

***MINUTES OF A REGULAR MEETING OF  
BIG BEAR MUNICIPAL WATER DISTRICT  
HELD ON THURSDAY, SEPTEMBER 5, 2013***

**CALL TO ORDER**

President Smith called the Open Session to order at 1:00 PM. Those in attendance included Director Murphy, Director Lewis, Director Suhay, Director Eminger, District Counsel Wayne Lemieux (via Skype), General Manager Scott Heule, and Board Secretary Vicki Sheppard.

**DISCUSSION AND ACTION ON CLOSED SESSION ITEMS**

President Smith reported that there was no closed session at the meeting of August 15<sup>th</sup>.

**REPORTS**

General Manager Scott Heule reported that the effort to document work in kind to the ACOE auditors continues to move forward. He stated that after we receive credit for the alum treatment, high resolution mapping and the aeration system we will be within about \$610,000 of the \$4.36 million needed to finally close out the project. He explained that we have to rush through some last bits to be sure we can get everything we need from Kathy Bergmann who intends to retire within a few months. Mr. Heule reported that after today, only 6 days are left available for the harvester to work. He explained that we lost some time due to inclement weather and lightening the past few days. He added that this has been a rough summer with declining water levels, clearer water allowing a more robust crop of aquatic plants, and large areas of very shallow water that prevents access by the harvester. He explained that we must be careful not to chemically harvest large areas because the dying and decomposing plants increase algae blooms that smell and kill fish. Mr. Heule asked that everyone take a moment to look over the large yellow paper banner with notes and drawings done by the 3<sup>rd</sup> graders at North Shore Elementary thanking MWD for the KOOL Kids event last month. He also shared some notes with pictures drawn by some of the children from Baldwin Lane Elementary. He commented that you might have seen some District activity at the Stanfield Marsh corner. He explained that a couple of our maintenance staff is there pressure-washing a couple decades of dirt and grime off the gazebo and generally cleaning up around the parking lot and landscaping. He added that they will also be painting the concrete floor and refinishing the wood of the gazebo.

**APPROVAL OF CONSENT CALENDAR**

Upon a motion by Director Murphy, seconded by Director Suhay, the following consent items were unanimously approved:

- Minutes of a Regular Meeting of August 15, 2013
- Warrant List dated August 29, 2013 for \$81,622.66

**DISCUSS AND DIRECT STAFF REGARDING THE PROPOSED IN-LIEU WATER AGREEMENT AMENDMENT AND SEPTEMBER LAKE RELEASE**

Mr. Heule reported that the Board had the opportunity to review and ask questions of staff concerning a proposed amendment to the in-lieu agreement with San Bernardino Valley Municipal Water District during the workshop on August 22, 2013. He added that Don Evenson provided a PowerPoint presentation (copy attached) that detailed the history of the in-lieu

