

**SPECIAL MEETING
OF THE
CACHUMA OPERATION AND MAINTENANCE BOARD**
at Cachuma Operation and Maintenance Board Office
3301 Laurel Canyon Road
Santa Barbara, California 93105

Monday, March 7, 2016

Start Time
1:00 P.M.

AGENDA

Note: This is a special meeting of the Governing Board called in accordance with Government Code Section 54956. Other than the listed agenda items, no other business will be conducted by the Governing Board.

1. **COMB CALL TO ORDER, ROLL CALL** (COMB Board of Directors)
2. **PUBLIC COMMENT** (In accordance with Government Code Section 54954.3, every notice for a special meeting shall provide an opportunity for members of the public to directly address the legislative body concerning any item that has been described in the notice for the meeting before or during consideration of that item.)
3. **VERBAL REPORTS FROM BOARD COMMITTEES**
Receive verbal information regarding the following committee meetings:
 - Fisheries Committee Meeting – March 1, 2016
 - Operations Committee Meeting – March 3, 2016
4. **RESOLUTION NO. 610 – APPROVING ADDITIONAL EXPENDITURES AND THE EXTENSION OF TIME FOR APPROVED EXPENDITURES FOR THE DROUGHT EMERGENCY PUMPING FACILITY PROJECT THROUGH JUNE 30, 2017**
Action: Recommend approval by motion and roll call vote of the Board
5. **SUBMITTAL OF GRANT APPLICATION FOR FISH PASSAGE IMPROVEMENT PROJECT – QUIOTA CREEK CROSSING 5**
Action: Recommend approval by motion and roll call vote of the Board
6. **[CLOSED SESSION]: PUBLIC EMPLOYEE APPOINTMENT**
[Government Code Section 54957]
PUBLIC EMPLOYMENT
Title: General Manager
7. **RECONVENE INTO OPEN SESSION**
[Government Code Section 54957.7]
Disclosure of actions taken in closed session, as applicable
[Government Code Section 54957.1]

8. MEETING SCHEDULE

- **March 28, 2016 at 2:00 P.M., COMB Office**
- **Board Packages Available on COMB Website**
www.cachuma-board.org

9. COMB ADJOURNMENT

NOTICE TO PUBLIC

Posting of Agenda: This agenda was posted at COMB's offices, located at 3301 Laurel Canyon Road, Santa Barbara, California, 93105 and on COMB's website, in accordance with Government Code Section 54954.2. The agenda contains a brief general description of each item to be considered by the Governing Board. The Board reserves the right to modify the order in which agenda items are heard. Copies of staff reports or other written documents relating to each item of business are on file at the COMB offices and are available for public inspection during normal business hours. A person with a question concerning any of the agenda items may call COMB's General Manager at (805) 687-4011.

Written materials: In accordance with Government Code Section 54957.5, written materials relating to an item on this agenda which are distributed to the Governing Board less than 72 hours (for a regular meeting) or 24 hours (for a special meeting) will be made available for public inspection at the COMB offices during normal business hours. The written materials may also be posted on COMB's website subject to staff's ability to post the documents before the scheduled meeting.

Public Comment: Any member of the public may address the Board on any subject within the jurisdiction of the Board that is not scheduled for as an agenda item before the Board. The total time for this item will be limited by the President of the Board. The Board is not responsible for the content or accuracy of statements made by members of the public. No action will be taken by the Board on any Public Comment item.

Americans with Disabilities Act: in compliance with the Americans with Disabilities Act, if you need special assistance to review agenda materials or participate in this meeting, please contact the Cachuma Operation and Maintenance Board office at (805) 687-4011 at least 48 hours prior to the meeting to enable the Board to make reasonable arrangements.

Note: If you challenge in court any of the Board's decisions related to the listed agenda items you may be limited to raising only those issues you or someone else raised at any public hearing described in this notice or in written correspondence to the Governing Board prior to the public hearing.

CACHUMA OPERATION & MAINTENANCE BOARD

Fisheries Committee Meeting

3301 Laurel Canyon Road
Santa Barbara, CA 93105

Tuesday, March 1, 2016
3:00 PM

AGENDA

1. Call to Order
2. Public Comment (Public may address the Committee on any subject matter not on the agenda and within the Committee's jurisdiction)
3. Tributary Projects *(for information and possible recommendations)*
 - a. Update on Fish Passage Improvement Project at Quiota Creek Crossing 0a & 0b
 - b. Update on Fish Passage Improvement Project at Quiota Creek Crossing 3
 - c. Grant Agreement with California Department of Fish and Wildlife for Fish Passage Improvement at Quiota Creek Crossing 4
 - d. Grant Application for Fish Passage Improvement Project at Quiota Creek Crossing 5
 - e. Fish Passage Improvement Project at Quiota Creek Crossing 8
 - Cooperative Agreement
 - f. Update Quiota Creek Master Agreement with the County of Santa Barbara
 - g. Update on Quiota Creek: Refugio Road Flood Area Certificates
4. Reports *(for discussion and possible recommendation)*
 - a. 2012 Annual Monitoring Report
 - b. 2013 Annual Monitoring Report – Timeline
 - c. RPM 6
 - d. Tributary Project Performance Evaluations
5. Status Report on Data Posting *(for information)*
6. Water Quality Monitoring with CDFW *(for discussion)*
7. Adjournment

[This Agenda was Posted at 3301 Laurel Canyon Road,
Santa Barbara, CA. and Noticed and Delivered in
Accordance with Section 54954.1 and .2 of the
Government Code.]

CACHUMA OPERATION & MAINTENANCE BOARD

Operations Committee Meeting

3301 Laurel Canyon Road
Santa Barbara, CA 93105

Thursday, March 3, 2016
10:00 a.m.

AGENDA

1. Call to Order
2. Public Comment (Public may address the Committee on any subject matter not on the agenda and within the Committee's jurisdiction)
3. Emergency Pumping Facilities Project (EPFP) – Barge Relocation (*for information and recommendation*)
4. Adjournment

[This Agenda was Posted at 3301 Laurel Canyon Road,
Santa Barbara, CA. and Notices and Delivered in
Accordance with Section 54954.1 and .2 of the
Government Code.]

CACHUMA OPERATION & MAINTENANCE BOARD

BOARD MEMORANDUM

Date:	March 7, 2016
Submitted by:	Janet Gingras

SUBJECT: EMERGENCY PUMPING FACILITY PROJECT – Barge Relocation

SUMMARY:

The Emergency Pumping Facility Project has been operating at Location 1 since August 24, 2015. Per the USBR Daily Operations Report, as of March 4, 2016, the lake elevation was 664.93' with storage volume of 28,534 AF. The minimum lake elevation at which the barge can physically operate at Location 1 before relocating to Location 2 is 658'.

The Design, Build, Operate and Maintain (DBOM) contract with Cushman Contracting requires a ninety (90) day notice for relocation of the pumping facility in order for the contractor to procure the approximate 7,500' length of additional 36" HDPE pipe and related materials for construction and extension of the conveyance line. The pump station is designed to operate in Location 2 with no changes to the on-board system. The pump station capacity for deliveries from Location 2 per design will be reduced from a maximum flow rate of 45 mgd to 25 mgd. Per contract, operational costs will increase at Location 2 from \$98,000 to \$124,000 per month.

Relocation of the electrical transformer to support PGE service is estimated to cost approximately \$150,000. PGE costs for electrical service are currently under contract and being paid for by grant funding under the Emergency Drought Relief Project through the Bureau of Reclamation. The delivery order with PGE is written for a maximum expenditure of \$300,000 during the two year period from January 23, 2015 to January 22, 2017.

Supply and demand projections for the remainder of the calendar year have been provided to COMB by each of the Member Agencies. Using the projections provided by the Member Agencies and without substantial rainfall during March, notification to the contractor would need to be given early March to provide the required ninety days necessary to procure and install the remaining pipeline to Location 2.

Utilizing the supply and demand projections, the South Coast Member Agencies will have available carryover balances of approximately 4,734 AF once the barge is relocated to Location 2 in early July. Location 2 remains viable for continued delivery of carryover, state and supplemental water without additional pipeline installation by CCWA. Depending on the schedule of WR89-18 releases during the upcoming summer, and once the lake recedes to elevation 643' (minimum pool), the Member Agencies will be restricted to receive only their amount of state and supplemental water delivered to and/or stored in the lake, or new allocations of project water, if any.

FISCAL IMPACT:

The COMB Fiscal Year 2015-16 Adopted Budget includes funding for relocation of the Emergency Pumping Facility System. Budgeted line items are shown below with expenditures contemplated for relocation of the facility. Attached as exhibit 5 is the HDR memo regarding contractor costs for 800' of additional pipe and pile purchase / installation for the preferred site 2 location as depicted in the project description (exhibit 4).

Relocation of Barge Facility (per contract plus change order) <i>Change order for 800' additional length pipe and piles</i>	\$753,000
PGE Re-conducting Costs (<i>estimate</i>)	<u>\$150,000</u>
Total	\$903,000

LEGAL CONCURRENCE:

General Counsel developed Resolution No. 610.

ENVIRONMENTAL COMPLIANCE:

The environmental permit addendums are addressed in a separate memorandum attached as exhibit 6.

COMMITTEE STATUS:

Operations Committee reviewed and concurred with recommendation to forward item to Board for approval.

RECOMMENDATIONS:

Board adopt Resolution No. 610 approving additional expenditures and the extension of time for approved expenditures related to the Emergency Pumping Facility Project and authorize the Interim General Manager to promptly provide a 90 day notice to Cushman Contracting Corp. (per contract) to proceed with relocation of the Emergency Pumping Facility Project to Location 2, including all actions necessary and appropriate to implement the relocation of the Emergency Project.

LIST OF EXHIBITS:

1. Board Resolution No. 610
2. HDR Technical Memorandum – March 2, 2016 (Barge Relocation)
3. HDR Memorandum – February 23, 2106 (Lake Level Projection Update)
4. Project Description
5. HDR Memorandum – March 2, 2016 (added costs)
6. Permit Memorandum

RESOLUTION NO. 610

**RESOLUTION OF THE GOVERNING BOARD OF THE
CACHUMA OPERATION & MAINTENANCE BOARD APPROVING ADDITIONAL
EXPENDITURES AND THE EXTENSION OF TIME FOR APPROVED
EXPENDITURES FOR THE DROUGHT EMERGENCY PUMPING FACILITY
PROJECT THROUGH JUNE 30, 2017**

WHEREAS, the Cachuma Operation & Maintenance Board (“COMB”) is a joint powers authority and public entity, organized and existing in the County of Santa Barbara in accordance with Government Code Section 6500 et seq., and operating pursuant to the 1996 Amended and Restated Agreement for the Establishment of a Board of Control to Operate and Maintain the Cachuma Project - Cachuma Operation And Maintenance Board, dated May 23, 1996 (“Amended and Restated Agreement”), as amended by an Amendment to the Amended and Restated Agreement made effective September 16, 2003 (collectively the “Joint Powers Agreement”); and

WHEREAS, COMB operates and maintains Cachuma Project facilities pursuant to a Transfer of Operation and Maintenance Contract with the United States Bureau of Reclamation; and

WHEREAS, the Member Agencies of COMB consist of the City of Santa Barbara, the Goleta Water District, the Montecito Water District, the Carpinteria Valley Water District (collectively herein the “South Coast Member Agencies”), and the Santa Ynez River Water Conservation District, Improvement District No. 1 (“ID No. 1”); and

WHEREAS, on January 17, 2014 the Governor of the State of California proclaimed a state of emergency due to current drought conditions, and on March 1, 2014, the Governor signed into law emergency drought legislation that finds and declares that California is experiencing an unprecedented dry period and shortage of water for its residents, local governments, agriculture, the environment and other uses; and

