

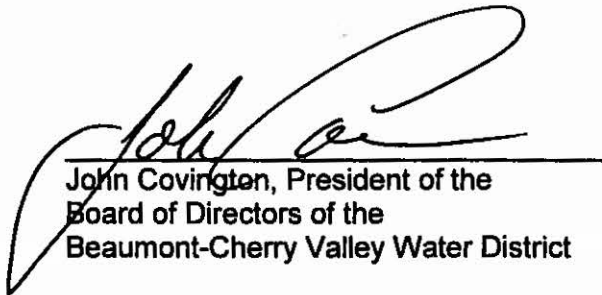


**CALL OF SPECIAL MEETING
OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT
BOARD OF DIRECTORS**

The undersigned, John Covington, President of the Beaumont-Cherry Valley Water District, hereby calls a Special Meeting of the Board of Directors to be held Wednesday, April 18 2018 at 7:00 p.m. at the District's Administrative Offices located at 560 Magnolia Avenue, Beaumont, California 92223.

The agenda for said meeting is attached.

Dated: Wednesday, April 11, 2018



John Covington, President of the
Board of Directors of the
Beaumont-Cherry Valley Water District



SPECIAL MEETING NOTICE

Special Meeting of the Board of Directors of the Beaumont-Cherry Valley Water District Scheduled for April 18, 2018 at 7:00 p.m.

NOTICE IS HEREBY GIVEN that a Special Meeting of the Board of Directors of the Beaumont-Cherry Valley Water District has been scheduled for Wednesday, April 18 2018 at 7:00 p.m., at 560 Magnolia Ave., Beaumont, CA 92223.

The agenda for this meeting will be posted no later than 6:59 p.m. on Tuesday, April 17, 2018.

Respectfully,

Dan Jagers
General Manager



**BEAUMONT-CHERRY VALLEY WATER DISTRICT
SPECIAL MEETING AGENDA
ENGINEERING WORKSHOP OF BOARD OF DIRECTORS
560 Magnolia Avenue, Beaumont, CA 92223
Wednesday, April 18, 2018 - 7:00 p.m.**

Call to Order, President Covington

Roll Call

Public Comment

PUBLIC COMMENT: At this time, any person may address the Board of Directors on matters within its jurisdiction which are not on the agenda. However, any non-agenda matters that require action will be referred to Staff for a report and possible action at a subsequent meeting. To provide comments on specific agenda items, please complete a speaker's request form and provide the completed form to the Board Secretary prior to the Board meeting. Please limit your comments to three minutes. Sharing or passing time to another speaker is not permitted.

ACTION ITEMS

- 1. Discussion: San Geronio Pass Water Agency rates and water supply needs for the region, and effects on BCVWD (pages 5 - 49)**
- 2. Presentation of Updated San Geronio Pass Regional Water Supply Planning Spreadsheet – White Paper No. 6 (pages 50 - 51)**
- 3. Discussion of potential security strategies for the Noble Creek Recharge Facility Phase I (pages 52 - 54)**
- 4. General Manager's Report**
- 5. Topics for Future Meetings**
- 6. Adjournment**

AVAILABILITY OF AGENDA MATERIALS - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont-Cherry Valley Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, at 560 Magnolia Avenue, Beaumont, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during the meeting, they can be made available from the District Office in the Board Room of the District's Office.

REVISIONS TO THE AGENDA -In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the District's Main Office, located at 560 Magnolia Avenue, Beaumont, California, up to 72 hours prior to the Board Meeting.

REQUIREMENTS RE: DISABLED ACCESS - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the District Office, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. The District Office may be contacted by telephone at (951) 845-9581, email at info@bcvwd.org or in writing at the Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.

**CERTIFICATION OF POSTING
SPECIAL MEETING**

I certify that on or before April 17, 2018, a copy of the foregoing notice was posted near the regular meeting place of the Board of Directors of Beaumont-Cherry Valley Water District and to its website at least 24 hours in advance of the meeting (Government Code §54956(a)).



Lynda Kerney, Administrative Assistant, for:
Yolanda Rodriguez
Director of Finance and Administration



**Beaumont-Cherry Valley Water District
Special Board Meeting
April 18, 2018**

Item 1

STAFF REPORT

TO: Board of Directors
FROM: Dan Jagers, General Manager
SUBJECT: Discussion: San Gorgonio Pass Water Agency rates and water supply needs for the region, and effects on BCVWD

Staff Recommendation

No recommendation.

Background

This Staff Report serves to continue discussions began at the March 14, 2018 Board of Directors meeting relating to an upcoming issue that may drastically affect ratepayers of the Beaumont-Cherry Valley Water District (BCVWD).

On March 1, 2018, the District's Board President and General Manager attended a Water Rate Workshop of the San Gorgonio Pass Water Agency (SGPWA) where issues related to increasing water rates were discussed.

In carrying out its mission, the SGPWA has identified that they will need to provide imported water at build out, build facilities, and invest in new water supply. A portion of that new water supply will be funded through wholesale water rates recovered from retail water districts.

The current water rate charged by the SGPWA of \$317 per acre-foot (A/F) consists mainly of Department of Water Resources (DWR) pass-through energy and transmission costs, with additional charges for SGPWA operations and administrative salaries and benefits, as well as amounts to be put into reserves. A breakdown of the current rate structure is included as Attachment "A." The SGPWA is considering adding potential components to the water rate structure, such as Agency infrastructure costs and costs for new water supplies such as Yuba water (already a component of the current rate structure), AVEK-Nickel Water, and Valley District water, among others.

The SGPWA staff has asked their Board to provide input on what components to include in the water rate (cost recovery). The SGPWA Board directed staff and their rate study consultant to develop several options for a rate structure model to be completed and brought back for Board review as follows:

- Option 1** includes 50% of the cost of the new water deals the SGPWA has secured or is in the process of securing
- Option 2** Includes 100% of the cost of new water. SGPWA staff indicated preparation of the model rate structure and completion of the rate study could reasonably be expected within two to six months.



BCVWD staff believes it is imperative to be prepared to respond without delay in order to represent, protect, and educate the District's ratepayers, monitor the SGPWA activity, and prepare to take any necessary actions to absorb and mitigate the impact of any SGPWA rate increases.

BCVWD staff has continued analysis to compare the current imported pass-through water rate charged to BCVWD customers to the actual wholesale water rate paid to the SGPWA for the past seven years and will present preliminary results of that work during discussion of this workshop item in a Powerpoint presentation.

For the purposes of this discussion, the preliminary results suggest that the current rate paid for the imported water (\$317 per acre-foot) will most likely exceed the pass-through charge being collected from BCVWD customers (currently \$0.46/hundred cubic feet). Even in the event both the SGPWA wholesale rate and charge remain unchanged, continued growth in the District's service area will cause a further imbalance between the BCVWD pass-through and the charge resulting in an under-collection of funds necessary to recover the cost of imported water purchased from the SGPWA.

Staff has also performed preliminary analysis regarding the impact of an increased wholesale water rate from the SGPWA. The proposed rates were compared to the current pass-through rate being collected from BCVWD customers, using several different scenarios based on the most current information available from the SGPWA regarding current and future potential deals for new water.

Staff generally identifies that when new increased water rates are collected through consumption rates as opposed to tax-based funding strategies, older, less efficient homes appear to be more adversely impacted than newer, more water-conserving homes. Increasing SGPWA wholesale water rates will most likely result in older homes paying a higher bill comparatively than newer homes due to less efficient plumbing fixtures and more water use-intensive landscaping.

Regardless, the BCVWD must continue to work on strategies to increase its imported water supply to meet current and future projected demand, and drought-proof the Beaumont Basin through banking of additional supplies when available.

Staff will continue to work on the analysis of the rate components and structure and make diplomatic recommendations to the SGPWA as they consider their rate structure. Regardless of the final outcome, it appears that the impact of any rate increases will be keenly felt by BCVWD customers. Staff proposes to begin public outreach as soon as possible in order to prepare customers for the likelihood of increased bills due to both the actions of the SGPWA as well as the needs of BCVWD. A next step for the District to consider will most likely be initiating a cost of service study.

Fiscal Impact

The fiscal impact of this potential rate increase is yet to be determined once more information is available from the San Geronio Pass Water Agency.



Attachments

- A. San Geronimo Pass Water Agency Current Water Rate Structure
- B. San Geronimo Pass Water Agency Water Rate Resolution 2009-3 and David Taussig & Associates Water Rate Study for San Geronimo Water Agency (February 2, 2009)

Handouts

- 1. Preliminary Cost Analysis of SGPWA Current and Possible Water Supply Portfolio Components and potential effect on BGVWD Rates
- 2. BGVWD Presentation – SGPWA Rates and BGVWD Imported Water Pass Through Charges

Report prepared by Dan Jagers, General Manager – April 12, 2018

ATTACHMENT A

SAN GORGONIO PASS AGENCY CURRENT WATER RATE STRUCTURE

SGPWA currently charges \$317/AF with includes the DWR pass through energy and transmission charges (“transportation costs”) plus other costs shown in Table 1. The costs in Table 1 were extracted from SGPWA Resolution 2009-3, (February 17, 2009), Exhibit A, Findings, Supporting the Adoption of Wholesale Water Rates. The rate study was prepared by David Taussig Associates, February 2, 2009 (Draft).¹

Table 1
Costs Included in SGPWA's Current Water Rate

Cost Item	Cost, \$/AF
Agency Operational Expenses	\$10.00
Agency Administrative Cost	\$3.50
SBVMWD Pass Through	\$8.00
Yuba Water Purchases	\$3.86
New Water Purchase	\$22.00
Rate Stabilization	\$11.00
Subtotal	\$57.36
Rate Charged by SGPWA	\$317.00
DWR Pass Through	\$259.64 (\$260)

The DWR “Pass Through” energy and transmission charges were determined by subtraction to be \$260/AF. It varies from year to year depending on the amount of water delivered and the power rates etc. DWR issues an invoice to SGPWA at the end of the year with the adjustment as either a credit or debit. The David Taussig Rate Study assumed the net of debits and credits was “zero” in FY 2010/11 through FY12/13. BCVWD is reviewing past DWR invoices to SGPWA to validate the “prior year adjustments” and determine the actual “DWR Pass Through” cost.

¹ SGPWA (2009). Final Draft – Water Rate Study, David Tausig Associates, Inc., February 2.

RESOLUTION NO. 2009-3

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SAN GORGONIO PASS WATER AGENCY
ESTABLISHING WHOLESALE WATER RATES**

WHEREAS, the SAN GORGONIO PASS WATER AGENCY (Agency) is a State Water Project (SWP) Contractor authorized to acquire or contract to acquire waterworks, waters, and/or water rights, including, but not limited to, water from the State of California from the SWP, and to provide, sell, and deliver that water under the control of the Agency to cities and other territory, persons, corporations or private agencies within the Agency for use within the service area of said Agency. (Agency Law, Water Code Appendix §101-15, hereinafter referred to as the "Agency Act".)

WHEREAS, The San Gorgonio Pass Water Agency's mission is "to import supplemental water and to protect and enhance local water supplies for use by present and future water users and to sell imported water to local water districts within the service area of the San Gorgonio Pass Water Agency. The San Gorgonio Pass Water Agency promotes water conservation, education and efficient use of our water resources. The Agency's goal is to maximize the quality, quantity and reliability of available water in the most financially responsible and environmentally sensitive manner."

WHEREAS, the Board of Directors (Board) is authorized to fix the rates at which water should be sold and to establish different rates for different classes or conditions of service. (Agency Act, §101-16.) So far as practicable, the Board shall fix a rate or rates for the Agency's water that will result in revenues, which will pay the operating expenses of the agency, provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extensions, and enlargements, pay the interest on any bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due. (Agency Act, §101-25; Draft Water Rate Study, February 2, 2009, (hereinafter, "Study"), p. 2.)

WHEREAS, the Agency entered into a contract with the Department of Water Resources (DWR) in 1962 to bring supplemental water to the Agency service area from the State Water Project ("SWP"). The Agency's current SWP Table A Amount is 17,300 acre-feet per year (AFY). (Study, p. 4.)

WHEREAS, the Legislature allocated water from the SWP to the Agency, intending that highest priority be given to eliminating groundwater overdraft conditions within any agency or district receiving the water. (Agency Act, §101-15.5.)