agreement, efforts to amend the agreement to reduce the cost and increase the typical level of the lake, and describe the 600 acre-foot lake release that will take place beginning September 10. He explained that this Board and the Board of the San Bernardino Valley Municipal Water District have scheduled a combined workshop to further discuss amending the in-lieu agreement. He reported that if the proposed terms of the amendment are agreed to, the District will save \$80,000 to \$100,000 annually beginning in Fiscal Year 2017-18. He explained that in order for the studies necessary to analyze the details of the lake condition as a result of the proposed amendment, Staff must perform additional modeling and climate analysis. He stated that Staff requests that the Board consider approving this additional work in preparation for the combined workshop in November. He added that the additional effort is expected to require roughly 75 hours by Don Evenson to complete. Mr. Heule asked if the Board would like to see the slide presentation again or just ask questions. President Smith said that he is in favor of going straight to questions. Director Murphy said that he believes that slide numbers 5 and 6 might be of interest to the public. Mr. Heule went over slide 5 "1987 Mutual Lake Release Policy" and slide 6 "1996 In-Lieu Agreement" and also slide 19 "Lake Levels Under MOU and Big Bear Lake Release Policy". Director Lewis asked why we can't do a MOU rather than an amendment to the contract. District Counsel Wayne Lemieux explained that a contract is no different and just as good as a MOU adding that MOU's make people feel good. Director Suhay reported that in the past the District did MOU's because they considered them temporary. Director Lewis stated that during the workshop she heard that we could "opt out" of a contract. Mr. Lemieux explained that we can "opt out" of a contract or a MOU. Director Lewis asked for an explanation of water releases in emergency situations. Mr. Heule referred to slide 23 explaining that releases from Valley District's emergency storage account could be made when the SWP allocation to Valley District is less than 25,000 AF or operational problems would prevent Valley District from delivering in-lieu water to Mutual. He also explained slide 24, Valley District operational storage account when in the event of an "emergency" when Valley District's Emergency Storage Account is not full, Big Bear would make an "advance for emergency purposes" to ensure the full emergency amount is available. Adding that Valley District would repay the emergency advance with future supplemental in-lieu deliveries. Valley resident, Larry Cooke, asked for a definition of a SWP emergency situation. Mr. Heule explained that he can't really answer that question because the situation (political and environmental) with the Delta Smelt can't be projected. President Smith explained that we don't know exactly what SBVMWD is thinking "emergency account" vs. "operational account" adding that when we release water we are only giving back what is not ours to keep. Mr. Heule stated that whether or not the workshop in November resolves all the issues, it is important that we get together and discuss all of our concerns. President Smith added that there is nothing to prevent us from extending the current contract if we are not comfortable with the new agreement and if all our questions aren't answered in the November workshop. Mr. Heule reported that the release will begin next Tuesday adding that this release is a test. Larry Cooke asked where the water is going that will be released Tuesday. Mr. Heule explained that it goes down Bear Creek to the So. Cal Edison plant then it is percolated or distributed to Valley's customers. President Smith added that we will ramp up and then ramp down so we don't strand fish in Bear Creek. Director Murphy stated

that we may want to schedule another workshop before the one in November. President Smith explained that we may not have time. He added that he feels we should go to the meeting in November and if we still don't have any concrete information, extend the current agreement and then revisit it at a later workshop. Director Suhay stated that the release next week will show Valley that when they call for water we will comply. Mr. Heule stated that we can't make any decisions at the meeting in November; just get necessary information and go back and discuss it. He added that he will be meeting with Don Evenson and Doug Headrick before the next Watermaster meeting to discuss how in-lieu deliveries are called for. He explained that he doesn't anticipate there will be anything to sign before next year. Director Suhay stated that he hopes both parties will have what they need to make a decision sooner than later. President Smith asked Director Murphy if he thinks a workshop is still needed before the meeting in November. Director Murphy said he would like to see one after the November meeting. Mr. Heule asked for approval for the additional work in preparation for the combined workshop in November. President Smith stated it is approved.

#### **PUBLIC FORUM**

No comments were made

#### **ANNOUNCEMENTS**

Mr. Heule announced that the annual summer staff barbeque that was cancelled has been rescheduled for Sunday, October 6<sup>th</sup>. He reported that the Lake release begins Tuesday, September 10<sup>th</sup>. He added that, as far as we can determine, everything is in place and ready to record and manage. He explained that changes in release rates are scheduled to be made only once on any given day and always on a week day. He commented that we will provide a detailed update on the progress of the release at the next Board meeting on September 19. He reported that Mike Stephenson returns to work Monday, September 16. Mr. Heule explained that he will be at the annual CSDA conference Monday, Tuesday, and Wednesday, September 16, 17 and 18.

#### **DIRECTOR COMMENTS**

No comments were made.

#### **ADJOURNMENT**

There being no further business, the meeting was adjourned at 2:05 P.M.

#### **NEXT MEETING**

Open Session at 1:00 P.M.  
Thursday, September 19, 2013  
Big Bear Municipal Water District  
40524 Lakeview Drive, Big Bear Lake, CA



Vicki Sheppard  
Secretary to the Board  
Big Bear Municipal Water District

(SEAL)

# **In-Lieu Water Agreement with San Bernardino Valley MWD 1996 - 2013**

Big Bear MWD Board Workshop  
August 22, 2013

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## **Three Important In-Lieu Periods Since The 1977 Judgment was Signed.**

- 1977 – 1986. The years after the Judgment was signed and before Big Bear adopted the Mutual Lake Release Policy.
- 1987 – 1995. The years after Big Bear adopted the Mutual Lake Release Policy and before the In-Lieu Agreement with Valley District was signed.
- 1996 – 2013. The years since the In-Lieu Agreement with Valley District was signed.