WHEREAS, there continues to exist severe drought conditions in the South Coast geographic area served by COMB, and given such persistence conditions, water levels in Cachuma Lake have continued to diminish, so that water in the reservoir can no longer gravity flow into the existing Cachuma Lake inlet tower, which comprises a portion of the Cachuma Project facilities; and

WHEREAS, it remains necessary for COMB to continue to undertake emergency action to cause and allow the pumping of water through a floating platform mounted system to the existing lake inlet tower, the re-establishment of service of an existing water entry gate, and related actions thereto (the “Emergency Project”), thereby ensuring the continued use of the Cachuma Lake reservoir until reservoir levels return to a normal operating level, and ensuring the continuing conveyance and supply of Cachuma Lake Project water through the intake tower to the Tecolote Tunnel/South Coast Conduit and then to the South Coast Member Agencies for distribution to their customers and residents; and

WHEREAS, on April 16, 2014 and on May 7, 2014, the Governing Board unanimously adopted Resolution Nos. 576 and 577, respectively, which among other things approved the Emergency Project; authorized a capital expenditure and indebtedness in excess of One Million Dollars (\$1,000,000) for the Emergency Project, and a total Emergency Project expenditure not to exceed Six Million Dollars (\$6,000,000), to be budgeted and paid over two (2) fiscal years from July 1, 2013 through June 30, 2015; authorized COMB to incur indebtedness for the Emergency Project in an amount not to exceed Six Million Dollars (\$6,000,000), with repayment of such indebtedness to COMB by South Coast Member Agencies (and not ID No. 1) pursuant to an April 16, 2014 Indemnification Agreement separately approved by the Governing Board; as between the South Coast Member Agencies; with the aforesaid approvals of such COMB expenditures and incurring of indebtedness contingent upon ratification by each and every Member Agency of COMB; allocated the costs of the Emergency Project to South Coast Member Agencies according to respective percentage allocations as specified therein, with the Electrical Power Component of the cost of the Emergency Project allocated on a modified basis following commencement of operation of the Emergency Project until its end; selected both Cushman Contracting Corporation (“Cushman”) as the contractor for the Emergency Project and HDR as COMB’s Project Oversight Engineering Firm; and authorized COMB’s officers and staff, including the General Manager, to enter into a Contract Agreement with Cushman, issue Notices to Proceed for Phases One and Two of the Emergency Project, and to take other necessary and appropriate steps to implement the Emergency Project; and

WHEREAS, on April 17, 2014, in compliance with the California Environmental Quality Act (“CEQA”), COMB filed with the Santa Barbara County Clerk two separate Notices of CEQA Exemption (“NOE”) for the Emergency Project. These NOEs identified the applicable exemptions as: 1) CEQA Guidelines Exemption section 15301 et seq., relating to a categorical exemption for existing facilities in order to allow the continued operational delivery of reservoir water to the inlet tower; and 2) CEQA Guidelines Exemption section 15269 et seq., relating to actions necessary to prevent or mitigate an emergency. During the 35-day notice period, no comments to the NOEs were received by COMB.

WHEREAS, Cushman thereafter undertook and completed design, site mobilization and construction of the Emergency Project; and

WHEREAS, through June 30, 2015, cumulative expenditures, including any capital and operational and maintenance costs, for the Emergency Project totaled approximately Five Million Five Hundred Thousand Dollars (\$5,500,000); and

WHEREAS, additional work by Cushman has been, and continues to be, necessary for the Emergency Project to become and remain fully operational, including engineering oversight provided by HDR as COMB’s Project Oversight Engineering Firm, and operation and maintenance of the Emergency Project (“Additional Work”); and

WHEREAS, COMB in its adopted Fiscal Year 2015-2016 budget appropriated a total additional amount of approximately Two Million Seven Hundred Thousand Dollars (\$2,700,000) that could potentially be expended for the Additional Work; and

WHEREAS, on July 27, 2015, the Governing Board approved Resolution No. 606, which, among other things, authorized COMB to enter into the Sub-Grant Agreement with the Santa Barbara County Water Agency for the receipt of Proposition 84 grant funds in order to implement projects within the Santa Barbara County Integrated Regional Water Management Plan. Pursuant to this Sub-Grant Agreement, One Million Thirty-Seven Thousand Eight Hundred Twenty-Eight Dollars (\$1,037,828) in Proposition 84 grant funds were dedicated to the Emergency Project; and

WHEREAS, in August 2015, COMB estimated that expenditures for the Additional Work would involve approximately Six Hundred Thirty-Eight Thousand Dollars (\$638,000) during the period between July 1, 2015 and December 31, 2015, with the total actual expenditure for the Emergency Project anticipated to increase to approximately Six Million Six Hundred Thirty-Eight Thousand Dollars (\$6,638,000); and

WHEREAS, on August 24, 2015, the Governing Board unanimously adopted Resolution No. 608, which, among other things, approved and authorized the requested expenditure for Additional Work, and an increase in the total expenditure by COMB not to exceed Six Million Six Hundred Thirty-Eight Thousand Dollars (\$6,638,000), for implementation of the Emergency Project through December 31, 2015. The Governing Board further found and determined that, consistent with prior Resolution Nos. 576 and 577, the cost of the Emergency Project should continue to be allocated among the South Coast Member Agencies in accordance with their respective percentage allocations set forth in prior Resolution Nos. 576 and 577, namely, Goleta Water District, 40.42%; City of Santa Barbara, 35.88%; Carpinteria Valley Water District, 12.20%; and Montecito Water District, 11.50%. In addition, pursuant to the April 16, 2014 Indemnification Agreement referenced herein, the Governing Board further found and determined that ID No. 1 shall not bear any portion of the cost of the Emergency Project; and

WHEREAS, on November 16, 2015, the Governing Board approved Resolution No. 609, which, among other things, authorized and approved that the previously-approved expenditures for the Emergency Project be continued during the time period December 31, 2015 through June 30, 2016, which included operational and related costs regarding the floating platform (or “barge”) in its current location; and

WHEREAS, through February 29, 2016, cumulative expenditures, including any capital and operational and maintenance costs, for the Emergency Project total approximately Six Million Four Hundred Forty Thousand Dollars (\$6,440,000), with Two Million Six Hundred One Thousand Three Hundred Seventeen Dollars (\$2,601,317) of that expenditure constituting an indebtedness borrowed through a line of credit. COMB does not intend to borrow any additional funds or incur any additional indebtedness through that, or any other, line of credit to pay for the costs of the Emergency Project; and

WHEREAS, as of March 1, 2016, the Member Agencies have been awarded, and are anticipating receipt in the near future of, One Million Thirty-Seven Thousand Eight Hundred Twenty-Eight Dollars (\$1,037,828) in Proposition 84 grant funds pursuant to the Sub-Grant Agreement with the Santa Barbara County Water Agency as reimbursement for costs incurred on the Emergency Project in order to implement projects within the Santa Barbara County Integrated Regional Water Management Plan; and

WHEREAS, as of March 1, 2016, the Member Agencies have received One Million Nine Hundred Forty-Six Thousand Four Hundred Seventy-Two Dollars (\$1,946,472) in Drought Emergency Response Program grant funds from both the California Department of Water Resources (“DWR”) and State Water Resources Control Board (“SWRCB”) to assist in funding the costs of the Emergency Project in order to respond to a drought-related drinking water emergency.

WHEREAS, given the continuing drought conditions, it has been determined by COMB that additional expenditures for Additional Work are necessary and are anticipated to continue during the period between July 1, 2016 through June 30, 2017, including the need to move the barge to a new location, which COMB has estimated will require an additional expenditure under the Contract Agreement of approximately Nine Hundred Thousand Dollars (\$900,000), with monthly operational and related costs thereafter to be expended through June 30, 2017, or until such time as the rainfall increases the water level of Cachuma Lake, so that the Emergency Project is no longer necessary; and

WHEREAS, the Governing Board desires to authorize and approve additional expenditures for the Additional Work for the Emergency Project to be continued during the time period from July 1, 2016 through June 30, 2017, which will include operational and related costs regarding the barge, including the barge’s movement to a new location; and

WHEREAS, the Governing Board desires to reaffirm that the repayment of any and all of the indebtedness and costs incurred by COMB for the Emergency Project will be made by the South Coast Member Agencies, and not by ID No. 1, pursuant to the April 16, 2014 Indemnification Agreement separately approved by the Governing Board; and that the Governing Board desires to document that affirmation by amending and supplementing the Indemnification Agreement to reflect that the definition of “Emergency Project” or “Project” in the Indemnification Agreement includes any Additional Work and approved expenditures, including any Proposition 84 grant funds received through the Sub-Grant Agreement with the Santa Barbara County Water Agency and Drought Emergency Response Program grant funds received from the DWR or SWRCB; and

WHEREAS, the Governing Board desires to affirm: that all of the five Member Agencies of COMB have each separately and independently, as Cachuma Member Units, entered into various contracts and agreements with the United States Bureau of Reclamation, including the Master Contract dated April 14, 1996 (Contract No. 175r-1802R) and contracts with the Santa Barbara County Water Agency, which specifically set forth and provide for the taking and delivery of the respective share or yield of Cachuma Project water for each Member Agency; that pursuant to the Transfer of the Operation and Maintenance of the Cachuma Transferred Project Works dated March 12, 2003 (Contract No. 14-06-200-5222R) (“Transfer Agreement”), COMB is obligated “while operating and maintaining the transferred project works or any part thereof, [to] perform all valid obligations of the United States pertaining to the transportation, storage, and delivery of water from, through or by such transferred project works; and as such, COMB will work cooperatively with the United States Bureau of Reclamation and other pertinent agencies so that the amount of Cachuma Project water delivered to each Member Agency does not exceed the respective share or yield to which each Member Agency is entitled pursuant to the applicable contracts and agreements, and local, state and federal laws.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF COMB AS FOLLOWS:

1. The Governing Board finds and determines that the facts set forth in the above recitals and in the documents referenced herein are true and correct.

2. The Governing Board approves and authorizes the requested expenditure for Additional Work for implementation of the Emergency Project, including the movement of the barge to a new location, and that such approved expenditures be continued during the time period July 1, 2016 through June 30, 2017.

3. The Governing Board further finds and determines that, consistent with prior Resolution Nos. 576, 577, 608 and 609, the indebtedness and costs of the Emergency Project shall continue to be allocated among the South Coast Member Agencies in accordance with their respective percentage allocations set forth in prior Resolution Nos. 576, 577, 608 and 609, namely, Goleta Water District, 40.42%; City of Santa Barbara, 35.88%; Carpinteria Valley Water District, 12.20%; and Montecito Water District, 11.50%. In addition, pursuant to the April 16, 2014 Indemnification Agreement referenced herein, ID No. 1 shall not bear any portion of the indebtedness or cost of the Emergency Project.