WHEREAS, in 2004, the Beaumont Storage Unit (BSU), one of the major groundwater basins in the Agency service area, was determined by the Riverside County Superior Court to be in overdraft. (Study, p. 4.)

WHEREAS, despite having a SWP Table A Amount of 17,300 AFY, in 2005, DWR projected the Agency's long-term reliability of water supply delivery from the SWP

to be 77 percent of its 17,300 AFY Table A Amount, which equates to less than 13,500 AFY. Subsequent changes in climate conditions, and shortages in rainfall and snowmelt have combined with cutbacks in SWP water deliveries due to environmental court challenges and the ecological crises in the Delta to further reduce the current long-term delivery reliability of the Agency's SWP water supply to an even greater amount.

WHEREAS, SGPWA Ordinance No. 8 mandates that the Agency, at a minimum, shall establish and charge rates for: "The delivery of SGPWA Water sufficient to cover SGPWA's variable costs (including off-aqueduct costs) for delivery of SGPWA Water, internal SGPWA costs and other amounts as determined by the SGPWA Board of Directors reasonably related to the cost of delivery." Cost of delivery means the costs related to securing water commensurate with the Agency's SWP Table A Amount, currently set at 17,300 AFY, and any other sources of water that the Agency Board deems necessary and prudent. Cost of delivery includes operations, administrative overhead, SBVMWD pass-through, dry year transfer costs, rate stabilization surplus reserves, new water purchase surplus reserve contributions, and DWR imported water purchase.

WHEREAS, the existing revenues from water rates are insufficient to cover all of the related costs of delivery, including, meeting the needs of the Agency to purchase new water, funding Agency operations, and establishing a surplus for repairs, improvements, extensions, and enlargements, which will benefit all existing users within the Agency's service area.

WHEREAS, the Agency has directed the preparation of a water rate study, which sets forth the costs of providing service and delivery and the anticipated sources of revenues available to cover those costs, and the Agency has distributed the draft water rate study to the retail water purveyors within the Agency's service area.

WHEREAS, the California Environmental Quality Act ("CEQA") is set forth in Sections 21000 to 21178 of the Public Resources Code.

WHEREAS, CEQA sets forth certain types of activities that are not subject to review under CEQA.

WHEREAS, Section 21080(b)(8) of the Public Resources Code states that "the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, or other charges by public agencies which the public agency finds are for the purpose of (A) meeting operating expenses, including employee wage rates and fringe benefits, (B) purchasing or leasing supplies, equipment, or materials, (C) meeting financial reserve needs and requirements, (D) obtaining funds for capital projects necessary to maintain service within existing service areas, or (E) obtaining funds necessary to maintain those intracity transfers as are authorized by city charter" is not subject to CEQA.

WHEREAS, Section 15273(a) of the CEQA State Guidelines states that "CEQA does not apply to the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, or other charges by public agencies which the public agency finds

are for the purpose of: (1) Meeting operating expenses, including employee wage rates and fringe benefits, (2) Purchasing or leasing supplies, equipment, or materials, (3) Meeting financial reserve needs and requirements, (4) Obtaining funds for capital projects, necessary to maintain service within existing service areas, or (5) Obtaining funds necessary to maintain such intra-city transfers as are authorized by city charter."

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the San Geronimo Pass Water Agency that it hereby makes the following findings and determinations:

- 1) The Agency's Board has carefully reviewed and considered the Draft Water Rate Study dated February 2, 2009 ("Study"), the Kennedy/Jenks Memorandum dated July 16, 2008, on the probable cost of water transfers ("July 16th Memorandum"), and the Kennedy/Jenks Consultants Memorandum dated January 2, 2009, on water reliability ("January 2nd Memorandum"); and has considered the public and Board comments, and the oral and written presentation by the Agency's staff and consultants made at the February 2, 2009, public Board meeting, as well as any written public comments.
- 2) The Board adopts the Findings, attached as Exhibit "A," determines that the record for the establishment of the wholesale water rates contains substantial evidence to support the Findings; and further finds that the conclusions reached in the Study are supported by substantial evidence.
- 3) The Board further determines that the conclusions contained in the July 16th Memorandum and in the January 2nd Memorandum are supported by substantial evidence, and adopts the conclusions in each memorandum, including the recommendation to utilize 63 percent as the projected average annual SWP Table A delivery reliability. This percentage equates to less than 11,000 AFY of the Agency's current SWP Table A Amount.
- 4) Based upon substantial evidence before the Board, it is determined that the Agency will need to acquire at least 10,000 AFY of additional SWP supplies to repair annual SWP delivery reliability that the agency has already lost to date, and it is further determined that the costs associated with the acquisition of 10,000 AFY of additional water supplies through the current expiration date of the Agency's SWP water supply contract with DWR is approximately \$40 million depending upon a variety of market forces.
- 5) Based upon substantial evidence presented to the Board, it is determined that it is in the best interest of the retail water purveyors and the residents within the Agency's service area to have long term reliability of wholesale water and to maintain a stable water rate. Based upon substantial evidence, it is further determined that the set of water rates the Board is enacting by this Resolution will be sufficient to fund Agency operations, to purchase additional water to repair the lost reliability of SWP water, to replenish groundwater basins within

the Agency's service area, and to obtain a reasonable surplus for repairs, improvements, extensions, and enlargements of the Agency's existing system.

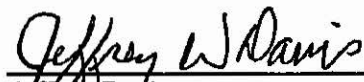
- 6) The wholesale water rate applicable to all water sold by the Agency to retail water purveyors within the Agency's jurisdiction downstream of Cherry Valley Pump Station (CVPS) shall be a uniform rate of \$277 per acre-foot, as provided in Agency Resolution # 2008-6, adopted April 21, 2008, which shall become effective immediately.
- 7) In order to offset expected energy cost increases from DWR and low expected sales, the wholesale water rates will increase for Fiscal Year 2009-2010 from \$277 per acre-foot to a uniform rate per acre-foot charged to retail purveyors downstream of CVPS in the amount of \$317 per acre-foot effective July 1, 2009.
- 8) The wholesale water rate applicable to all water sold by the Agency to retail water purveyors within the Agency's jurisdiction upstream of CVPS will be \$8 less than the rates set for water sold to retail water purveyors downstream of Cherry Valley Pump Station.
- 9) New water purchased by the Agency using the revenues from water rates paid by areas overlying overdrafted groundwater basins will be given pro-rata priority to purchase new water according to their contribution into the surplus reserve for the purchase of new water. If after all purveyors with new water priorities have been given an opportunity to exercise their priorities, the Agency will offer any remaining new water for sale to any other purveyor within the Agency's service area. The Agency finds that this new water priority policy is consistent with the policy set forth in Agency Ordinance No. 8 (i.e. "SGPWA sale of water and dedication of Return Flows resulting from use of SGPWA water to eliminate overdraft in SGPWA groundwater basins provides the highest priority that is reasonably available to eliminate overdraft conditions.").
- 10) As more fully set forth in the Findings, attached as Exhibit "A", the Board is adopting the wholesale water rates in order to meet the Agency's operating expenses, purchase materials (water) and meet the Agency's reserve needs. Therefore, the Board finds and determines based upon substantial evidence that the establishment of the wholesale water rates are exempt from CEQA, pursuant to Section 21080(b)(8) of the Public Resources Code and Section 15273(a) of the State CEQA Guidelines because the establishment of the water rates is for the purpose of meeting operating expenses, purchasing materials (water) and meeting the Agency's reserve needs.
- 11) The Agency only sells water to retail water purveyors and does not sell water to landowners; therefore, the wholesale water rates adopted by this Resolution do not involve a property-related service, and the requirements of Proposition 218 and Government Code section 53750, et. seq., do not apply.

- 12) This Resolution shall become effective immediately ("effective date"), and the wholesale water rates provided herein shall apply to all water delivered from the effective date and thereafter until such time as the rates are changed by action of the Board. It is the intent of the Board that the wholesale water rates established herein shall continue for a minimum of five (5) years from and after the effective date (2008-2009 to 2012-2013).
- 13) If any section, subsection, paragraph, sentence, clause, or phrase of this Resolution or its application to any person or entity is held or decided to be invalid, inoperative or unenforceable for any reason by any court of competent jurisdiction, such reason shall not have the effect of rendering any other provision(s) invalid, inoperative or unenforceable. Provided, however, that if the water rate(s) established by this Resolution is declared invalid, or is otherwise struck down, the water rate in effect prior to the effective date of this Resolution shall be restored, revived, and brought to full force and effect.
- 14) The Secretary of the Agency is hereby directed to mail copies of this Resolution to every retail water purveyor that purchases water from the Agency.

The foregoing resolution was duly passed at a regular meeting of the Board of Directors of the San Geronio Pass Water Agency on February 17, 2009 by the following roll call vote:

Ayes:	Haring, Voigt, Morris, Workman, Dysart, Dickson and Jeter
Noes:	None
Abstain:	None
Absent:	None

I certify that this is a true, full and correct copy Resolution 2009-03, approved by the Board of Directors of the San Geronio Pass Water Agency at its meeting held on February 17, 2009.



Jeffrey Davis
Secretary of the Board

FINAL DRAFT

**WATER RATE STUDY
FOR
SAN GORGONIO PASS WATER
AGENCY**

FEBRUARY 2, 2009

Public Finance
Facilities Planning
Urban Economics

Newport Beach
Riverside
Walnut Creek

FINAL DRAFT

**WATER RATE STUDY FOR
SAN GORGONIO PASS WATER AGENCY**

FEBRUARY 2, 2009

Prepared for
SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue
Beaumont, California 92223
(951) 845-2577

Prepared by
DAVID TAUSSIG & ASSOCIATES, INC.
5000 Birch Street, Suite 6000
Newport Beach, California 92660
(949) 955-1500

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I. Introduction

In September, 2008 the San Geronio Pass Water Agency ("SGPWA"), a State Water Project ("SWP") Contractor, authorized David Taussig and Associates, Inc. ("DTA") to prepare a comprehensive rate study for proposed wholesale water rates that SGPWA would charge to its retail water districts. This study incorporates the guidelines of American Water Works Association publication M1¹ and will determine the revenue requirements necessary to fund the appropriate SGPWA operating and Department of Water Resources ("DWR") SWP water purchase pass through costs, dry year water purchases, reserves for new water purchases and related reserves over a five year period. Furthermore, this study will demonstrate that the proposed wholesale water rate will:

- Generate revenues that will not exceed the funds required to provide the related services
- Generate revenues that will not be used for any purpose other than that for which the rate is imposed
- Will be uniformly charged to the retail customers

SGPWA was formed pursuant to Water Code Appendix Sections 101-1 to 52 ("Act"). Section 25 of the Act provides for the charging of water rates as follows:

"The board of directors, so far as practicable, shall fix such rate or rates for water in the agency and in each improvement district therein as will result in revenues that will pay the operating expenses of the agency, and the improvement district, provide for the repairs and depreciation of works, provide a reasonable surplus for improvements, extensions and enlargements, pay the interest on bonded debt, and provide a sinking or other fund for the payment of the principal of such debt as it may become due. Said rates for water in each improvement district may vary from the rates of the agency and from other improvement districts therein."

SGPWA Ordinance No. 8 mandates that the Agency, at a minimum, shall establish and charge rates for:

"[T]he delivery of SGPWA Water sufficient to cover SGPWA's variable costs (including off-aqueduct costs) for delivery of SGPWA Water, internal SGPWA costs and other amounts as determined by the SGPWA Board of Directors reasonably related to the cost of delivery."

This study and its supporting rate model will focus upon the use of the SGPWA water rate for funding of the seven (7) cost components of SGPWA's Cost of Delivery, which are (1) operations cost, (2) administrative overhead cost, (3) SBVMWD pass through cost, (4) DWR pass through cost, (5) dry year transfer program cost, (6) rate stabilization reserve contribution, and (7) new water purchase surplus reserve contribution. Each of these seven cost components is described in Section 25 of the Act and each is a cost of delivery of SGPWA Water, and internal SGPWA cost and/or reasonably related to the cost of delivery of SGPWA water.