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## 1996 In-Lieu Agreement

- 1996 – Big Bear and Valley District entered into an In-Lieu Agreement for Valley District to deliver In-lieu water to Mutual beginning in FY 1996-97 following the 1987 Mutual Lake Release Policy.
- The “base cost” of the In-Lieu Agreement was \$834,000 a year for the first ten fiscal years.
- Beginning in FY 2006-07 the “base cost” was adjusted for changes in AV relative to FY 2004-05
- The annual In-Lieu cost reached a maximum in FY 2009-10 at \$1,281,000

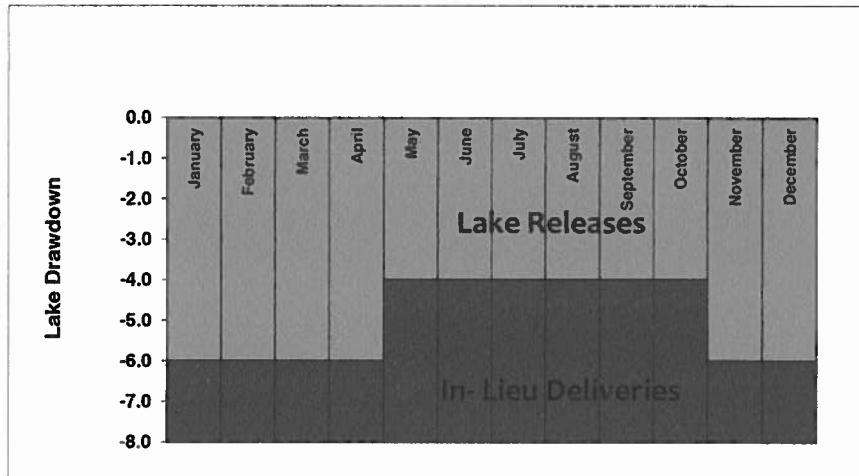
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## 1996 In-Lieu Agreement

- The current (FY 2013-14) annual In-Lieu cost is \$1,220,000.
- Beginning in FY 2017-18 there will be an increase in the “base cost” from \$834,000 to \$895,000 that could increase the annual In-Lieu cost an additional \$80,000 to \$100,000 per year depending on the AV at the time.
- The 1996 In-Lieu Agreement has been modified four times
  - 1999 for repairs to the Greenspot Pipeline
  - 2006 for impacts of Big Bear’s Flood Control Drawdown Policy
  - 2006 for Big Bear’s revised Snowmaking water sales contract
  - 2012 for connections to the SWP East Branch Extension and to evaluate alternative in-lieu storage concepts.

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## 1987 Mutual Lake Release Policy



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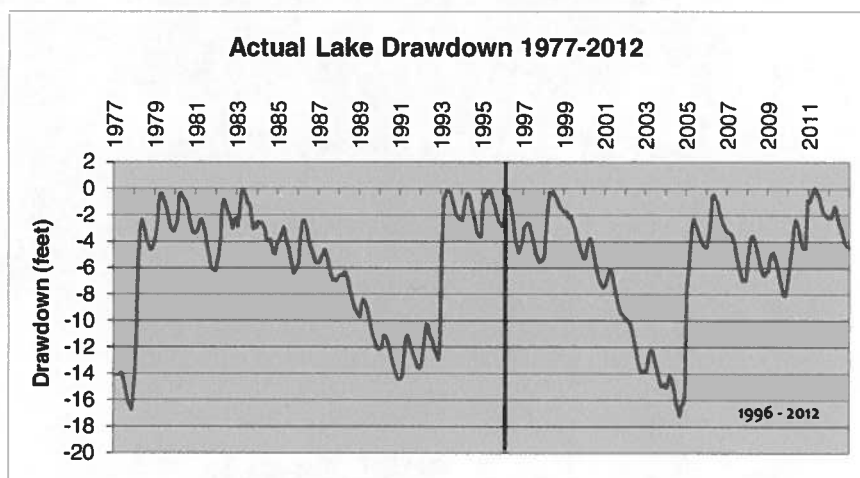
## 1996 In-Lieu Agreement

- For the 17 years (1996 – 2012) under the In-Lieu Agreement:
- Mutual's demands averaged 5,616 AF/year.
- They were met by:
 

▪ Mutual Lake Releases	242 AF/year
▪ Fishery Lake Releases	362 AF/year
▪ In-Lieu Deliveries	<u>5,012 AF/year</u>
▪ Total Deliveries	5,616 AF/year
- Lake levels declined to a record low and recovered.

