

**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)

**TIME:** 1:30 pm  
**DATE:** Thursday, April 11, 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 MEETINGS HELD ON MARCH 7, 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. The Committee will discuss possible reservoir release scenario options and present a proposed Reservoir Release Schedule for this conservation period (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. **DISCUSS LOGISTICS FOR THE JUNE COMMITTEE MEETING**  
Staff and the Committee will discuss logistics for the June Committee meeting, which is usually held at one of the reservoirs, and includes a visit to Agency facilities.
  
8. **SET NEXT MEETING DATE AND DISCUSS FUTURE AGENDA ITEMS**  
The Committee will discuss and determine details for its next meeting.
  
9. **ADJOURNMENT**

**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, March 7, 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, David Pozzi, John Baillie,  
Benny Jefferson, Paavo Ogren, Tom Shepherd  
Members absent: Fred Ledesma, Mark Nielsen, Randy Korsgaard

A quorum was established.

**2. PUBLIC COMMENT**

None.

**3. APPROVE THE MINUTES OF THE RESERVOIR OPERATIONS COMMITTEE HELD ON FEBRUARY 7, 2013**

**Committee Action:** On motion and second of Committee members John Baillie and Ken Ekelund the Committee unanimously approved the minutes with the correction on item 9; "Chair Ken Ekelund" should read "Chair David Hart".

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

Howard Franklin, Senior Water Resources Hydrologist/Program Manager, provided a status report. There is no flow in the Salinas River upstream of the confluence with the Nacimiento River. All current releases are from the high-level gates due to maintenance repairs occurring at the Nacimiento Hydroelectric Powerplant. Based on the current elevation, and after meeting forecasted water demands for this year, Nacimiento will likely reach minimum pool by the end of the season.

Jason Demers, Hydrologist, compared this year's current reservoir inflow with last year's inflow. Nacimiento received 71,000 acre-feet of inflow this year, WY 2013, and 46,000 last year, WY 2012. San Antonio received 26,000 acre-feet of inflow in WY 2013, and 13,000 in WY 2012. The Committee discussed strategies for the release schedule. Staff will present a draft release plan to the Committee for review and comment, prior to presentation to the BOD for final approval.

There were questions about the Tunnel Project; and cloud-seeding. Staff stated that the Tunnel Project is being sponsored by the NRWMC through the Greater Monterey County Integrated Regional Water Management Plan (GMCIRWMP) process. There are many issues that need to be worked out regarding the Tunnel Project, including water rights that are being discussed. In relation to cloud seeding, the Agency prepared a Mitigated Negative Declaration, though it came after the Basin Complex Fire in 2008. There were numerous concerns regarding the potential for mudslides and debris flows; therefore it was determined that an Environmental Impact Report (EIR) would be necessary to move forward with cloud seeding. The Agency did not, nor does not have enough money to perform the EIR analysis, so cloud seeding is not an option this year.

**NACIMIENTO** elevation is 758.15 feet and 179,913 acre-feet of storage, 48% of capacity, and current release is 60 cfs.

**SAN ANTONIO** elevation is 747.60 feet and 187,540 acre-feet of storage, 56% of capacity, and current release is 10 cfs.

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

Chris Moss, Senior Water Resources Engineer, provided a report. At Nacimiento three (3) valve actuators on the Low Level Outlet Works are in the process of being rebuilt. One (1) actuator has just been completed and is scheduled to be re-installed the week of March 25, 2013 by a professional team of divers. Once the first is re-installed, the other two (2) actuators will then be removed and refurbished; the target date for re-installation of the other two is April 15, 2013. Staff previously reported about one of the outlet valves that broke off on the downstream side of the reservoir; a plan for stabilization is currently being developed. Unit #1 at the Nacimiento Hydroelectric Powerplant is disassembled; the crane arrived Tuesday and crews are in the process of removing the shaft rotor and stator, which will be delivered next week to the General Electric service center in Los Angeles for repairs. The turbine shutoff valve will be inspected on both sides. The Committee had questions about the insurance payments; staff stated that updates on invoices and payments will be provided.

**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. Staff is facing decisions about hiring seasonal employees and possibly utilizing employees from other County Parks at the two

lakes, as needed. Other activities include closing the shallows this week for the bass spawn, the law enforcement and medical training efforts are nearing completion, and staff has been working with the new Parks Director to get him up to speed.

Preparations are underway for the San Antonio Wildflower Festival scheduled for May 3-5, 2013, which is expected to attract approximately 18,000 visitors. Staff is discussing with organizers the possibility of a mud-event, to be scheduled at San Antonio the weekend prior to the Wildflower Festival.

There was a question on the erosion problem at San Lorenzo Park. Parks has met with Cal Trans and the property owner, who has requested verification of ownership. County Counsel is providing Parks Department with advice and direction.

