



MONTEREY COUNTY WATER RESOURCES AGENCY

893 BLANCO CIRCLE
SALINAS, CA 93901
(831) 755.4860
(831) 424.7935 FAX

BOARD OF DIRECTORS

BOARD OF DIRECTORS:

Claude Hoover, Chair
Mike Scattini, Vice Chair
Ken Ekelund
Mark Gonzalez
David Hart
John Huerta
Richard Ortiz
Deidre Sullivan
(Vacant)

STAFF:

David E. Chardavoyne, General Manager
Robert Johnson, Deputy General Manager
Brent Buche, Deputy General Manager
Cathy Paladini, Finance Manager
Wini Chambliss, Clerk to the Board
Jesse Avila, Deputy County Counsel

NOTICE OF SPECIAL BOARD OF DIRECTORS MEETING

Tuesday, August 11, 2015 at 3:00 P.M.
893 BLANCO CIRCLE
SALINAS, CA 93901

AND SPECIAL BOARD OF DIRECTORS MEETING

A G E N D A

Staff reports relative to the agenda items listed below will be available for public review on the Agency's website by 12:00 p.m., Monday, August 10, 2015 and at the Monterey County Water Resources Agency (Agency), 893 Blanco Circle, Salinas. If additional documents are produced by the Agency and provided to a majority of the Board regarding any item on the agenda after staff reports have been distributed, they will be available at the Agency during normal business hours and posted on the Agency website at http://www.mcwra.co.monterey.ca.us/BOD/BOD/AgendaCurrent_n.htm. For additional information, please contact Alice Henault, Senior Secretary, at (831) 755-4843.

If requested, the agenda and associated documents shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 USC Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Individuals with a disability requiring a modification or accommodation, including auxiliary aids or services, in order to participate in the public meeting may make these requests to Alice Henault, Senior Secretary, at (831) 755-4843. Please notify Alice Henault at least 72 hours in advance to ensure availability of appropriate equipment.

1. CALL TO ORDER/ESTABLISH QUORUM – 3:00 P.M.

2. PUBLIC COMMENTS ON CLOSED SESSION ITEMS

Closed Session under Government Code section 54950, relating to the following items:

a) Conference with Legal Counsel – Significant Exposure to Litigation

Pursuant to Government Code section 54956.9(d)(2), the Board of Directors will confer with legal counsel regarding two matters of significant exposure to litigation.

3. ADJOURN TO CLOSED SESSION

4. RECONVENE MEETING/RE-ESTABLISH QUORUM (No earlier than 3:30 P.M.)

5. PLEDGE OF ALLEGIANCE

6. PUBLIC COMMENTS

Members of the public have the opportunity to directly address the Agency concerning any item that has been described in the notice (and Agenda) for the special meeting before or during consideration of that item (Government Code 54954.3(a)). Public comments are limited to three minutes per speaker per item listed on the agenda.

7. ACTION ITEM

A. Consider receiving a report on Agency and National Marine Fisheries Service activities regarding reservoir releases since the July 27, 2015 Board of Directors Meeting.

B. Consider authorizing Agency Staff to confer with National Marine Fisheries Service on release options of 100 and 150 cubic feet per second from Nacimiento Reservoir.

C. Consider giving Agency staff direction to consult with National Marine Fisheries Service (NMFS) and the California Department of Fish & Wildlife (CDFW) to determine if the San Antonio Reservoir can be reduced to 644.9 feet (dead pool) in order to perform essential deferred maintenance, and to implement that action if as a result of that consultation the action will not result in a “take” of threatened or endangered species, or a violation of the California and Federal Endangered Species Acts or other state or federal law.

8. ADJOURNMENT

**MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS**

MEETING DATE:	August 11, 2015	AGENDA ITEM: 7 A	
AGENDA TITLE:	Consider receiving a report on Agency and National Marine Fisheries Services activities regarding reservoir releases since July 27, 2015 Board of Directors Meeting		
Consent ()		Action (X)	
SUBMITTED BY:	Howard Franklin	PREPARED BY:	Howard Franklin
PHONE:	(831) 755-4860	PHONE:	(831) 755-4860
DEADLINE FOR BOARD ACTION:		August 11, 2015	

RECOMMENDED BOARD ACTION:

Consider receiving a report on Agency and National Marine Fisheries Service activities regarding reservoir releases since the July 27, 2015 Board of Directors Meeting.

SUMMARY:

Current drought conditions and emergency operations of Nacimiento and San Antonio reservoirs have resulted in reservoir level conditions that have not allowed the Agency to operate the Salinas River Diversion Facility for two consecutive years. As a result of these conditions all hydrologic subareas of the Salinas Valley, with the exception of the Pressure 400-Foot Aquifer, are currently experiencing historic groundwater level declines.

Due to the extreme drought conditions and concerns raised by Salinas Valley Stakeholders; the Monterey County Water Resources Agency Board of Directors and the Monterey County Board of Supervisors have directed the Agency to prepare recommendations for providing additional releases to the Salinas River.

DISCUSSION:

RESERVOIR ELEVATION / STORAGE: As of August 10, 2015, San Antonio Reservoir is at an elevation of approximately 653.35 feet mean sea level (msl), 14,360 acre-feet of storage. Nacimiento Reservoir is at elevation 727.9 feet msl, 87,005 acre-feet of storage. San Antonio Reservoir is currently at 4% of storage capacity and Nacimiento Reservoir is at 23% of capacity.

Releases as of August 10, 2015:

- Nacimiento Reservoir: 60 cfs
- San Antonio Reservoir: 5 cfs

At a specially scheduled July 6, 2015 BOD meeting, staff provided an update to the Board on reservoir releases, discussions with National Marine Fisheries Service (NMFS) and a summary of Committee and Board direction regarding reservoir releases. At that meeting the Board directed the Agency to:

1. Maintain Reservoir Releases at 60 cfs; and
2. Discuss with NOAA Fisheries the possibility of making temporary Conservation Releases.

On July 23, 2015 Agency Staff met with the National Marine Fisheries Service (NMFS) in San Francisco. At that meeting, options for reservoir release increases were discussed. NMFS requested that any requests for consultation on release changes be submitted to NMFS in a written proposal.

On July 28, 2015 Agency Staff received direction from the Monterey County Board of Supervisors to prepare written recommendations to NMFS for providing additional releases to the Salinas River. Supervisors also directed the Agency to propose a meeting be scheduled with NMFS to discuss release recommendations; and that an Upper Valley grower be included in that meeting.

On July 31, 2015 Agency Staff submitted to NMFS a reservoir release plan ("Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015") in order to:

- Meet the most immediate and extreme needs for groundwater availability
- Perform repair and maintenance work on San Antonio Dam outlet works to prevent emergency work due to equipment failure
- Maintain water for minimum flow releases from Nacimiento Reservoir (60 cfs)
- Provide a unique and adaptive approach to enhance steelhead habitat and migration opportunities.

Also included in the Agency letter of July 31st the Agency proposed: *"As time is of the essence, staff from the Agency, along with a Salinas Valley Stakeholder is hoping to meet with you and/or other appropriate National Marine Fisheries staff at your earliest convenience to discuss a response to this recommended conservation release plan."*

On August 4, 2015 NMFS responded to the Agency's letter of July 31, 2015. Highlighted from that letter, NMFS responded:

- *"Your proposed reservoir releases are outside the scope of analysis in our Salinas Valley Water Project (SVWP) biological opinion (NMFS 2007)."*
- *"...your proposed increased reservoir releases pose a risk to steelhead"*
- *"...we cannot allow mitigation after-the-fact under existing conditions."*
- *"We further appreciate the offer to meet with a Salinas Valley stakeholder and hear of their particular concerns, however, information shared at such a meeting would not change our determination that the proposed increased reservoir releases are inconsistent with our SVWP biological opinion."*

On August 5, 2015 Agency Staff continued to discuss with NMFS, options specific to the critical need to perform repair and maintenance work on the San Antonio dam's outlet works. NMFS's

recommendation was to demonstrate, through field investigations, that the action at San Antonio could be implemented without causing take of a listed species.

On August 6, 2015 the Reservoir Operations Committee was provided an update from Staff on communications with NMFS. Based on that update, the Committee recommended to the BOD that:

“...the BOD direct Agency Staff to maximize releases from San Antonio Reservoir in order to reach dead pool, to allow maximum accessibility and ensure work safety, for making necessary repairs prior to the rainfall season; if it is found through a fish survey that maximizing releases will not result in a take of a threatened or endangered (listed) species.”

OTHER AGENCY INVOLVEMENT:

Agency Staff and staff from the NMFS have been in ongoing communications.

FINANCING:

Unknown

FINANCIAL IMPACT:	YES (X) Unknown	NO ()
FUNDING SOURCE:		
COMMITTEE REVIEW AND RECOMMENDATION:	<ol style="list-style-type: none"> 1. Reservoir Operations Committee met on July 2, 2015 and recommended keeping Nacimiento releases at 60 cfs. 2. Reservoir Operations Committee met on August 6, 2015 and recommended maximizing releases from San Antonio Reservoir; if possible without take of a listed species. 	
ATTACHMENTS:	<ol style="list-style-type: none"> 1. Agency Letter dated July 31, 2015 (abridged) 2. Attachment 2: Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015 (from July 31, 2015 Letter) 3. NMFS Letter dated August 4, 2015 	
APPROVED:	<p style="text-align: center;"><i>David E Chardavoyne</i> 8/10/15 General Manager Date</p>	

MONTEREY COUNTY

WATER RESOURCES AGENCY

PO BOX 930
SALINAS, CA 93902
(831)755-4860
FAX (831) 424-7935

DAVID E. CHARDAVOYNE
GENERAL MANAGER



STREET ADDRESS
893 BLANCO CIRCLE
SALINAS, CA 93901-4455

July 31, 2015

Ms. Joyce Ambrosius
National Marine Fisheries Service
North-Central Coast Office Central Coast Branch
777 Sonoma Ave. Rm 325
Santa Rosa, CA 95404

Dear Ms. Ambrosius:

California, the Central Coast, and Monterey County are experiencing its fourth consecutive critically dry winter. A combination of these dry conditions and an unexpected hydroelectric plant breakdown at Nacimiento Reservoir has resulted in conditions that have not allowed the Monterey County Water Resources Agency (Agency) to operate the Salinas River Diversion Facility or provide reservoir conservation releases to the Salinas River Groundwater Basin for two consecutive years. As a result of these conditions all hydrologic subareas of the Salinas Valley, with the exception of the Pressure 400-Foot Aquifer, are currently experiencing historic groundwater level declines (Attachment 1 – “Salinas River Groundwater Basin Water Conditions for the third Quarter of Water Year 2014 – 2015”).