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## 1996 In-Lieu Agreement



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## 1999 Memorandum of Understanding

- 1999 – Big Bear and Valley District entered into a Memorandum of Understanding that modified the In-Lieu Agreement for two years to provide assurances that Valley District could meet their high elevation In-Lieu obligations while their Greenspot Pipeline was under repair.
- 2001 – The MOU was extended for two years, until the end of 2002.

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## **1999 Memorandum of Understanding**

- MOU allowed Valley District to deliver In-Lieu Water when the lake level was high enough that lake releases would normally be made.
- MOU allowed an equivalent amount of water to be stored in Big Bear Lake in the event Valley District needed it to meet their “high elevation” In-Lieu obligations in the following years.
- Unused water would be returned to Big Bear.

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## **1999 Memorandum of Understanding**

- In 1999 Valley District delivered an extra 3,501 AF of In-Lieu water to Mutual, which increased lake levels about 1.2 feet.
- During the four years of the MOU, Valley District did not need any of the water stored in the lake for “high elevation” In-Lieu requirements.
- Increased evaporation from the lake over the four years of the MOU was estimated to be 893 AF.
- Big Bear got the balance of 2,608 AF at the end of 2002 and the MOU was terminated.

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## **2003-04 In-Lieu Studies**

- To better analyze in-lieu needs, Big Bear, Valley District and Mutual jointly conducted a Lake Management Study.
- They agreed to use water years and a 53-year period between October 1945 and September 1998 that included three wet and dry cycles with the lake full at the beginning and end of the 53-year period.
- During this 53-year period, the average annual in-lieu deliveries was estimated to be 2,815 AF/year assuming the Mutual Lake Release Policy was followed.

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## **2006 Flood Control Release Policy**

- 2006 – Big Bear adopted a flood control release policy to maintain lake levels one foot below full between December 31 and March 31.
- Estimated long-term average In-Lieu Deliveries increased from 2,815 to 2,895 AF/year, an increase of 80 AF/year.
- The cost of In-Lieu Water was priced at \$150/AF.
- The increase in the “base cost” of the In-lieu Agreement was \$12,000 per year.
- Adjusted for changes in AV this increase is now about \$17,000 per year.

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## **2006 Snowmaking Water Sales**

- 2006 –Big Bear entered into an agreement to increase the annual snowmaking withdrawal to up to 11,000 AF in any ten-year period, not to exceed 1,300 AF in any single water year.
- Estimated long-term average In-Lieu Deliveries increased from 2,895 to 2,914 AF/year, an increase of 19 AF/year.
- The cost of In-Lieu Water was priced at \$150/AF.
- The increase in the “base cost” of the In-lieu Agreement was \$2,850 per year.
- This increase after adjusting for AV changes is now about \$4,000 per year

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## **2010 In-Lieu Concept Discussions**

- Big Bear and Valley District held further discussions to determine if the In-Lieu Agreement could be modified to:
  - Increase water levels in Big Bear Lake during the summer recreation season (between Memorial Day and Labor Day), and
  - Provide Valley District water in storage in Big Bear Lake for “emergency” purposes.
- The goal was an operational plan that would be beneficial to both agencies and would not change the existing cost of the In-Lieu Agreement.
- The discussions were put on hold before any detailed discussions or evaluations on the limitations of storage and releases were held.

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## **2012 Discussions/Concepts**

- Valley District expressed interest in resuming the 2010 discussions on the In-Lieu Agreement.
- Valley District has an interest in water storage in Big Bear Lake, improving on the 1999 MOU experience.
- A concept that would eliminate summer lake releases for Mutual, better manage fall deliveries to Valley District, provide storage opportunities for Valley District and reduce In-Lieu costs would be developed and evaluated.

