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

#### **COMMITTEE MEMBERS**

David Hart, Chair Ken Ekelund Richard Ortiz Mark Nielsen David Pozzi Mark Gonzalez John Baillie Benny Jefferson Dean Benedix Michael Tozzi (Parks) Mark Sandoval (CalParks)

TIME:

1:30 p.m.

DATE:

Thursday November 5, 2015

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 1, 2015

The Committee will consider approval of the minutes of the above-mentioned meeting (Attachment 1).

# 4. REVIEW THE STATUS OF BOTH RESERVOIRS; REVIEW RELEASES AND RELEASE SCHEDULE

Staff will present a summary of current conditions at both reservoirs, as well as provide a synopsis of release changes that have occurred since the last meeting (Attachments 2, 2a, 3, 3a, 4).

# 5. RECEIVE REPORT ON THE STATUS OF THE OPERATIONS POLICY MANUAL FOR SAN ANTONIO AND NACIMIENTO RESERVOIRS

Staff will report on the status of the current San Antonio and Nacimiento Reservoirs Operations Policy manual and discuss incorporating reservoir operational requirements implemented with the construction of the Salinas Valley Water Project.

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

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

# 7. RECEIVE REPORT REGARDING OPERATIONS AND MAINTENANCE ACTIVITIES AT THE RESERVOIRS

Staff will present a verbal report discussing the various Operations and Maintenance activities at both reservoirs that have occurred over the last month.

### 8. RECEIVE REPORT REGARDING INTERLAKE TUNNEL PROJECT

Staff will report on current activities regarding the Interlake Tunnel Project.

- 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 SAN LUIS OBISPO COUNTY ACTIVITIES
  - E. NATIONAL MARINE FISHERIES SERVICE

### 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

Richard Ortiz

Mark Nielsen

David Pozzi

Mark Sandoval (CalParks)

Mark Gonzalez

TIME: 1:30 PM

DATE: Thursday, October 1, 2015

PLACE: Monterey County Water Resources Agency

Board Room 890 Blanco Circle Salinas, CA 93901 (831) 755-4860

#### MINUTES

1. CALL TO ORDER

The meeting was called to order @ 1:35 P.M. by Chair David Hart and a quorum was established.

Members Present: Hart, Ekelund, Ortiz, Nielsen, Pozzi, Baillie, Jefferson, Benedix,

Tozzi and Sandoval

Members Absent: Gonzalez

2. PUBLIC COMMENT

None

3. APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE MEETING HELD ON SEPTEMBER 3, 2015

ACTION: On motion and second of Directors Baillie and Pozzi, the Committee

approved the minutes.

VOTE: YES: Hart, Ekelund, Nielsen, Pozzi, Baillie, Jefferson, Benedix,

Tozzi, and Sandoval

NO: None ABSTAIN: Ortiz ABSENT: Gonzalez

4. REVIEW THE STATUS OF BOTH RESERVOIRS; REVIEW RELEASES AND RELEASE SCHEDULE

Jason Demers, Hydrologist, presented this item for review. Beginning August 28, 2015, releases from San Antonio Reservoir were gradually increased from 5 cfs to a maximum of

191 cfs on September 4. Since September 4, releases have gradually reduced due to head loss in the reservoir, up until September 21, when bypass pumping of 3 cfs began. There is 42 cfs in the Salinas River near Bradley. On September 29, the end of flow in the Salinas River was at river mile 83.6. The reservoirs received no significant rainfall from the recent rains.

Nacimiento Reservoir elevation is 723.50 feet and 76,625 acre-feet of storage, 20% of capacity, and current release is 60 cfs.

San Antonio Reservoir elevation is 646.00 feet and 10,507 acre-feet of storage, 3% of capacity, and current release is 3 cfs.

# 5. RECEIVE REPORT ON THE STATUS OF THE OPERATIONS POLICY MANUAL FOR SAN ANTONIO AND NACIMIENTO RESERVOIRS

Brent Buche, Deputy General Manager, presented this item. The PowerPoint presentation listed the sections found in the existing operations policy and other requirements that need to be incorporated to the policy document. A subcommittee, consisting of Mark Nielsen, John Baillie, Benny Jefferson, and stakeholder member Bob Martin, was formed to review and update the existing policy manuals.

