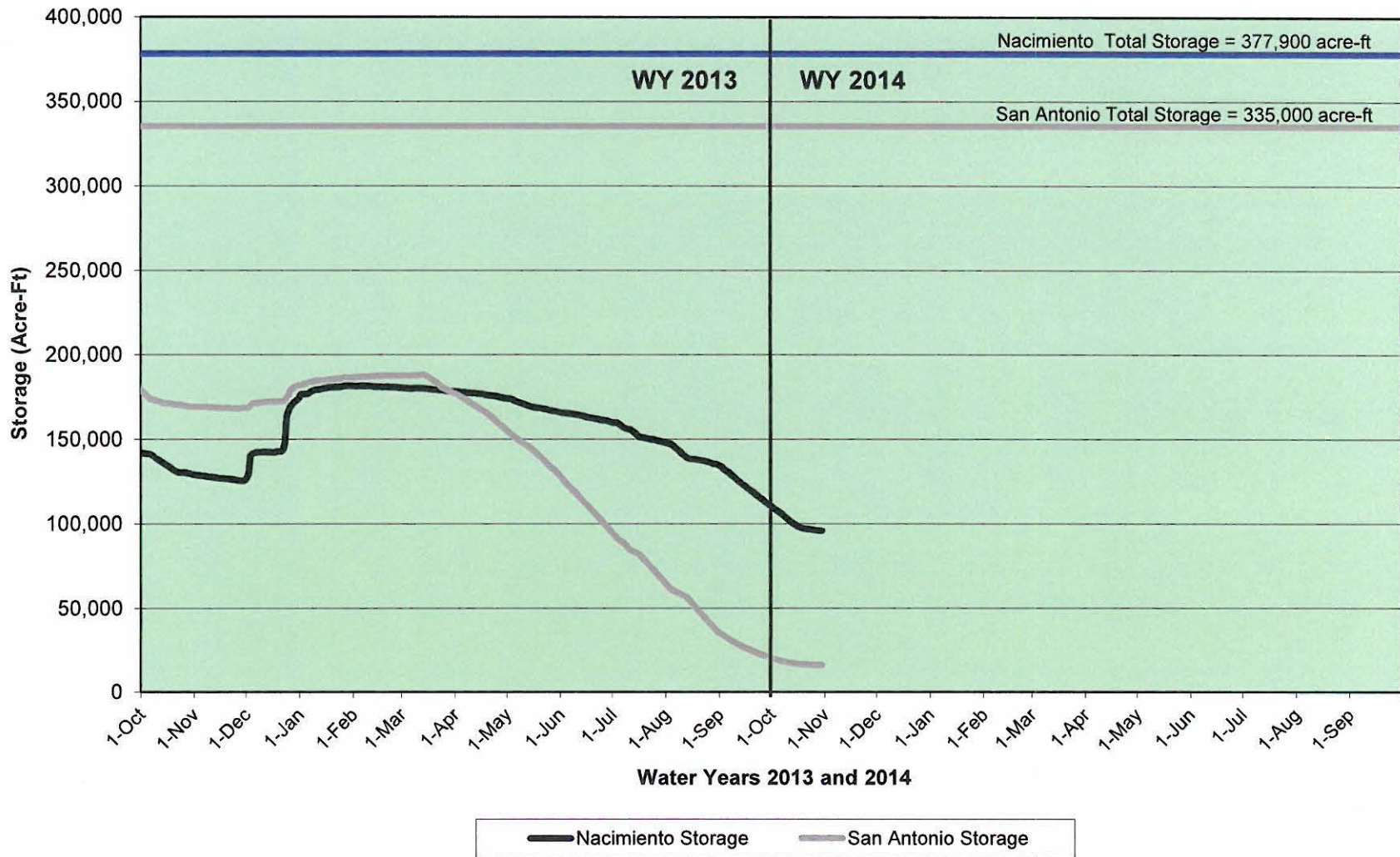
Synopsis of Reservoir Release Changes from August 3, 2013 to October 3, 2013

Date	San Antonio Reservoir		Nacimiento Reservoir		Total Releases
	Starting Flow	Ending Flow	Starting Flow	Ending Flow	
August 3, 2013	615	415	*	57	472
August 4, 2013	415	415	*	304	719
August 5, 2013	415	245	*	373	618
August 7, 2013	245	270	410	410	680
August 12, 2013	270	370	410	310	680
August 13, 2013	370	620	310	150	770
August 14, 2013	620	620	*	39	659
August 16, 2013	620	590	*	62	652
August 26, 2013	590	440	*	152	592
August 27, 2013	440	590	*	194	784
August 30, 2013	590	280	60	370	650
September 3, 2013	280	500	370	220	720
September 4, 2013	500	564	*	139	703
September 5, 2013	564	290	60	370	660
September 12, 2013	290	240	370	370	610
September 16, 2013	240	225	370	370	595
September 17, 2013	225	225	370	360**	585
September 19, 2013	225	200	360	360	560
September 23, 2013	200	175	360	360	535
October 3, 2013	175	150	360	350**	500
October 4, 2013	150	125	350	350	475
October 8, 2013	125	100	350	350	450
October 9, 2013	100	75	350	350	425
October 14, 2013	75	50	350	350	400
October 16, 2013	50	50	350	250	300
October 17, 2013	50	25	250	150	175
October 18, 2013	25	25	150	60	85
October 25, 2013	25	10	60	60	70