Although Nacimiento Reservoir has had over 80,000 acre-feet of water available for conservation release to the Salinas Valley this summer, this water has had to remain in reservoir storage due to release limitations of the outlet works that restrict the Agency from providing releases of sufficient capacity to maintain a minimum flow of 2 cfs to the Salinas River Lagoon.

Due to the extreme drought conditions and concerns raised by Salinas Valley Stakeholders; the Monterey County Water Resources Agency Board of Directors and the Monterey County Board of Supervisors have directed the Agency to prepare recommendations for providing additional releases to the Salinas River. This release plan (Attachment 2 – “Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015”) is in response to that direction. The Agency has developed these recommendations in order to:

- Meet the most immediate and extreme needs for groundwater availability
- Perform repair and maintenance work on San Antonio Dam outlet works to prevent emergency work due to equipment failure
- Maintain water for minimum flow releases from Nacimiento Reservoir (60 cfs)

Ms. Joyce Ambrosius
July 31, 2015

- Provide a unique and adaptive approach to enhance steelhead habitat and migration opportunities.

The Monterey County Water Resources Agency Board of Directors will be scheduling an emergency meeting in August in order to discuss this conservation release plan and direct Agency staff on options for implementation.

As time is of the essence, staff from the Agency, along with a Salinas Valley Stakeholder is hoping to meet with you and/or other appropriate National Marine Fisheries staff at your earliest convenience to discuss a response to this recommended conservation release plan. The Agency believes this plan integrates an adaptive approach to implementation of the Salinas Valley Water Project Flow Prescription for steelhead and provides flows fostering recovery of steelhead subpopulations in the Salinas Watershed.

If you have any questions regarding this request, please contact Howard Franklin at 831.755.4860.

Sincerely,

A handwritten signature in blue ink that reads "David P. Chardavoyne". The signature is written in a cursive style with a prominent flourish at the end.

Attachment 2

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015



Monterey County Water Resources Agency
893 Blanco Circle
Salinas, CA 93901

July 31, 2015

Attachment 2

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015

Introduction

Four consecutive critically dry winters have resulted in extreme drought conditions in the Salinas Valley, Monterey County, and much of California. As a result of these conditions and concerns raised by Salinas Valley Stakeholders; the Monterey County Water Resources Agency Board of Directors and the Monterey County Board of Supervisors have directed the Monterey County Water Resources Agency (Agency) to prepare recommendations for immediately providing additional releases to the Salinas River. This proposed plan is in response to that direction. The Agency has developed these recommendations in order to:

- Meet the most immediate and extreme needs for groundwater availability
- Perform repair and maintenance work on the San Antonio Dam outlet works to prevent potential emergency work do to equipment failure
- Maintain water for minimum flow releases from Nacimiento Reservoir (60 cfs)
- Provide a unique and adaptive approach to enhance steelhead habitat and migration opportunities

Background

On March 5, 2014 the Reservoir Operations Committee unanimously passed a motion advising the Agency not to operate the Salinas River Diversion Facility (SRDF) for the 2014 irrigation season (April – October) based on lack of water in the Agency’s two reservoirs, Nacimiento and San Antonio, and insufficient winter rainfall. A second motion unanimously passed by the Committee requested Agency staff to make a formal recommendation to the National Marine Fisheries Service to comment on the reduction of minimum flow criterion from Nacimiento Reservoir from 60 cubic feet per second (cfs) to 25 cfs.

On March 18, 2014 the Agency sent a letter to NMFS (Attachment 2A) forwarding that recommendation in accordance with page 31 of the “Salinas Valley Water Project Flow Prescription for Steelhead Trout in the Salinas River” (Flow Prescription) which is included in the description of the proposed action in the NMFS issued biological opinion (B.O.) SWR/2003/2080, June 2007.

“Under drought conditions, the MCWRA will evaluate reservoir storage with regard to the continuation of minimum releases. When the water surface of Nacimiento Reservoir is at or below elevation 784 feet (mean sea level) recommendations may be presented to NMFS for a reduction of the minimum flow criterion.”

On March 31, 2014 the Agency Board of Directors unanimously adopted Board Order No. 14-24 directing staff to reduce the minimum flow criteria from Nacimiento Reservoir from 60 cfs to 25 cfs, as agreed upon with NMFS, “... in order to prolong flow into the Nacimiento River

Attachment 2

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015

maintaining steelhead habitat as long as possible, offsetting the uncertainties of continuing drought conditions.”

On April 25, 2014 NMFS provided a response to the Agency regarding minimum flow releases from the Nacimiento Reservoir (Attachment 2B). In that response NMFS noted that “...*reducing the minimum flow release from 60 to 25 cfs is likely to result in adverse impacts to the quality and quantity of S-CCC steelhead habitat, which could result in take of S-CCC steelhead.*” Of concern to NMFS was that the reduced flow volume would cause adverse temperature increases with distance downstream from the reservoir and that their 2007 biological opinion did not analyze minimum flows of less than 60 cfs. But in order to work with the Agency in its water conservation efforts, NMFS made several operational recommendations that could be implemented in order to minimize potential impacts to steelhead habitat should the Agency choose to implement a reduction in minimum releases; along with recommendations to expanded monitoring procedures in the Nacimiento River downstream of the reservoir.

On April 28, 2014 the Agency Board of Directors received an update on NMFS response to the Agency’s recommendation to reduce minimum releases from Nacimiento Reservoir. By unanimous decision, the Board directed Staff to continue discussions with NMFS and return with additional information and recommendations.

On June 2, 2014 the Agency Board of Directors received an update on discussions with NMFS regarding reducing the minimum release criterion from Nacimiento Reservoir from 60 cfs to 25 cfs; and was requested to provide direction to Staff. Agency Staff evaluated and presented three release options for the Board to consider:

1. Maximize conservation releases from Nacimiento Reservoir
Under this release option, Nacimiento would reach “Minimum Pool” by late August, 2014.
2. Maintain 60 cfs minimum release from Nacimiento Reservoir
With no winter inflow, under this release option, Nacimiento would reach “Minimum Pool” by early February, 2015.
3. Reduce minimum releases from Nacimiento Reservoir to 25 cfs
With no winter inflow, under this release option, Nacimiento would reach “Minimum Pool” by late summer, early fall of 2015.

By unanimous decision, the Board directed Staff to gradually reduce minimum releases to 25 cfs, or as close as possible without dropping below 25 cfs, following the guidelines recommended by NMFS.

On June 4, 2014 Agency Staff began a gradual ramp down of releases from Nacimiento. A minimum release of 25 cfs was reached on June 18, 2014. Actual minimum release rates as a result of this action varied from between 25 – 35 cfs.

On March 5, 2015 at the Reservoir Operations Committee meeting, Staff discussed the amount of reservoir storage needed to operate the Salinas River Diversion Facility (SRDF). To operate

Attachment 2

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015

the SRDF for a minimum of 30 days staff reported it would require approximately 10,000 acre-feet (AF) of storage above minimum pool at San Antonio and about 40,000 AF of storage above minimum pool at Nacimiento would be needed. On March 5, 2015 there was 86,000 AF above minimum pool at Nacimiento. San Antonio reservoir storage would need to increase by about 19,000 AF in order to supplement releases needed to deliver water to the SRDF. The Committee advised that the reservoirs should continue at current minimum releases and staff would continue to monitoring river and reservoir conditions.

On April 2, 2015 at the Reservoir Operations Committee meeting, Staff again discussed the amount of reservoir storage needed to operate the Salinas River Diversion Facility (SRDF). With San Antonio Reservoir storage 6,500 AF below minimum pool, and needing at least 10,000 AF above minimum pool in order to provide the release capacity to operate the SRDF; it was decided through general consensus that with conditions similar to March 2014, the SRDF should not be operated in 2015.

On May 26, 2016 the Agency Board of Directors received a report from Staff updating them on the status of releases from both reservoirs. At that meeting Staff was directed to increase releases from Nacimiento Reservoir to 60 cfs beginning May 27, 2015. Additionally, the Reservoir Operations Committee was directed by the Board to discuss the impacts of increasing the minimum flow criteria at its next regular meeting and provide its recommendation(s) to the Board of Directors for further action.

On June 5, 2015 Staff presented various release options to the Reservoir Operations Committee. The Committee advised maintaining 60 cfs releases from Nacimiento Reservoir and to continue evaluating issues and policies related to reservoir release.

On June 22, 2015 the Agency Board of Directors received an update on reservoir releases and directed Staff and Counsel to investigate:

- The definition of conservation releases and the requirement for 2 cfs to the lagoon
- Benefits of release options of flows up to 300 cfs
- And to confer with NMFS reservoir release options above minimum flow

From June 23 thru June 30, 2013 Agency staff consulted numerous times with Staff from NMFS regarding questions related to the Biological Opinion for the Salinas Valley Water Project (SWR/2003/2080).

On July 1, 2015 NMFS issued a letter to Claude Hoover, Chair of Monterey County Water Resources Agency Board of Directors regarding the Agency's proposal for increasing releases from Nacimiento Reservoir during summer 2015 (Attachment 2C). In that letter, the NMFS "...strongly objects to the proposed increase in flow releases from Nacimiento Reservoir in light of the severe ongoing drought conditions, particularly releases as high as 250 to 300 cfs."

"Implementing this flow release is likely to result in adverse consequences to the federally threatened Salinas River population of the South-Central California Coast (SCCC) steelhead

Attachment 2

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015

(Oncorhynchus mykiss) Distinct Population Segment because there will not be adequate water supplies reserved in the reservoir to maintain stream flows for fish in the Salinas River.”

On July 2, 2015 the Reservoir Operations Committee considered the impacts of release options presented by Staff, NMFS input received in their July 1, 2015 letter, and legal opinion from Counsel regarding conservation releases above 60 cfs and up to 300 cfs without maintaining 2 cfs minimum flow to the lagoon. After consideration of this information, the Committee recommended keeping Nacimiento releases at 60 cfs.

On July 6, 2015 at a “Special” meeting of the Board of Directors of the Monterey County Water Resources Agency by Board Order No. 15-46 the directors directed Staff to:

- Maintain Reservoir releases at 60 cfs; and
- Discuss with NOAA Fisheries the possibility of making temporary conservation releases from Nacimiento Reservoir

On July 28, 2015 Agency Staff received direction from the Monterey County Board of Supervisors to prepare a written proposal for immediate releases increases to the Salinas River, and to submit that proposal to NMFS for consideration.