4. The Governing Board further finds and determines that the April 16, 2014 Indemnification Agreement should be amended and supplemented to reflect that the definition of "Emergency Project" or "Project" in the Indemnification Agreement includes any Additional Work and approved expenditures, including any Proposition 84 grant funds received through the Sub-Grant Agreement with the Santa Barbara County Water Agency or Drought Emergency Response Program grant funds received from the DWR or SWRCB; and

5. The Governing Board further finds and determines that, consistent with prior Resolution Nos. 577, 608 and 609, and notwithstanding the respective percentage allocations set forth in Paragraph 3, the South Coast Member Agencies shall be responsible on a different basis for that component of the Emergency Project cost attributable to electrical power costs for the pumping of water ("Electrical Power Component"). For purposes of COMB's budget, the Electrical Power Component shall be allocated and billed to each of the South Coast Member Agencies in the respective percentage allocations set forth in Paragraph 3. However, at the end of the first six (6) month period after commencement of operation of the Emergency Project, and for every six (6) month operating period (or shorter) thereafter until the end of the Emergency Project, each South Coast Member Agency's percentage of total water actually delivered to that particular Member Agency through the Emergency Project facilities shall be compared to its respective percentage allocation set forth in the preceding paragraph. Based on such evaluation, each South Coast Member Agency's share and liability for the Electrical Power Component shall thereafter be adjusted to reflect the percentage of total water actually delivered to the member Agency through the Emergency Project facilities; and

6. The Governing Board further finds and determines that, consistent with the various contracts and agreements that the Member Agencies of COMB have entered into with the United

States Bureau of Reclamation and the Santa Barbara County Water Agency, and with the Transfer Agreement, COMB will continue to work cooperatively with the United States Bureau of Reclamation and other pertinent agencies so that the amount of Cachuma Project water delivered to each Member Agency does not exceed the respective share or yield to which each Member Agency is entitled pursuant to the applicable contracts and agreements, as well as applicable local, state and federal law; and

7. The Governing Board further finds and determines that, consistent with CEQA Guidelines Exemption sections 15301 et seq., relating to a categorical exemption for existing facilities in order to allow the continued operational delivery of reservoir water to the inlet tower, and 15269 et seq., relating to actions necessary to prevent or mitigate an emergency, addenda to the NOEs should be filed with the Santa Barbara County Clerk.

8. The Governing Board further authorizes COMB’s officers and staff, including the General Manager, to continue to do all things necessary and appropriate, including, but not limited to, execution and delivery of documents, the processing and continuing execution of the Contract Agreement and any changes thereto, the providing of 90-day notice to Cushman to proceed with the relocation of the barge, the obtaining of necessary permits, the filing of any necessary environmental documents in compliance with the CEQA, and any other actions to implement the Emergency Project.

9. This Resolution amends prior Resolution Nos. 576, 577, 608 and 609 by approving and authorizing the additional expenditures for the Additional Work, and authorizing and approving the extension of such approved expenditures for the Emergency Project through June 30, 2017.

PASSED, APPROVED AND ADOPTED by the Governing Board of the Cachuma Operation and Maintenance Board, this 7th day of March 2016, by the following roll call vote:

Ayes:

Nays:

Abstain:

APPROVED:

President of the Governing Board

ATTEST:

Secretary of the Governing Board

Memo

Date: Wednesday, March 02, 2016

Project: COMB – Emergency Pumping Facility Project

To: Janet Gingras, COMB

From: Dan Ellison, PE



Subject: Necessity of Relocating the Pumping Barge to Site 2

This memo discusses the need to soon relocate the pumping barge to Site 2 and the bases for this requirement. It also discusses reasons Site 2 is located near the campground and why other locations and alternatives are not considered feasible.

Overview

When the lake level is at elevation 658 feet¹, pumping operations at Site 1 cannot continue, but it is better that the pumping barge be moved sooner. For planning purposes, 660 feet should be considered the elevation when the barge needs to be relocated.

Current projections indicate elevation 660 feet will be reached in late June or early July. COMB's contract with Cushman Contracting Corporation (CCC) requires that COMB provide 90-day notice of when relocation is required. Thus, for relocation by the end of June, notice must be given in March.

Because these lake-level projections are not precise and because things do not always go according to plan, it is best that the notice be issued as soon as possible. It is unlikely that enough rain will occur in the next two months to negate the need to relocate the barge.

This memo discusses:

- The basis of the Site 1 pumping limits
- The estimated date when these limits will be reached
- Criteria used to select the location for Site 2
- Alternatives to moving the barge to Site 2

Summary of Conclusions

1. Relocation of the barge must be completed before the lake reaches elevation 658 ft. It is preferred that relocation be completed by elevation 660 ft., or sooner.
2. It is currently projected that the lake will reach this elevation by the end of June or early July, if severe drought conditions continue, necessitating a notice to proceed in March.

¹ The elevations used in this memo correspond to the tower datum elevations used by the USBR, and are based on NGVD29, rather than the more recent standard (NAVD88).

3. Unless a very substantial amount of rain falls in the next month, it is imperative that relocation be completed before July 15.
4. Based on the current projections from member agencies and SYRWCD, the minimum pool level can be expected by the end of the year.
5. The pumping barge needs to be located to a position which enables continued conveyance of SWP water after minimum pool level is reached.
6. Based on bathymetric contours of where the barge must be located, the only feasible location is near the County campground.
7. By locating the pumping barge near the County campground, the need to construct roads is negated and other impacts are minimized.
8. The selected location for Site 2 also may allow the facility to remain operational in one location until the lake rises sufficiently for gravity flow to resume. At Site 2, pumping capacity is somewhat reduced, but within the range of anticipated South Coast demands.
9. No feasible alternatives other than moving the barge to Site 2 have been identified.

Detailed Discussion

Site 1 Pumping Limits

The pumping barge *should* be moved before the lake level drops to 660 feet and *must* be moved before elevation 658 feet. This is because the pumping barge was designed to operate in at least 10 to 12 feet of water and the lake bed beneath the barge is at elevation 648 feet.²

Two considerations set the limits for pumping from Site 1: (1) One to three feet of clearance between the intake pipe and the lake bed is required, (2) the depth of water needs to be sufficient to float the barge to the next site. Both of these considerations point to 660 feet as the critical elevation for planning the move, and 658 feet as the absolute elevation when pumping must stop at the current site.

Current Projections of Lake Levels

Forecasts since last summer have consistently indicated that barge relocation would be needed by Spring 2016 if severe drought continued. The current forecast (Figure 1) shows elevation 660 feet will be reached around July 1, necessitating a notice to proceed (NTP) by April 1. This forecast is based on the predicted usage figures provided by South Coast member agencies and their anticipated orders of State Water Project (SWP) water over the next several months.

By nature, these forecasts are imprecise, since they depend on many uncontrollable factors, including the weather, the availability of SWP water, and the reliability of water infrastructure both north and south of the Tecolote Tunnel. For contingency, issuance of the NTP should occur as soon as possible.

² After 5 feet of silt was removed last summer.

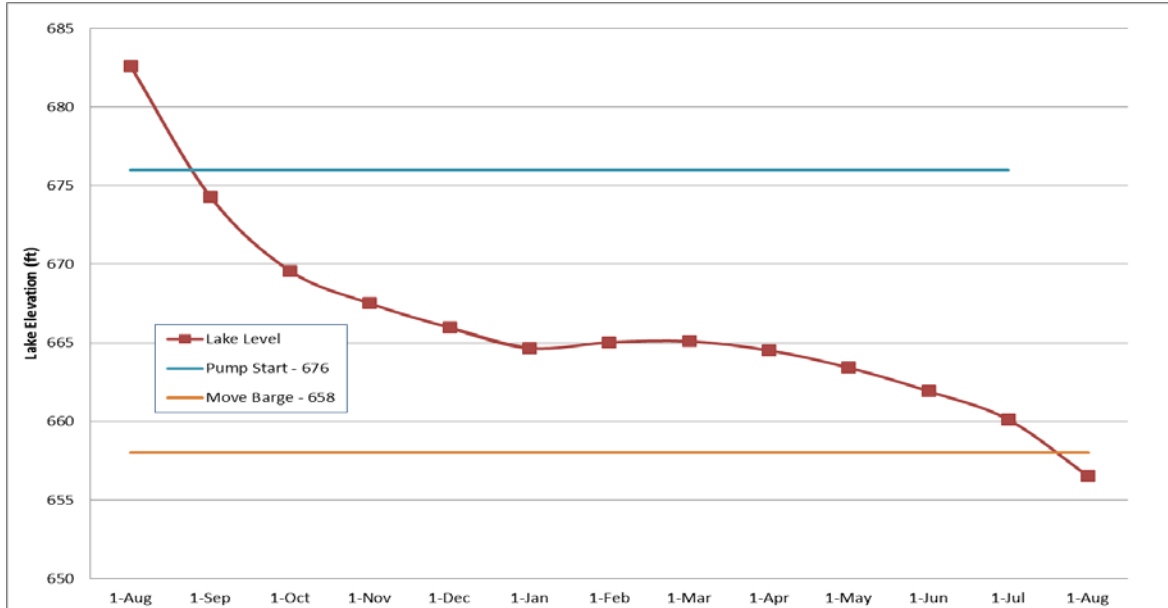


Figure 1. Recent and predicted water levels at Lake Cachuma, based on March 1, 2016 data

Figures 2 and 3 show lake-level and lake-volume projections through November 1, when the water level is currently projected to reach the minimum pool level (~643-ft elevation, ~12,000 AF).