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## **July 2012 In-Lieu MOU**

- Big Bear and Valley District entered into an In-Lieu MOU effective July 1, 2012 through December 31, 2013.
- Valley District informed Big Bear that due to construction of the East Branch Extension of the SWP, elements of Valley District's water delivery system would be out of service in 2013 and they may not be able to deliver In-Lieu Water to Mutual during a portion of the year.
- Valley District agreed to deliver In-Lieu water to Mutual during times when Big Bear would normally make lake releases for Mutual and Big Bear agreed to give them storage credit in the Lake for these supplemental In-Lieu deliveries.

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## **July 2012 In-Lieu MOU**

- Additional evaporation resulting from the higher lake levels would be deducted from Valley District's lake storage account.
- Big Bear agreed to release water from Valley District's lake storage account as needed to meet Mutual's In-Lieu needs.
- Big Bear and Valley District agreed to examine changes to the 1996 In-Lieu Agreement that would create additional benefits for each party.

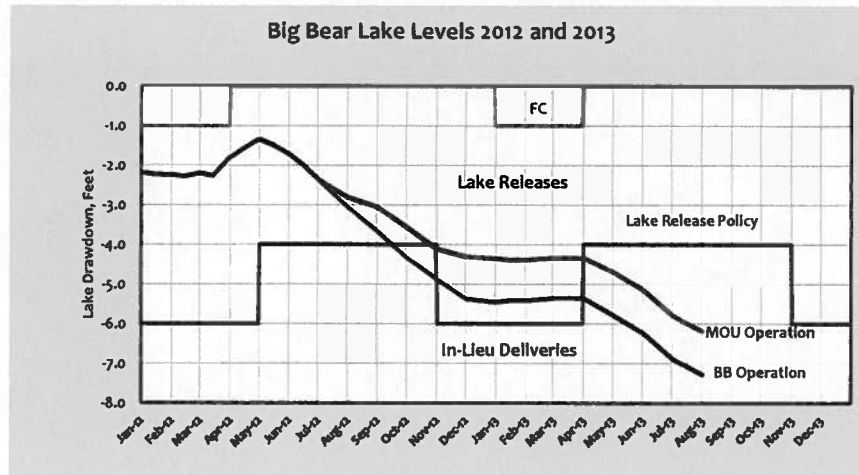
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## **Status of July 2012 In-Lieu MOU**

- Status as of July 2013
- Valley District has delivered 3,291 AF of supplemental In-Lieu water to Mutual when Big Bear normally would have made lake releases for Mutual.
- Big Bear Lake is 1.09 feet higher than it would have been if the Lake Release Policy had been followed.
- Additional evaporation from the higher lake levels has been 187 AF.
- Valley District has 3,104 AF of water in their lake account.

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## Lake Levels Under MOU and Big Bear Lake Release Policy



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## Status of July 2012 In-Lieu MOU

- A draft “term sheet” for an amendment to the 1996 In-Lieu agreement has been developed for discussion purposes.
- A test release plan has been proposed to evaluate the capability to control, measure and capture lake releases that would occur under the conditions of the draft term sheet.
- The test release plan could also be used in the event Valley District is unable to deliver In-Lieu water to Mutual.

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## Draft Term Sheet

- Big Bear would allow Valley District to store water in Big Bear Lake for
  - Emergency Purposes (2,800 AF)
  - Operational Purposes (2,800 AF)
- Valley District would meet all of Mutual's needs for lake water between Memorial Day and Labor Day regardless of lake level and would get credit in their storage account for deliveries made when Big Bear would normally make lake releases for Mutual. Credits would go first to their Emergency Account, and when full would go to their Operational Account.

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## Draft Term Sheet

- After Labor Day and before Memorial Day Valley District would have the option to also deliver In-Lieu water to Mutual during periods when lake releases would normally be made; storage credits would go to their Operational Storage Account.
- Spills and Flood Control Releases from Big Bear Lake would first come from Valley District's Operational Storage Account; when it is depleted, they would come from their Emergency Storage Account until it is depleted, then they would come from Big Bear's lake account.

