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

#### **COMMITTEE MEMBERS**

David Hart, Chair Ken Ekelund Vacant (BOD Representative) Mark Nielsen David Pozzi Mark Gonzalez John Baillie Benny Jefferson Paavo Ogren Tom Shepherd (Parks) Mark Sandoval (CalParks)

TIME:	1:30 pm
DATE:	Thursday, February 6, 2014
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 JANUARY 9, 2014

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). Staff will present Salinas River Diversion Facility operational options for the Committee to consider for recommendation to the Board of Directors.

# 5. RECEIVE REPORT ON AGENCY DISCUSSIONS WITH NATIONAL MARINE FISHERIES ON POSSIBLE RESERVOIR OPERATION DROUGHT CONTIGENCIES

Staff will report on options for reducing minimum release requirements from Nacimiento and San Antonio Reservoirs.

#### 6. RECEIVE REPORT ON CLOUD-SEEDING

Staff will report on and discuss possible options for cloud-seeding opportunities.

## 7. RECEIVE REPORT ON EFFORTS RELEATED TO PASO ROBLES GROUNDWATER BASIN

Paavo Ogren (San Luis Obispo County, Director of Public Works), will present an update on issues related to the Paso Robles Groundwater Basin

# 8. 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.

### 9. 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
- E. UPDATE ON WINTER OUTLOOK
- 10. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS The Committee will discuss and determine details for its next meeting.
- 11. 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) Mark Sandoval (CalParks)

TIME:	1:30 p.m.
DATE:	Thursday, January 9, 2014
PLACE:	Monterey County Water Resources Agency
	Board Room
	893 Blanco Circle
	Salinas, CA 93901
	(831) 755-4860

# MINUTES

# CALL TO ORDER @ 1:30 p.m. by Chair David Hart. Members present: David Hart, Ken Ekelund, Mark Nielsen, David Pozzi, John Baillie, Benny Jefferson, Paavo Ogren, Tom Shepherd, Mark Sandoval (CalParks) Members absent: Fred Ledesma, Mark Gonzales

A quorum was established.

#### 2. PUBLIC COMMENT

John Baillie stated last month he provided a copy of a letter by Dianne Feinstein, Dept. of Interior about NOAA Fisheries' regulations in the San Joaquin Valley. Due to the local drought conditions in our area, he suggests the Agency prepare a similar letter requesting NOAA Fisheries evaluate the figures and develop criteria for drought conditions. He feels the current minimum releases are a waste of water and should be reserved because we are in a drought. He would like to see this discussed at the Board of Directors meeting.

He also recommends an evaluation of the cost benefit ratio for water releases because the water is not reaching the north. When the reservoir was built in the 1950s a cost benefit factor was developed to determine the fees for landowners in the Salinas Valley who would benefit from the reservoirs. The fees for North Monterey County landowners were higher than South County because the benefits would be greater in the North.

Robert Johnson, Assistant General Manager and Chief of Water Resources Management, stated a cost benefit analysis was also used to determine fees for the CSIP and SVWP.

Mark Sandoval joins the Reservoir Operations Committee as a regular member, replacing interim CalParks representative Tim Colvin. Mr. Sandoval became the General Manager of CalParks in November 2013 and is working at San Antonio and Nacimiento.

Robert Johnson stated he will now be the staff liaison for the Basin Management Plan (BMP) Committee and will no longer be involved with the Reservoir Operations Committee on a regular basis. Brent Buche will now be the staff liaison for the Reservoir Operations Committee.

#### 3. APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE HELD ON DECEMBER 5, 2013

Committee Action: On motion and second of Committee members John Baillie and Mark Nielsen, 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. Flow was observed in the Salinas River near Elm Street in Greenfield. There are no flows to Soledad, Chualar or Spreckels. Both reservoirs are at minimum releases to meet the fisheries requirement. San Antonio is about 6,000 acre-feet (AF) below minimum pool *(Minimum Pool is 22,300 AF and Dead Pool is 10,000 AF)*.

The Committee reviewed elevation projections for Nacimiento and San Antonio and discussed scenarios for next season based on forecasts. If SRDF demands are similar to the 2013 season, using a combination of releases from both Nacimiento and San Antonio, there will only be enough water to operate the SRDF for about one month. With the forecasted inflow, there would be water to operate the SRDF for the month of April. If we opted to wait to begin the SRDF until later in the season when demands are higher, it would require a greater amount of water from both reservoirs for the flow to reach the destination. In a best case scenario for this option, if we waited until June or later, there would be 1-2 weeks of operation for the SRDF.

The Committee asked about costs for obtaining additional water from Nacimiento by using pumps. The Committee also requested discussing cloud-seeding possibilities and asked it be placed on the agenda for next month.