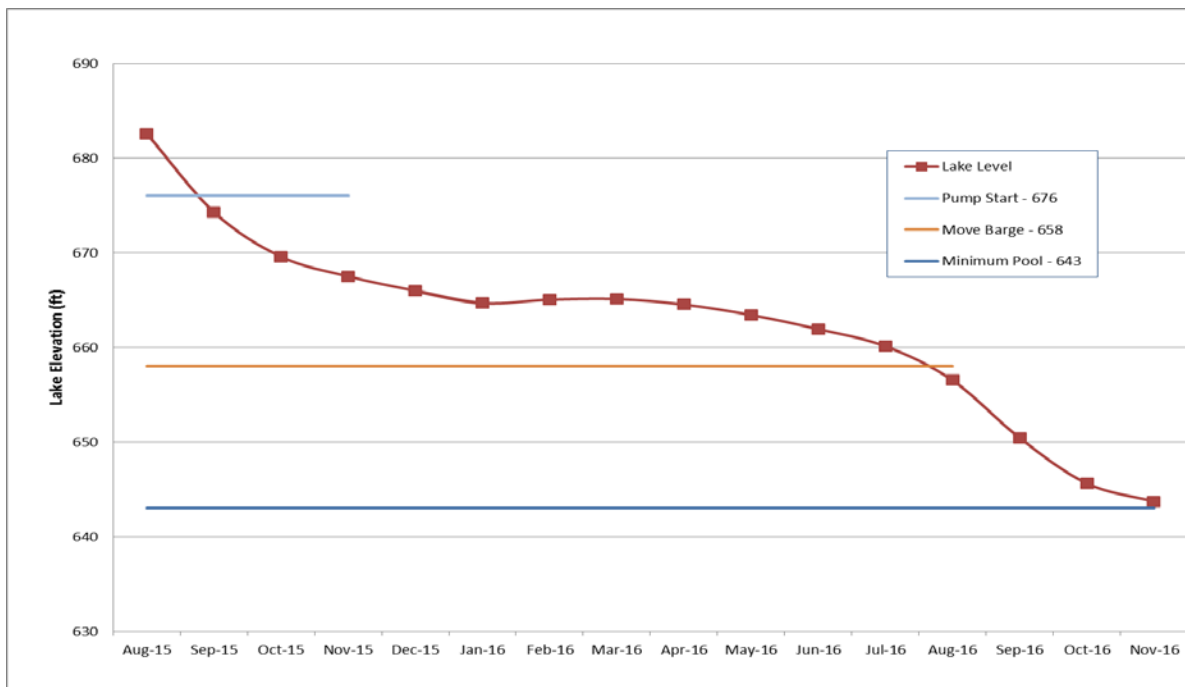


Figure 2. Recent and predicted lake level projections through November 1, 2016

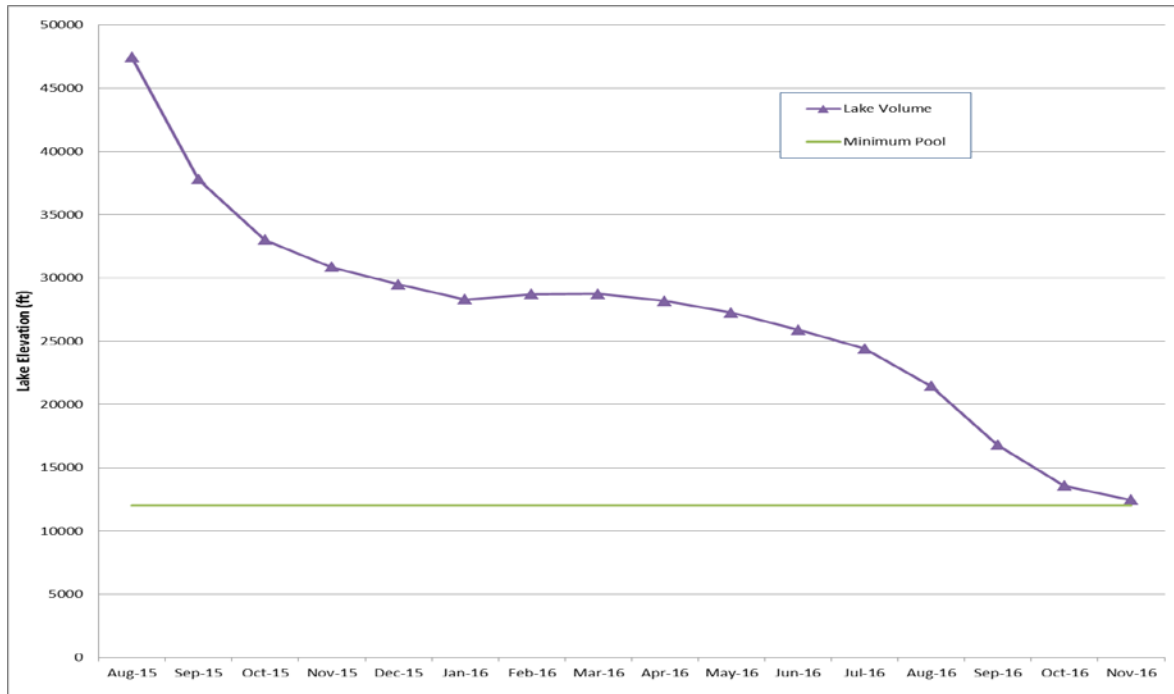


Figure 3. Recent and predicted lake volume projections through November 1, 2016

Table 1 provides the basis of these charts, which came from South Coast member agencies in December. These data do not reflect variations in consumptions and deliveries that have occurred since that time.

Table 1. Projected inflows, outflows, evaporative losses, and resulting lake elevations and volumes

Date	Inflow	Precip	CCWA	South Coast	Hilton Cr & SYRWCD	Evap	Net	Elev (ft)	Storage
1-Mar	200	50	717	790	230	500	-553	665.0	28723
1-Apr	200	0	792	1100	230	600	-938	664.5	28170
1-May	200	0	943	1492	230	750	-1329	663.4	27232
1-Jun	200	0	871	1502	230	850	-1511	661.9	25903
1-Jul	200	0	842	1648	1500	850	-2956	660.1	24392
1-Aug	200	0	840	1802	3000	900	-4662	656.5	21436
1-Sep	200	0	830	1874	1500	850	-3194	650.4	16774
1-Oct	200	0	515	1109	230	500	-1124	645.6	13580
1-Nov	200	0	224	835	30	300	-741	643.7	12456

After the lake reaches minimum pool level, extractions of lake water are expected to cease, except for a small flow for Hilton Creek fish habitat. The rate of decline would slow at that point, as only evaporation and the Hilton Creek flows would remove water from the lake.

After reaching minimum pool, the lake will still function as a means of conveying SWP water to the pumping barge, from where CCWA delivers it at Bradbury Dam. This conveyance of SWP

water through the lake is expected to remain feasible for more than a year, without the need for a connecting pipeline or modifications to the pumping barge.

Conclusions Regarding Lake Level Predictions

1. A NTP should be issued soon to assure relocation of the barge by the end of June.
2. Even if modest rain occurs, relocation must be completed before WR89-18 releases begin which will drop the lake by several feet.
3. The minimum pool level can be expected to be reached by the end of 2016.
4. Relocation of the pumping barge will enable conveyance of SWP water to continue after the minimum pool level is reached.

Criteria for Locating Site 2

As indicated earlier, the pumping barge was designed to pump while floating in 12 feet of water. Because the minimum pool is reached at elevation 643 feet, the barge must be located within the 631-ft (12 feet of operational depth) bathymetric contour for continued conveyance of CCWA water.

Figure 4 shows these contours along with the approximate proposed location for Site 2. As this figure shows, the 631 bathymetric contour confines the pumping barge to a small zone near the County's campground facility.

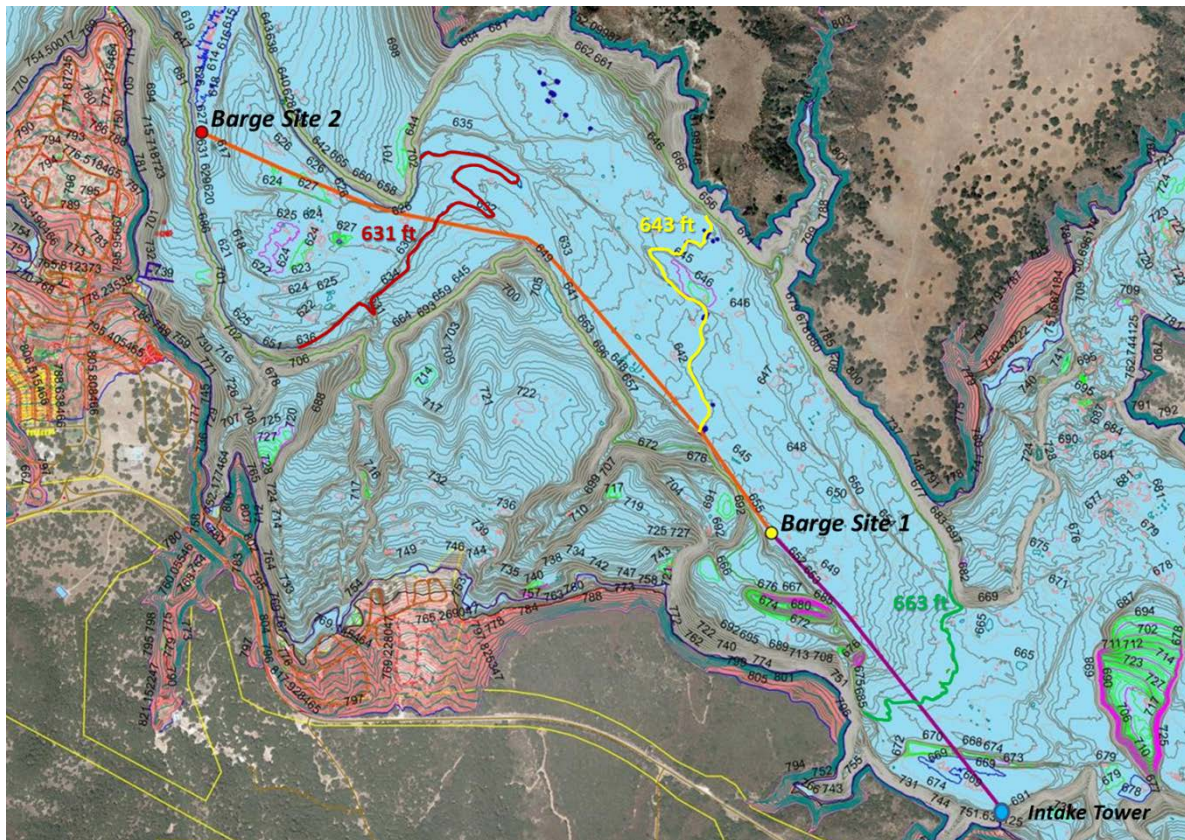


Figure 4. Approximate location of Site 2, as well as critical bathymetric contours

A location near the campground is extremely advantageous. By placing the on-shore facilities within the County's facility, COMB avoids costs and environmental issues associated with constructing roads and power lines to service Site 2. A suitable, secure location within the County's facility has been selected for the on-shore equipment, which is outside of the public use area.

Another major advantage of the campground location is that the equipment is above the high-water level of the lake. When the lake level rises, pumping can continue from this location until gravity flow to the Tecolote Tunnel resumes. This avoids the necessity of having to re-establish pumping at Site 1 during future wet weather.³ Continued pumping from Site 2, however, will require a means of mooring the pipeline at elevations higher than originally contemplated.

The only major disadvantage of leaving the pumping barge at Site 2 when the lake level rises is diminished flow capacity. The longer pipe creates higher friction losses which reduces pumping capacity. When the lake level is at 663 feet, for example, maximum capacity from Site 2 is expected to be 30 mgd, whereas from Site 1, the capacity is over 40 mgd. However, the South Coast has consistently used less than 30 mgd since the pump station started operations.

Conclusions Regarding Site 2 Location

1. Site 2 must be within the 631-ft bathymetric contour, which places it near the campground facility.
2. Locating the on-shore equipment at the campground saves money and minimizes impacts.
3. The campground location enables operations until gravity flow resumes, avoiding the need to move the pump station back to Site 1, but a means of effectively mooring the pipe for higher water levels will be required.

Alternatives to Moving to Site 2

Several alternatives have been suggested, but none has been found that is as effective as moving the barge to Site 2. These are briefly discussed below.

Intermediate Location

Because projections show water reaching the minimum pool by the end of the year, an intermediate location would be very short-lived and provides no advantage. Moreover, an intermediate location requires additional costs associated with road construction, power line construction, and the likely need to move the barge twice.

More Silt Removal From Under the Barge

Pump station operations cannot be extended appreciably through additional silt removal. As explained earlier, to float the barge to a new location requires a minimum lake level of approximately 658 feet. While removing silt from below the barge might extend operations by a few weeks, the barge would soon be stuck in the current location. Barge relocation needs to occur in advance of WR89-18 releases, which could lower the lake level several feet in July .

³ It also avoids the need to moving the barge back and forth between Sites 1 and 2 as the lake level goes up and down.

Modifying the Barge

Likewise, modifications to the inlet pipes would allow the barge to pump from shallower water, but the barge would soon become landlocked and unmovable.

Leaving the barge in place and extending a suction pipeline to deeper water is also not feasible. Negative pressures from pipe friction losses would cause pump cavitation, which could quickly wear out the pump. Generally, COMB should avoid directing specific modifications to the pumping barge design. Currently, CCC is wholly responsible for the design and operations of the facility.

Pipeline Connection from CCWA to Site 1

Building a pipeline from CCWA's pipeline at the Bradbury Dam spillway and connecting it to the existing pipeline at Site 1 would be more than twice the cost of moving the pump station, and provides fewer benefits. Without pump station relocation, South Coast member agencies would lose access to all their remaining lake water allocations, and to any future allocations they might receive when wet weather returns. Compared to other sources of water, the costs associated with accessing this remaining lake water are quite affordable.⁴

It is conceivable that a pipeline from CCWA to Site 2 will eventually be constructed, if severe drought conditions continue, but our analysis indicates that such a pipeline should only be needed two or more years in the future.⁵ If rain returns in 2017 or 2018, a pipeline to CCWA could be avoidable.

* * *

HDR appreciates the opportunity to assist COMB with this critical project. We welcome any comments or questions on this memorandum.

⁴ Assuming that 5,000 AF of carryover water exists between elevation 660 and 643, the estimated capital cost of accessing this water is \$180/AF and the estimated pumping cost is \$160/AF, for a total cost of \$340/AF, which is much cheaper than State Water Project Water.