¹ American Water Works Association, *Principals of Water Rates, Fees, and Charges* (Manual of Water Supply Practices M1), Fifth Edition

As an example, a key element in this study and its supporting rate model will be the funding of a reasonable surplus for repairs, improvements, extensions, and enlargements, principal and interest on bonded debt dedicated to the purchase of additional water to assist in offsetting the reduction in reliability of the SWP. With the amount of water deliveries from DWR uncertain from year to year, as well as drought conditions within the local watershed, it is essential that SGPWA maintain the ability to fund additional water purchases in any given year in order to maintain the high level of water reliability that the service area demands. As a result, these expenses are considered SGPWA "operating expenses" and "repairs" under Section 25 of the Act to repair the lost reliability of SWP and "costs for delivery" under SGPWA Ordinance No. 8.

II. Background

In 1961 SGPWA was formed pursuant to the Act as a result of the approval by the voters of California of the Burns-Porter Act, which authorized the financing and construction of the SWP. SGPWA entered into a contract with DWR in 1962 for Table A Amount² capacity in the SWP, which is currently 17,300 acre-ft per year ("AFY") to bring supplemental water to the SGPWA service area³. The SWP system originates at Oroville Reservoir in Northern California and water is delivered through a series of dams, pipelines, rivers, Sacramento Delta canals, sloughs, reservoirs and pumping stations to the SGPWA turnout at Devil Canyon in San Bernardino County. From that point it is delivered by pipeline, pump stations and reservoir to the SGPWA SWP terminus at Cherry Valley, in Northern Riverside County.

The primary source of local water supply to the SGPWA service area at the present time is natural surface runoff and groundwater basins. The major groundwater basin is the Beaumont Storage Unit ("BSU"), which serves the City of Beaumont through the Beaumont-Cherry Valley Water District ("BCVWD"), the Cities of Calimesa and Yucaipa through the Yucaipa Valley Water District ("YVWD"), the City of Banning and the South Mesa Mutual Water Company ("SMMWC"). The BSU was determined by the Riverside Superior Court in 2004 to be in overdraft and a watermaster was appointed to manage the BSU through controlled overdraft (temporary surplus) through 2013.⁴

California has been experiencing recent shortages in rainfall and snowmelt, in addition to cutbacks in SWP water deliveries due to environmental court challenges. SGPWA's current long-term reliability of water supply from the SWP is estimated to be reduced to 63%, or to about 11,000 AFY, of SGPWA's 17,300 AFY Table A Amount.⁵ SGPWA needs to replace the reduced water supply with water supplies to repair the lost reliability of the SWP ("new water"). A small percentage of the SGPWA water rate (\$22 per acre-ft) will be allocated to provide a reasonable surplus reserve to finance the acquisition of new water to repair the lost reliability of the SGPWA SWP supplies.

A more detailed discussion is set forth in Appendix A attached hereto.

² Table A water is SGPWA's annual entitled water amounts from DWR pursuant to Contract Between the State of California, Dept. of Water Resources and San Geronio Pass Water Agency, for a Water Supply, dated 16th day of November, 1962, and its subsequent Amendments

³ An acre-ft of water is the volume of water that will approximately cover a football field one foot deep. The average household water use in the SGPWA service area is presently calculated .63 AFY

⁴ See also, San Geronio Pass Water Agency Report on Water Conditions (Reporting Period 2006-2007), dated December 2008.

⁵ Kennedy/Jenks Consultants Memorandum, "Water Supply Reliability of the San Geronio Pass Water Agency", dated January 2, 2009.

III. Revenues

SGPWA has four basic revenue components available to finance its Mission. These are pre-Proposition 13 ad valorem taxes, shared 1% ad valorem taxes, water rates and capacity fees. The Mission statement for SGPWA is quoted herein:

"The San Geronio Pass Water Agency's mission is to import supplemental water and to protect and enhance local water supplies for use by present and future water users and to sell imported water to local water districts within the service areas of the San Geronio Pass Water Agency.

The San Geronio Pass Water Agency promotes water conservation, education and efficient use of our water resources.

The Agency's goal is to maximize the quality, quantity and reliability of available water in the most financially responsible and environmentally sensitive manner."

SGPWA's three principal sources of revenue currently in place are pre-Proposition 13 ad valorem taxes, 1% revenues and water rates⁶. Pre-Proposition 13 ad valorem revenues are basically dedicated to the debt service fund for repayment of the SWP costs. The revenues received from the 1% ad valorem property taxes pay for SGPWA local operations and maintenance, a major portion of SGPWA administrative costs and a proportionate share of capital improvement costs and expected new water supply purchases. SGPWA policy dictates that the 1% revenues fund the District's operations, except for 5% of the administrative overhead costs and 50% of the Operations Manager's time, which are funded through the water rates. Water rates are charged to SGPWA's retail agency customers for the purchase of imported water. See Section IV for a detailed description of the items funded through the water rates. In the near future SGPWA is planning to augment annual revenues by instituting a capacity fee that will insure that new development will pay its fair share of facility costs needed to mitigate the impacts of future growth and a proportionate share of the cost to purchase new water required to serve new growth and to maintain and repair the lost reliability of the SWP that SGPWA requires to adequately serve the needs of the area. In essence, the capacity fee will pay for new water needed for growth and a small portion of the water rate will pay for new water needed for reliability for existing users.

⁶ Ad valorem taxes were limited and 1% revenues established as a result of Proposition 13 (Jarvis Amendment to the California Constitution) adopted by the voters in 1977. Proposition 218, passed by the voters in 1996, created new procedures for adopting retail water rates. SGPWA's water rates proposed in this study are not impacted by Proposition 218. See Appendix B for a more detailed discussion.

Relationship of Four Sources of Revenue and the Cost of Purchase of New Water

In order to carry out its Mission to import supplemental water, it is estimated SGPWA will need to import approximately of 70,000 acre-feet of imported water by the time the study area reaches build out conditions⁷. In order to provide that amount of water, SGPWA will need to build pipelines, pump stations, turnouts, reservoirs and spreading grounds and acquire new additional reliable water sources. It is estimated by reasonable engineering estimates that, in current dollar values, \$54.1⁸ million will be needed to be invested in SGPWA facilities and supplemental new water purchases over the next 5-8 years. These facilities include pipeline extensions to Banning, a new groundwater recharge facility and purchase of new water rights. These are near term facility needs and by no means represent the long term build out facility needs of SGPWA. Present planning does not require that all of the needed funds be raised at the outset, but it does require that money be raised at strategic points in advance of the time that the demand for additional supplies will be needed. The water rates proposed in this study cover the costs of maintaining and repairing lost water supply reliability of the SWP for existing users throughout the service area, while funds for pipelines and recharge facilities will be funded through other revenue sources. SGPWA intends to utilize its four basic revenue components to fund projects in a manner that meets SGPWA goals as well as the requirements of the public agency financial markets.

At this time, it is determined reasonable and prudent to acquire 10,000 acre-feet of new water supplies for reliability as the next step towards carrying out SGPWA's Mission. It is estimated by reasonable market analysis that costs to acquire such new water supplies will be in the range of approximately \$40 million for 10,000 acre-feet, depending upon a variety of market forces⁹. A portion of the water rates will be devoted to the acquisition of new water either through debt financing or direct "pay-as-you-go" purchase, or a combination of both. New water supplies required for new development will be funded through the proposed capacity fee program.

The negotiations for acquisition of new water will commence early in 2009, and the water rate with the "new water" component will enhance the opportunities for successful completion of such negotiations.

It must be pointed out that the cost of new water and the conditions of the public agency financing market may require an adjustment of the water rate "new water" component as more information becomes known. However, at this time at the beginning of the acquisition process, the "new water" component of the water rate is believed to be at a reasonable and prudent level.

This study focuses on the revenue requirements of the wholesale water rate in order to pay for the costs related to the delivery of imported water and a reasonable surplus for

⁷ Draft Supplemental Water Plan by Albert Webb and Assoc., 2008

⁸ Of the \$54.1M, \$40M is allocated to new water purchase for supply and improved reliability, \$5.5M is allocated to the over sizing of the pipeline to Banning and the remainder to a water recharge facility for the BSU.

⁹ Kennedy/Jenks Consultants Memorandum, "Probable Cost of Water Transfers", dated July 16, 2008.

needed repairs to the SWP water supply reliability by the purchase of new water necessary to insure a safe and reliable water supply to its customer retail agencies.

The initial new water purchase, estimated to cost \$40 million plus the cost of issuance of any bonded debt, will be funded by other sources of revenue in addition to a small portion of the water rate. Although it is fair for existing water users to pay for a portion of the costs of repairing the lost water reliability of the SWP through new water purchases, it is also fair for future water users to pay their fair share of a portion of such water from facility capacity fees imposed as a condition of land development. Thus existing users and future users will equitably share in the overall costs of the new water supplies. For instance, the BSU is in need of replenishment and all BSU overlyers have a significant interest in replenishment of the BSU to improve BSU long-term reliability. Thus, it is a significant advantage and benefit to the BSU rate payers to contribute to the cost of new water purchases.

In order to maintain flexibility in allocating the new water supply to all water rate payer areas within the SGPWA service area, and not just the BSU service area, the SGPWA policy is to give the highest priority to overlying areas with overdraft groundwater basins. Thus, new water purchased from water rates paid by areas overlying overdrafted groundwater basins would be given first priority to purchase new water to the extent of the contribution for replenishment purposes. If such water is not purchased, then it would be available for purchase by other user rate payers contributing to the purchase of new water. This flexibility allows water to be allocated to maximize beneficial use as dictated by local choice.

Water Rate Revenues

Annual water rate revenues are based on the volume of water sales. Water sales are limited by delivery capacity, the availability of Table A water and the availability of new water supplies. Table 1 below shows the annual revenues and expenses for a five year period beginning with fiscal year (July 1 to June 30) 2008-2009. Fiscal year 2008-2009 is used as the base year for both revenues and expenses. Water sales for the base fiscal year are expected to hold at the current estimated demand of 6,479 acre-feet. The base year water rate is determined by computing the weighted average between the existing rate (\$211 per acre-foot) and the new proposed rate (\$277 per acre-ft) to go into effect mid-FY (February 2, 2009). For example, the \$211 per acre-foot rate was and will be in effect from July 1, 2008 to February 2, 2009, or 7.07 months, or 58.93% of one year. Table 2 below shows the average rate and revenue estimate for Fiscal Year 2008-2009. The revenue from water sales for the base year is calculated by multiplying the average rate by the water sales in acre-feet:

$$\$238.11 \times 6,479 \text{ acre-feet} = \$1,542,696$$

Table 1
RATE ANALYSIS for DOWNSTREAM OF CHERRY VALLEY PUMP STATION⁸

Placed Year	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Water Sales (acre-ft)	8,479	4,000	7,000	8,000	12,000
Water Rate (\$ per acre-ft) (annual rate increase)	\$ 238.11	\$ 317.00 33.13%	\$ 317.00 0.00%	\$ 317.00 0.00%	\$ 317.00 0.00%
REVENUE					
water sales	\$ 1,542,886	\$ 1,268,000	\$ 2,219,000	\$ 2,536,000	\$ 3,804,000
general fund revenue contribution	\$ 94,126	\$ -	\$ -	\$ -	\$ -
Total Revenue	\$ 1,636,821	\$ 1,268,000	\$ 2,219,000	\$ 2,536,000	\$ 3,804,000
OPERATIONAL EXPENSES:					
SGPWA Operations ¹	\$ 68,100	\$ 68,678	\$ 68,678	\$ 68,878	\$ 68,678
SGPWA Administrative Overhead Allocation ² 5% of Total Administrative Overhead ³	\$ 22,769	\$ 23,667	\$ 24,680	\$ 25,538	\$ 26,534
Salaries	\$ 275,000	\$ 285,725	\$ 296,868	\$ 308,448	\$ 320,476
Payroll Taxes	\$ 18,691	\$ 19,316	\$ 20,089	\$ 20,852	\$ 21,685
Workman's Comp Insurance	\$ 4,000	\$ 4,168	\$ 4,318	\$ 4,468	\$ 4,661
PERS	\$ 103,860	\$ 107,911	\$ 112,119	\$ 116,492	\$ 121,035
Health Insurance	\$ 42,840	\$ 44,511	\$ 46,247	\$ 48,050	\$ 49,924
Dental Insurance	\$ 4,861	\$ 4,739	\$ 4,924	\$ 5,116	\$ 5,315
SGPWA Staff Misc. Medical	\$ 4,203	\$ 4,367	\$ 4,537	\$ 4,714	\$ 4,898
Long Term Disability	\$ 2,328	\$ 2,419	\$ 2,513	\$ 2,611	\$ 2,713
Total Administrative Overhead	\$ 455,383	\$ 473,143	\$ 491,596	\$ 510,788	\$ 530,886
SAN BERNARDINO VALLEY MUNICIPAL PASS THROUGH⁴	\$ 47,603	\$ 49,460	\$ 51,388	\$ 53,393	\$ 55,475
CALIF. DEPT. OF WATER RESOURCES PASS THROUGH⁵:					
Energy	\$ 1,326,853	\$ 948,514	\$ 1,659,900	\$ 1,897,029	\$ 3,130,098
Transmission	\$ 96,882	\$ 59,875	\$ 104,781	\$ 119,750	\$ 197,587
Prior Year Adjustments ⁶	\$ (36,300)	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 1,387,535	\$ 1,008,389	\$ 1,764,681	\$ 2,016,779	\$ 3,327,685
ADDITIONAL WATER - YUBA DRY YEAR TRANSFER PROGRAM⁷					
purchase cost	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Sub Total	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
TOTAL EXPENSES	\$ 1,549,008	\$ 1,176,184	\$ 1,934,327	\$ 2,189,387	\$ 3,503,372
NET OPERATING REVENUE (total revenue minus total expenses)	\$ 87,814	\$ 92,816	\$ 284,673	\$ 346,613	\$ 300,628
Less:					
Reserve Fund contributions at \$33 per acre-ft (see breakdown below)	\$ 87,814	\$ 132,000	\$ 231,000	\$ 284,000	\$ 398,000
Net Operating Surplus (Deficit)	\$ 0	\$ (39,184)	\$ 53,673	\$ 82,613	\$ (95,372)
Transfer from Rate Stabilization Surplus Reserves		\$ 39,184			\$ 95,372
Transfer of revenue surplus to Reserves for Purchase of New Water			\$ (53,673)	\$ (82,613)	
Operating Account Balance	\$ 0	\$ -	\$ -	\$ -	\$ -
Rate Stabilization Surplus Reserves @ \$11 max per acre-ft ⁷	\$ 29,271	\$ 44,000	\$ 77,000	\$ 38,913	\$ -
Less: transfers to net operating Fund	\$ -	\$ (39,184)	\$ -	\$ -	\$ (95,372)
Add: transfers from net operating income	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated	\$ 29,271	\$ 4,816	\$ 111,087	\$ 150,000	\$ 54,628
Maximum Allowable Rate Stabilization Fund Balance	\$ 160,000				
Reserves for Purchase of New Water @ \$22/acre-ft ⁷	\$ 58,542	\$ 88,000	\$ 154,000	\$ 176,000	\$ 264,000
excess contributions from rate stabilization			\$ -	\$ 49,087	\$ 132,000
excess contributions from net operating surplus			\$ 53,673	\$ 82,613	\$ -
annual revenue stream	\$ 58,542	\$ 88,000	\$ 207,673	\$ 307,700	\$ 396,000
Accumulated	\$ 58,542	\$ 146,542	\$ 354,215	\$ 661,915	\$ 1,057,915

Notes:

- SGPWA operations cost funded entirely through ad valorem taxes, except for 50% of operational manager salary and benefit costs
- 5% of SGPWA administrative overhead allocated to rate related activities performed by non operations staff
- SBVMWD operational costs passed through is based on actual 12 month billing amount w/ 50% allocated to rate requirements
- DWR costs are passed through on a per acre-ft basis. The '08-'09 FY rates are \$198.729 for energy and \$14.568 for transmission. Therefore, for example, energy costs in 2008 = \$198.73/acre-ft X 8,479 acre-ft = \$1,724,607
- SGPWA is expecting a credit of \$227,000 for '09-'10 FY. It is assumed that over the long term the DWR adjustments will average out to zero
- Rate and quantity of purchased water is dependent on availability from other sources. There is no way to predict year to year so the assumption is made to assume future years purchase at the '08-'09 FY levels. Transmission costs are included in "CALIF. DWR PASS THROUGH" costs herein. "Transmission" line item
- Reserve contribution for the base year is determined by multiplying the per acre rate (\$11 or \$22) by the projected water sales after February 2 as shown in Table 2
- Since most of the costs occur downstream of Cherry Valley Pump Station, the analysis was performed over the downstream reach. Upstream the DWR costs are approximately \$9 lower (See Section IV, subsection "Department of Water Resources Pass Through").

The rate analysis in Table 1 (Page 8) was performed on a Fiscal Year basis using actual and projected annual revenues and costs. Table 2 below shows the calculation for the average rate and estimated revenue for FY 2008-2009, based on pro-ration of the new rate of \$277 per acre-ft to be implemented on February 2, 2009.

Table 2
Average Rate and Estimated Revenue for 2008-2009

Rate (\$ per AF)	Months in effect	Percent of Fiscal Year in effect	Prorated water sales (AF)	Sales Revenue
\$211.00	7.07	58.93%	3,818	\$ 805,594
\$277.00	4.93	41.07%	2,661	\$ 737,102
\$238.11	12.00	100.00%	6,479	\$ 1,542,696

Table 3 (Page 10) shows the summary of revenues and costs for the next two fiscal years and those costs shown as dollars per acre-ft, based on projected water sales for each fiscal year.

In the past, as in the base year, revenues from water rates have not been sufficient to cover all of the related costs of delivery. Revenues from the general fund have been used to subsidize the water rate account to meet any short falls. For the base year as shown on Table 3 (Page 10), \$94,125 will be needed from general fund revenues to meet the total cost of delivery. In future years (2009-2010 to 2012-2013) the rates are set at a constant rate of \$317.00 with the intent that no subsidy from the general fund will be needed. This strategy is based on the following key factors:

1. The water rate is calculated to offset the energy cost increases from DWR, and
2. Expected growth in sales volume will result in additional revenue to meet fixed and variable cost obligations

Table 3 (Page 10) indicates that for Fiscal year 2009-2010 an increase in the water rate of 33.13% (from \$277 per acre-ft to \$317 per acre-ft) will be needed to meet costs. A large increase in DWR energy costs and low expected sales are the two primary factors in the need for the large increase. In subsequent fiscal years no increase in rates will be needed as expected increased water sales volume and assumed steady levels of DWR energy costs contribute to generally maintaining revenues at the same level of costs. The rate stabilization reserve fund will be used to mitigate years of negative cash flow, yet revenues in subsequent years are sufficient to repay the rate stabilization fund quickly.

Table 3
Revenues and Expenses in \$ per Acre-ft

Description	FY 2008-2009		FY 2009-2010	
	Amount	\$ per acre-ft	Amount	\$ per acre-ft
Water Sales (acre-ft)	6,478		4,000	
Water Rate (\$ per acre-ft)	\$ 238.11		\$ 317.00	
REVENUE				
water sales	\$ 1,542,898	\$ 238	\$ 1,268,000	\$ 317
general fund revenue contribution	\$ 94,125	\$ 15	\$ -	\$ -
Total Revenue	\$ 1,636,821	\$ 253	\$ 1,268,000	\$ 317
OPERATIONAL EXPENSES:				
SGPWA Operations	\$ 66,100	\$ 10	\$ 68,678	\$ 17
SGPWA Administrative Overhead Allocation 5% of total administrative overhead	\$ 22,769	\$ 4	\$ 23,657	\$ 6
SAN BERNARDINO VALLEY MUNICIPAL PASS THROUGH	\$ 47,603	\$ 7	\$ 49,460	\$ 12
CALIF. DEPT. OF WATER RESOURCES PASS THROUGH				
Energy	\$ 1,326,853	\$ 205	\$ 948,514	\$ 237
Transmission	\$ 96,982	\$ 15	\$ 59,876	\$ 15
Prior Year Adjustments	\$ (36,300)	\$ (6)	\$ -	\$ -
Sub Total	\$ 1,387,535	\$ 214	\$ 1,008,389	\$ 252
ADDITIONAL WATER - YUBA DRY YEAR PROGRAM	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 25,000	\$ 4	\$ 25,000	\$ 6
Rate Stabilization Surplus Reserves @ \$11 max per acre-ft	\$ 29,271	\$ 6	\$ 44,000	\$ 11
Reserves for Purchase of New Water @ \$22/acre-ft	\$ 58,642	\$ 9	\$ 88,000	\$ 22
TOTAL EXPENSES	\$ 1,636,821	\$ 253	\$ 1,307,184	\$ 327
Net Revenue (short fall)	\$ 0	\$ 0	\$ (39,184)	\$ (10)

IV. Cost of Delivery

The common terminology for costs paid for by water rates is Cost of Service. The American Water Works Association Manual M1 broadly defines Cost of Service as:

"The operating and capital costs incurred in meeting various aspects of providing water service, such as customer billing costs, demand related costs, and variable costs."

Costs identified in this report are related to the delivery of SGPWA water and fall well within and are consistent with the broad limitations of the M1 Manual. For the purposes of this report, the more specific term, "Cost of Delivery" will be used and means the costs related to securing water commensurate with SGPWA's SWP Table A Amount, currently being 17,300 AFY, and any other sources of water that the SGPWA Board deems necessary and prudent.

Cost of Delivery includes operations, administrative overhead, SBVMWD pass-through, dry year transfer costs, rate stabilization surplus reserves and new water purchase surplus reserve contributions. The largest component of SGPWA annual costs is the purchase of imported water from DWR. At this time, the best information available indicates that the cost of energy to operate SWP will continue to increase in the future, primarily due to general inflation and the "green" energy requirements of AB 32, more fully discussed under the "Department of Water Resources Pass Through" section below. DWR has indicated by their annual forecast of expected energy costs that the energy cost for 2009 will rise by almost 16%. Increases thereafter are uncertain, mainly due to uncertain future weather conditions and the corresponding levels of reservoirs and hydroelectric power generation. Lower reservoir levels reduce the output of hydroelectric generators, thereby increasing the demand for more expensive fossil fuel related power. Due to these expected increases in DWR energy costs over the five year period, it will be necessary to raise water rates once in FY 2009-2010 (in addition to the February 2, 2009 increase) over the five year study period to cover the costs of delivery (see Table 1, page 8). The one-time annual increase of 33.13% (from \$277 per acre-ft to \$317 per acre-ft) in fiscal year 2009-2010 is necessary to offset both increased DWR energy rates and decreased forecasted water sales. By implementing the substantial increase in FY 2009-2010 and holding the rate constant over the next three fiscal years, it is reasonable to estimate SGPWA can most closely match revenues with expenses on both an annual basis and on a cumulative basis over the five year study period.

Use of the 2008-2009 budget is a reasonable assumption because the actual costs to date are very close to budget predictions and there are no major foreseen differences in cost assumptions for the first half of calendar year 2009. In addition to the planned increases in water rates over the next five (5) years, SGPWA is including a rate stabilization reserve. It is believed that the rate stabilization reserve will adequately fund negative net operating revenues in any given year caused by energy cost fluctuations and lower than expected revenues that occur when there is less water available to sell. The total Cost of Delivery is the aggregate of the following categories:

- SGPWA Operations Cost
- SGPWA Administrative Overhead Cost
- SBVMWD Pass Through Cost
- DWR Pass Through Cost
- Dry Year Transfer Program Cost

- Rate Stabilization Surplus Reserve Contribution
- New Water Purchase Surplus Reserve Contribution

The rate design used for this study is the uniform volume rate for wholesale service, as discussed in AWWA M1 manual¹⁰. Applying a uniform rate to the volume of water purchased is a straight forward method to calculate water rates and is consistent with the current rate structure. The wholesale water rate applicable to water sold by the Agency to retail water purveyors within the Agency's jurisdiction upstream of Cherry Valley Pump Station will be \$8 less than the rates set for water sold to retail water purveyors downstream of Cherry Valley Pump Station.¹¹ This price differential is due to DWR's lower energy and transmission costs upstream of Cherry Valley Pump Station. The SGPWA retail customers share common major goals, such as BSU replenishment and long term reliability of water sources. Therefore, other than the cost difference upstream and downstream from Cherry Valley Pump Station, there is no need to allocate costs of delivery by customer class or seasonal demands at this time.

