

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

COMMITTEE MEMBERS

David Hart, Chair
Richard Ortiz

Ken Ekelund
Mark Gonzalez

TIME: 1:30 p.m.
DATE: Thursday, February 23, 2017
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 26, 2017**
The Committee will consider approval of the minutes of the above-mentioned meeting (Attachment 1).
4. **Discussion on application and selection process for the Monterey County Water Resources Agency Reservoir Operations Advisory Committee**
Chair Hart will discuss the status of the application and selection process for the membership of the Reservoir Operations Advisory Committee.
5. **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).
6. **Receive report on the status of the Operations Policy Manual for San Antonio and Nacimiento Reservoirs**

Staff will report on the work being done to update the San Antonio and Nacimiento Reservoirs Operations Policy manual.

7. **Receive report regarding Operations and Maintenance activities at the Reservoirs**
Staff will present a verbal report discussing the Operations and Maintenance activities at both reservoirs over the last month.
8. **Receive report regarding Interlake Tunnel Project**
Staff will report on current activities regarding the Interlake Tunnel Project.
9. **Receive report on the work being done by the Grazing Lease Subcommittee**
Staff will report on the review work being done by the Grazing Lease Subcommittee to update the agreement documents to be used to lease Agency-owned land around the reservoirs.
10. **Receive status reports on:**
 - A. **Lake recreation by Concessionaire and Parks Department**
 - B. **Easements and Agency Leases**
 - C. **Quagga / Zebra Mussel Plan**
 - D. **San Luis Obispo County Activities**
 - E. **National Marine Fisheries Service**
 - F. **Cloud Seeding**
11. **Set next meeting date and discuss future Agenda items**
The Committee will discuss and determine details for its next meeting.
12. **Adjournment**

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

David Hart, Chair
Richard Ortiz

Ken Ekelund
Mark Gonzalez

TIME: 1:30 PM
DATE: Thursday, January 26, 2017
**PLACE: Monterey County Water Resources Agency
Board Room
890 Blanco Circle
Salinas, CA 93901
(831) 755-4860**

MINUTES

1. **Call to Order at 1:30 P.M. by Chair David Hart and a quorum was established.**
Members present: David Hart, Richard Ortiz, Ken Ekelund, Mark Gonzalez
Members absent: None

Bill Stevens, NOAA National Marine Fisheries Service (NMFS), participated in the meeting via Conference Call.

2. **Public Comments: None**
3. **Approve the Minutes of the Reservoir Operations Committee Meeting held on December 1, 2016**

ACTION: On motion and second of Committee members Gonzalez and Ortiz, the Committee approved the minutes.

VOTE: Motion carried unanimously by those members present.

4. **Discussion on application and selection process for the Monterey County Water Resources Agency Reservoir Operations Advisory Committee**
Chair David Hart reported on this item.
5. **Review the status of both reservoirs; review releases and release schedule**
Jason Demers, Hydrologist, Germán Criollo, Associate Hydrologist, and Chris Moss, Senior Water Resources Engineer, reported on this item. There was a PowerPoint presentation on potential flood control releases for February and March.

Both reservoirs received significant inflow from rain events in December and January. San Antonio increased over 46 feet in elevation (about 60,000 acre-feet of storage) since the season low in mid-December 2016. Nacimiento increased over 58 feet in elevation (about 215,000 acre-feet of storage).

The Salinas River mouth opened to the ocean on January 12, 2017 as a result of sandbar management activities in response to flow from the Arroyo Seco River. As of today, the Salinas River Lagoon remains open to the ocean.

On January 17, 2017 the Monterey County Water Resources Agency's Board of Directors, in collaboration with National Marine Fisheries Service, authorized releases of up to 460 cubic feet per second (cfs) from Nacimiento Reservoir to enhance adult steelhead migration conditions in the Salinas River. Releases of 440 cfs began on January 23, 2017. The release increase was made as part of an adaptive management approach to improve adult steelhead upstream passage conditions in the Salinas River.

San Antonio remains at the minimum 3 cfs. The current streamflow peaks from the storm events in the Salinas River are 1210 cfs at Bradley, 1210 cfs near Chualar, 1220 cfs near Spreckels, and 313 cfs at Soledad, and all flows are decreasing.

Nacimiento Reservoir elevation is 785.90 feet and 301,900 acre-feet of storage, 80% of capacity, and current release is approximately 440 cfs.