Flow Proposal

The Monterey County Water Resources Agency is proposing to make immediate release increases to the Salinas River. Under this proposal both Nacimiento and San Antonio Reservoirs would be utilized to provide an average combined flow of approximately 230 cfs (maximum combined release of 250 cfs) for a period of 60 days. Table 1 provides an accounting of proposed mean daily releases from each reservoir. The Agency is proposing a ramping of releases through the various increases and decreases that occur through this 60 day period. An approximate total of an additional 29,550 acre-feet of releases, above the prescribed minimum reservoir release requirements for this period, would be released in the implementation of this proposed action. This proposed release plan would include the lowering of San Antonio Reservoir to “Dead Pool” by the second week in September in order to perform needed repairs and maintenance on the low level outlet works in order to prevent unscheduled emergency work due to potential equipment failure.

Benefit/Impact Analysis

In order to fully evaluate the potential benefits and impacts of this proposed release plan it is necessary to evaluate those benefits and impacts relative to a range of forecasted inflow scenarios that might occur in the upcoming winter. The Agency has developed, through statistical analysis of the period of record, representative “year type” inflows to both Nacimiento and San Antonio Reservoir corresponding to “Dry” “Normal” and “Wet” year types as defined in the Flow Prescription. The results of this analysis are presented in detail in Tables 2, 3, and 4; and graphically in Figures 1 thru 6.

Attachment 2

Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015

Mitigation

The Monterey County Water Resources Agency views this proposed action as an opportunity for NMFS to discuss and recommend unique and adaptive strategies in a joint approach to enhance steelhead habitat and migration.

Next Steps

The Agency is proposing a meeting be scheduled at NMFS earliest convenience to discuss a response to this proposed release plan. Specifically, the Agency would propose that Senior Hydrologist Howard Franklin, Senior Water Resources Engineer Chis Moss, along with Upper Valley Stakeholder Mr. Jerry Rava, meet with NMFS Staff the week of August 3rd. The Agency hopes to present NMFS response at a special scheduling of the Agency's Board of Directors in early August in order to receive direction on possible options regarding the implementation of this proposed release plan.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404

August 4, 2015

Refer to NMFS No: SWR-2003-2080

David Chardavoigne, General Manager
Monterey County Water Resources Agency
893 Blanco Circle
Salinas, California 93901-4455

Re: Monterey County Water Resources Agency's proposal for increasing stream flow releases from Nacimiento and San Antonio Reservoirs during summer 2015

Dear Mr. Chardavoigne:

On July 31, 2015, NOAA's National Marine Fisheries Service (NMFS) received your July 31, 2015, letter with two attachments (Salinas River Groundwater Basin Water Conditions for the third Quarter of Water Year 2014-2015 [Attachment 1] and Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015 [Attachment 2]). According to your letter, the Monterey County Water Resources Agency (MCWRA) Board of Directors and the Monterey County Board of Supervisors directed MCWRA staff to prepare recommendations for providing additional releases to the Salinas River in order to increase aquifer recharge in the southern portion of the Salinas Valley. Attachment 2 is MCWRA's response to that direction. Your letter also noted that the Board of Supervisors directed MCWRA staff to schedule a meeting between MCWRA, a Salinas Valley stakeholder, and NMFS to discuss a response to your recommendations.

According to Attachment 2, MCWRA proposes immediate increases in reservoir releases to the Salinas River of up to 250 cfs. This would reduce current reservoir storage by approximately 29,550 acre-feet and bring San Antonio Reservoir to "dead pool" by the second week in September. In addition to aquifer recharge, the reduction would allow MCWRA to perform needed repairs and maintenance on the low level outlet works.

Your proposed reservoir releases are outside the scope of analysis in our Salinas Valley Water Project (SVWP) biological opinion (NMFS 2007). Section 9 of the Endangered Species Act (ESA) and federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without special exemption. Additionally, reducing San Antonio Reservoir storage to dead pool would preclude releases from the reservoir and dry most, if not all, of the San Antonio River downstream of the dam. Such an action is not exempt from ESA prohibitions. In order to comply with the ESA, MCWRA needs to obtain a section 10(a)1(B) permit from NMFS, receive incidental take coverage through a section 7 consultation between



NMFS and another federal agency, or implement the project without causing take of a listed species.

NMFS fully understands the severity of this unprecedented drought and its wide-ranging consequences to stakeholders and the environment throughout California. However, your proposed increased reservoir releases pose a risk to steelhead. While we appreciate your viewpoint that the proposed increased reservoir releases provide an opportunity to discuss strategies to enhance steelhead habitat and migration through mitigation, we cannot allow mitigation after-the-fact under existing conditions. We further appreciate the offer to meet with a Salinas Valley stakeholder and hear of their particular concerns, however, information shared at such a meeting would not change our determination that the proposed increased reservoir releases are inconsistent with our SVWP biological opinion.

We look forward to continuing our collaboration on ways to improve water resource and fisheries management strategies in the Salinas River Watershed. Please direct questions regarding this letter to Mr. William Stevens, North-Central Coast Office, at (707) 575-6066, or via e-mail at William.Stevens@noaa.gov.

Sincerely,



Alecia Van Atta
Acting Assistant Regional Administrator
California Coastal Office

cc: Elizabeth Krafft, MCWRA, Salinas
German Criollo, MCWRA, Salinas
Howard Franklin, MCWRA, Salinas
Holly Costa, U.S. Army Corps, San Francisco
Linda Connolly, DFW, Fresno
Julie Vance, CDFW, Fresno
Margaret Paul, CDFW, Monterey
Jon Rohrbough, CCRWQCB, San Luis Obispo
Ho Truong, NOAA Office for Law Enforcement, Long Beach
Kevin Painter, NOAA Office of Law Enforcement, Santa Rosa

Literature Cited

NMFS (National Marine Fisheries Service). 2007. Biological opinion issued to the U.S. Army Corps of Engineers for the Monterey County Water Resources Agency's Salinas Valley Water Project in Monterey County, California. National Marine Fisheries Service, Southwest Region, Long Beach, California. File No: SWR/2003/2080; ARN: 151422SWR2003SR8711. June 21, 2007. 123 pp.

**MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS**

MEETING DATE:	August 11, 2015	AGENDA ITEM: 7 B	
AGENDA TITLE:	Consider authorizing Agency Staff to confer with National Marine Fisheries Service (NMFS) on release options of 100 and 150 cubic feet per second from Nacimiento Reservoir.		
Consent ()		Action (X)	
Information ()			
SUBMITTED BY:	Howard Franklin	PREPARED BY:	Howard Franklin
PHONE:	(831) 755-4860	PHONE:	(831) 755-4860
DEADLINE FOR BOARD ACTION:	August 11, 2015		

RECOMMENDED BOARD ACTION:

Consider authorizing Agency Staff to confer with National Marine Fisheries Service (NMFS) on release options of 100 and 150 cubic feet per second from Nacimiento Reservoir.

SUMMARY:

Due to the extreme drought conditions and concerns raised by Salinas Valley Stakeholders; the Monterey County Water Resources Agency Board of Directors and the Monterey County Board of Supervisors have directed the Agency to prepare recommendations for providing additional releases to the Salinas River.

DISCUSSION:

In an effort to explore additional release options not proposed in the July 31st release plan, Agency Staff is seeking direction from the Agency Board of Directors in order to continue to confer with NMFS on additional release scenarios for Nacimiento Reservoir. The Agency would like to propose that NMFS consider the following release proposals for Nacimiento Reservoir (Attachment 1):

- Release of 25,000 acre-feet at a rate of 100 cubic feet per second (cfs)
- Release of 25,000 acre-feet at a rate of 150 cfs
- Release 100 cfs for 60 days
- Release of 150 cfs for 60 days

OTHER AGENCY INVOLVEMENT:

Agency Staff and staff from the NMFS have been in ongoing communications.

FINANCING:

Unknown

FINANCIAL IMPACT:	YES (X) Unknown NO ()
FUNDING SOURCE:	
COMMITTEE REVIEW AND RECOMMENDATION:	Reservoir Operations Committee met on August 6, 2015 and recommended maximizing releases from San Antonio Reservoir; if possible without take of a listed species.
ATTACHMENTS:	1. Agency Draft Letter to NMFS
APPROVED:	<p><i>David P. Chardavoyne</i> 8/10/15</p> <p>General Manager Date</p>



*Before the Board of Directors of the Monterey County Water Resources Agency
County of Monterey, State of California*

BOARD ORDER No.

DIRECT STAFF TO:

**CONFER WITH NATIONAL MARINE FISHERIES SERVICES ON RELEASE OPTIONS OF)
OF 100 AND 150 CUBIC FEET PER SECOND FROM NACIMIENTO RESERVOIR)**

Upon motion of _____, seconded by _____, and carried by those members present, the Board of Directors hereby directs Staff to:

Confer with National Marine Fisheries Services on release of 100 and 150 cubic feet per second from Nacimiento Reservoir.

PASSED AND ADOPTED on this 11th day of **August 2015**, by the following vote, to-wit:

AYES:

NOES:

ABSENT:

BY: Claude Hoover, Chair
Board of Directors

ATTEST: David E. Chardavoyne
General Manager

MONTEREY COUNTY

WATER RESOURCES AGENCY

PO BOX 930
SALINAS, CA 93902
(831)755-4860
FAX (831) 424-7935

DAVID E. CHARDAVOYNE
GENERAL MANAGER



STREET ADDRESS
893 BLANCO CIRCLE
SALINAS, CA 93901-4455

August XX, 2015

Ms. Joyce Ambrosius
National Marine Fisheries Service
North-Central Coast Office Central Coast Branch
777 Sonoma Ave. Rm 325
Santa Rosa, CA 95404

Dear Ms. Ambrosius:

Monterey County Water Resources Agency (Agency) appreciates the timely response (NMFS August 4, 2015) by the National Marine Fisheries Service (NMFS) to our request of July 31, 2015 for consideration of a proposed "Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015".

With regard to San Antonio Reservoir the Agency has a critical need to perform repair and maintenance work on the dam's outlet works to prevent possible emergency work due to equipment failure as a result of not performing these maintenance activities. The Agency will be requesting assistance from NMFS in a separate correspondence regarding that effort.