Operational Expenses

SGPWA's operational expenses are allocated to SWP operations and maintenance costs and local operations and maintenance costs. SWP operations and maintenance costs are funded through pre-Proposition 13 ad valorem tax revenues, with the exception of 50% of the Operations Manager's salary and benefit cost. This is based on an analysis of typical duties and responsibilities of the Operations Manager with respect to the delivery and purchase of imported water from the SWP and represents a reasonable allocation of the Operations Manager's time. A recent audit of the Operations Manager's time charges over the past six months confirmed the daily duties and responsibilities of this position still result in a 50/50 ratio, within a 10% margin of error, between SWP related work activities and work activities related to local operations and maintenance. For the base year, SGPWA Finance Department estimates the salary and benefit cost to be \$132,200.

$50\% \times \$132,200 = \$66,100$ or approximately \$10 per acre-foot based on sales of 6,479 acre-feet

The other 50% of the costs of the operations manager are charged to SGPWA's share of debt service and operations of the SWP. These costs are funded from pre-Proposition 13 ad valorem tax revenues.

Budget increases in subsequent years for Operations Manager's costs are largely dependent on industry wide increases in labor costs. For subsequent years the 50% allocation of the Operations Manager's salary and benefit budget is escalated at 3.9% annually, which is based on an average of annual labor compensation increases, by percentage, over the last six (6) years, as provided by the U.S. Department of Labor (See Table 4 below).

¹⁰ American Water Works Association, *Principals of Water Rates, Fees, and Charges* (Manual of Water Supply Practices M1), Fifth Edition

¹¹ "2008 Transportation Variable Plant Unit Rates (Energy and Transmission)", State Water Project Analysis Office, dated February 26, 2008.

Table 4
Percent Changes in the Employment Cost Index (ECI)¹

Year	2003	2004	2005	2006	2007	2008
Percent change in Employment Cost Index	4.3	3.5	3.5	3.8	4.8	3.5
Average annual	3.9					

1. U.S. Department of Labor, Bureau of Labor Statistics, see State and Local Governments Section, "Compensation"

Administrative Overhead Allocation

SGPWA charges a portion of direct and indirect costs of administrative overhead to water rates. It is reasonable to conclude that the General Manager, Finance Manager and Administrative Assistant spend approximately 4 hours per week each related to planning, delivering and billing for imported water related services. This amounts to approximately 10% of the SGPWA salary and benefit budget on an annual basis. Table 1 (Page 8) lists the various line items that make up the salary and benefit budget for the base year. Since these percentages can fluctuate in the future due to many operational variables, it is conservative to assume a 5% allocation to insure that the proposed rate does not cover administrative costs other than those related to water delivery services. The bolded line item described as "5% of the Total Administrative Overhead" on Table 1 (Page 8) represents 5% of the total salary and benefit budget which is allocated to the water rate.

$5\% \times \$455,383 = \$22,769$ or approximately \$3.50 per acre-foot based on water sales of 6,479 acre-feet in the base year.

As with annual escalations for Operational Expenses discussed above, this Administrative Overhead component is labor intensive and therefore uses the same 3.9% escalation rate.

San Bernardino Valley Municipal Water District Pass Through

As discussed in the Background section of this report, imported SWP water is conveyed from the Devil Canyon delivery point through the East Branch Extension facilities that are owned by San Bernardino Valley Municipal Water District ("SBVMWD"), subject to SGPWA's capacity rights. SBVMWD operates and maintains these facilities and charges SGPWA for a proportionate share of its operations labor cost at a melded rate of approximately \$56 per hour, which is reflected in the costs shown on Table 1 (Page 8) for the base year. Last year's total billing from SBVMWD amounted to \$95,206. At present, 50% of this total cost is funded through general fund revenues and 50% is allocated to water rate, based on the assumption that the benefits received and the costs allocated from the delivery of SWP water through SBVMWD facilities are equally split between property tax based revenues and consumption related water rates. Therefore:

$50\% \times \$95,206 = \$47,603$, or approximately \$8 per acre-foot based on water sales of 6,479 acre-feet in the base year

As with annual escalations for Operational Expenses discussed above, this pass through component is labor intensive and will use the same 3.9% escalation.

Department of Water Resources Pass Through

Energy and Transmission Costs

The DWR water rate charged to SGPWA through the SWP Contract includes an energy component (electric power), a transmission component (non-power related operating costs) and a prior year cost recovery adjustment (see Page 13 "Prior Year Adjustment" subsection). The amount of the energy and the transmission costs that are passed on to SGPWA depend upon the location of the delivery point of the Phase I facilities. For instance, the delivery costs for 2008, in \$ per acre-foot:

Upstream of Cherry Valley Pump Station:

• Energy Cost	\$196.7289
• Transmission Cost	\$ 14.5680
• Total	\$211.2969

Downstream of Cherry Valley Pump Station:

• Energy Cost	\$204.7929
• Transmission Cost	\$ 14.9687
• Total	\$219.7616

Conservative unit costs for downstream of Cherry Valley Pump Station were used because most of the water demand occurs downstream of this pump station. The calendar base year costs and the subsequent year escalated costs were taken from Table 5 (Page 15), "DWR Delivery Costs" for downstream of Cherry Valley Pump Station. DWR costs are expected to jump dramatically in 2009 due to lower reservoir storage levels which results in reduced production of hydroelectric energy. DWR estimates the per mil energy rate that they will pay will jump from \$38 to \$44 in 2009, or a 15.8% increase. Increases beyond 2009 are difficult to determine as future rates will depend on climate, storage levels in reservoirs, environmental regulation and the cost of fossil fuel generated power. This study assumes the DWR estimate for 2009, i.e. energy costs will increase by 15.8%, 2010 and 2011 will hold constant and 2012 will see a 10% increase. While it is speculative at this time to expect energy costs to rise almost 16% per year for all subsequent years, holding costs constant for two years (2010 and 2011) and increasing costs by 10% in the last year (2012) is a reasonable assumption that takes into account an improvement in climate conditions and improved efficiencies in the overall SWP delivery system. This is strictly a best estimate and it must be understood that rates will need to be adjusted if actual costs produce a trend that is different from that based on these assumptions.

It is planned that transmission cost will be held constant over the five (5) year period because this number has historically held constant.

Table 5
DWR Delivery Costs

	2008	2009	2010	2011	2012
Downstream of Cherry Valley Pump Station					
Energy Cost	204.7929	237.1286	237.1286	237.1286	260.8415
Transmission Cost	14.9687	14.9687	14.9687	14.9687	16.4656
Total Cost	219.7616	252.0973	252.0973	252.0973	277.3071
inflation adjustment in 2012					10.00%

Prior Year Adjustment

Since DWR cannot predict exact energy costs and volume demand each budget year, DWR bills SGPWA, in addition to its periodic charges, intermittent charges to account for the exact energy cost increases within the calendar year. Also, an annual charge or credit at the end of the calendar year may be billed to cover any understating or overstating of the energy component of their rate. In 2008 an additional \$264,100 was billed to SGPWA. However, for 2009 it is expected that DWR will refund \$227,800. SGPWA's Board has acted to combine these two DWR actions into one year and apply the difference between the debit and credit (\$36,300) to the 2008-2009 rate (or approximately \$6 per acre-foot). Table 1 (Page 8) shows the prior year adjustment credit of \$36,000 in Fiscal Year 2008-2009. It is also expected that over the long run, the charges and refunds will tend to offset each other based on historical trends. For this reason it is assumed for Fiscal Year 2010-2011 and beyond the annual adjustments will be assumed to be zero.

Expected Power Cost Increases

It is expected that energy costs will increase over the long-term for at least three reasons: inflation, "green" energy legislation, and marginal cost increases. See Appendix C attached

Yuba Dry Year Transfer Program

SGPWA can purchase additional water through an agreement¹² to purchase supplemental water from Yuba County Water District at clearly defined prices. Presently this is the least expensive supplemental water available to SGPWA. There are four categories of water in the agreement; Component 1, Component 2, Component 3, and Component 4. Each category has its own specific price, in \$ per acre-ft, depending on dry, normal, wet or critical year conditions. This past year SGPWA purchased 68 acre-ft of Component 2 water and 124 acre-ft of Component 1, 3 and 4 water, for a combined annual purchase of 192 acre-ft.

Obviously it is impossible to characterize future water years in terms of "dry" vs. "wet" vs. "critical". As indicated in the Yuba agreement, each type of year has a specific water

¹² Agreement for the Supply and Conveyance of Water by the Department of Water Resources for the State of California to the Participating State Water Contractors Under the Dry Year Water Purchase Program, dated March 31, 2008

rate varying between \$25 per acre-ft in a wet year for Component 2 water to \$125 per acre-ft in a critical year for Component 3 and 4 water. For the purposes of this study it is conservatively assumed that the price of Yuba water purchased will be the critical year price of \$125 per acre-ft. Based on the recent annual purchase of 192 acre-ft, it is also assumed that SGPWA will continue to purchase approximately 200 acre-feet of additional water through the Yuba Dry Year Transfer Program as set forth in Table 1 (Page 8). The base year water cost is assumed as follows:

$\$125 \times 200 \text{ acre-feet} = \$25,000$, or \$3.86 per acre-foot based on water sales of 6,479 acre-feet

No costs are shown on the "delivery cost" line item because the delivery costs attributable to Dry Year Transfers are included in DWR pass through costs.

It is very difficult to predict, especially during these times of protracted water shortage, the levels of water purchases from this program. During wet years obviously SGPWA will not need to purchase large quantities of water. However, during critical years, SGPWA might need to purchase as much water as possible, limited by agreement to a percentage of SWP Table A water. Therefore, in the absence of any clear trends in historical data or any credible estimates, this study uses conservative assumptions as to the amount and price of expected purchases of Yuba water.

Surplus Reserves

Each year funds from net operating revenue are set aside for the purpose of

- Rate stabilization
- Purchase of new water

A total of \$33 per acre-ft of annual water sales is dedicated to fully funding the rate program, consisting of both rate stabilization and new water purchase components. The rate stabilization fund will be capped at approximately 150% of the maximum annual revenue shortfall year in the five year study. Any rate stabilization contribution over and above the cap will flow over into the reserve fund for the purchase of new water.

Rate Stabilization Surplus Reserves

In order to manage the effects of fluctuations in energy costs, delivery costs, facility maintenance costs and sales volume on the ability of SGPWA to meet expenses on an annual basis, SGPWA will implement a rate stabilization surplus reserve. In dry years the availability of water to sell is reduced, possibly resulting in various fixed costs not able to be funded through rates and water sales. A rate stabilization reserve will be used to meet the obligations in such dry years. The rate stabilization surplus reserve will be funded at the rate of \$11 per acre ft of water sales until the rate stabilization surplus reserve balance reaches a maximum of at least 150% of the revenue shortfall in the year of maximum deficit. Table 1 (Page 8) indicates that FY 2012-2013 generates a deficit of \$95,372, just under \$100,000. Therefore the maximum balance is set at \$150,000. Also, the maximum rate stabilization surplus reserve balance is projected to occur in FY 2011-2012. The contribution to the rate stabilization surplus reserve in base year 2008-2009 is

derived from contributions after the February 2, 2009 inception date (41.07% of one year) and is estimated to be:

$$\$11 \times 6,479 \text{ acre-feet} \times 41.07\% = \$29,270$$

As shown on Table 1 (page 8), for FY 2012-2013 an operating deficit of \$95,372 will be offset by a contribution from the rate stabilization surplus reserve, leaving a balance in that fund of \$54,628 to carry over into the next five year period. These balances in the rate stabilization surplus reserve provide a reasonable fund over the five year study period needed to avoid as much as practical any rate fluctuations.