⁵ Assuming that only Hilton Creek and evaporation losses shrink the lake, once minimum pool is reached.

Appendix A - Site 1 Pumping Limits

In the body of this memo, it says “the pumping barge *should* be moved before the lake level drops to 660 feet and *must* be moved before elevation 658 feet.” The bases of this statement are detailed in this appendix.

Two considerations set the limits for pumping from Site 1: (1) intake clearance from the lake bed and (2) sufficient water depth to move the barge. Both of these considerations point to 660 feet as the elevation to be used for planning, and 658 feet as the elevation when pumping ends.

Intake Clearance from the Lake Bed

The intake pipes on the pumping barge extend to a depth of 9 feet, as shown in Figure 1. The minimum clearance these intakes must be from lake bottom is uncertain, but water quality will diminish as the water level drops and these intakes approach the lake bed. Turbidity will increase as more silt will be drawn in.

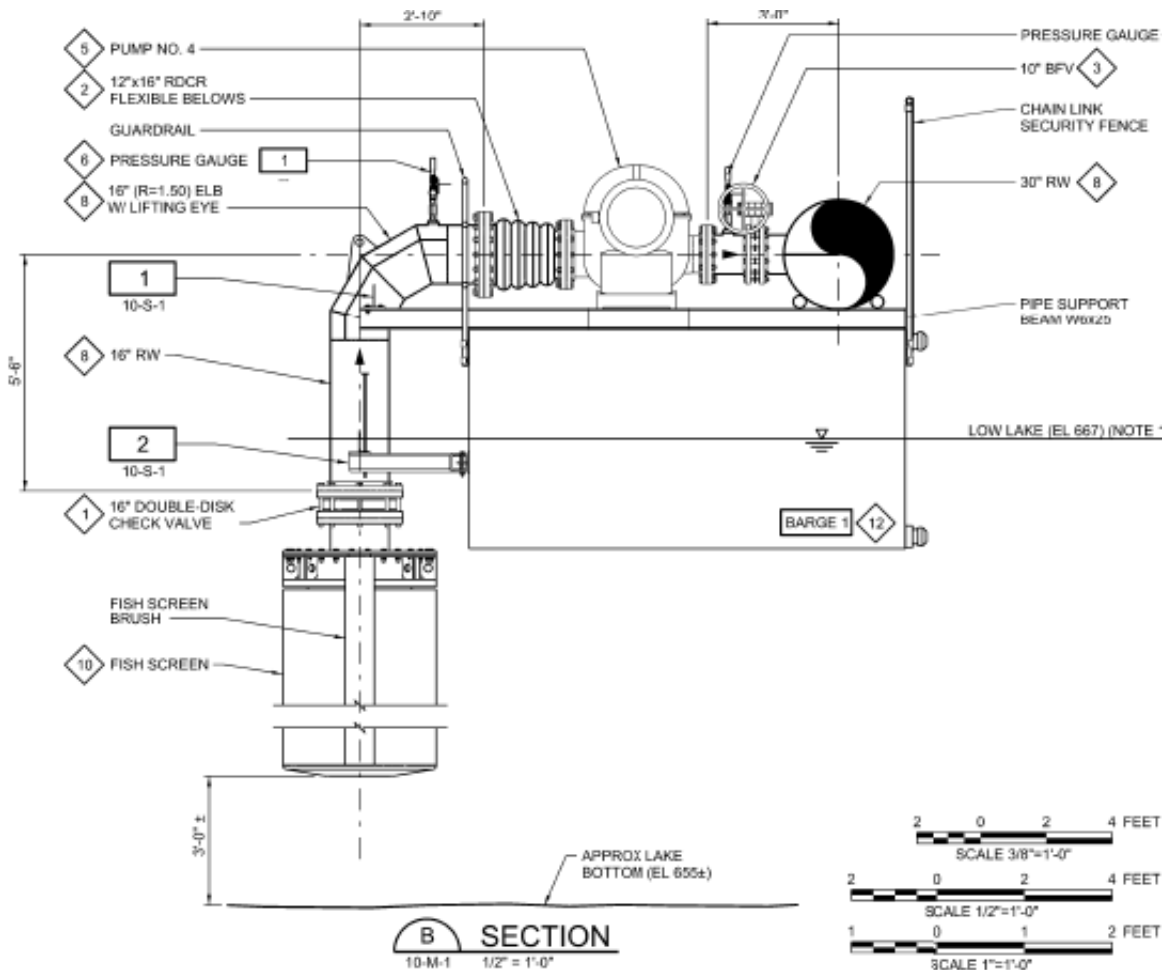


Figure 3. Intake detail from Pumping Barge drawings by Waterworks Engineers. The elevations shown here use the NAVD88 datum, which is different from the “tower” datum used by USBR to report lake levels. Elevation 667 ft (NAVD88) corresponds to approximately elevation 665 ft per the tower datum. (Note that the lake bottom under the barge is now 5 feet lower than shown here, due to silt removal performed last summer.)

The final design by Waterworks Engineers shows the intakes extending to within 3 feet from the lake bottom. It may be possible to operate with less clearance. One foot of clearance is believed to be the absolute limit. Thus, the barge needs to float in at least 10 feet of water (9 feet draft + 1 feet of clearance), while 12 feet of water is recommended.

Based on intake clearance, the pumping barge **must** be moved before the lake drops to 658 feet, but **should** be moved before it reaches 660 feet.

Water Depth Needed for Barge Relocation

The barge must be moved before it becomes stuck in the mud. While the intake pipes can be temporarily removed, about 5 feet of water is needed to safely float the barge to another location.

The lake bed below the barge is at approximately elevation 648 feet. This is based on field measurements recently taken from the barge, but the lake bed surrounding the barge is at about elevation 653 feet. The 5-ft difference stems from silt removal that occurred from beneath the barge last summer. Had this not occurred, the barge would now be floating in 12 feet of water and activities to move the barge would be well underway. By removing 5 feet of silt, COMB extended operations through the end of the 2016 “rainy” season.

Because the bed elevation surrounding the barge is approximately 653 feet and 5 feet of water is needed to move the barge, the barge must be moved before the lake drops below 658 feet.

Other considerations

It also should be noted that pumping from this 5-ft deep hole means that water flowing to the barge comes from shallower waters. When the barge is operating in 10 to 12 feet of water, for example, water will be flowing towards the barge through water that is only 5 to 7-ft deep. This will have a negative impact on water quality, particularly as the weather becomes warmer and algae grows. The water in shallow areas is often noticeably murkier than water in deeper areas. This argues for moving the barge early, once the need to move the barge is confirmed.

Conclusions Regarding Site 1 Pumping Limits

1. Action must be completed before the lake reaches elevation 658 ft. It is preferred that action be completed by elevation 660 ft.
2. Less water quality deterioration is expected if the barge is moved sooner.

Memo

Date: Tuesday, February 23, 2016

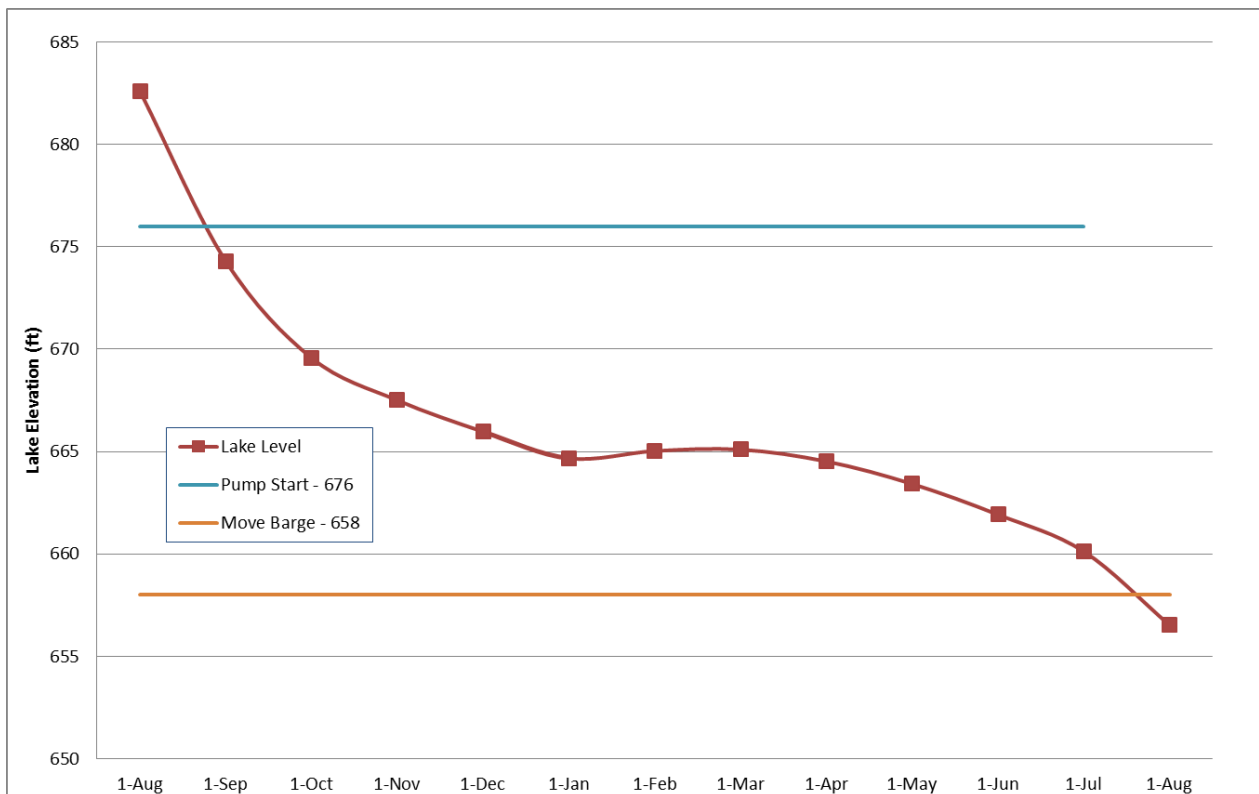
Project: COMB – Emergency Pumping Facility

To: Janet Gingras, COMB

From: Dan Ellison, HDR

Subject: Lake Level Projection Update

Our lake level forecast has been updated to reflect the lake level as of today. Like the projections made in December and January, this one utilizes South Coast member agency forecasts of their carryover water usage and their expected CCWA water deliveries and consumption through the end of 2016. The projection also assumes continued severe drought conditions.



You asked specifically for the forecasted water level on July 15. Per this forecast, the July 15 elevation is 659.0 feet. This is based on the assumption that WR89-18 releases of 7200 AF will start not start until July 15.

This projection is independent of whether the pumping barge is relocated to Site 2 or remains at Site 1. However, if not relocated to Site 2, barge operation would cease at elevation 658 feet.

Emergency Pumping System Project at Lake Cachuma

DRAFT Project Description Augmentation for Pumping Barge Location 2

The following is an augmentation to the initial Project Description (Attachment 1) dated June 4, 2014 for the Emergency Pumping System (EPS) Project to facilitate project review and regulatory permit compliance. Due to the ongoing severe drought conditions in Santa Barbara County and the ever diminishing water supply in Lake Cachuma, it is essential for Cachuma Project Member Units, acting as Member Agencies through the Cachuma Operation and Maintenance Board (COMB), to move the Pumping Barge of the EPS Project (Figure 1) from Location 1 to Location 2 (Figures 2 and 3) as soon as practicable in order to access deeper water as the Lake recedes from east to west. As part of this augmentation, 1) the current Pumping Barge will be moved; 2) a Staging Yard established within the developed areas of the County Park; 3) additional 36-inch HDPE transmission pipe fused; 4) the additional pipe attached to the current line; and 5) power reestablished from the nearby County Park facilities. This relocation of the Pumping Barge will be used until such time the Lake drops to the elevation of the combined stored water, which includes 1) the Water Right (WR 89-18) accounts; 2) Minimum Pool (12,000 acre-feet); and 3) any fish account water. At such time, pursuant to existing contract, either water diversions will cease or sufficient rainfall must occur to fill the lake and render the EPS Project unnecessary, at which time, all project elements would be removed.