**NACIMIENTO** elevation is 727.25 feet and 85,413 acre-feet of storage, 23% of capacity, and current release is 60 cfs.

SAN ANTONIO elevation is 656.40 feet and 16,260 acre-feet of storage, 5% of capacity, and current release is 10 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. An annual settlement survey is scheduled to be conducted next week by Monterey County Public Works. Other activities occurring involve routine maintenance at both dams.

#### 6. RECEIVE REPORTS ON STATUS OF:

#### A. LAKE RECREATION BY CONCESSIONAIRE & PARKS DEPARTMENT

Tom Shepherd, Monterey County Parks Department, provided a status report on lake recreation activities. Parks staff have been discussing different scenarios and considering various actions including reduction of temporary summer employees and transferring permanent employees to other parks as needed. It is unlikely North Shore would have water next season. The annual Triathlon/Wildflower Festival still take place in May 2014. Staff has met with concert promoters to discuss the possibility of renting out North Shore at San Antonio for an event for the Memorial Day weekend.

Mark Sandoval of Cal Parks stated that things are uncertain about what the conditions of the lakes will be in the summer. Staff is aware that North Shore will likely remain closed and South Shore is unknown at this time.

#### **B. EASEMENTS AND AGENCY LEASES**

Chris Keehn, Right-Of-Way Specialist, provided an update to the Committee. The Agency has received a quarterly report from one of the leases. He is not running any cattle at this time. There has been on-going trespassing at this parcel including people driving off the easement road when driving through the parcel. Two large signs are being considered to be placed at the major entrance and exit locations.

#### C. QUAGGA / ZEBRA MUSSEL PLAN

Elizabeth Krafft, Senior Water Resources Hydrologist/Program Manager, and Tom Shepherd provided an update. In December 2013 Lake Piru in Ventura County was found to be infested with Dreissenid Mussels. It is the first lake in Southern California that's been infested, outside of the Colorado River system. The Committee suggested developing a plan of action in the event the lakes become infected. Agency staff is in the process of preparing a draft response plan and have met with State Fish & Wildlife to seek input. Agency and Parks staff will be attending a meeting of the Bay Area Consortium on January 21, 2014 and will seek ideas for improving our inspection programs.

#### D. UPDATE ON SLO COUNTY ACTIVITIES

Paavo Ogren, San Luis Obispo County (SLO), provided an update on SLO County activities including restrictions for agriculture and resident development, and feasibility studies for water supply.

#### **E. UPDATE ON WINTER OUTLOOK**

Howard Franklin provided a three-month outlook. A few systems that could bring showers and rain are forecasted for January 20-23. The outlook for January is forecasted to bring 50% of normal rainfall amounts, February is forecasted for 55-65%, and March 70-80%. There will not be much rain in January/February but if the forecasted rainfall amounts for March materialize, it could add approximately 40,000 acre feet of storage to Nacimiento.

#### 7. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS

The next meeting is scheduled for Thursday, February 6, 2014 at 1:30 p.m. at the Agency. Items for discussion include cloud seeding options and a presentation by Committee member Ogren.

#### 8. ADJOURNMENT BY CHAIR DAVID HART @ 3:08 P.M.

#### SUBMITTED BY: TERESA CAMPA

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

MEETING DATE:	February 6, 2014	AGENDA ITEM:							
AGENDA TITLE:	RESERVOIR RELEASE UPDATE								
	Consent ( ) Action ( ) Information ( X )								
SUBMITTED BY: PHONE:	Howard Franklin (831) 755-4860	PREPARED BY: PHONE:	Howard Franklin (831) 755-4860						
DEADLINE FOR BO	DARD ACTION:	February 6, 2014							

#### **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 January 28, 2014 San Antonio Reservoir is at approximately 656.0 feet mean sea level (msl), 16,000 acre-feet of storage. Nacimiento Reservoir is at elevation 726.15 feet msl, 82,760 acre-feet of storage. San Antonio Reservoir is currently at 5% of storage capacity and Nacimiento Reservoir is at 22% of capacity.

**RESERVOIR RELEASES**: Releases from both reservoirs are being made to meet minimum fisheries flow requirements.

Releases as of January 28, 2014:

•	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:

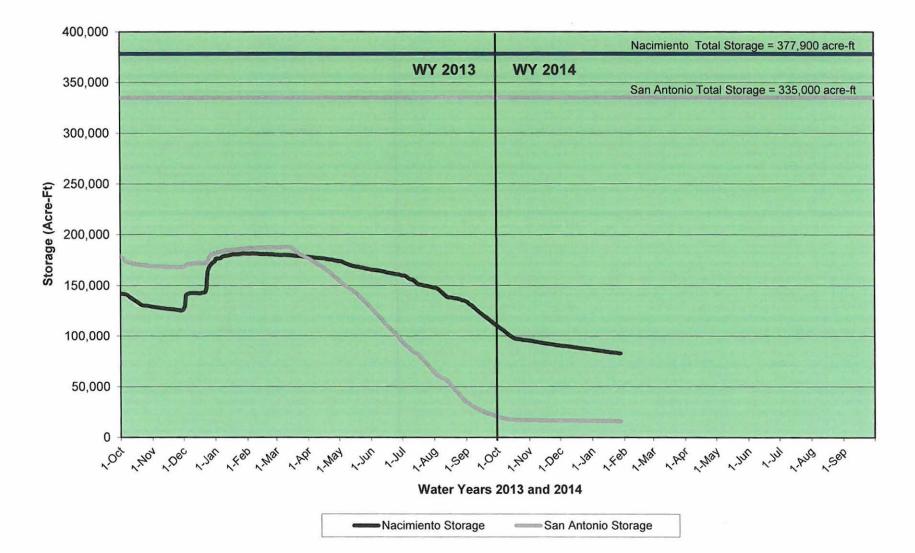
0	Salinas River near Spreckels:	0 cfs
0	Salinas River near Chualar:	0 cfs
0	Salinas River near Soledad:	0 cfs
	Salinas River near Bradley:	79 cfs (steady)

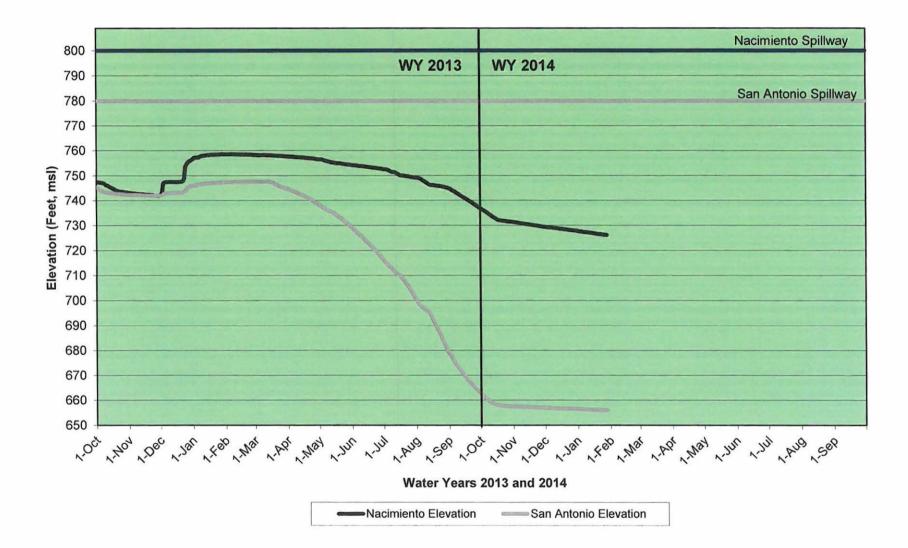
# Synopsis of Reservoir Release Changes from October 1, 2013 to January 28, 2014

	San An Reserv		Nacimie Reserv			
Date	Starting Flow	Ending Flow	Starting Flow	Ending Flow	Total Releases	
October 2, 2013	175	175	360	355*	530	
October 3, 2013	175	150	355	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	
5						

\*Reduction of release output due to head loss.

# **Reservoir Storage**





# **Reservoir Elevation**

**ATTACHMENT 3a** 

# MONTEREY COUNTY WATER RESOURCES AGENCY

1/29/2014

PRELIMINARY - Estimated Elevation/Storage/NWP Diversions; after Jan. 1<sup>st</sup>

				RE	SERVOIF	RELEA	SE SCHE	DULE FO	DR 2014	4					
				NACIMIENTO							SAN ANTONIO				
	Combined	Combined			Reservoir	NWP	NWP	Storage	Elev.	Evap.	Reservoir	Reservoir	Storage	Elev.	
	Releases	Releases		Releases		Orders	Diversions				Releases	Releases			
	(cfs)*	(ac-ft)	(ac-ft)**	(cfs)*	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ft)	(ac-ft)**	(cfs)*	(ac-ft)	(ac-ft)	(ft)	
1/1/2014								86,392	727.7				16,390	656.6	
	70	4,304	446	60	3,689	844				397	10	615			
2/1/2014		0.000	570	00	0.000	0.1.4		82,250	725.9	404	10		15,878	655.8	
	70	3,888	579	60	3,332	844				431	10	555			
3/1/2014			22.5												
			1.5						1.6.5	1.2.3					
4/1/2014															
5/1/2014													-		
0/1/0011															
6/1/2014															
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7/1/2014															
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10/1/2014										1					
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11/1/2014															
40/4/0044												1			
12/1/2014															
4/4/2045															
1/1/2015		0.400	4.005		7 000	4 000	0		1000	000		4 470			
TOTALS:		8,192	1,025		7,022	1,688	0			828		1,170			

\* 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.

1. Nacimiento Reservoir storage capacity 377,900 acre feet.

NOTES: 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.