**PUBLIC COMMENT:** Bill Stevens, NOAA Fisheries (on conference call) and Bob Martin, Rio Farms

#### 6. RECEIVE REPORT ON CLOUD SEEDING

Dean Benedix, San Luis Obispo County, provided an update on this item. There are no new developments at this time.

# 7. RECEIVE REPORT REGARDING OPERATIONS AND MAINTENANCE ACTIVITIES AT THE RESERVOIRS

Brent Buche, Deputy General Manager, presented this item. The Agency's field crew is currently working on maintenance projects at San Antonio Reservoir. A safety consultant was on-site recently and provided comments and suggestions on the outlet pipe and trash rack maintenance work. The Committee requested photos of the maintenance work in progress. A "Confined Space" safety class is scheduled for next week.

#### 8. RECEIVE REPORT REGARDING INTERLAKE TUNNEL PROJECT

Dave Chardavoyne, General Manager, presented this item. The consultants for engineering and environmental work for this project have been selected and the contracts are currently being negotiated.

**PUBLIC COMMENT:** Bob Martin, Rio Farms

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

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

Mark Sandoval, CalParks, and Michael Tozzi, Parks Department, provided an update on this item. Business for the summer was good at Nacimiento - September was up 60% from last year.

#### B. EASEMENTS AND AGENCY LEASES

Brent Buche provided an update on this item. The Agency is working with Monterey County Fish and Game Advisory Commission and Monterey County Parks Department to allow bow-hunting at South Shore at San Antonio Reservoir; lessees will be notified if this is implemented. The Agency is also working with Tri Counties regarding a request to lease portion of Lease 3B.

### C. QUAGGA / ZEBRA MUSSEL PLAN

There was no update on this item.

#### D. UPDATE ON SLO COUNTY ACTIVITIES

Dean Benedix, San Luis Obispo County, provided an update on this item. The amendment for the Nacimiento Water Project stakeholders for use of the remaining reserve water will be presented to the San Luis Obispo County Board of Supervisors for consideration.

# **10. SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS**The next meeting is scheduled for Thursday November 5, 2015 at 1:30 P.M. at the Agency.

11. ADJOURNMENT BY CHAIR DAVID HART AT 3:16 P.M.

SUBMITTED BY: TERESA CAMPA

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

MEETING DATE:	November 5, 2015		AGENDA ITEM:				
AGENDA TITLE:	Reservoir Release Update						
Consent ( ) Action ( ) Information ( X )							
SUBMITTED BY: PHONE:	Germán Criollo (831) 755-4860	PREPARED BY: PHONE:	Jason Demers (831) 755-4860				
DEADLINE FOR BOARD ACTION:		November 5, 2015	November 5, 2015				

#### RECOMMENDED BOARD ACTION:

None – item presented for informational purposes.

#### **SUMMARY:**

The Board of Directors receives monthly updates on the status of Agency reservoirs.

#### DISCUSSION/ANALYSIS:

RESERVOIR ELEVATION / STORAGE: As of October 26, 2015, San Antonio Reservoir is at an elevation of approximately 645.9 feet mean sea level (msl), 10,456 acre-feet of storage. Nacimiento Reservoir is at elevation 721.65 feet msl, 72,548 acre-feet of storage. San Antonio Reservoir is currently at 3% of storage capacity and Nacimiento Reservoir is at 19% of capacity.

RESERVOIR RELEASES: Beginning Friday, August 28, 2015, releases from San Antonio Reservoir were gradually increased from a rate of 5 cubic feet per second (cfs) up to a maximum rate of 191 cfs on September 4, 2015. Since that time, releases from San Antonio gradually reduced due to head loss until September 21, 2015 when bypass pumping of 3 cfs began. Releases from Nacimiento Reservoir remain at 60 cfs.