Operations of the EPS Pumping Barge at Location 2 will allow access by South Coast Member Agencies to their respective carryover balance in the Lake and continued transfer of State Water and supplemental water from outside of the Lake without additional pipeline installation by the Central Coast Water Authority (CCWA), which conveys State Water to the region. Depending on the schedule of WR 89-18 releases during the upcoming dry season, and once the Lake recedes to elevation 643 feet, plus any remaining WR 89-18 account water in storage, the South Coast Member Agencies will be restricted to receive only their respective amount of State Water and supplemental water delivered to and/or stored in the lake to which they are entitled; or new allocations of Project water, if any.

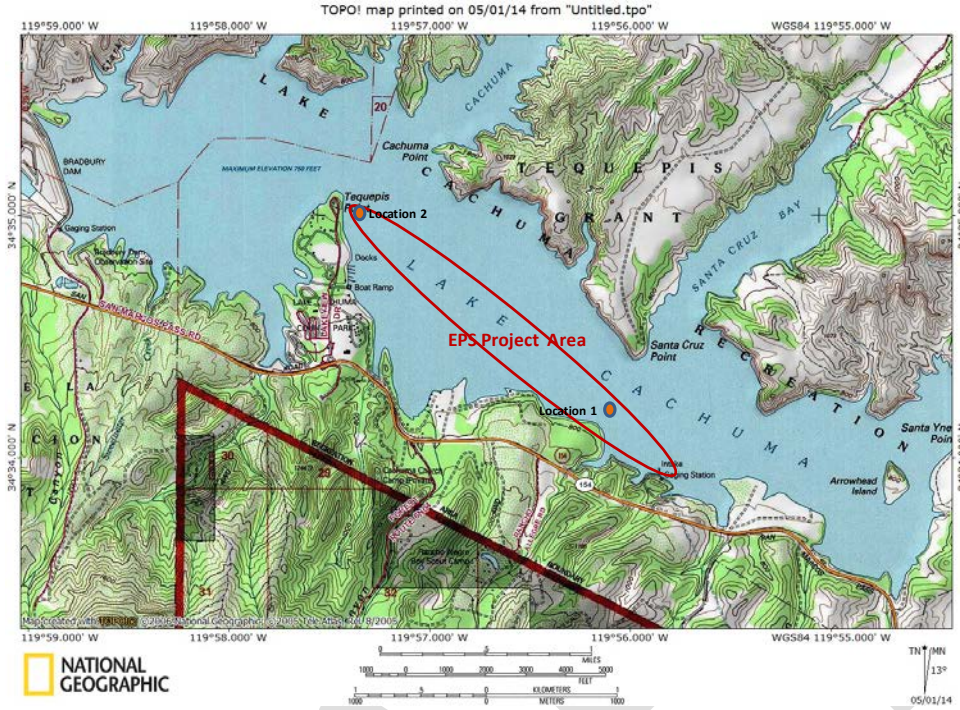


Figure 1: A topographic map showing the EPS Project area with the two pumping barge locations.

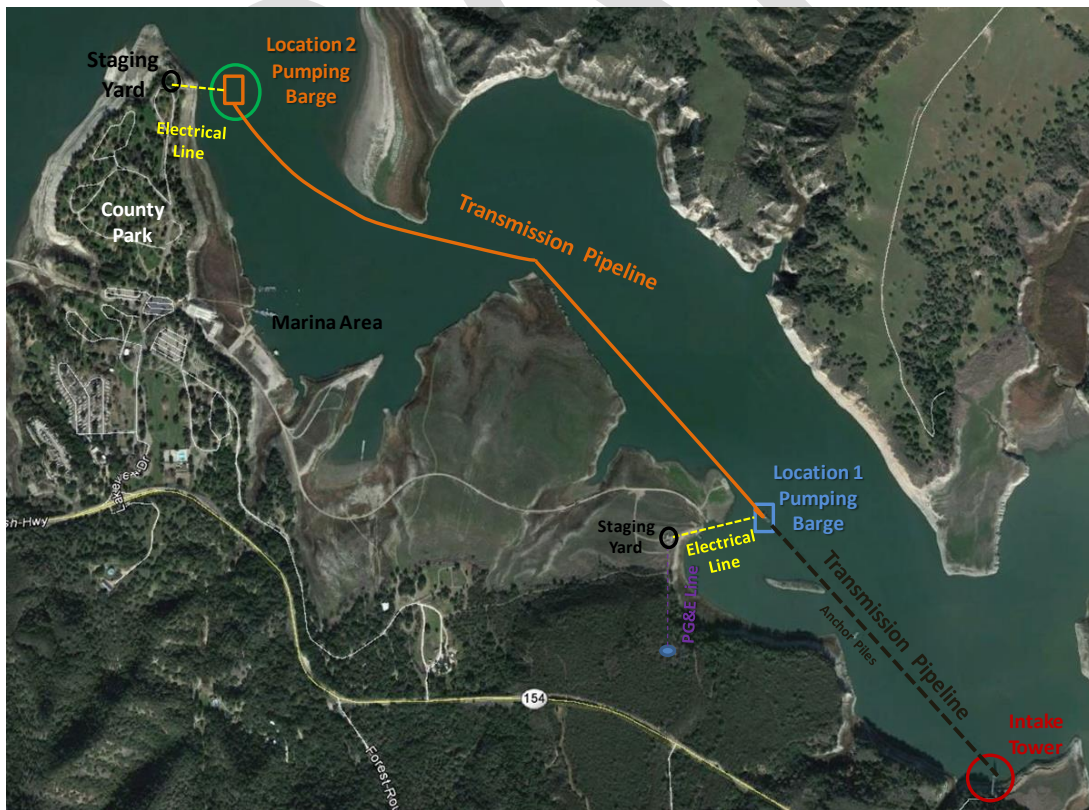


Figure 2: EPS Project Location 2 with the additional transmission pipeline marked in orange.

The EPS Project will entail:

- Adding approximately 7,500 feet of 36-inch diameter HDPE transmission pipeline between to two locations;
- Installing anchor piles for the floating pipeline approximately one every 100 feet up to the marine area of the County Park at which point it would be sunk to the bottom and held in place with some form of concrete deadmen anchors to facilitate boat egress in that area (the exact length of each section has yet to be determined);
- Moving the existing Pumping Barge and electrical lines to Location 2;
- Dismantling all components of Staging Yard 1 (except the small concrete pad from the transformer for potential future use) and relocating them to Staging Yard 2 which would be installed next to the water extraction and treatment plant for the County Park; and
- Installing an additional PG&E power pole at Staging Yard Location 2 for the power supply to the Pumping Barge.

A list of all project augmentation tasks with an estimated timeline are provided in Table 1.

Table 1: EPS Project augmentation installation tasks all to be done in 2016.

Category	Task	Timeline	Supporting Materials
Transmission Pipeline:			
1	Fuse pipe segments and install Transmission Pipeline	April-May	Attachment 1
2	Set Anchor Piles for Transmission Pipeline	April-May	Figures 2+4
Staging Yard:			
1	Prepare the staging area	May	Figures 3+4
2	Place the PG&E Drop Pole within the Staging Yard	May	Figures 3+4
3	Complete the transfer of all equipment to Staging Yard Location 2	June	Figure 2
Pumping Operation (Location 2):			
1	Move the Pumping Barge to Location 2	June	Figure 2
2	Attach the electrical line power supply	June	Figure 6
4	Install backup diesel powered generator	June	Figure 4
3	Test system	June	
4	Complete EPF Project installation at Location 2 - ready for operation	June	

Staging Yard:

The Staging Yard for Location 2 would be placed in close proximity to the Lake Cachuma County Park Water Treatment Plant (WTP) at a site that has been highly disturbed through years of Park usage and is closed to public access (Figure 3). The same components from the current Staging Yard (PG&E power drop pole, on-ground electrical lines to the pumping barge, diesel generator for backup power supply, equipment storage container and a contractor management trailer) would be transported to and used at this site (Figure 4). The PG&E line will be trenched from the drop pole to within the Staging Yard where the transformer will be placed. PG&E will install a new transformer at Location 2 and retrieve the current transformer at Location 1 to assure a seamless transition from one location to the other. The footprint would be small

(approximately 4,000 sq. ft.; Staging Yard at Location 1 was approximately 8,000 sq. ft.) and would be surrounded by a chain link fence for security. Construction and maintenance of the Staging Yard will include Stormwater Best Management Practices (BMPs) for the protection of spills and elimination of erosion throughout the duration of the project. The Staging Yard will have contractor personnel onsite 24/7 for operations and safeguarding the facility against public access and potential tampering or theft.

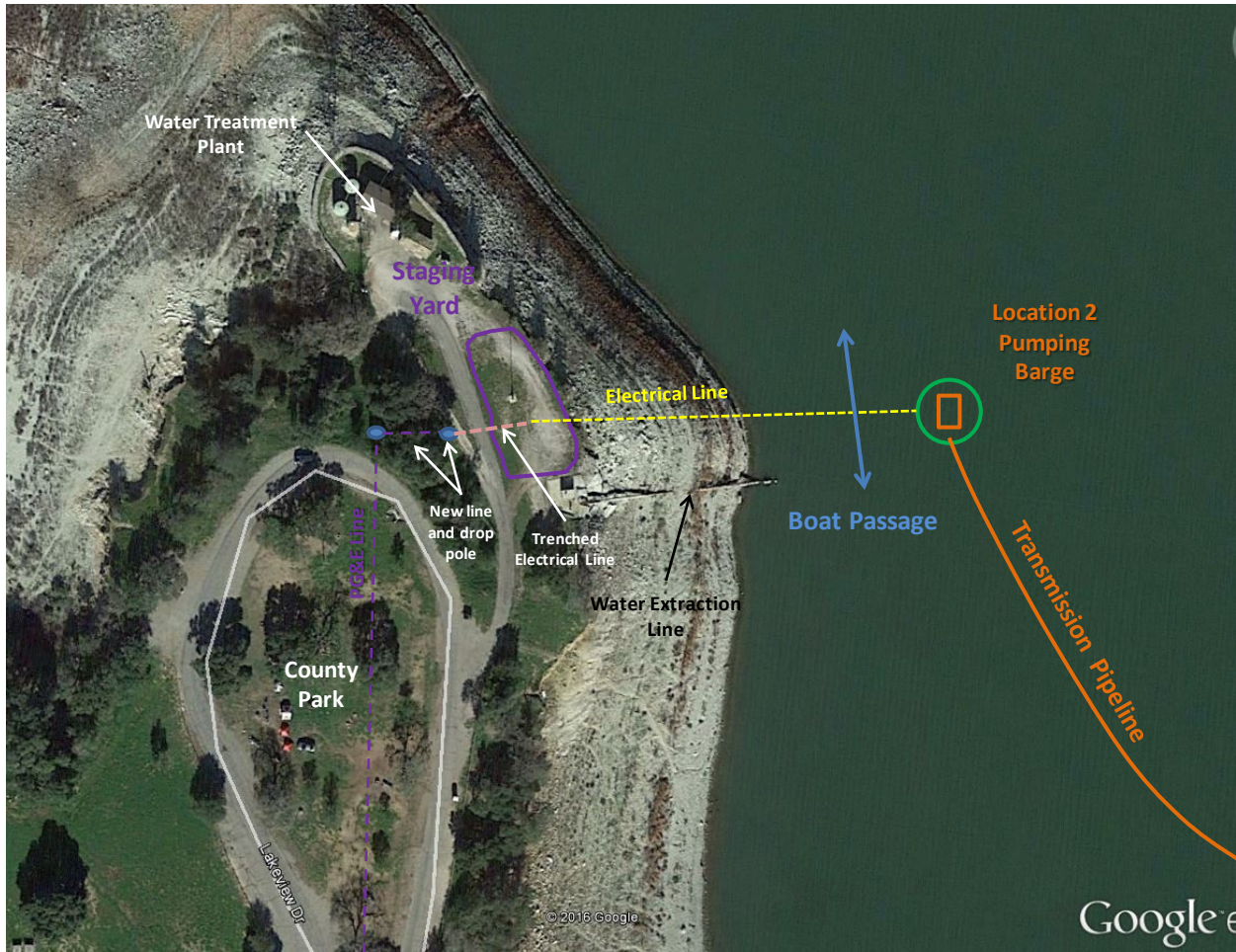


Figure 3: Location 2 of the EPS Project Pumping Barge, Transmission Pipeline, PG&E Drop Pole, trenched Electrical Line, Electrical Line and Staging Yard.