With regard to Nacimiento Reservoir, and in an effort to explore all possible contingencies regarding Nacimiento release options, the Agency Board of Directors at an emergency meeting on August 11, 2015 has directed Agency Staff to confer with NMFS on additional release scenarios for Nacimiento Reservoir. The Agency would like NMFS to consider the following release proposals for Nacimiento Reservoir (detailed in the attached Tables A through D):

- Release of 25,000 acre-feet at a rate of 100 cubic feet per second (cfs) – Table A
- Release of 25,000 acre-feet at a rate of 150 cfs – Table B
- Release 100 cfs for 60 days – Table C
- Release of 150 cfs for 60 days – Table D

The potential benefit and impacts of these proposed release actions evaluated relative to forecasted inflow scenarios that might occur in the upcoming winter and are summarized in the attached Tables E thru J and Figures 1A, 1B, 1C, 2A, 2B, and 2C. Under these proposed release scenarios San Antonio Reservoir releases are held to 5 cfs.

Ms. Joyce Ambrosius
August XX, 2015

As conveyed in our letter of July 31, 2015 extreme drought conditions have prompted concerns from Salinas Valley Stakeholders. In response, the Agency Board of Directors and the Monterey County Board of Supervisors have requested the Agency staff to prepare these release recommendations for your consideration. Your timely evaluation and response to these proposed release plans proposed is appreciated. The agency will not take any action without completing the consultation process with NMFS.

If you have any questions regarding this request, please contact Howard Franklin at 831.755.4860.

Sincerely,

DRAFT

Table A

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for summer 2015
(Release of Approximately 25,000 AF at a Rate of 100 cfs from Nacimiento Reservoir)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
8/16/2015	60	5	65
8/17/2015	100	5	105
8/18/2015	100	5	105
8/19/2015	100	5	105
8/20/2015	100	5	105
8/21/2015	100	5	105
8/22/2015	100	5	105
8/23/2015	100	5	105
8/24/2015	100	5	105
8/25/2015	100	5	105
8/26/2015	100	5	105
8/27/2015	100	5	105
8/28/2015	100	5	105
8/29/2015	100	5	105
8/30/2015	100	5	105
8/31/2015	100	5	105
9/1/2015	100	5	105
9/2/2015	100	5	105
9/3/2015	100	5	105
9/4/2015	100	5	105
9/5/2015	100	5	105
9/6/2015	100	5	105
9/7/2015	100	5	105
9/8/2015	100	5	105
9/9/2015	100	5	105
9/10/2015	100	5	105
9/11/2015	100	5	105
9/12/2015	100	5	105
9/13/2015	100	5	105
9/14/2015	100	5	105
9/15/2015	100	5	105
9/16/2015	100	5	105
9/17/2015	100	5	105
9/18/2015	100	5	105
9/19/2015	100	5	105
9/20/2015	100	5	105
9/21/2015	100	5	105
9/22/2015	100	5	105
9/23/2015	100	5	105
9/24/2015	100	5	105
9/25/2015	100	5	105
9/26/2015	100	5	105
9/27/2015	100	5	105
9/28/2015	100	5	105
9/29/2015	100	5	105
9/30/2015	100	5	105
10/1/2015	100	5	105
10/2/2015	100	5	105
10/3/2015	100	5	105
10/4/2015	100	5	105

Table A

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for summer 2015
(Release of Approximately 25,000 AF at a Rate of 100 cfs from Nacimiento Reservoir)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
10/5/2015	100	5	105
10/6/2015	100	5	105
10/7/2015	100	5	105
10/8/2015	100	5	105
10/9/2015	100	5	105
10/10/2015	100	5	105
10/11/2015	100	5	105
10/12/2015	100	5	105
10/13/2015	100	5	105
10/14/2015	100	5	105
10/15/2015	100	5	105
10/16/2015	100	5	105
10/17/2015	100	5	105
10/18/2015	100	5	105
10/19/2015	100	5	105
10/20/2015	100	5	105
10/21/2015	100	5	105
10/22/2015	100	5	105
10/23/2015	100	5	105
10/24/2015	100	5	105
10/25/2015	100	5	105
10/26/2015	100	5	105
10/27/2015	100	5	105
10/28/2015	100	5	105
10/29/2015	100	5	105
10/30/2015	100	5	105
10/31/2015	100	5	105
11/1/2015	100	5	105
11/2/2015	100	5	105
11/3/2015	100	5	105
11/4/2015	100	5	105
11/5/2015	100	5	105
11/6/2015	100	5	105
11/7/2015	100	5	105
11/8/2015	100	5	105
11/9/2015	100	5	105
11/10/2015	100	5	105
11/11/2015	100	5	105
11/12/2015	100	5	105
11/13/2015	100	5	105
11/14/2015	100	5	105
11/15/2015	100	5	105
11/16/2015	100	5	105
11/17/2015	100	5	105
11/18/2015	100	5	105
11/19/2015	100	5	105
11/20/2015	100	5	105
11/21/2015	100	5	105
11/22/2015	100	5	105
11/23/2015	100	5	105

Table A

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for summer 2015
(Release of Approximately 25,000 AF at a Rate of 100 cfs from Nacimiento Reservoir)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
11/24/2015	100	5	105
11/25/2015	100	5	105
11/26/2015	100	5	105
11/27/2015	100	5	105
11/28/2015	100	5	105
11/29/2015	100	5	105
11/30/2015	100	5	105
12/1/2015	100	5	105
12/2/2015	100	5	105
12/3/2015	100	5	105
12/4/2015	100	5	105
12/5/2015	100	5	105
12/6/2015	100	5	105
12/7/2015	100	5	105
12/8/2015	100	5	105
12/9/2015	100	5	105
12/10/2015	100	5	105
12/11/2015	100	5	105
12/12/2015	100	5	105
12/13/2015	100	5	105
12/14/2015	100	5	105
12/15/2015	100	5	105
12/16/2015	100	5	105
12/17/2015	100	5	105
12/18/2015	100	5	105
12/19/2015	100	5	105
12/20/2015	100	5	105
12/21/2015	60	5	65
Summary of Proposed Releases (8/17/15 - 12/20/15)			
	Nacimiento (af)	San Antonio (af)	Combined (af)
Proposed Releases	24,992	1,250	26,242
Current Fisheries Releases	14,995	1,250	16,245

Table B

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for summer 2015
(Release of Approximately 25,000 AF at a Rate of 150 cfs from Nacimiento Reservoir)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
8/16/2015	60	5	65
8/17/2015	150	5	155
8/18/2015	150	5	155
8/19/2015	150	5	155
8/20/2015	150	5	155
8/21/2015	150	5	155
8/22/2015	150	5	155
8/23/2015	150	5	155
8/24/2015	150	5	155
8/25/2015	150	5	155
8/26/2015	150	5	155
8/27/2015	150	5	155
8/28/2015	150	5	155
8/29/2015	150	5	155
8/30/2015	150	5	155
8/31/2015	150	5	155
9/1/2015	150	5	155
9/2/2015	150	5	155
9/3/2015	150	5	155
9/4/2015	150	5	155
9/5/2015	150	5	155
9/6/2015	150	5	155
9/7/2015	150	5	155
9/8/2015	150	5	155
9/9/2015	150	5	155
9/10/2015	150	5	155
9/11/2015	150	5	155
9/12/2015	150	5	155
9/13/2015	150	5	155
9/14/2015	150	5	155
9/15/2015	150	5	155
9/16/2015	150	5	155
9/17/2015	150	5	155
9/18/2015	150	5	155
9/19/2015	150	5	155
9/20/2015	150	5	155
9/21/2015	150	5	155
9/22/2015	150	5	155
9/23/2015	150	5	155
9/24/2015	150	5	155
9/25/2015	150	5	155
9/26/2015	150	5	155
9/27/2015	150	5	155
9/28/2015	150	5	155
9/29/2015	150	5	155
9/30/2015	150	5	155
10/1/2015	150	5	155
10/2/2015	150	5	155
10/3/2015	150	5	155
10/4/2015	150	5	155

Table B

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for summer 2015
(Release of Approximately 25,000 AF at a Rate of 150 cfs from Nacimiento Reservoir)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
10/5/2015	150	5	155
10/6/2015	150	5	155
10/7/2015	150	5	155
10/8/2015	150	5	155
10/9/2015	150	5	155
10/10/2015	150	5	155
10/11/2015	150	5	155
10/12/2015	150	5	155
10/13/2015	150	5	155
10/14/2015	150	5	155
10/15/2015	150	5	155
10/16/2015	150	5	155
10/17/2015	150	5	155
10/18/2015	150	5	155
10/19/2015	150	5	155
10/20/2015	150	5	155
10/21/2015	150	5	155
10/22/2015	150	5	155
10/23/2015	150	5	155
10/24/2015	150	5	155
10/25/2015	150	5	155
10/26/2015	150	5	155
10/27/2015	150	5	155
10/28/2015	150	5	155
10/29/2015	150	5	155
10/30/2015	150	5	155
10/31/2015	150	5	155
11/1/2015	150	5	155
11/2/2015	150	5	155
11/3/2015	150	5	155
11/4/2015	150	5	155
11/5/2015	150	5	155
11/6/2015	150	5	155
11/7/2015	150	5	155
11/8/2015	150	5	155
11/9/2015	60	5	65
Summary of Proposed Releases (8/10/15 - 11/8/15)			
	Nacimiento (af)	San Antonio (af)	Combined (af)
Proposed Releases	24,992	833	25,825
Current Fisheries Releases	9,997	833	10,830

Table C

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015
(Release of 100 cfs from Nacimiento Reservoir for 60 Days)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
8/17/2015	100	5	105
8/18/2015	100	5	105
8/19/2015	100	5	105
8/20/2015	100	5	105
8/21/2015	100	5	105
8/22/2015	100	5	105
8/23/2015	100	5	105
8/24/2015	100	5	105
8/25/2015	100	5	105
8/26/2015	100	5	105
8/27/2015	100	5	105
8/28/2015	100	5	105
8/29/2015	100	5	105
8/30/2015	100	5	105
8/31/2015	100	5	105
9/1/2015	100	5	105
9/2/2015	100	5	105
9/3/2015	100	5	105
9/4/2015	100	5	105
9/5/2015	100	5	105
9/6/2015	100	5	105
9/7/2015	100	5	105
9/8/2015	100	5	105
9/9/2015	100	5	105
9/10/2015	100	5	105
9/11/2015	100	5	105
9/12/2015	100	5	105
9/13/2015	100	5	105
9/14/2015	100	5	105
9/15/2015	100	5	105
9/16/2015	100	5	105
9/17/2015	100	5	105
9/18/2015	100	5	105
9/19/2015	100	5	105
9/20/2015	100	5	105
9/21/2015	100	5	105
9/22/2015	100	5	105
9/23/2015	100	5	105
9/24/2015	100	5	105
9/25/2015	100	5	105
9/26/2015	100	5	105
9/27/2015	100	5	105
9/28/2015	100	5	105
9/29/2015	100	5	105
9/30/2015	100	5	105
10/1/2015	100	5	105
10/2/2015	100	5	105
10/3/2015	100	5	105
10/4/2015	100	5	105
10/5/2015	100	5	105