Surplus Reserve for the Purchase of New Water (Repair Lost Reliability, SWP)

The rate revenue will provide a surplus reserve to accumulate for contribution together with other SGPWA funds for the future purchase of new water, the purchase of rights to new water supplies, or both. The annual fixed amount to be set aside in early years is calculated by applying a \$22 per acre-foot allocation to the annual water sales volume in acre-feet. As the maximum rate stabilization surplus reserve reaches its maximum target, the excess rate stabilization funds will flow to the surplus reserve for the purchase of new water. In addition, excess operating revenues in any fiscal year will also be transferred to the surplus reserve for the purchase of new water. As indicated in Table 1 (Page 8), beginning in year three the revenue stream for purchase of new water sharply increases. The fund contributions will vary year to year dependent on water sales and rate stabilization surplus reserve balances. The surplus reserve contribution for the purchase of new water for FY 2008-2009 is calculated as follows:

$$\$22 \text{ per acre-foot} \times 6,469 \text{ acre-ft} \times 41.07\% = \$58,540$$

Fund Balances

For each fiscal year the beginning and ending balance for the water rate operating account is shown near the bottom of Table 1 (Page 8). The starting fund balance is zero, and as mentioned in the Revenue section of this report, a contribution from the general fund account will be needed to insure that there is no shortfall in the base year. The second year the study shows again a zero ending balance as a rate increase and a contribution from the rate stabilization surplus reserve is sufficient to meet costs and require no transfers from the general fund. Subsequent years will show modest surpluses and shortfalls, with a closing balance of approximately \$50,000 in the rate stabilization fund at the end of the study period. This demonstrates that the rates proposed will be the minimum to generate revenues sufficient to meet expenses and reserve requirements over a five year period, with occasional borrowing from and repayment to the rate stabilization reserve fund to meet needs on an annual basis.

Table 1 (Page 8) also shows the accumulation of surplus reserves balances for both rate stabilization surplus reserves and surplus reserves for the purchase of new water over the five (5) year study under the line items described as "Accumulated".

V. Recommendation

In order to fund the Cost of Delivery related to imported water activities, it is recommended that a uniform water rate of \$277 per acre-foot (See Table 2, Page 9) be implemented for the service area downstream of Cherry Valley Pump Station ("CVPS"), effective February 2, 2009. The new uniform water rate for the service area upstream of CVPS will be slightly lower due to lower DWR pass through costs. In fiscal year 2009-2010 it will be necessary to increase the uniform water rate to \$317.00 per acre-foot for the service area downstream of CVPS in order to meet operational expenses, avoid subsidies from the general fund and adequately fund water rate reserves. Again, the increased rate for the service area upstream of CVPS will be slightly lower due to anticipated lower DWR pass through costs for the upstream segment. It is expected that DWR energy costs will increase over the five year study period requiring SGPWA to increase the rate to \$317.00 per acre-foot (33.13% increase over the previous year) in Fiscal Year 2009-2010. In subsequent years it is assumed that the volume of water sales will increase and the level of energy costs from DWR will hold relatively steady, resulting in no need to increase the SGPWA water rate. Of course if any of these assumptions, or any of the assumptions made with respect to the other cost components discussed in this report become significantly different from trends in actual costs incurred, the water rate level will need to be reviewed.

The proposed water rates will provide sufficient revenue to pay for the costs related to delivery of SWP water, contribute to a rate stabilization reserve of \$11 per acre-foot of water sold, and contribute to a reserve fund for a portion of the cost for the purchase of new water at the rate of \$22 per acre-foot of water sold. This fund and the expenditures that it will support will assist to provide the much needed water supply that will improve lost SWP water supply reliability, meet future increased demand from retail agencies and meet groundwater replenishment goals.

APPENDIX A

Detailed Background

In 1960 the voters of the State of California approved the issuance of bonds to finance the construction of the nations largest state built water storage and delivery system. This project, referred to as the State Water Project ("SWP"), relies on 29 water contractors to fund the debt service on SWP facilities financing incurred by the Department of Water Resources ("DWR"), the State agency responsible for the construction, operation and maintenance of the SWP. SGPWA (a SWP Contractor) pays for its fair share of the debt service through ad valorem taxes. The SGPWA Board sets the ad valorem rate each year. Currently the rate is \$0.17 per \$100 of assessed valuation. This tax revenue is referred to in this report as pre-Proposition 13 ad valorem tax revenues.

In 1961 SGPWA was formed for the purpose of delivering wholesale imported SWP water to its customer water retailers for the purpose of groundwater recharge and to supplement the demands of new growth in the area. The SGPWA service area includes the communities of Banning, Beaumont, Calimesa, Cherry Valley, Poppet Flat, Morongo Indian Reservation and Cabazon. SGPWA overlies several local groundwater basins of which the Beaumont Storage Unit ("BSU") is the major groundwater supply. The BSU provides the potable water source for most of the retail agencies within the SGPWA service area. Because the annual water demands of the growing communities increased over the years, those demands began to exceed the water supplied by local runoff, and now the BSU is currently in a managed overdraft (see "Managed Basin" below). It is now necessary to replenish the basin to not only meet the local water demands but also restore groundwater levels.

In 1962 SGPWA and DWR entered into a contract for capacity in the SWP ("SWP Contract") whereby SGPWA would have a right to receive 15,000 acre-feet per year of imported water to 2035 and extended periods thereafter ("Table A Amount"). SGPWA would then pay its proportionate share of the SWP debt financing, operations and maintenance costs to DWR on an annual basis. Since 1962 the entitled amount has been amended several times, with the current Table A Amount of 17,300 acre-ft per year. The SWP Contract and debt financing was approved by the California voters in 1960 and, thus, is exempt from the limitations of Proposition 13 limiting the use of ad valorem taxes to pay for the SWP Contract obligations.

Water Supply

The SWP turnout that delivers water to the SGPWA service area is located at Devil Canyon, located in the hills behind California State University, San Bernardino. SGPWA owns capacity rights in the pipelines, pump stations and reservoirs (collectively known as the East Branch Extension) from this point to Garden Air Creek, on the common boundary of San Bernardino and Riverside Counties. Downstream from this point SGPWA owns 100% of capacity rights in all of the water storage and conveyance facilities in the system. Most of the cost for these facilities is financed by DWR bonds, with the debt service for SGPWA's proportionate share repaid by SGPWA through pre-Proposition 13 ad valorem tax revenues.

Water users and retailers in the SGPWA service area primarily depend upon natural surface runoff and local groundwater basins to meet local water supply demands. The BSU is currently in overdraft, as the water demand of a growing population continues to exceed the natural recharge rate of the BSU. A local joint powers agency consisting of members dependant on

water from the BSU has been supporting the management of the BSU by a watermaster through agreements and legal proceedings (see below). SGPWA has been replenishing the BSU with imported water since 2003. Beaumont-Cherry Valley Water District ("BCVWD") has also been replenishing the BSU with imported water purchased from SGPWA since 2006. It has been determined by SGPWA and the Watermaster that there is a need to increase the rate of replenishment of the BSU with imported water in the very near future.

Managed Basin

On February 20, 2003, the San Timoteo Watershed Management Authority, a joint powers public agency ("STWMA"), whose members are the Beaumont-Cherry Valley Water District ("BCVWD"), the City of Beaumont ("Beaumont"), the South Mesa Mutual Water Company ("SMMWC"), and the Yucaipa Valley Water District ("YVWD") filed a complaint in the Riverside Superior Court for adjudication of water rights, injunctive relief, and the imposition of a physical solution against the City of Banning ("Banning"), each of the members of STWMA, and various other alleged overlying landowners, pumpers, and appropriators within the boundaries of a certain area defined as the BSU. On February 17, 2004, a judgment pursuant to stipulation, was entered which provided, among other specifics, the BSU had a safe yield of 8,650 acre-feet per year ("AFY"), appointed a Watermaster consisting of representatives from Beaumont, Banning, BCVWD, SMMWC, and YVWD, authorized a controlled overdraft (temporary surplus) of 16,000 AFY up to 160,000 AF over a ten-year period, and required each appropriator to provide funds to enable the Watermaster to replace water pumped in excess of the safe yield of 8,650 AFY. The ten-year period for the controlled overdraft runs out in 2013.

Lost Reliability

Shortages in rainfall and snowmelt within California and the Colorado River basin, and recent cutbacks in deliveries from the SWP due to environmental court challenges, have made it increasingly difficult for water purveyors to maintain and plan for sustained and reliable water deliveries. SGPWA is continuously looking for opportunities to purchase additional water for storage and BSU replenishment in order to maintain and repair lost reliability of the SWP within its service area. The primary sources of SGPWA general fund revenue are 1% Revenue ("share of County 1% ad valorem tax revenue") and wholesale water rates. In the near future SGPWA plans to implement a capacity fee program to insure that new development pays its fair share of capital improvements and new water purchases necessary to mitigate the impacts of growth. The SGPWA wholesale water rate must be calculated such that the expected revenues adequately and fairly recover the DWR pass through costs, proportionate SGPWA overhead costs, additional short term dry year water purchases, rate stabilization reserves and contributions to the portion of the cost of new water purchases that are necessary for repair of SWP lost water delivery reliability.

APPENDIX B Legal Limitations

Proposition 13

In 1978 the voters of the State of California passed Proposition 13 which placed a cap on ad valorem taxes of 1% of the then current assessed property value. The law further provides any new state taxes need a 2/3 vote by the legislature and any new local taxes also require a 2/3 vote of the local voters. The cap on ad valorem taxes does not apply to ad valorem taxes or special assessment to pay interest and redemption charges on any indebtedness approved by the voters prior to July 1, 1978. The Burns-Porter Act was approved by the voters in a State election in 1960, which authorized payments to the State DWR for the SWP from revenues including those derived from ad valorem taxes on real property (*Goodman v. County of Riverside* (1983) 140 Cal. App 3rd 900). SGPWA has been levying an ad valorem tax on real property within its boundaries since it acquired capacity in the SWP by executing the SWP Contract in 1962. The current ad valorem tax rate is \$.17 per \$100.00 of valuation to pay for the SWP Contract obligations and reserves, amounting to about \$13,000,000 per year. This source of revenue will be used to pay for Phase I and Phase II extensions of the SWP into the service area.

In addition to the ad valorem tax levy to pay for the SWP, pursuant to Proposition 13, SGPWA receives its proportionate share of the 1% on all ad valorem real property taxes levied in the County of Riverside each year. As assessed property values increase, the 1% share of revenues increases. The current amount received per year is about \$2,200,000.

Proposition 218

In 1996, Proposition 218 was adopted adding Article XIII C and D to the California Constitution dealing with the initiative process and procedures involving real property related fees and charges. While some real property fees and charges require voter approval, it is clear that water agencies are exempt from such requirement. However, water agencies that serve water to landowners are still subject to certain requirements of Proposition 218, including:

1. Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service;
2. Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee charge was imposed;
3. The amount of fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to that parcel;
4. No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.

SGPWA only sells water to retail water purveyors and does not sell water to landowners and, therefore, under Proposition 218, does not charge a water rate as a property-related service. However, in the interest of insuring a fair and equitable rate to SGPWA retail water purveyors and to assist them in complying with Proposition 218, this study will incorporate the intent of the above mentioned requirements of Proposition 218 as an integral part of the study.

APPENDIX C

Expected DWR Energy Cost Increases

It is expected that energy costs will increase over the long-term for at least three reasons: inflation, "green" energy legislation, and marginal cost increases.

First, general inflation will raise costs as raw materials, transportation, and labor costs increase.

Second, AB 32 (cited as Section 38500 of the Health and Safety Code, "The California Global Warming Solutions Act of 2006"), passed by the legislature and signed by the governor, will require the DWR to gradually transition to "greener" energy sources over time. At this time, "greener" energy is expected to be more costly than conventional energy sources such as fossil fuels. Most green energy production is located far from the power grid, meaning that additional transmission lines will have to be constructed to allow this energy source to be widely used. With regard to energy sources¹³, i) green energy in the form of *solar* power is inefficient (silicon photovoltaic technology converts about 11% of the total solar energy reaching the panel), has a high first cost and is area or land intensive as compared to conventional sources. For instance, while photovoltaic technology is getting more affordable with time, currently installation costs range from \$4,000 to \$5,000 per kW as compared to \$450 per kW for natural gas plants. ii) DWR already maximizes its use of *hydroelectric* power, iii) a previous attempt by DWR to generate power from *geothermal* sources resulted in much higher costs for various reasons. In fact, geothermal capacity peaked in 1989 and has been on the decline since, due to plant retirement and reduced steam flow. It can be expected that expansion of capacity would require high capital costs contributing to higher overall energy rates, and iv) although power produced by older *wind* turbines is definitely not cost competitive, newer technologies show promise as a competitive option in the future. Currently wind power installation averages approximately \$1,000 per kW, significantly less than solar but greater than the \$450 per kW for natural gas power plants. Hence, the increased cost realized from installation of renewable power generation and in most cases costs related to less efficiency and reliability will result in higher energy rates from DWR.