Figure 4: Current Staging Yard with all components labeled.

Pumping Barge:

The Pumping Barge for Location 2 will be positioned on the east side of the end of the peninsula that contains the Lake Cachuma County Park (Figures 2 and 3). The exact location of the barge will be limited by the current length of the electrical lines from the Staging Yard to the pumping barge (approximately 900 feet) and the County requirement to leave sufficient navigable space for boat passage between the land and barge. This will be the only way boats can get to the lake from the marine area due to the transmission pipeline. The Pumping Barge will be held in place using spud piles in the same fashion as is currently in use.

Transmission Pipeline and Anchoring:

Approximately 7,500 feet of 36-inch HDPE transmission pipeline would be fused and then floated out into the lake at the lowest lake level County Park boast ramp (Figure 5). The boat ramp area used during the first phase of this project for Location 1 will be used for staging only due to the length and steep slope to the lake at the current lake level (Attachment 1). The transmission pipeline will be fused at this site and then fend into the lake off of the peninsula just

to the north (Figure 6). Anchor piles (Figure 7) would be driven into the lake substrate approximately 15 feet with the same method utilized for Location 1 from a barge with a percussion hammer. Those piles would be placed approximately every 100 feet apart along the transmission pipeline from Location 1 to Location 2; approximately 75 anchor piles will be needed. The piles will be loaded onto the construction barge at the lowest level boat ramps using a crane (Figures 5 and 8). The work area on this peninsula has been heavily used and impacted over the years with most of the area asphalted a compacted gravel surface for hauled boat access to the lake during low lake elevations.



Figure 5: Access via asphalt and dirt roads to the staging area, Transmission Pipe fusing location and direction to float it onto the lake, and boat ramps for loading Anchor Piles onto the construction barge; numbers are photos presented in Figures 6 and 8.

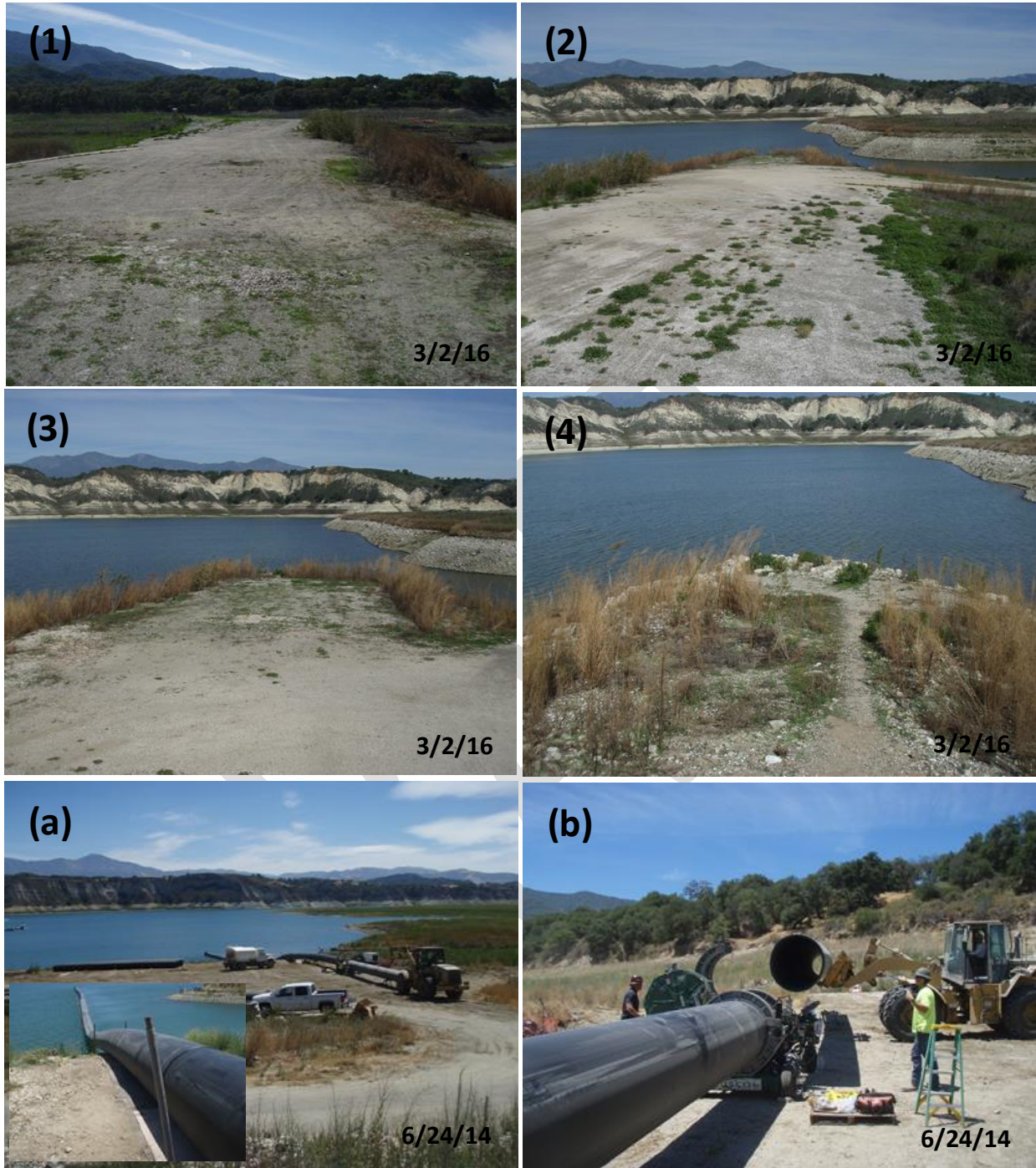


Figure 6: Transmission Pipe staging, fusing and floating onto the lake site for the Location 2 project; photo numbers reflect viewpoints shown in Figure 5 and (a) and (b) show this operation during the initial project for Location 2 in June of 2014 for an example.

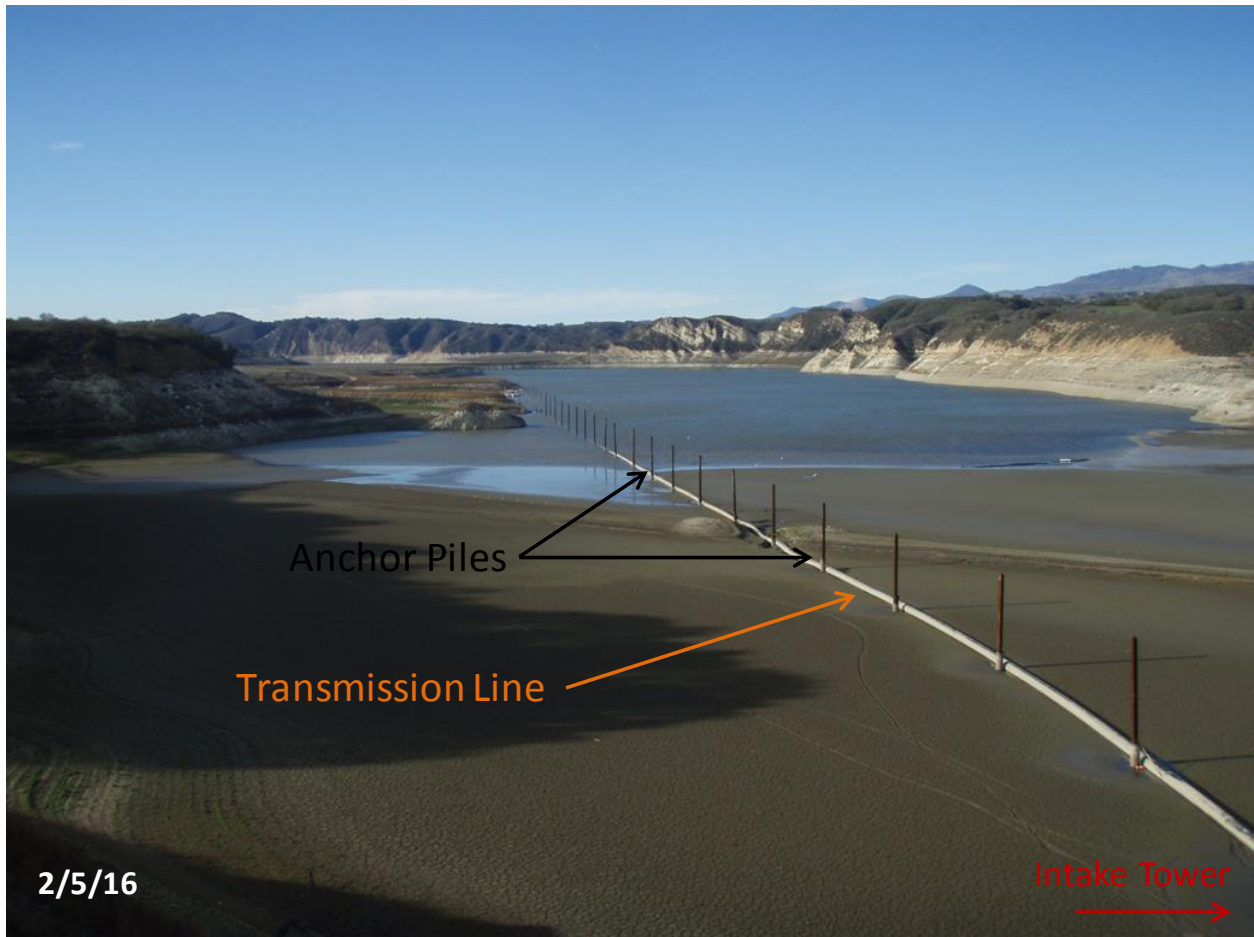


Figure 7: The Intake Tower showing the attached transmission pipeline and Anchor Piles at approximately 100 foot spacing.