Releases as of October 26, 2015:

San Antonio Reservoir: 3 cfs Nacimiento Reservoir: 60 cfs

Total releases from both reservoirs to the Salinas River are approximately 63 cfs. The following "provisional" flows have been recorded by the USGS:

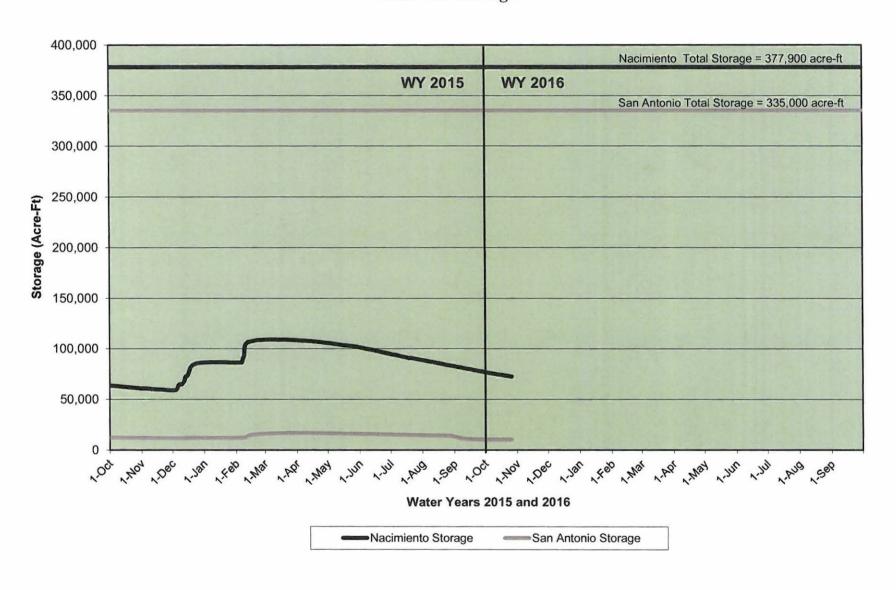
• Salinas River near Spreckels: 0 cfs Salinas River near Chualar: 0 cfs Salinas River near Soledad: 0 cfs

Salinas River near Bradley: 52 cfs (steady)

# Synopsis of Reservoir Release Changes from August 28, 2015 to October 30, 2015

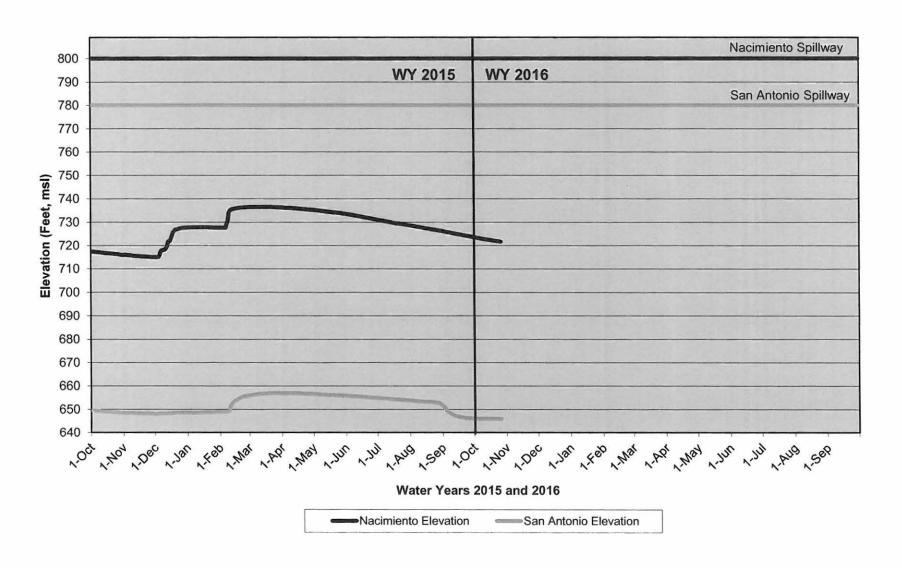
	San Antonio Reservoir		Nacimiento Reservoir		
Date	Starting Flow	Ending Flow	Starting Flow	Ending Flow	Total Releases
August 28, 2015	5	56	60	60	116
August 29, 2015	56	100	60	60	160
September 1, 2015	100	113	60	60	173
September 2, 2015	113	138	60	60	198
September 3, 2015	138	175	60	60	235
September 4, 2015	175	191	60	60	251
September 5, 2015	191	145	60	60	205
September 6, 2015	145	115	60	60	175
September 7, 2015	115	97	60	60	157
September 8, 2015	97	84	60	60	144
September 9, 2015	84	75	60	60	135
September 10, 2015	75	55	60	60	115
September 11, 2015	55	50	60	60	110
September 12, 2015	50	45	60	60	105
September 13, 2015	45	40	60	60	100
September 14, 2015	40	37	60	60	97
September 15, 2015	37	35	60	60	95
September 16, 2015	35	32	60	60	92
September 17, 2015	32	28	60	60	88
September 18, 2015	28	25	60	60	85
September 19, 2015	25	23	60	60	83
September 20, 2015	23	20	60	60	80
September 21, 2015	20	3	60	60	63