Third, the least expensive energy sources have already been tapped. The cost of producing additional energy will increase as more costly sources, whether "green" or not, must be used. As overall energy demands in California increase, it is expected that the marginal cost of producing this additional energy will increase.

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¹³ Managing Greenhouse Gas Emissions in California, The Californian Climate Change Center at UC Berkeley, January 2006, Chapter 4, Section 2.3 "Renewable Energy"

Kennedy/Jenks Consultants

16 July 2008

Memorandum

To: Mr. Jeff Davis, General Manager
San Geronio Pass Water Agency

From: Lynn M. Takaichi

Subject: Probable Cost of Water Transfers
K/J 0689057

Background and Objective

San Geronio Pass Water Agency (SGPWA) is one of 29 State Water Project (SWP) contractors, and was established by the State Legislature in 1961. Its mission is to import supplemental water and to protect and enhance local water supplies for use by present and future water users and to sell imported water to local water districts within the SGPWA service area. SGPWA is able to import supplemental water from whatever sources provide the highest quality at the lowest price, including the SWP as well as other potential sources. SGPWA also works with local water retailers and others to manage local and regional water resources in a sustainable manner, in an effort to end groundwater overdraft in the SGPWA service area. SGPWA's boundaries extend through the cities of Calimesa, Beaumont, and Banning and Riverside County areas from Cherry Valley to Cabazon.

SGPWA has identified the need to acquire 10,000 to 15,000 acre-feet per year (AFY) of additional imported water supplies to serve existing and projected water demands within its service area. To provide the financial capacity to execute the necessary water transfers, SGPWA desires to include appropriate costs into its fees and charges. Accordingly, the objective of this memorandum is to provide an opinion regarding the probable cost of the additional supplies.

To accomplish this objective, the comparable sales method of valuation is utilized. This method uses prior sales of water supplies having similar characteristics to the water to be acquired. However, it should be noted that the current dry conditions have created scarcity in the water market and prior sales may underestimate current and future market conditions.

Comparable Sales

Because any additional water supplies would be used primarily for existing and new municipal and industrial water demands, SGPWA desires water supplies that are long-term and reliable, or that can be made reliable through water banking. In selecting comparable sales, only water transfers in California executed by public agencies in the last three years through negotiated sales without the threat of condemnation were considered. These criteria were established to

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Three potential comparable sales were identified. The first is a transfer of 11,000 AFY of firm water from the Buena Vista Water Storage District/Rosedale-Rio Bravo Water Storage District (BV-RRB) to the Castaic Lake Water Agency (CLWA). The second is a transfer of 16,000 AFY of SWP Table A Amount from the Berrenda Mesa Water District (BMWD), a Kern County Water Agency member agency, to the Coachella Valley Water District and Desert Water Agency (CVWD/DWA). The third is the current California Department of Water Resources (DWR) Yuba River water program under the Dry Year Water Purchase Program. Unlike the other comparable sales, this program is not a long-term water transfer but can be used to increase the delivery quantity of SGPWA's current Table A Amount and to provide a long-term supply through banking. A summary of the key provisions of those water transfers are presented in Table 1.

Based on the key provisions of the comparable water sales presented in Table 1, an economic evaluation of the probable costs of water transfers to SGPWA was performed. The probable cost does not include the cost of conveyance in the SWP facilities. These costs can vary depending on the point of delivery of the transfer and the utilization of SWP capacity by the other contractors. Because this opinion of the probable cost will be utilized for SGPWA's 2008 fees and charges, probable cost estimates are expressed in 2008 dollars. These cost estimates should be escalated for subsequent years.

- For the BV-RRB to CLWA transfer, the base rate of \$486.85/AF was escalated by a CPI increase of 3.45 percent. Accordingly, the estimated cost for 2008 is \$503.65/AF.
- For the BMWD to CVWD/DWA transfer the one-time cost of \$3,000/AF was amortized at 6 percent over 27 years (the SWP contract expires in 2035), escalated by 3.45 percent for 2008, and divided by a reliability factor of 66 percent based on the Draft State Water Project Delivery Reliability Report 2007, dated December 2007 by the California Department of Water Resources. Accordingly, the estimated cost for 2008 is \$355.96/AF. However, please note that this cost does not include the cost of banking to achieve the reliability factor of 66 percent.
- For the DWR to SWP Contractors transfer, the estimated cost is difficult to determine because quantity of water to be delivered is uncertain and variable. In addition, the cost of this transfer does not include the cost of banking to make this transfer a reliable water supply. Accordingly, the estimated cost of this transfer has not been determined.

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Opinion of Probable Cost

In developing an opinion of the probable cost of a water transfer, consideration was given to the identified comparable sales and current market conditions. As a result of these considerations, in my opinion, the probable cost of a water transfer to SGPWA excluding the cost of banking and conveyance, is \$450 to \$550/AF annually.

Memorandum

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TABLE 1
KEY PROVISIONS OF COMPARABLE WATER SALES

Seller and Buyer	Approx. Date of Sale	Water Type	Quality (AFY)	Delivery Point	One-Time Cost	General (\$/AF)
BV-RRB to CLWA	May 2007	Banked water from Kern River/SWP Exchange	11,000	SWP reach 13B	½ Permit Costs	\$486.85 ^(a) plus future SWP costs.
BMWD to CVWD/DWA	Early 2007	Table A Amount	16,000	SWP reach 31A	\$3,000/AF	Future SWP Costs ^(b)
DWR to SWP Contractors	Open	Yuba River	Variable depending on number and maximum Table A amount of participants.	Marysville Gage on Yuba River	Up to \$125,000 for fixed O&M ^(c) plus up to \$500,000 for diesel compression of GW pumps plus any unidentified agreement costs.	25 to 125 plus future SWP costs plus adjustments to GW O&M costs plus any unidentified agreement costs.

Notes:

- (a) Escalated by CPI with true-ups every 10 years.
 (b) All SWP costs that would be invoiced to BMWD.
 (c) To be created against any purchased water costs.

Kennedy/Jenks Consultants

2 January 2009

Memorandum**DRAFT**

To: Mr. Russ Behrens
McCormick, Kidman & Behrens, LLP

From: Lynn M. Takaichi

Subject: Water Supply Reliability of the San Geronio Pass Water Agency
K/J 0689057

In response to your request to evaluate the water supply reliability of the San Geronio Pass Water Agency (SGPWA), this memorandum summarizes our evaluations and the potential economic impact of restoring the reliability associated with SGPWA's water supply.

Background

SGPWA is one of 29 State Water Project (SWP) contractors, and was established by the State Legislature in 1961. Its mission is to import supplemental water and to protect and enhance local water supplies for use by present and future water users and to sell imported water to local water districts within the SGPWA service area. SGPWA currently has a SWP Table A Amount of 17,300 acre-feet per year (AFY). SGPWA is able to import supplemental water from whatever sources provide the highest quality at the lowest price, including the SWP as well as other potential sources. SGPWA also works with local water retailers and others to manage local and regional water resources in a sustainable manner, in an effort to end groundwater overdraft in the SGPWA service area. SGPWA's boundaries extend through the cities of Calimesa, Beaumont, and Banning and Riverside County areas from Cherry Valley to Cabazon.

Currently, SGPWA has only SWP water as a water supply. Accordingly, its reliability is described in the State Water Project Delivery Reliability Report 2007 (2007 Reliability Report) prepared by the California Department of Water Resources (DWR). The report is prepared every two years as required by the settlement agreement for litigation related to the Monterey Amendment of the SWP Contracts. The report estimates the SWP delivery reliability based on anticipated regulatory standards, population growth, levels of water conservation and recycling, water transfers, hydrology, and climate change.

Overview of the 2007 Reliability Report

The 2007 Reliability Report presents a statistical analysis of SWP delivery reliability. Twelve scenarios are presented. Two estimate the 2007 delivery reliability and ten estimate the 2027 delivery reliability. The two 2007 simulations of 2007 conditions represent higher and lower levels of flow targets for the Old River and Middle River established to protect the delta smelt. The ten 2027 simulations represent four climate change scenarios and a no climate change scenario under higher and lower levels of

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flow targets for the Old River and Middle River. The scenarios also reflect the pumping limitations imposed to protect the delta smelt until the recently revised biological opinion is implemented.

Recommended Delivery Reliability for Water Supply Planning

Of the ten scenarios, the delivery reliability estimate ranged from 63 to 71 percent of the SWP Table A Amount. Accordingly, it is recommended that SGPWA utilize the most conservative reliability estimate of 63 percent. This recommendation is prudent for the following reasons:

1. There is significant uncertainty in DWR's modeling analysis. This uncertainty is discussed in detail in the 2007 Reliability Report.
2. The reliability analyses are based on 2027 conditions. The modeling results for 2050 climate change emissions generally show lower delivery reliabilities (60 to 72 percent).
3. In addition to the pumping restrictions imposed to protect the delta smelt, the Fish and Game Commission imposed new rules to protect the longfin smelt. These rules are not included in the modeling scenarios and are expected to reduce delivery reliability. It should be recognized that the recently-released Biological Opinion for the Delta smelt results in 30% reductions in SWP supply on average, and under dry-year conditions, as much as 50% reductions.
4. Additional pumping limitations to protect the fall run Chinook salmon are expected. These limitations are also not included in the modeling scenarios.
5. To achieve the estimated delivery reliability, SWP contractors must take delivery of all SWP water made available through the annual allocations. When high delivery allocations are made available, SWP contractors must have sufficient users available or have banking facilities capable of receiving these allocations. Currently, SGPWA cannot receive and utilize its full SWP Table A Amount. To the extent that SGPWA cannot utilize the SWP water made available, the delivery reliability would be reduced accordingly.

Recommended Supplemental Water Requirements for Existing Water Users

SGPWA currently has a SWP Table A Amount of 17,300 AFY. Due to DWR's inability to complete all of the planned SWP facilities and pumping restrictions imposed to protect endangered species, SGPWA can now expect 63 percent of its Table A Amount on

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average. Accordingly, additional SWP supply of 10,200 AFY $[(17,300 \div 0.63) - 17,300]$ is needed to compensate for the reduction in reliability from SGPWA's Table A Amount of 17,300 AFY to its current estimated average delivery of 10,900 AFY. The additional SWP supply of 10,200 AFY is equivalent to a firm supply of 6,400 AFY.

Based on a memorandum dated 16 July 2008 from Kennedy/Jenks Consultants to SGPWA related to the probable cost of water transfers, additional water supplies are expected to cost \$450 to \$550/AF (2008 dollars) for a firm water supply. Please note that this cost estimate is based on water transfers during average conditions and costs during dry periods are expected to be higher. Assuming an average cost of \$500/AF, the anticipated cost of an additional water supply is \$3.2 million per year in 2008 dollars.