Table C

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015
(Release of 100 cfs from Nacimiento Reservoir for 60 Days)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
10/6/2015	100	5	105
10/7/2015	100	5	105
10/8/2015	100	5	105
10/9/2015	100	5	105
10/10/2015	100	5	105
10/11/2015	100	5	105
10/12/2015	100	5	105
10/13/2015	100	5	105
10/14/2015	100	5	105
10/15/2015	100	5	105
Summary of Proposed Releases (8/17/15 - 10/15/15)			
	Nacimiento (af)	San Antonio (af)	Combined (af)
Proposed Releases	11,901	595	12,496
Current Fisheries Releases	7,141	595	7,736

Table D

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015
(Release of 150 cfs from Nacimiento Reservoir for 60 Days)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
8/16/2015	60	5	65
8/17/2015	150	5	155
8/18/2015	150	5	155
8/19/2015	150	5	155
8/20/2015	150	5	155
8/21/2015	150	5	155
8/22/2015	150	5	155
8/23/2015	150	5	155
8/24/2015	150	5	155
8/25/2015	150	5	155
8/26/2015	150	5	155
8/27/2015	150	5	155
8/28/2015	150	5	155
8/29/2015	150	5	155
8/30/2015	150	5	155
8/31/2015	150	5	155
9/1/2015	150	5	155
9/2/2015	150	5	155
9/3/2015	150	5	155
9/4/2015	150	5	155
9/5/2015	150	5	155
9/6/2015	150	5	155
9/7/2015	150	5	155
9/8/2015	150	5	155
9/9/2015	150	5	155
9/10/2015	150	5	155
9/11/2015	150	5	155
9/12/2015	150	5	155
9/13/2015	150	5	155
9/14/2015	150	5	155
9/15/2015	150	5	155
9/16/2015	150	5	155
9/17/2015	150	5	155
9/18/2015	150	5	155
9/19/2015	150	5	155
9/20/2015	150	5	155
9/21/2015	150	5	155
9/22/2015	150	5	155
9/23/2015	150	5	155
9/24/2015	150	5	155
9/25/2015	150	5	155
9/26/2015	150	5	155
9/27/2015	150	5	155
9/28/2015	150	5	155
9/29/2015	150	5	155
9/30/2015	150	5	155
10/1/2015	150	5	155
10/2/2015	150	5	155
10/3/2015	150	5	155

Table D

**Proposed Release Plan for Nacimiento and San Antonio Reservoirs for Summer 2015
(Release of 150 cfs from Nacimiento Reservoir for 60 Days)**

Date	Nacimiento Release (cfs)	San Antonio Release (cfs)	Combined Releases (cfs)
10/4/2015	150	5	155
10/5/2015	150	5	155
10/6/2015	150	5	155
10/7/2015	150	5	155
10/8/2015	150	5	155
10/9/2015	150	5	155
10/10/2015	150	5	155
10/11/2015	150	5	155
10/12/2015	150	5	155
10/13/2015	150	5	155
10/14/2015	150	5	155
10/15/2015	150	5	155
10/16/2015	60	5	65
Summary of Proposed Releases (8/17/15 - 10/15/15)			
	Nacimiento (af)	San Antonio (af)	Combined (af)
Proposed Releases	17,852	595	18,447
Current Fisheries Releases	7,141	595	7,736

Table E

Reservoir Release Options for Consideration Benefits/Impacts of Proposed Nacimientos Releases <i>Dry Year Inflow Projection</i>		
Release Options	Proposed Nacimientos Releases of 25,000 af @ 100 cfs	Proposed Nacimientos Releases of 25,000 af @ 150 cfs
Combined Reservoir Releases (AF)	26,242	25,825
Estimated Nacimientos Reservoir Storage (AF) on 4/1/16	79,314	74,477
Estimated San Antonio Reservoir Storage (AF) on 4/1/16	26,163	26,163
Estimated Downstream River Mile (Fall 2015)	70	70
Estimated Groundwater Recharge from Releases (AF)	21,006	21,313
Storage Trigger of 220,000 AF Met for Upst. Migration Releases on Feb.1? (Combined Storage in AF)	No (101,114)	No (96,244)
Storage Trigger of 150,000 AF Met during Block Flow Period? (Maximum Combined Storage in AF)	No (106,391)	No (101,543)
Potential for 2016 SRDF Operation?	No	No

Reference Water Year 1988; San Antonio 16,494 AF Inflow, Nacimientos 48,607 AF Inflow

Table F

Reservoir Release Options for Consideration Benefits/Impacts of Proposed Nacimientos Releases Normal Year Inflow Projection		
Release Options	Proposed Nacimientos Releases of 25,000 af @ 100 cfs	Proposed Nacimientos Releases of 25,000 af @ 150 cfs
Combined Reservoir Releases (AF)	26,242	25,825
Estimated Nacimientos Reservoir Storage (AF) on 4/1/16	179,857	175,010
Estimated San Antonio Reservoir Storage (AF) on 4/1/16	56,494	56,494
Estimated Downstream River Mile (Fall 2015)	70	70
Estimated Groundwater Recharge from Releases (AF)	21,006	21,313
Storage Trigger of 220,000 AF Met for Upst. Migration Releases on Feb.1? (Combined Storage in AF)	No (165,089)	No (160,219)
Storage Trigger of 150,000 AF Met during Block Flow Period? (Maximum Combined Storage in AF)	Yes (236,605)	Yes (231,763)
Potential for 2016 SRDF Operation?	Yes, Partial Season	Yes, Partial Season

Reference Water Year 2008; San Antonio 50,225 AF Inflow, Nacimientos 149,924 AF Inflow

Table G

Reservoir Release Options for Consideration Benefits/Impacts of Proposed Nacimiento Releases <i>Wet Year Inflow Projection</i>		
Release Options	Proposed Nacimiento Releases of 25,000 af @ 100 cfs	Proposed Nacimiento Releases of 25,000 af @ 150 cfs
Combined Reservoir Releases (AF)	26,242	25,825
Estimated Nacimiento Reservoir Storage (AF) on 4/1/16	388,184	383,328
Estimated San Antonio Reservoir Storage (AF) on 4/1/16	127,354	127,354
Estimated Downstream River Mile (Fall 2015)	70	70
Estimated Groundwater Recharge from Releases (AF)	21,006	21,313
Storage Trigger of 220,000 AF Met for Upst. Migration Releases on Feb.1? (Combined Storage in AF)	Yes (330,334)	Yes (325,461)
Storage Trigger of 150,000 AF Met during Block Flow Period? (Maximum Combined Storage in AF)	Yes (525,083)	Yes (520,243)
Potential for 2016 SRDF Operation?	Yes	Yes

Reference Water Year 1993; San Antonio 127,815 AF Inflow, Nacimiento 371,851 AF Inflow

Table H

Reservoir Release Options for Consideration Benefits/Impacts of Proposed Nacimienta Releases (8/17/15 - 10/15/15) <i>Dry Year Inflow Projection</i>		
Release Options	Proposed Nacimienta Releases of 100 cfs for 60 Days	Proposed Nacimienta Releases of 150 cfs for 60 Days
Combined Reservoir Releases (AF) (8/17/15 - 10/15/15)	12,496	18,447
Estimated Nacimienta Reservoir Storage (AF) on 4/1/16	84,484	78,693
Estimated San Antonio Reservoir Storage (AF) on 4/1/16	26,163	26,163
Estimated Downstream River Mile (Summer 2015)	80	75
Estimated Groundwater Recharge from Releases (AF)	9,969	15,394
Storage Trigger of 220,000 AF Met for Upst. Migration Releases on Feb.1? (Combined Storage in AF)	No (106,318)	No (100,488)
Storage Trigger of 150,000 AF Met during Block Flow Period? (Maximum Combined Storage in AF)	No (111,573)	No (105,768)
Potential for 2016 SRDF Operation?	No	No

Reference Water Year 1988; San Antonio 16,494 AF Inflow, Nacimienta 48,607 AF Inflow

Table I

Reservoir Release Options for Consideration Benefits/Impacts of Proposed Nacimienta Releases (8/17/15 - 10/15/15) Normal Year Inflow Projection		
Release Options	Proposed Nacimienta Releases of 100 cfs for 60 Days	Proposed Nacimienta Releases of 150 cfs for 60 Days
Combined Reservoir Releases (AF) (8/17/15 - 10/15/15)	12,496	18,447
Estimated Nacimienta Reservoir Storage (AF) on 4/1/16	185,038	179,234
Estimated San Antonio Reservoir Storage (AF) on 4/1/16	56,494	56,494
Estimated Downstream River Mile (Summer 2015)	80	75
Estimated Groundwater Recharge from Releases (AF)	9,964	15,394
Storage Trigger of 220,000 AF Met for Upst. Migration Releases on Feb.1? (Combined Storage in AF)	No (170,294)	No (164,463)
Storage Trigger of 150,000 AF Met during Block Flow Period? (Maximum Combined Storage in AF)	Yes (241,781)	Yes (235,983)
Potential for 2016 SRDF Operation?	Yes, Partial Season	Yes, Partial Season

Reference Water Year 2008; San Antonio 50,225 AF Inflow, Nacimienta 149,924 AF Inflow