**B. EASEMENTS AND AGENCY LEASES**

No report provided.

**C. QUAGGA / ZEBRA MUSSEL PLAN**

Elizabeth Krafft provided an update about San Justo Reservoir, in response to the request by the Committee last month. An EIR was recently completed by San Benito County for treating the zebra mussels at San Justo Reservoir with pot ash, and they are waiting for finalization of an environmental assessment by the USBR. Until then, they are keeping the mussels in the pipelines under control by recirculating anoxic water (water that is void of oxygen) from the lake bottom through the pipelines.

An update was also provided on the Ridgemark Golf Course in San Benito County. There have been no signs of zebra mussels in the ponds but they have been found in the pumphouse. Ridgemark receives 80% of their water from San Luis Reservoir. The other 20% of water is received from San Justo Reservoir. San Luis Reservoir supplies water to San Justo Reservoir which in turn provides water to Ridgemark Golf Course, and others. Zebra mussels have been found in the pipeline between San Justo and San Luis Reservoir.

**D. UPDATE ON SLO COUNTY ACTIVITIES**

Nothing new to report.

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

The next meeting is scheduled for Thursday, April 4, 2013 at the Agency at 1:30 p.m. Items for discussion include Reservoir Release Options, and plans for June trip to lakes.

**8. ADJOURNMENT BY CHAIR DAVID HART @ 2:34 P.M.**

**SUBMITTED BY: TERESA CAMPA**





WATER RESOURCES AGENCY

MEMORANDUM

Monterey County

DATE: March 27, 2013

TO: Reservoir Operations Committee

FROM: Howard Franklin

SUBJECT: Reservoir Release Update

**RESERVOIR ELEVATION / STORAGE:** As of the date of this memorandum, San Antonio Reservoir is at approximately 745.2 feet mean sea level (msl), 178,960 acre-feet of storage. Nacimiento Reservoir is at elevation 757.8 feet msl, 178,628 acre-feet of storage. San Antonio Reservoir is currently at 53% of storage capacity and Nacimiento Reservoir is at 47% of capacity.

**RESERVOIR RELEASES:** Conservation releases began on March 13, 2013 in order to re-establish flows in the river for aquifer recharge and pending Salinas River Diversion Facility operations. Nacimiento Reservoir releases remain at minimum fisheries releases of 60 cfs as maintenance activities at Nacimiento Dam have constrained releases to the High Level Gates.

On March 15<sup>th</sup>, based on mean daily flows at the USGS gage Arroyo Seco near Soledad, the Agency forecasted the “year type” as DRY NORMAL. National Marine Fisheries was notified of this forecast; and the following triggers, if met, will result in the Agency initiating a block flow release for Steelhead Smolt outmigration:

- 125 cfs (mean daily flow) at USGS gage Nacimiento R BL Sapaque C NR Bryson or...
- 70 cfs (mean daily flow) at USGS gage Arroyo Seco BL Reliz C NR Soledad

Current releases are as follows:

Nacimiento Reservoir:	60 cfs
San Antonio Reservoir:	200 cfs

Total releases from both reservoirs to the Salinas River are approximately 260 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: | 31 cfs (peaking)     |
| • Salinas River near Chualar:   | 96 cfs (peaked)      |
| • Salinas River near Soledad:   | 201 cfs (decreasing) |
| • Salinas River near Bradley:   | 205 cfs (steady)     |