San Antonio Reservoir elevation is 709.90 feet and 81,450 acre-feet of storage, 24% of capacity, and current release is 3 cfs.

6. **Receive report on the status of the Operations Policy Manual for San Antonio and Nacimiento Reservoirs**
Germán Criollo reported on this item. The next Reservoir Operations Policy Subcommittee meeting is scheduled for 10:30 a.m. February 23, 2017 at the Agency.
7. **Receive report regarding Operations and Maintenance activities at the Reservoirs**
Brent Buche, Deputy General Manager, reported on this item.
8. **Receive report regarding Interlake Tunnel Project**
Dave Chardavoyne, General Manager reported on this item.
9. **Receive report on the work being done by the Grazing Lease Subcommittee**
Brent Buche, Deputy General Manager, reported on this item.
10. **Receive status reports on:**
 - A. **Lake Recreation by Concessionaire and Parks Department**
No report on this item.
 - B. **Easement and Agency Leases**
Brent Buche reported on this item.

C. Quagga / Zebra Mussel Plan

Mark Nielsen reported on this item.

D. San Luis Obispo County Activities

No report on this item.

E. National Marine Fisheries Service

Bill Stevens reported on this item.

F. Cloud Seeding

No report on this item.

11. Set next meeting date and discuss future Agenda items

The next meeting is scheduled for Thursday February 23, 2017.

12. Adjournment by Chair David Hart at 3:00 P.M.

SUBMITTED BY: TERESA CAMPA

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

MEETING DATE:	February 23, 2017	AGENDA ITEM:
Consent () Action () Information (X)		
DEADLINE FOR BOARD ACTION:	February 23, 2017	

..Title

Reservoir Release Update

..Report

RECOMMENDATION:

None – item presented for informational purposes.

SUMMARY/DISCUSSION:

The Reservoir Operations Advisory Committee receives monthly updates on the status of Agency reservoirs.

RESERVOIR ELEVATION / STORAGE: As of February 16, 2017, San Antonio Reservoir is at an elevation of approximately 725.5 feet mean sea level (msl), 117,900 acre-feet of storage. Nacimiento Reservoir is at elevation 789.1 feet msl, 318,325 acre-feet of storage. San Antonio Reservoir is currently at 35% of storage capacity and Nacimiento Reservoir is at 84% of capacity.

Rain events in January and early February resulted in significant inflow to both reservoirs. San Antonio Reservoir is currently 62.2 feet or 96,787 acre-feet higher than the seasonal low in mid-December. Nacimiento Reservoir is currently 61.3 feet or 231,442 acre-feet higher than the seasonal low in mid-December.

The Salinas River mouth opened to the ocean on January 12th as a result of sandbar management activities in response to flow from the Arroyo Seco River. As of February 16th the Salinas River lagoon remains open to the ocean.

RESERVOIR RELEASES: To preserve flood control space in Nacimiento Reservoir, flood control releases began on February 2nd. Flood control release rates have fluctuated between approximately 300 cfs and 4,500 cfs. Releases have been adjusted several times since February 2nd in consideration of rainfall forecasts, reservoir inflow, downstream river conditions, maintenance activities, and a search effort by law enforcement in the Greenfield area. Current releases from Nacimiento Reservoir are approximately 4,300 cfs. Current releases from San Antonio Reservoir are approximately 3 cfs. Minor fluctuations in release rates are not presented in this report but are documented in the Salinas Valley Water Project Annual Flow Reports.

Releases as of February 16, 2017:

- Nacimiento Reservoir: 4,300 cfs
- San Antonio Reservoir: 3 cfs

Total releases from both reservoirs to the Salinas River are approximately 4,303 cfs. The following “provisional” flows have been recorded by the USGS:

- Salinas River near Spreckels: 1,260 cfs (decreasing)
- Salinas River near Chualar: 2,160 cfs (decreasing)
- Salinas River at Soledad: 1,190 cfs (increasing)
- Salinas River near Bradley: 5,030 cfs (steady)

OTHER AGENCY INVOLVEMENT:

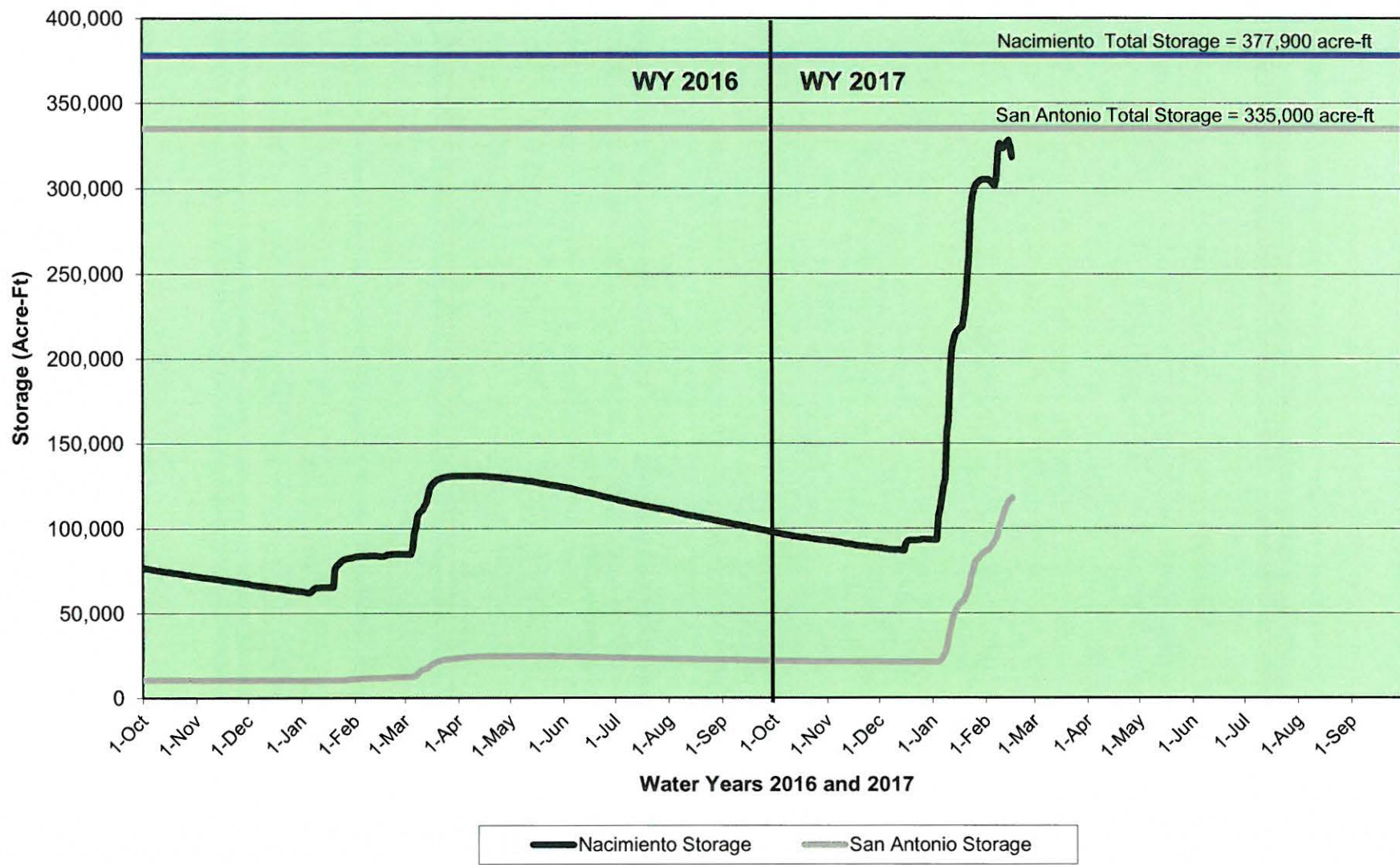
None

FINANCING:

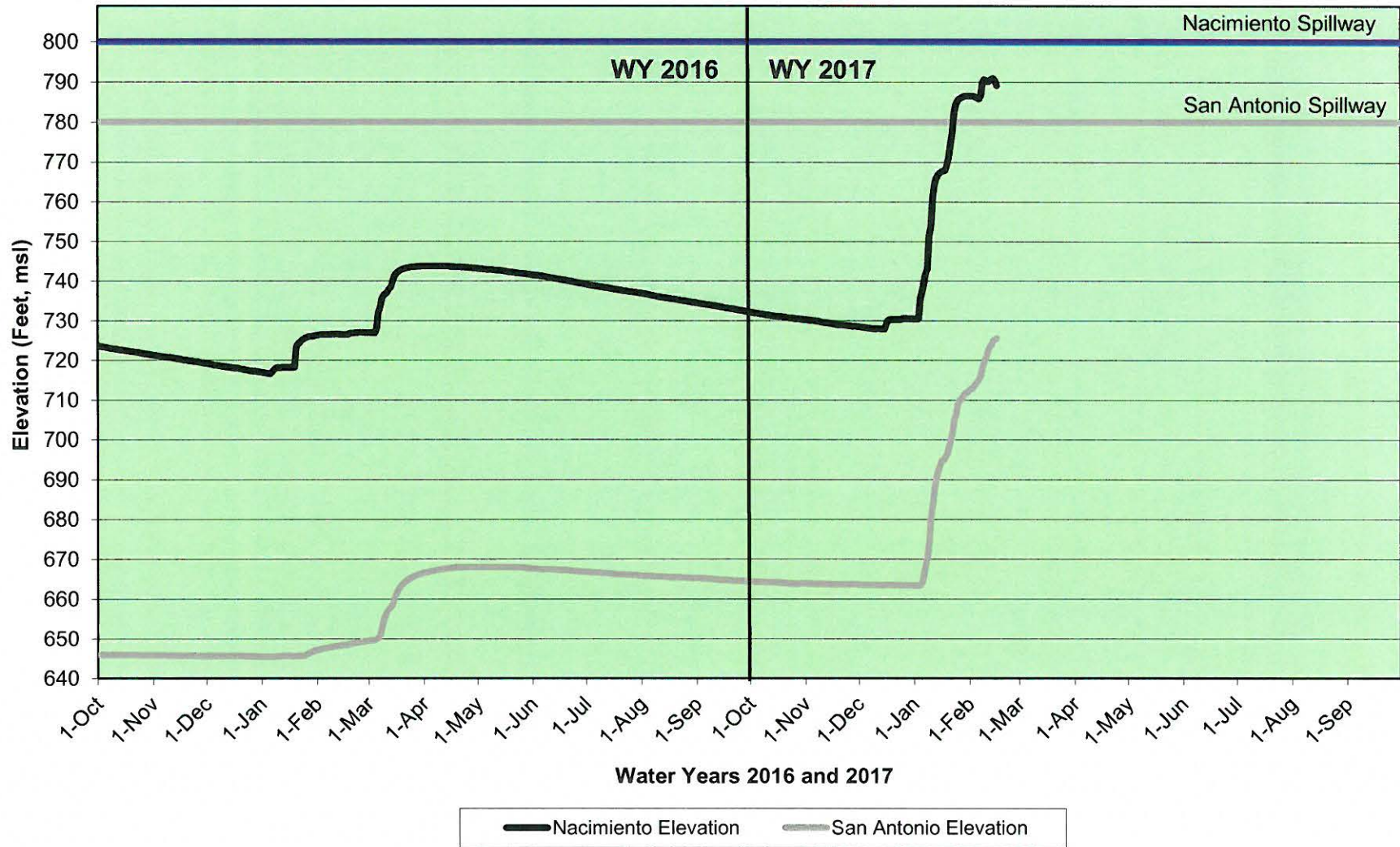
None

Prepared by: Germán Criollo, Associate Hydrologist, (831) 755-4860
Jason Demers, Hydrologist, (831) 755-4860

Reservoir Storage



Reservoir Elevation



MONTEREY COUNTY WATER RESOURCES AGENCY
PRELIMINARY - Estimated Elevation/Storage/NWP Diversions; after February 1st

2/16/2017

RESERVOIR RELEASE SCHEDULE FOR 2017

	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)
1/1/2017	159	9,777	266	156	9,592	386	330	93,275	730.5	86	3	184	21,150	663.4
2/1/2017						760		305,178	786.6				87,205	712.7
3/1/2017						784								
4/1/2017						881								
5/1/2017						2,012								
6/1/2017						2,206								
7/1/2017						2,221								
8/1/2017						2,221								
9/1/2017						2,221								
10/1/2017						2,106								
11/1/2017														
12/1/2017														
1/1/2018														
TOTALS:		9,777	266		9,592	13,576	330			86		184		

* 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.