Table J

Reservoir Release Options for Consideration Benefits/Impacts of Proposed Nacimiento Releases (8/17/15 - 10/15/15) <i>Wet Year Inflow Projection</i>		
Release Options	Proposed Nacimiento Releases of 100 cfs for 60 Days	Proposed Nacimiento Releases of 150 cfs for 60 Days
Combined Reservoir Releases (AF) (8/17/15 - 10/15/15)	12,496	18,447
Estimated Nacimiento Reservoir Storage (AF) on 4/1/16	393,372	387,560
Estimated San Antonio Reservoir Storage (AF) on 4/1/16	127,354	127,354
Estimated Downstream River Mile (Summer 2015)	80	75
Estimated Groundwater Recharge from Releases (AF)	9,969	15,394
Storage Trigger of 220,000 AF Met for Upst. Migration Releases on Feb.1? (Combined Storage in AF)	Yes (335,541)	Yes (329,708)
Storage Trigger of 150,000 AF Met during Block Flow Period? (Maximum Combined Storage in AF)	Yes (530,254)	Yes (524,461)
Potential for 2016 SRDF Operation?	Yes	Yes

Reference Water Year 1993; San Antonio 127,815 AF Inflow, Nacimiento 371,851 AF Inflow

Figure 1A
Nacimiento Reservoir Elevation
25,000 AF Released from Nacimiento
 Dry Year Inflow
 August 5, 2015 Forecast

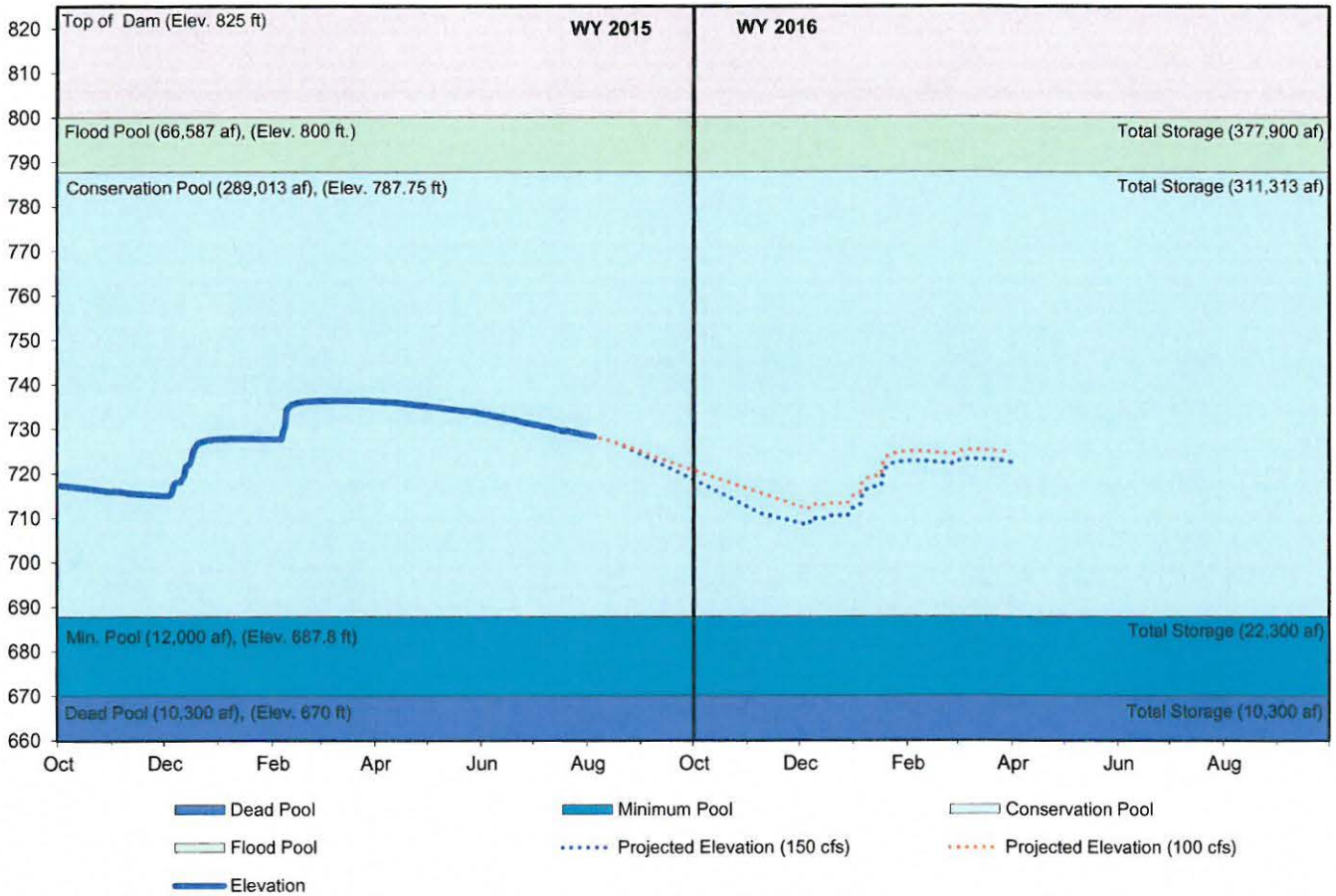


Figure 1B
Nacimiento Reservoir Elevation
25,000 AF Released from Nacimiento
 Normal Year Inflow
 August 5, 2015 Forecast

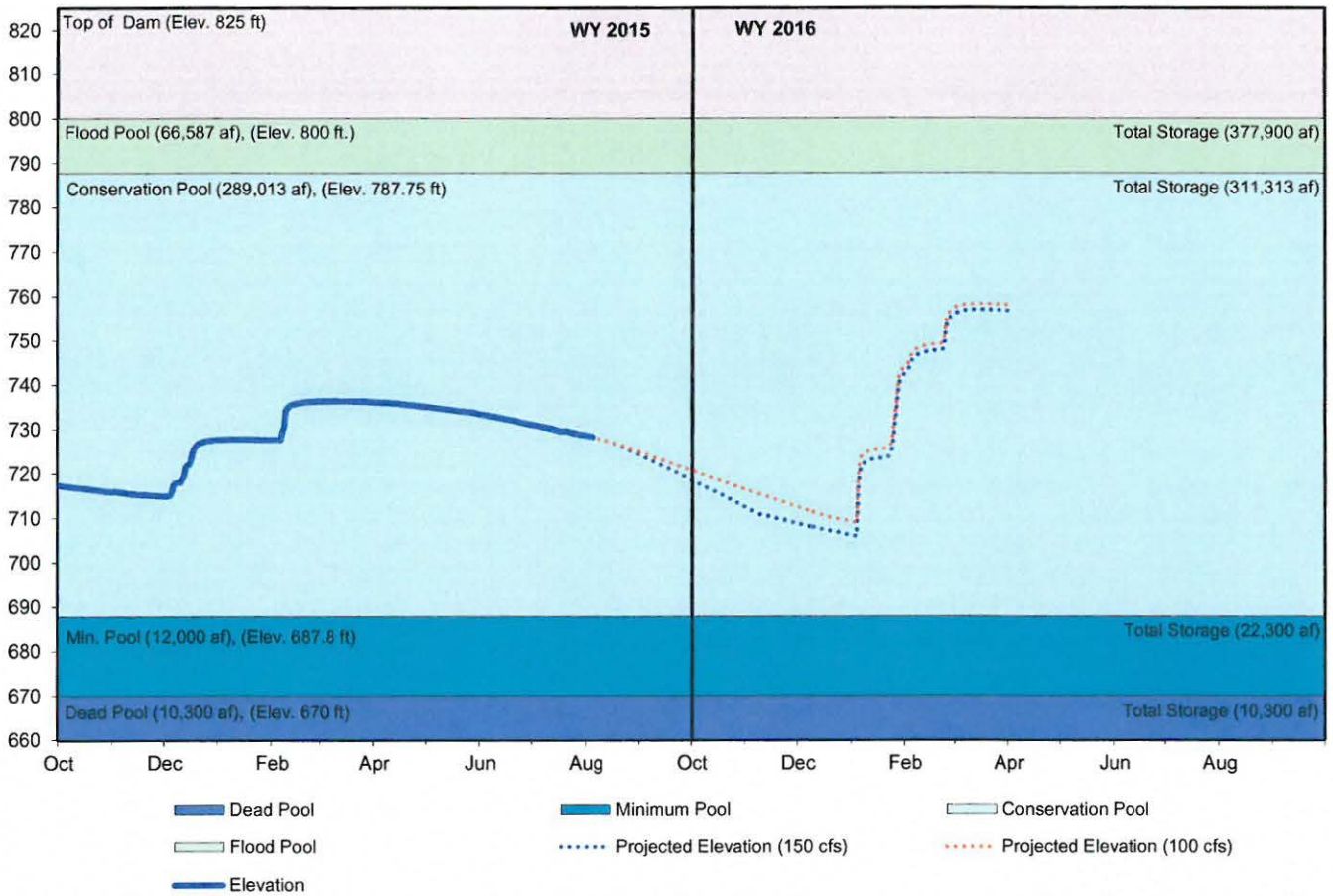


Figure 1C
Nacimiento Reservoir Elevation
25,000 AF Released from Nacimiento
 Wet Year Inflow
 August 5, 2015 Forecast