## Synopsis of Reservoir Release Changes from November 29, 2012 to March 26, 2013

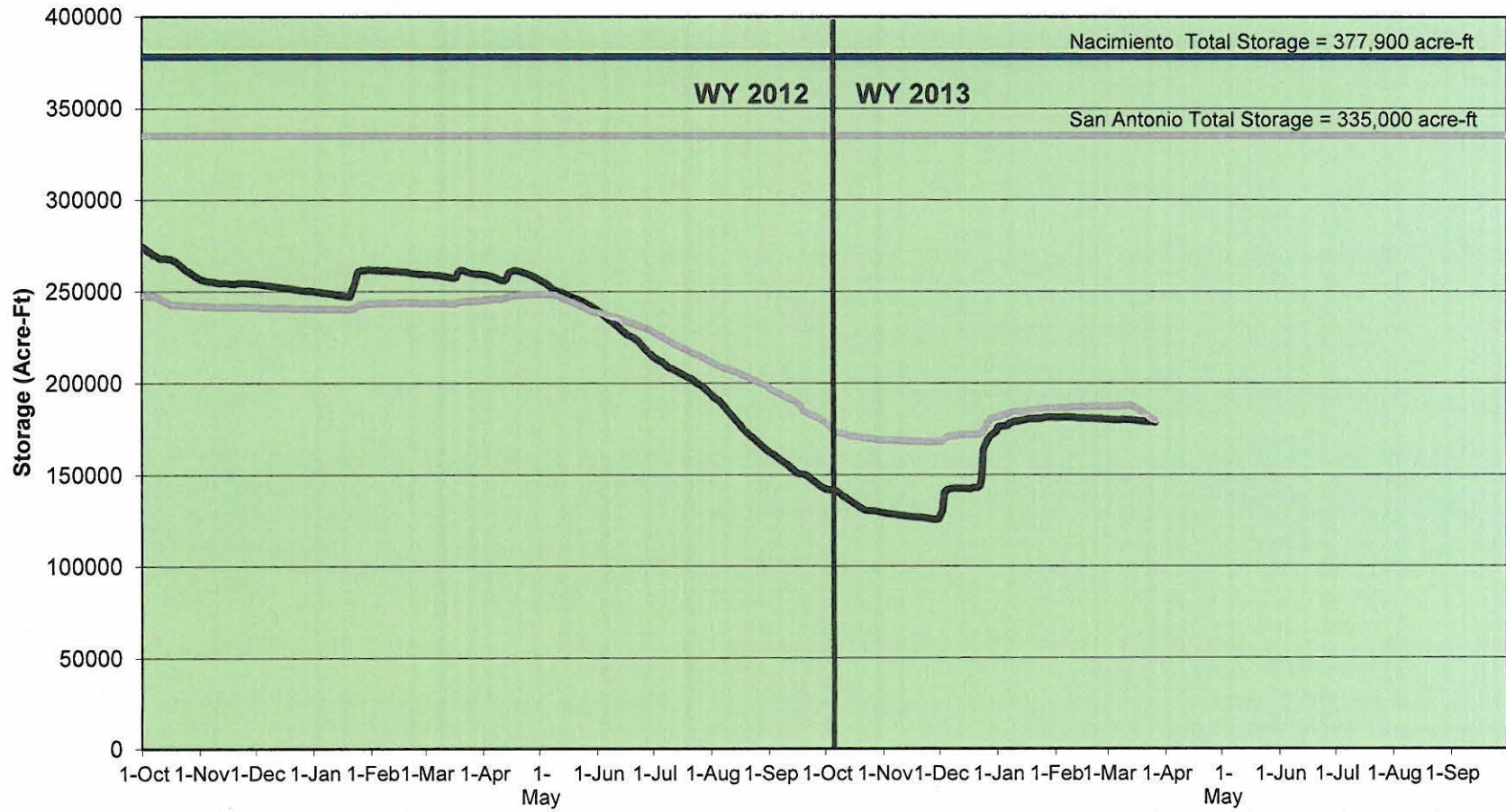
Date	San Antonio Reservoir		Nacimiento Reservoir		Total Releases
	Starting Flow	Ending Flow	Starting Flow	Ending Flow	
November 29, 2012	10	10	100	60	70
February 11, 2013*	10	10	60	59	69
February 12, 2013*	10	10	59	71	81
February 13, 2013*	10	10	71	69	79
February 14, 2013*	10	10	69	68	78
February 15, 2013*	10	10	68	64	74
February 16, 2013*	10	10	64	63	73
February 26, 2013*	10	10	63	62	72
February 27, 2013*	10	10	62	60	70
**					
March 7, 2013*	10	10	60	60	70
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	200	60	60	260

\*Operating releases through Nacimiento High Level Gates; Reporting Provisional Mean Daily Flow at USGS Gage, Nacimiento River below Nacimiento Dam near Bradley

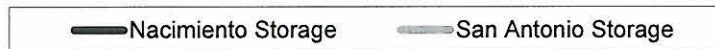
\*\*Operation of Nacimiento Releases through high level gates result in minor discharge variations; as noted in the reported Provisional Mean Daily Flow at the USGS Gage, Nacimiento River below Nacimiento Dam near Bradley, and as indicated in this table (through Feb. 27<sup>th</sup>). These variations 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