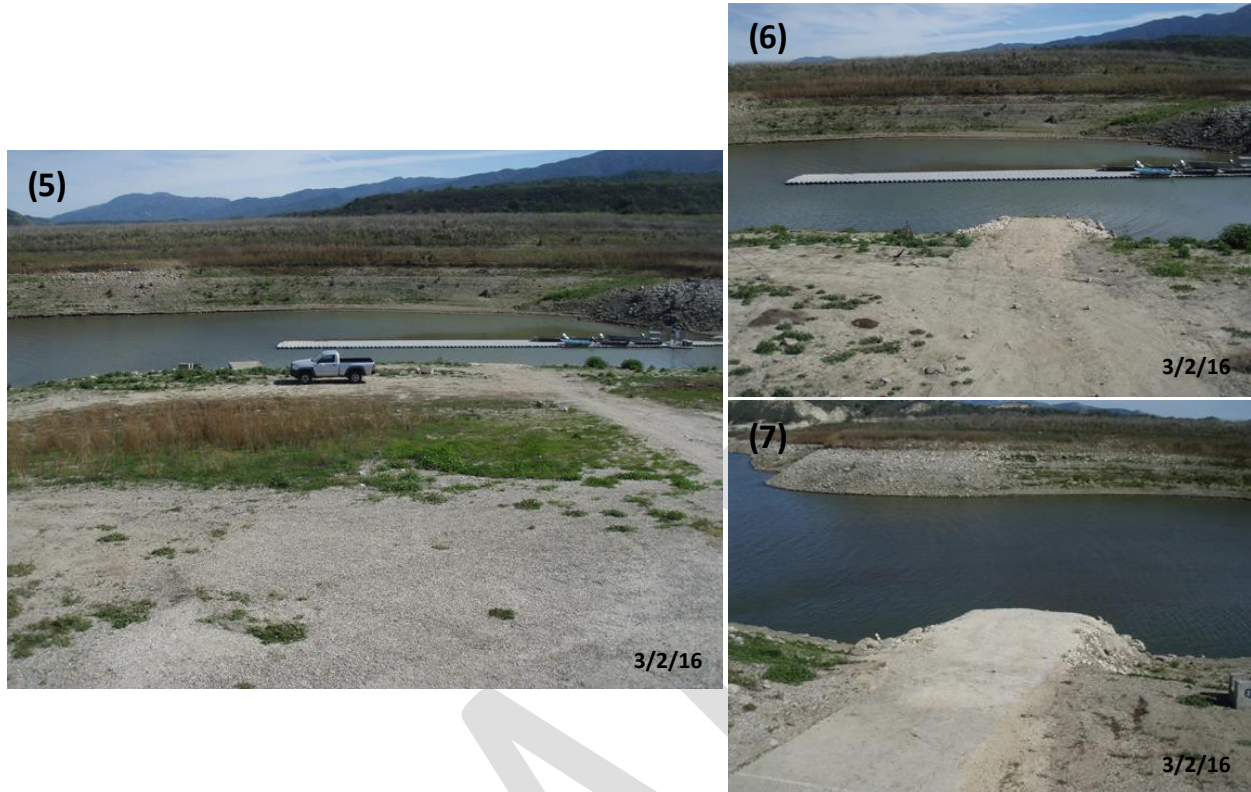


Figure 8: County Park boat ramps at the lowest lake elevation showing where loading of Anchor Piles with a crane onto the construction barge would occur; photo numbers reflect viewpoints shown in Figure 5.

Electrical Lines:

One PG&E power pole (drop pole) will need to be installed in Staging Yard Location 2 (Figure 3). The current on-ground/submerged electrical lines (conductor cables) will be moved to this location and laid on the ground from the Staging Yard down a steep embankment to the Pumping Barge on the lake (approximately 600 feet) (Figure 9). The current electrical lines are of sufficient length (approximately 900 feet) and still in excellent condition to be utilized at Location 2. This area of the Park is currently and historically closed to the public and is on the other side of the water intake line for the County Park WTP which provides additional protection against public access (Figure 3). PG&E has verified their ability to serve a 600 horsepower load (approximately 900 kW) at the proposed location.



Figure 9: Staging Yard and electrical line layout specifically (a) current electrical lines laid on the bank down to the Pumping Barge in the distance at Location 1, (b) proposed Staging Yard at Location 2 next to the WTP intake all within an area closed to the public, (c) position of the proposed new PG&E drop pole to the existing PG&E power pole, and (d) layout of the electrical line in yellow from the Staging Yard to the Pumping Barge just to the north of the WTP intake pipe.

The contractor will be required to protect the electrical lines using fencing, sandbags near the water’s edge and signage. Again, there will be contractor personnel on site 24/7 to guard the facility. Beyond the embankment, the cables will lie on the lake bottom until they reach the barge, where buoy protection will be provided. The electrical lines are specially designed for submarine applications with thick insulation and are not easily damaged. If they short out underwater, the breaker will trip, but electrical current will simply go to ground (the lake).

Attachment 1

Initial Project Description from June 4, 2015

DRAFT

Memo

Date: Wednesday, March 02, 2016

Project: COMB – Emergency Pumping Facility

To: Janet Gingras, COMB

From: Dan Ellison



Subject: Site 2 Relocation – Added Costs

In Cushman Contracting Corporation's (CCC) original proposal to COMB (submitted in April, 2014), the location for Site 2 was south of the site that is currently recommended. The originally proposed site would have minimized the length of pipeline, but would require placement of the on-shore facilities within a day-use picnic area of the County campground.

COMB staff has proposed an alternative location near the end of the peninsula which places the on-shore facilities in a non-public area. This site also has topography that naturally restricts public access. This alternate site means a longer pipeline than originally bid (7300 feet vs. 6500 feet).

CCC has quoted \$124,000 for the added costs associated with this alternative location. This cost covers the installation and removal of the additional 800 feet pipeline and associated mooring piles. This quoted cost is also less than the cost of modifications needed at the other site which would be needed to allow for boat passage.

HDR has evaluated the quoted price and believes a change order in this amount is both justified and reasonable. Because of the superiority of the alternative site, we recommend a change order be authorized as part of the notice to proceed. Final site selection is important in order that permit processing can proceed.

A future change order may be presented soon for protection of the electrical cables from boat anchors, so that boats may safely pass over the cables. This protection has not been designed, but details and pricing will be worked out and presented to the Board before the work occurs. The cost is expected to be modest. The original contract documents did not state that boat passage was a requirement, so provisions were not part of CCC's original proposal.

Please let me know if there are questions regarding this recommendation.

CACHUMA OPERATION & MAINTENANCE BOARD

BOARD MEMORANDUM

Date:	March 7, 2016
Submitted by:	Tim Robinson
Approved by:	Janet Gingras

SUBJECT: **Emergency Pumping Facility Project Location 2 at Lake Cachuma – Permit Amendment Acquisition Update**

SUMMARY:

Maintenance

Due to the prolonged drought, there is a high probability that the pumping barge of the Emergency Pumping Facility Project on Lake Cachuma will need to be moved from Location 1 to Location 2, towards the west. In doing so, project permits will have to be amended in order to accommodate the larger project footprint and additional potential environmental impact.

Staff has been in contact with all permitting regulatory agencies to describe the effort, initiate the process and provide all requested documentation. To that regard, a draft Project Description Augmentation has been drafted with all elements necessary for moving the pumping barge to Location 2, and has been reviewed by HDR and Cushman and subsequently submitted to each regulatory agency. All comments received from the last Operations Committee meeting have been addressed and incorporated and the latest draft of the Project Description augmentation will be distributed to all the regulatory agencies. The following is a status report for each of the required permits:

- **CDFW 1600 Lake or Streambed Alteration Permit # 1600-2014-0080-R5:** The permit coordinator has been contacted and the Project Description Augmentation received. The required draft Lake or Streambed Alteration (LSA) Amendment Request form was submitted for agency review and their comments have been incorporated. The amendment request form and associated permit fee of \$613.75 was sent to CDFW on 2/19/16. The CDFW LSA permit coordinator visited the site on 2/18/16 which should facilitate permit acquisition.
- **RWQCB Water Quality Certification Permit # 34214WQ02:** The permit coordinator has been contacted and the Project Description Augmentation received. They are awaiting refinements to the Project Description prior to determining the fee which is determined by area of impact. The initial estimate of the fee is for \$600.
- **USACE 404 Permit # SPL-2014-00278-CLH:** The permit coordinator has been contacted and the Project Description Augmentation received. They are reviewing the standing nationwide permit COMB utilized for Location 1 to assure compliance prior to issuing a permit amendment. To date, there has been no fee associated with this permit.
- **USBR Categorical Exclusion Checklist Permit # CEC-14-012:** Reclamation has been contacted and has reviewed the submitted Project Description Augmentation. They submitted to COMB a draft CEC amendment and we have submitted comments. A Reclamation archeological team visited the project site on 2/18/16. The group is in the process of authoring a report with their findings which will then be submitted to Office of Historical Preservation to further our Section 106 consultation. It is anticipated that there will be no issues with this process due to the limited impact posed by this project augmentation. To date, there has been no fee associated with this permit.

-Exhibit 6-

- **Notice of CEQA Exemption:** The initial Categorical and Emergency Notices of CEQA Exemption (NOE) were filed with the County on 4/17/14 and no comments were received during the 35 day review period. Amended Categorical and Emergency NOEs for moving the pumping barge to Location 2 have been drafted and are under COMB legal counsel review. They will be filed with the County as soon as possible.

The objective is to have all required permit amendments in place by April 2016, prior to initiation of the potential construction. All regulatory agencies know the timeline and immediacy of the effort and all are cooperating accordingly.

The Cultural Preservation Consultant for the Santa Ynez Band of Chumash Indians has been contacted and has visited the site. We agreed to have a cultural monitor from his group at the site during construction as was done during the Location 1 installation.

FINANCIAL IMPACT:

Permit fees that are yet to be determined and costs for a cultural resources monitor from the Chumash on site during construction.

LEGAL CONCURRENCE:

N/A

ENVIRONMENTAL COMPLIANCE:

Permit amendments will address all environmental protection requirements.

RECOMMENDATION:

For Board information only.

LIST OF EXHIBITS:

N/A

CACHUMA OPERATION & MAINTENANCE BOARD

BOARD MEMORANDUM

Date:	March 7, 2016
Submitted by:	Tim Robinson
Approved by:	Janet Gingras

SUBJECT: Grant Application for Fish Passage Improvement Project at Quiota Creek Crossing 5

SUMMARY:

A 59-foot prefabricated bottomless arched culvert with four wing walls and two rock weirs for grade-control are planned to replace the current concrete low flow crossing at Quiota Creek Crossing 5 of Refugio Road (a County road). This is the next crossing upstream of Crossings 1-3 that were replaced by COMB with bridges in 2013, 2011 and 2015, respectively, and Crossing 4 that is estimated to be constructed in the fall of 2016. The project will provide unimpeded fish passage for *O. mykiss* and meet all Santa Barbara County public road safety and weight requirements. Construction financing will be provided by a pending grant to the California Department of Fish and Wildlife Fisheries Restoration Grant Program (CDFW-FRGP) and a construction match of \$50,000 from COMB. If funding is secured, the project will be built in the fall of 2017 (FY 2018). This project was listed as a proposed action in the 2000 Cachuma Project Biological Opinion.

FINANCIAL IMPACT:

COMB would be obligated to a \$50,000 construction match for the project that will be reflected in the FY 2018 budget. There will be no financial impact to the COMB FY 2017 budget except for advancing the engineering designs for the project.

LEGAL CONCURRENCE:

N/A

ENVIRONMENTAL COMPLIANCE:

All necessary permits will be obtained prior to initiating construction of the proposed project.

COMMITTEE STATUS:

This fish passage enhancement project was reviewed by the Fisheries Committee on March 1, 2016 who recommended this project with \$50,000 construction cost match go to the Board for approval.

RECOMMENDATION:

COMB Board accepts the proposed COMB construction match of \$50,000 and authorizes staff to submit a CDFW-FRGP grant application for the Quiota Creek Crossing 5 Project.

LIST OF EXHIBITS:

N/A