# Reservoir Storage



ATTACHMENT 3

### **Reservoir Elevation**



**ATTACHMENT 3a** 

#### MONTEREY COUNTY WATER RESOURCES AGENCY

### PRELIMINARY - Estimated Elevation/Storage/NWP Diversions; after October 1 st

**RESERVOIR RELEASE SCHEDULE FOR 2015** SAN ANTONIO NACIMIENTO Combined NWP NWP Elev. Reservoir Storage Elev. Combined Evap. Reservoir Reservoir Storage Evap. Reservoir Releases Releases Losses Releases Releases Orders Diversions Losses 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) 86,638 727.8 11,775 648.6 1/1/2015 35 2,152 263 30 1.845 175 0 67 5 307 727.7 12,003 649.0 2/1/2015 86,515 5 35 1.944 30 1.666 310 0 70 278 282 736.4 15.903 655.9 109,100 3/1/2015 5 307 35 2.152 600 30 1.845 923 0 141 108,550 736.2 16,618 657.0 4/1/2015 35 2,083 862 30 1,785 1,469 965 201 5 298 5/1/2015 105.525 735.1 16,325 656.5 41 2,549 756 36 2,241 2,009 1,303 180 5 307 6/1/2015 101.225 733.5 15.838 655.8 65 3,868 1,740 60 3,570 2,353 1,264 310 5 298 654.8 7/1/2015 94,650 731.0 15,230 65 3.997 1.070 60 3.689 2.334 1,171 293 5 307 8/1/2015 88,720 728.6 14.630 653.8 76 4.663 1.326 60 3.689 2.393 1.065 436 16 974 82,640 726.1 13,220 651.3 9/1/2015 3.570 2.175 908 311 52 3.081 112 6.651 1.537 60 76,625 723.5 10,507 646.0 10/1/2015 63 3.874 60 3.689 1.436 **TBR** 574 3 184 901 721.2 10,456 645.9 11/1/2015 71,500 951 **TBR** 12/1/2015 512 TBR 1/1/2016 TOTALS: 33.932 9.335 27,590 17.040 6.677 2,583 6,342

#### NOTES:

10/30/2015

<sup>\*</sup> Mean daily flow for the month in cubic feet per second.

<sup>\*\*</sup> Evap. Losses estimated from long term pan evaporation data at Nacimiento and San Antonio Reservoirs.

<sup>1.</sup> Nacimiento Reservoir storage capacity 377,900 acre feet.

<sup>2.</sup> San Antonio Reservoir storage capacity 335,000 acre feet.

<sup>3.</sup> Reservoir Operations Committee may make release considerations for fish spawn and holiday periods to benefit recreation.

<sup>4.</sup> Shaded areas represent periods when elevations are influenced by inflow/runoff; releases may include flood control releases.

<sup>5.</sup> Preliminary Schedule assumes no inflow to reservoirs after May 1st.

<sup>6. &</sup>quot;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)

<sup>7.</sup> NACIMIENTO "NWP Diversions" do not include lakeside water use which is estimated at approximately 1,750 acre feet per year.