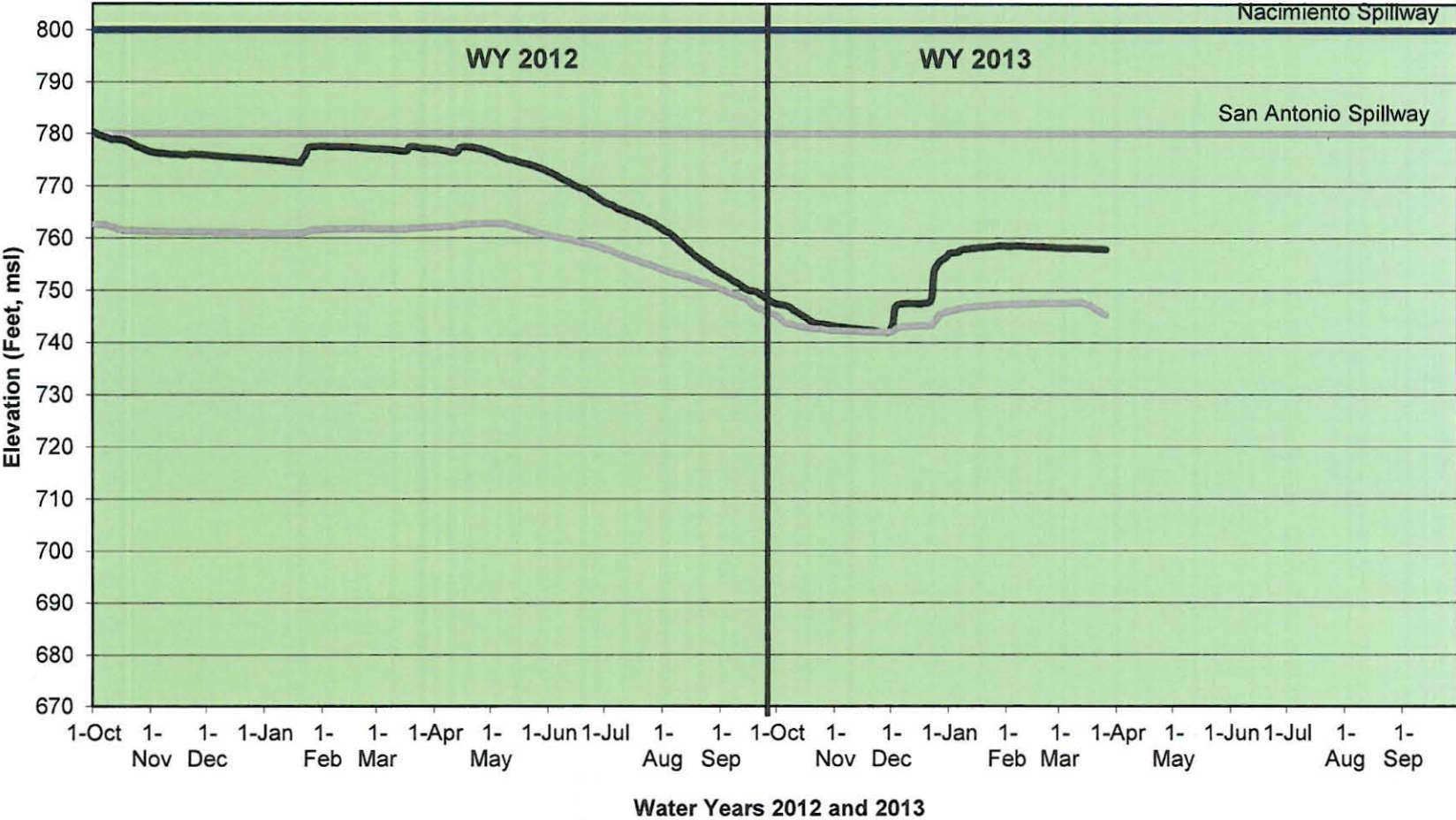


Water Years 2012 and 2013





# Reservoir Elevation



Nacimiento Elevation    
  San Antonio Elevation

**MONTEREY COUNTY WATER RESOURCES AGENCY**

**PRELIMINARY - Estimated Elevation/Storage/NWP Diversions; after March 1<sup>st</sup>**

3/26/2013

	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	4,340	396	60	3,720	776	8	176,101	757.1	397	10	620	181,623	746.0
2/1/2013	72	4,032	782	62	3,472	1,037	0	181,225	758.5	431	10	560	186,445	747.3
3/1/2013	247	15,314	1,275	64	3,968	1,033	TDR	180,288	758.3	1,091	183	11,346	187,358	747.6
4/1/2013								177,726	757.6				176,850	744.6
5/1/2013						1,133								
6/1/2013						1,166								
7/1/2013						1,258								
8/1/2013						2,035								
9/1/2013						2,094								
10/1/2013						1,880								
11/1/2013						1,240								
12/1/2013						1,253								
1/1/2014						844								
<b>TOTALS:</b>		<b>23,686</b>	<b>2,453</b>		<b>11,160</b>	<b>15,750</b>	<b>8</b>			<b>1,919</b>		<b>12,526</b>		

\* Mean daily flow for the month in cubic feet per second.

\*\* Evap. Losses calculated from pan evaporation data at Nacimiento and San Antonio Reservoirs. Estimated from long term data after: March 1st

**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. "NACIMIENTO "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)