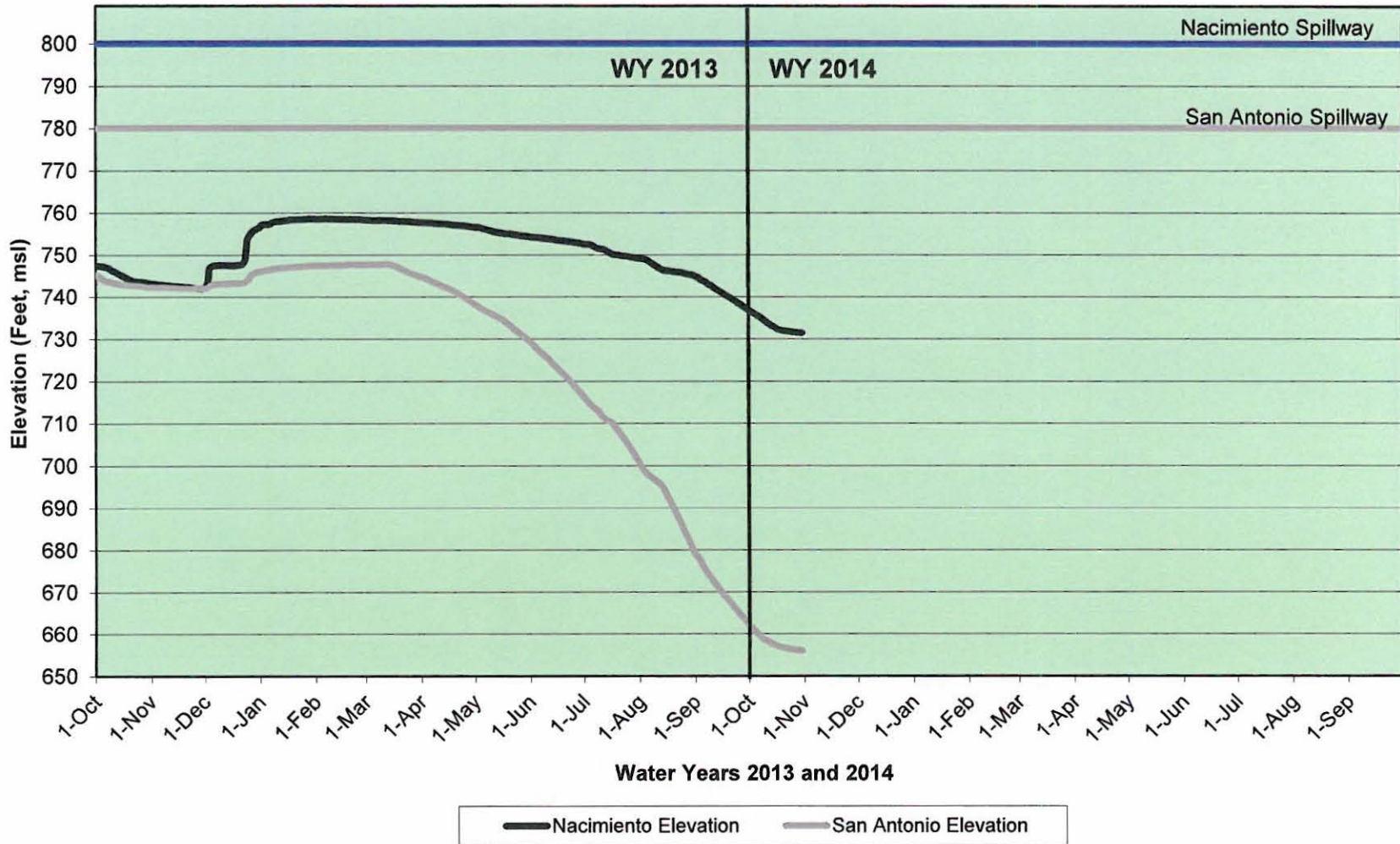
* Release rates will fluctuate while repair work is being performed on the Nacimiento hydroelectric facility. Daily reservoir releases will be reported as mean daily flow at the USGS gage Nacimiento River below Nacimiento Dam during the repair period.

**Reduction of release output due to head loss.

Reservoir Storage



Reservoir Elevation



MONTEREY COUNTY WATER RESOURCES AGENCY

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

10/31/2013

	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	640	39,346	3,220	149	9,134	2,035	903	159,748	752.6	2,213	491	30,212	94,000	715.8
8/1/2013	668	41,060	2,860	180	11,062	2,094	956	147,720	749.1	1,410	488	29,998	63,800	700.0
9/1/2013	602	35,838	1,993	349	20,783	1,880	928	133,888	744.8	688	253	15,055	34,725	678.5
10/1/2013	417	25,641	1,237	352	21,644	1,240	1,240	109,788	736.7	337	65	3,997	19,995	661.9
11/1/2013	70	4,165	574	60	3,570	1,253	1,253	95,690	731.4	153	10	595	15,968	656.0
12/1/2013	70	4,304	360	60	3,689	844	844	90,293	729.2	92	10	615	15,220	648.4
1/1/2014	70	4,304	360	60	3,689	844	844	85,399	727.2	92	10	615	14,513	645.0
TOTALS:		268,534	18,824		94,351	15,750	6,792			12,505		174,183		

* 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:

- Nacimiento Reservoir storage capacity 377,900 acre feet.
- San Antonio Reservoir storage capacity 335,000 acre feet.
- Reservoir Operations Committee may make release considerations for fish spawn and holiday periods to benefit recreation.
- Shaded areas represent periods when elevations are influenced by inflow/runoff; releases may include flood control releases.
- Preliminary Schedule assumes no inflow to reservoirs after May 1st.
- "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)
- NACIMIENTO "NWP Diversions" do not include lakeside water use which is estimated at approximately 1,750 acre feet per year.