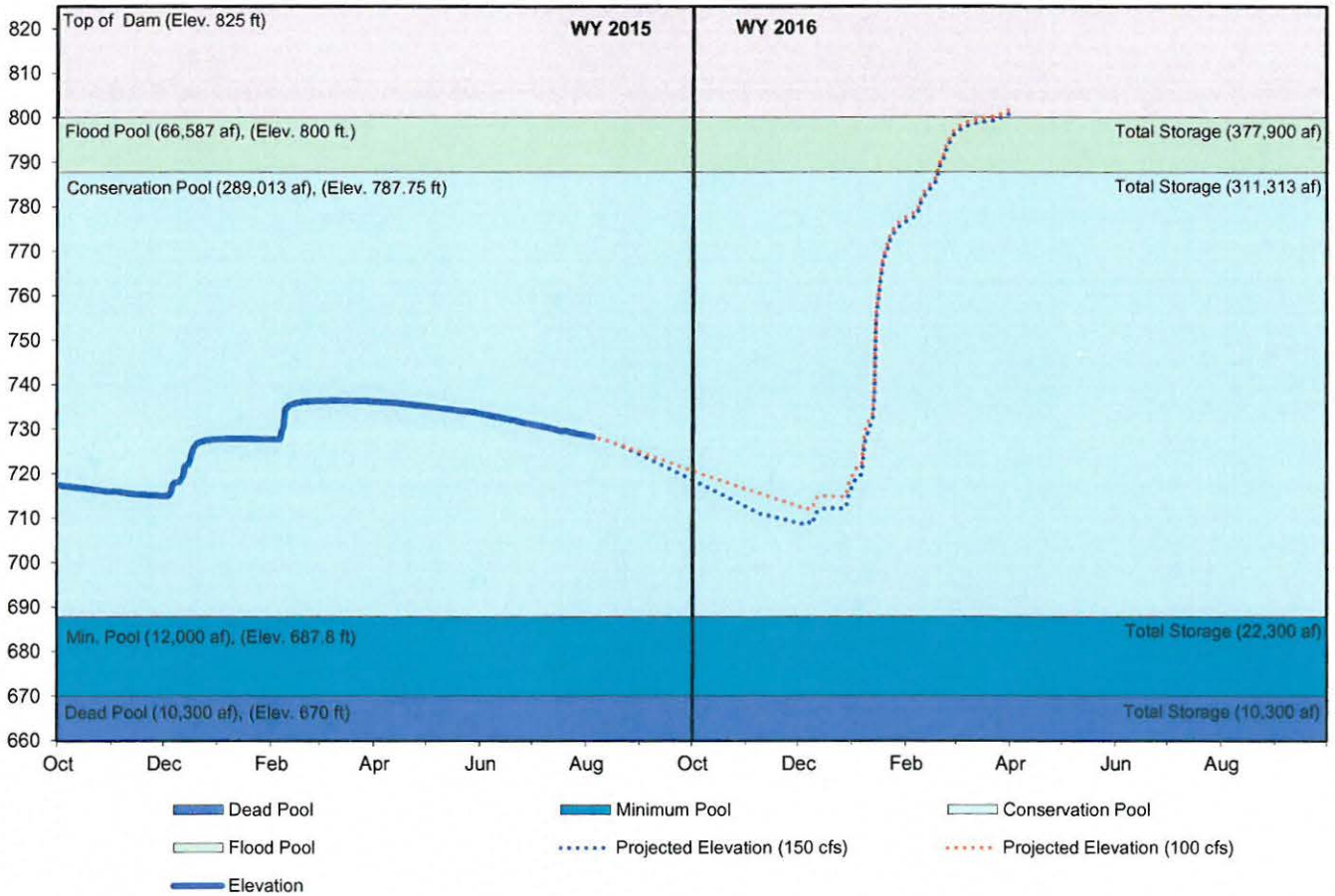


Figure 2A
Nacimiento Reservoir Elevation
Releases of 100 cfs and 150 cfs for 60 Days
 Dry Year Inflow
 August 5, 2015 Forecast

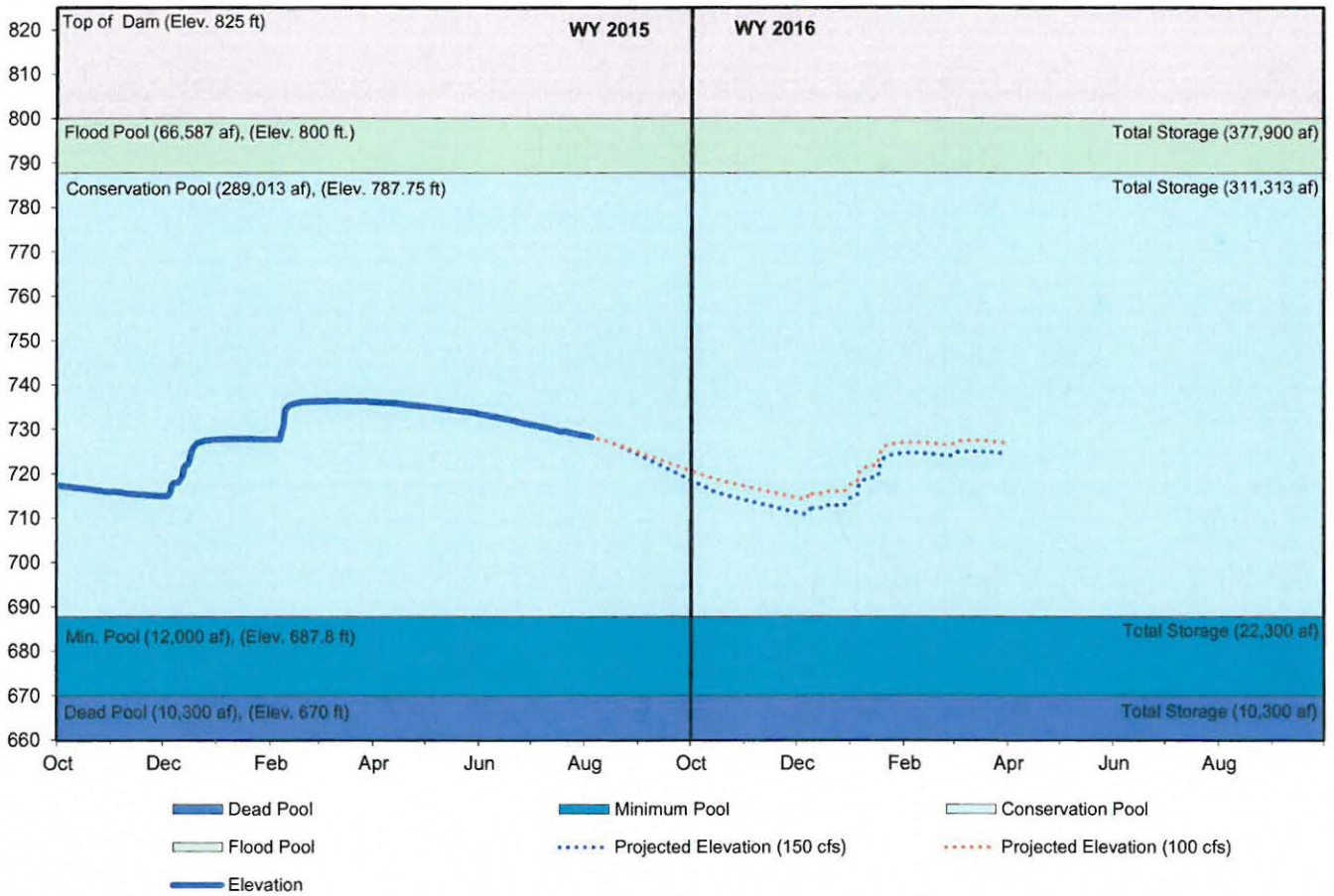


Figure 2B
Nacimiento Reservoir Elevation
Releases of 100 cfs and 150 cfs for 60 Days
 Normal Year Inflow
 August 5, 2015 Forecast

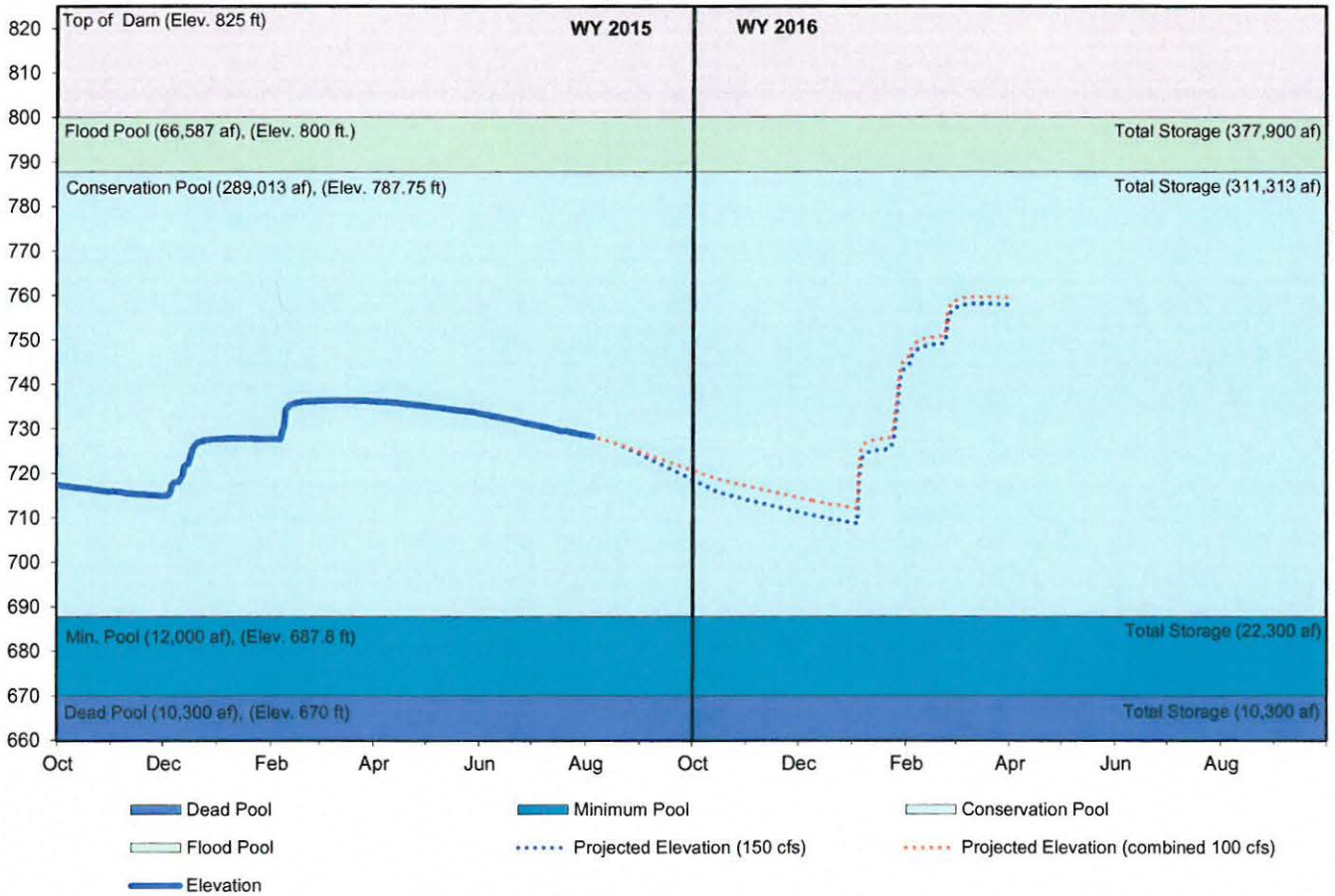
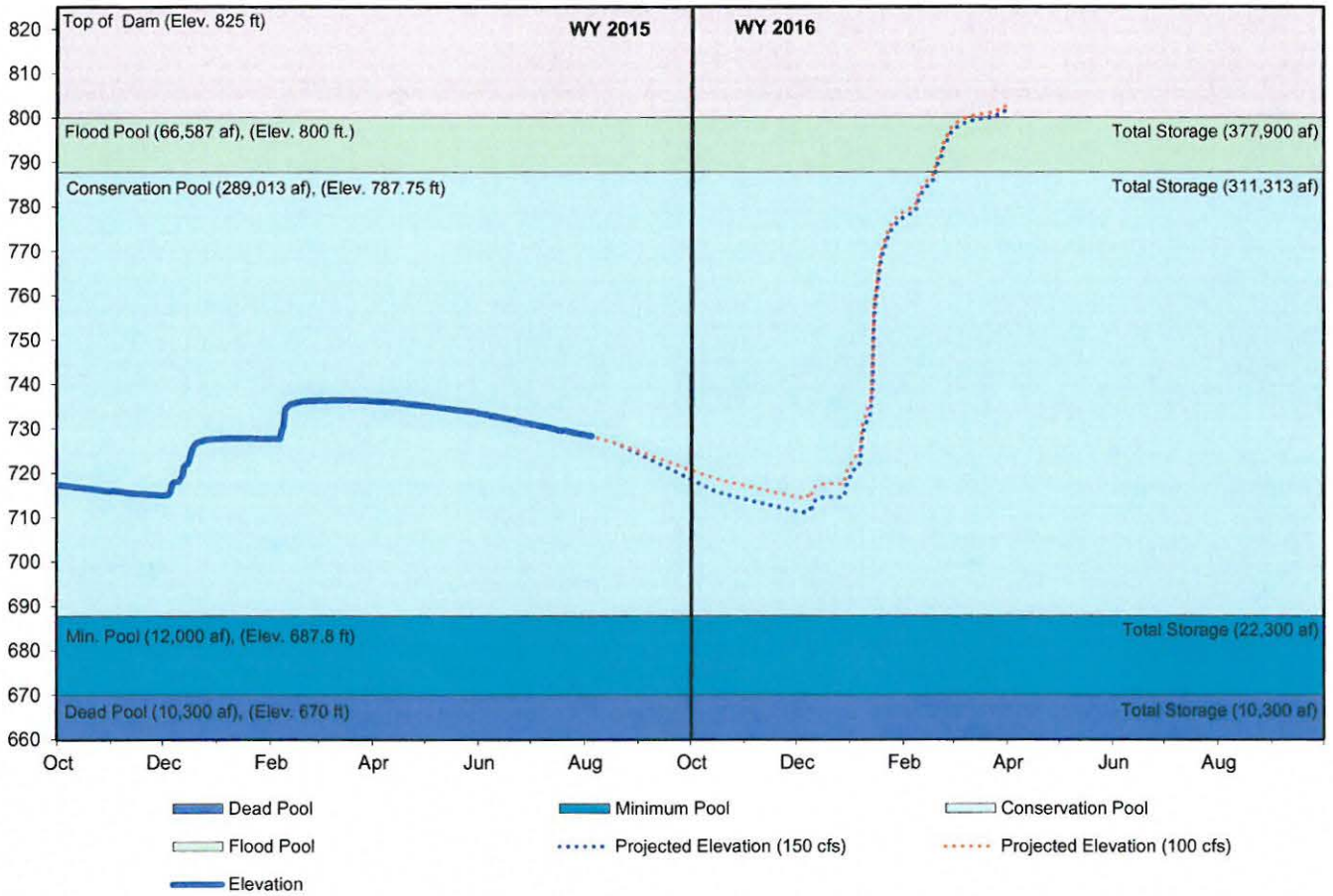