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## Draft Term Sheet

- Increased lake evaporation resulting from higher lake levels would be
  - Deducted from Valley District's storage accounts between Labor Day and Memorial Day, and
  - Shared 50-50 between Valley District and Big Bear between Memorial Day and Labor Day to reflect the benefits gained by each agency during the summer recreation season.
- Releases from Valley District's Emergency Storage Account could be made when
  - The SWP Allocation to Valley District is less than 25,000 AF, or
  - Operational problems would prevent Valley District from delivering In-lieu water to Mutual.

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## Draft Term Sheet

- Releases from Valley District's Operational Storage Account could be made after Labor Day and before Memorial Day providing
  - the lake level is within 8 feet of full, and
  - Emergency Releases are not occurring.
- In the event of an "emergency" when Valley District's Emergency Storage Account is not full, Big Bear would make an "advance for emergency purposes" to ensure the full emergency amount (2,800 AF) is available; Valley District would repay the emergency advance with future supplemental In-Lieu deliveries.

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## Draft Term Sheet

- To reflect the benefits of these changes in In-Lieu Policy
  - Valley District would waive the In-Lieu Cost increase scheduled for FY 2017-18; the estimated cost increase is \$80,000 to \$100,000 per year depending on AV at the time of the increase,
  - Valley District would reduce the In-Lieu costs by \$50,000 per year for FY 2014-15, FY2015-16, and FY 2016-17 while the amendment is being implemented and the storage accounts are being filled, and
  - Valley District and Big Bear would evaluate and adjust the In-Lieu requirements and costs resulting from changes in lake releases for fishery protection under SWRCB Order 95-4 as amended on January 8, 2009.

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## Test Release Plan

- A “test release plan” has been developed to evaluate the capability to control future Valley District releases, to accurately measure the releases, and to determine how much of the releases will reach a point where Valley District can divert the flow.
- The releases would be made through the 14-inch sluice gate on the Outlet Works of Bear Valley Dam.
- Releases would be measured by the 36-inch electromagnetic flowmeter in the Outlet Works.
- Downstream flow measurements would be made at Station A on Bear Creek and at SCE PH #1 intake to estimate losses between Bear Valley Dam and SCE PH#1.

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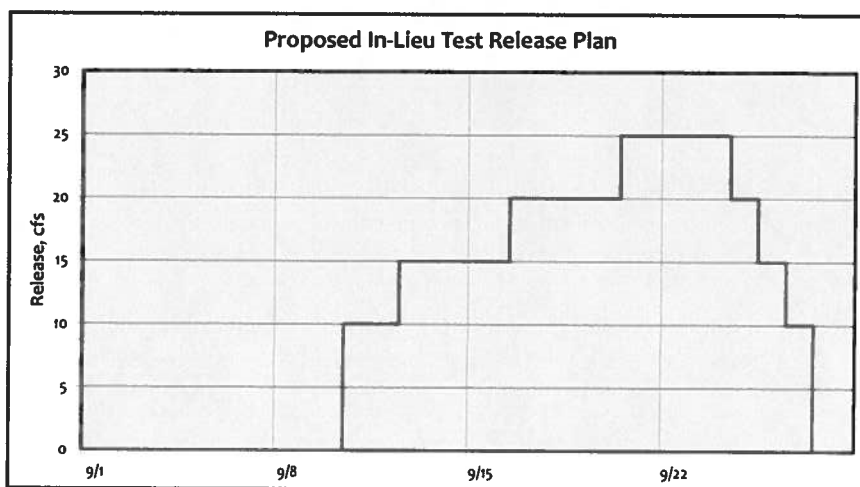


## Test Release Plan

- The release rates would cover the expected range of “emergency” releases when Valley District would not be able to deliver In-Lieu water to Mutual; this flow range is estimated to be 15 to 25 cfs.
- The test release plan would begin Tuesday September 10 and end on Friday September 27; a duration of 18 days.
- Approximately 605 AF of water would be released.
- The lake level would drop about 3 inches.

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## Test Release Plan



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## **Possible Next Steps**

- Prepare operational concepts to be evaluated.
- Evaluate results of Test Release Plan
- Evaluate benefits and impacts of alternative operational concepts.
- Board Workshop(s)
- Select preferred concept
- Finalize draft term sheet
- Determine CEQA requirements
- Prepare Amendment to 1996 In-Lieu Agreement

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