Figure 2C
Nacimiento Reservoir Elevation
Releases of 100 cfs and 150 cfs for 60 Days
 Wet Year Inflow
 August 5, 2015 Forecast



**MONTEREY COUNTY WATER RESOURCES AGENCY
BOARD OF DIRECTORS**

MEETING DATE:	August 11, 2015	AGENDA ITEM:	
AGENDA TITLE:	Consider giving Agency staff direction to consult with National Marine Fisheries Service (NMFS) and the California Department of Fish & Wildlife (CDFW) to determine if the San Antonio Reservoir can be reduced to 644.9 feet (dead pool) in order to perform essential deferred maintenance, and to implement that action if as a result of that consultation the action will not result in a “take” of threatened or endangered species, or a violation of the California and Federal Endangered Species Acts or other state or federal law.		
Consent ()		Action (X)	
Information ()			
SUBMITTED BY:	Brent Buche	PREPARED BY:	Chris Moss
PHONE:	831-755-4860	PHONE:	831-755-4860
DEADLINE FOR BOARD ACTION:		August 11, 2015	

RECOMMENDED BOARD ACTION:

Give Agency staff direction to consult with National Marine Fisheries Service (NMFS) and the California Department of Fish & Wildlife (CDFW) to determine if the San Antonio Reservoir can be reduced to 644.9 feet (dead pool) in order to perform essential deferred maintenance, and to implement that action if as a result of that consultation the action will not result in a “take” of threatened or endangered species, or a violation of the California and Federal Endangered Species Acts or other state or federal law.

SUMMARY:

San Antonio Reservoir water elevation is presently approximately eight feet above the invert of the main outlet conduit. Storage released to reach dead pool would be approximately 4,450 acre-feet. San Antonio Reservoir has not been this low since original construction. This action provides Agency staff direction to consult with NMFS and CDFW to determine if reducing San Antonio Reservoir to dead pool to improve worker safety in performing essential deferred maintenance will result in violation of the Federal and California Endangered Species Acts, or other state or federal law, and to implement reducing San Antonio Reservoir to dead pool if NMFS and CDFW provide appropriate “take” coverage.

DISCUSSION/ANALYSIS:

Certain deferred maintenance work on the San Antonio Dam outlet works is accomplished under the safest working conditions if San Antonio Reservoir is reduced to dead pool – the elevation when water can no longer gravity-flow out of the reservoir. That work consists of the following:

1. Perform internal inspection of large diameter butterfly valve. Though there is no evidence of structural instability, this valve is known to leak.
2. Clean the internal sleeve of the main-conduit flow control valve, and inspect other internal parts. Debris and corrosion products accumulate in the valve sleeve area and need periodic cleaning for proper valve functioning.

3. Inspect inside of main-conduit and recoat as needed. The last recoating work occurred approximately 1988.
4. Video inspect inside of concrete encased steel air-relief pipeline upstream of butterfly valve, find and repair known leak. The condition of this pipeline has not been known since original installation (1966).
5. Replace corroded plugs on main-conduit and small diameter bypass lines.
6. Perform other maintenance/repair work revealed from the above inspections.

In addition to the work described above, other work that could be accomplished in the safest manner possible while San Antonio Reservoir is at dead pool, but could be accomplished at other reservoir elevations, is as follows:

7. Install new anchors for inlet structure trash rack replacement. Existing trash racks are originally installed equipment (1966) and in need of replacement due to corrosion. While trash rack failure is not imminent, replacement is considered prudent, and the California Department of Water Resources, Division of Safety of Dams (DSOD) requires the trash racks be replaced by December 31, 2020. Installation of new anchors while at dead pool allows safer installation of the new anchors above water and safer installation of the new trash racks by underwater construction methods when the reservoir rises.
8. Cycle main-conduit large valves (butterfly valve and flow control valve). Cycling these valves is an annual maintenance function to confirm valve operability through their full cycle.
9. Replace one leaky main-conduit air-release/vacuum-relief valve.

San Antonio Reservoir elevation is presently approximately 653 feet. The invert of the main outlet conduit is 644.9 feet. Storage released to reach dead pool would be approximately 4,450 acre-feet. San Antonio Reservoir has not been this low since original construction.

If Federal or State threatened or endangered species are affected by reducing San Antonio Reservoir to dead pool, the Agency is not presently covered for "take" of such species. Agency staff is presently engaging the National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) to obtain favorable clearances from those agencies to increase releases from San Antonio Reservoir and reduce storage to dead pool as soon as possible, preferably by early September.

In order to obtain Federal and/or State clearance, it may be necessary to perform a presence/absence survey for steelhead trout. Staff has discussed such work with a qualified environmental firm, and such a survey could be performed for less than \$25,000. Staff has begun engagement of a firm to perform such work, if it becomes necessary.

OTHER AGENCY INVOLVEMENT:

County Counsel's Office has reviewed this report. National Marine Fisheries Service and California Department of Fish and Wildlife will be consulted to obtain their conclusion with regard to Federal and State Endangered Species Acts and "take" coverage for reducing San Antonio Reservoir to dead pool.

FINANCING:

N/A.

FINANCIAL IMPACT:	YES ()	NO (X)
FUNDING SOURCE:	N/A	
COMMITTEE REVIEW AND RECOMMENDATION:	None.	
ATTACHMENTS:	1. Board Order	
APPROVED:	<i>David E. Chardaroyne</i> 8/10/15 General Manager Date	



***Before the Board of Directors of the Monterey County Water Resources Agency
County of Monterey, State of California***

BOARD ORDER No. _____

**DIRECTS AGENCY STAFF TO CONSULT WITH NATIONAL MARINE)
FISHERIES SERVICE AND THE CALIFORNIA DEPARTMENT OF)
FISH & WILDLIFE TO DETERMINE IF THE SAN ANTONIO RESERVOIR)
CAN BE REDUCED TO 644.9 FEET (DEAD POOL) IN ORDER TO)
PERFORM ESSENTIAL DEFERRED MAINTENANCE, AND TO IMPLEMENT)
THAT ACTION IF AS A RESULT OF THAT CONSULTATION THE ACTION)
WILL NOT RESULT IN A “TAKE” OF THREATENED OR ENDANGERED)
SPECIES, OR A VIOLATION OF THE CALIFORNIA AND FEDERAL)
ENDANGERED SPECIES ACTS OR OTHER STATE OR FEDERAL LAW.)**

Upon motion of _____ seconded by _____ and carried by those members present, the Board of Directors hereby:

Directs Agency staff to consult with National Marine Fisheries Service (NMFS) and the California Department of Fish & Wildlife (CDFW) to determine if the San Antonio Reservoir can be reduced to 644.9 feet (dead pool) in order to perform essential deferred maintenance, and to implement that action if as a result of that consultation the action will not result in a “take” of threatened or endangered species, or a violation of the California and Federal Endangered Species Acts or other state or federal law.

PASSED AND ADOPTED on this 11th day of **August 2015**, by the following vote, to-wit:

AYES:

NOES:

ABSENT:

BY: Claude Hoover, Chair
Board of Directors

ATTEST: David E. Chardavoyne
General Manager