RESOLUTION NO. 20097-162**RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN
GORGONIO PASS WATER AGENCY REVISING A POLICY FOR
AGENCY RESERVES****(RESCINDING RESOLUTION NO. 20076-0416)**

WHEREAS, this Board is charged with responsibility for providing an imported water supply to customers located within the Agency's boundaries, for the construction, operation, maintenance, repair and replacement of facilities to transport and deliver that water to Agency customers, and for the collection and accumulation of revenues necessary to accomplish these purposes; and

WHEREAS, the implementation of Board policy over a period of many years has resulted in the accumulation of funds to be utilized for a variety of Agency activities and to protect the Agency's customers and taxpayers from the financial impacts of catastrophic events and from fluctuations in Agency expenses; and

WHEREAS, by separate action this Board has created a restricted fund for the deposit and separate accounting of Agency revenues which may be expended only for particular Agency purposes, entitled the "State Water Contract Fund" and

WHEREAS, in addition to the collection and deposit of money into the restricted account, this Board also wishes to provide for the creation of certain unrestricted reserve accounts, and to set forth in writing the Agency's policy regarding the accumulation of reserves, the purposes for which they may be expended, and the levels which the Agency should strive to maintain;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the San Gorgonio Pass Water Agency hereby provides for the deposit of revenue into the restricted fund, the creation of certain unrestricted reserve accounts, and the accumulation and administration of reserves in each, as follows:

1. Restricted Reserves.

(a) State Water Contract Fund. All revenue collected from taxes levied on real property within the Agency's boundaries to pay amounts due and owing to the State of California Department of Water Resources ("DWR") pursuant to the Agency's contract with the State ("State Water Contract") for participation in the State Water Resources Development System shall be deposited into the State Water Contract Fund. The revenues deposited into the State Water Contract Fund may be utilized only to pay the Agency's financial obligations on the State Water Contract. The Agency shall endeavor to maintain money in the State Water Contract Fund in an amount which is more than the total of the previous year's invoices from DWR, but not more than two and one half times the total of such invoices, so that a reserve may be maintained to absorb temporary increases in charges from DWR, help to stabilize Agency tax rates, and protect against economic conditions which could result in the failure of numerous Agency taxpayers to pay their taxes. The reserves maintained in the State Water Contract Fund may be invested in the same manner as other Agency funds. Investment earnings thereon as determined by the Agency shall be credited to the State Water Contract Fund and shall be used only to pay State Water Contract obligations.

2. Unrestricted Reserves.

(a) Reserve for Operations. A "Reserve for Operations" is hereby created for the Agency, to which the Board may appropriate unrestricted Agency revenues. The Reserve for Operations may be utilized to pay the cost of operating the Agency's general system including unanticipated costs of operations. The Agency shall endeavor to maintain in the Reserve for Operations an amount sufficient to pay for six months of normal operations of the Agency excluding depreciation expense and payments to DWR not to exceed one year of normal operation, as reflected in the annual audit of the Agency presented to the Board each year. However, the funds appropriated to the Reserve for Operations may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to the Reserve for Operations may be invested in the same manner as other Agency funds, and the earnings thereon shall be credited to the Agency's General Fund.

(b) Reserve for New Infrastructure. A "Reserve for New Infrastructure" is hereby created for the Agency's general account, to which the Board may appropriate unrestricted Agency revenues. The Reserve for New Infrastructure may be utilized to construct or procure new infrastructure for the Agency; expenditures include but are not limited to transmission and distribution capital assets, buildings, pumping equipment, technical equipment, furniture and fixtures and transportation equipment. The Agency shall endeavor to maintain the Reserve for New Infrastructure in an amount approximately equal to 20% of the original cost of the Agency's physical plant, as reflected in the annual audit of the Agency presented to the Board each year. However, the funds appropriated to the Reserve for New Infrastructure may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to the Reserve for New Infrastructure may be invested in the same manner as other Agency funds, and the earnings thereon shall be credited to the Agency's General Fund.

(c) Reserve for Additional Water. A "Reserve for Additional Water" is hereby created to which the Board may appropriate unrestricted Agency revenues. The Reserve for Additional Water may be utilized for the temporary purchase of additional water, to augment the Agency's annual allocation of water pursuant to Table A of the Agency's State Water Contract, and for costs associated with the banking or transfer of any water or water rights purchased by the Agency. The Agency shall endeavor to maintain the Reserve for Additional Water in an amount of at least \$2.5 million as of June 30, 2008, with a goal of increasing this amount at least \$250,000 per year thereafter, which is greater than the total of the previous year's invoices from DWR pursuant to the Agency's State Water Contract, but which does not exceed ten times that amount. This reserve fund is to be augmented by income from the "new water" component of the water rate, to be set by the Board. Funds added to this reserve from the water rates shall not be used for any purpose other than to purchase new water or water rights. It is anticipated that other funds will also be added to this reserve. However, the funds initially appropriated to the Reserve for Additional Water (\$2.5 million) and funds from sources other than the water rate may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to the Reserve for Additional Water may be invested in the same manner as other Agency funds, and the earnings thereon shall be credited to the Agency's General Fund.

(d) Rate Stabilization Reserve. A "Rate Stabilization Reserve" is hereby created, to which the Board may appropriate unrestricted Agency revenues. The Rate Stabilization Reserve may be utilized to protect Agency ratepayers from temporary increases in the cost of providing water service, such as fluctuations in the cost of energy, for example. The Agency shall endeavor to maintain the Rate Stabilization Reserve in an amount equal to \$150,000, or approximately 150% of the maximum annual revenue shortfall year identified in

~~the February 2, 2009 water rate study, approximately equal to one-half of the previous year's operational expenses, not including amounts paid to DWR in satisfaction of State Water Contract obligations. This reserve fund is to be augmented by income from the rate stabilization component of the water rate, to be set by the Board. As the initial \$150,000 allocated to this fund as of February 2, 2009 is augmented by funds from water rates, these initial funds shall be allocated to other reserve funds as needed. However, the initial funds appropriated to the Rate Stabilization Reserve may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds added to this reserve from the water rates shall not be used for any purpose other than stabilizing or subsidizing the water rate. However, if at any time the funds accumulated in this reserve fund from the rate stabilization component of the water rate reach the goal of \$150,000, additional funds earmarked for this reserve above \$150,000 shall be allocated to the reserve for new water until such time as the rate stabilization reserve fund is reduced below \$150,000. At that time, revenue from the rate stabilization fund portion of the water rate will again be allocated to the rate stabilization reserve fund until such time as it reaches \$150,000. Funds appropriated to the Rate Stabilization Reserve may be invested in the same manner as other Agency funds, and the earnings thereon shall be credited to the Agency's General Fund.~~

(e) Reserve for Replacements. A "Reserve for Replacements" is hereby created for the Agency's general account, to which the Board may appropriate unrestricted Agency revenues. The Reserve for Replacements may be utilized to replace the Agency's physical plant, as needed. The Agency shall endeavor to maintain the Reserve for Replacements an amount approximately equal to the accumulated amount of depreciation of the Agency's physical plant (not including the State Water Project facilities), as reflected in the annual audit of the Agency presented to the Board each year. However, the funds appropriated to the Reserve for Replacements may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to the Reserve for Replacements may be invested in the same manner as other Agency funds, and the earnings thereon shall be credited to the Agency's General Fund.

(f) Reserve for Unexpected Legal Expenses. A "Reserve for Unexpected Legal Expenses" is hereby created, to which the Board may appropriate unrestricted Agency revenues. The Reserve may be used to pay unexpected legal expenses incurred by the Agency, such as for planned or unplanned litigation, pending litigation, threatened litigation, or other such legal expenses as may be incurred. The Agency shall endeavor to maintain in the Reserve at least \$150,000, not to exceed \$250,000. However, the funds appropriated to the Reserve for Unexpected Legal Expenses may be accessed at any time for any other Agency purpose, upon approval by the Board. Funds appropriated to the Reserve for Unexpected Legal Expenses may be invested in the same manner as other Agency funds, and the earnings thereon shall be credited to the Agency's General Fund.

3. Additional Reserves. In addition to the reserves identified above, the Board may approve the creation of such additional accounts, whether temporary or permanent, as the Board deems necessary or appropriate, by amendment to this resolution or by simple motion. In such event, the Board will identify the purposes for which such additional accounts are created, provide guidance as to the amount which the Agency should endeavor to maintain in each such fund or account, and establish the limits and restrictions pertaining thereto.

4. Annual/Quarterly Reports. Each year/quarter the Agency's General Manager shall provide the Board with a report indicating the beginning and ending balance for each of

the reserve funds or accounts created pursuant to this resolution and the purposes for which expenditures have been made therefrom, and shall make recommendations to replenish or augment fund or account balances as appropriate.

5. Concurrent Adoption of Water Rates Resolution. This Resolution revising the policy for the accumulation of the Agency Reserves is dependent on the concurrent adoption of Resolution No. 2009-3, which establishes wholesale water rates.



**Beaumont-Cherry Valley Water District
Special Board Meeting
April 18, 2018**

Item 2

STAFF REPORT

TO: Board of Directors

FROM: Dan Jagers, General Manager

SUBJECT: **Presentation of Updated San Gorgonio Pass Regional Water Supply Planning Spreadsheet – White Paper No. 6**

Staff Recommendation

No recommendation.

Background

This Staff Report serves as a summary of the presentation that will be given at the April 18, 2018 Engineering Workshop relating to the updated San Gorgonio pass regional water supply planning spreadsheets and the associated White Paper No. 6 created by District Staff to further set forth planning activities related to water needs in the San Gorgonio Pass region.

Since the development of a series of White Papers (1 through 5) by BCVWD discussing imported water supply needs in the San Gorgonio Pass Area in late 2017 and early 2018, the San Gorgonio Pass Water Agency (SGPWA) has initiated a water rate study to identify a potential rate structure to secure imported water supply for the entire Pass Area.

The previous White Papers provided the SGPWA and other interested parties in the Pass Area with a preliminary overview of imported water supply needs. These White Papers were based on BCVWD's planning efforts¹ and SGPWA's 2015 Urban Water Management Plan (UWMP).

BCVWD has now developed a series of spreadsheets that can be utilized by each major water supplier in the SGPWA area to evaluate the impacts of their water supply strategies on their own Beaumont Basin Storage Accounts and assess needed imported water supplies over time. Suppliers can input their data, anticipated development rates on a year by year basis considering their own Water Supply Assessments (WSAs), and project demands using these spreadsheets.

In addition, these updated water demand and supply spreadsheets can be adjusted to include the latest water supply projections on the California Water Fix (CWF) and the Sites Reservoir Project. This set of spreadsheets has been developed for imported water supply planning in the San Gorgonio Pass Area which updates the spreadsheets developed to support BCVWD White Papers 1 through 5. The basic conclusions presented in White Papers 1 through 5 remain essentially the same though the new, updated spreadsheet and the conclusions developed from it provide refinements and allow the water supply agencies to adjust housing startups, build-out years, infill development and commercial/institution EDUs, unit water demands for new and existing housing, and account for conservation for new and existing demands, among other items.

¹ BCVWD's 2013 Potable Water Master Plan, 2015 Urban Water Management Plan, and others



The spreadsheet allows for adjustments to imported water use throughout the study period and provides an annual groundwater storage account balance graphically and automatically updated. The purpose is to allow the agencies to model, on a year by year basis, various imported water purchase and banking strategies *vis-à-vis* available imported water from SGPWA until such time as the planned CWF and Sites Reservoir are operational (2035 or so) or cease to be viable alternatives to water supply opportunities. Adjustments can be made to water demands using conservation factors on new and existing (older) housing units; water supply sources can include groundwater, recharged recycled water (indirect potable reuse), and captured storm water. Beaumont Basin Watermaster redistribution of unused overlie rights and forbearance water are included in the model.

Separate spreadsheet models have been developed for:

- Beaumont-Cherry Valley (ongoing and planned developments)
- City of Banning (Banning Heights Mutual Water Company, High Valleys Water District Butterfield Development, and Rancho San Geronio Development)
- YVWD (Summerwind Ranch Development and Mesa Verde Development)

A demonstration of the analysis performed with the planning spreadsheet will be provided by District Staff at the Engineering Workshop to demonstrate the usefulness of this planning tool and begin dialog related to how these tools might be used by Pass Area Agencies, Districts, and Water Companies as planning tools.

Handout

1. BCVWD Presentation – Updated San Geronio Pass Regional Water Supply Planning Spreadsheet – White Paper No. 6

Report prepared by Kaden Johnsen, Civil Engineering Assistant – April 12, 2018



**Beaumont-Cherry Valley Water District
Special Board Meeting
April 18, 2018**

Item 3

STAFF REPORT

TO: Board of Directors

FROM: Dan Jagers, General Manager

SUBJECT: Discussion of Potential Security Strategies for the Noble Creek Recharge Facility Phase I

Staff Recommendation

Direct staff as desired.

Background

The Noble Creek Recharge Facility, Phase I and Phase 2 is approximately 82 acre site located on the east side of Beaumont Avenue between Cherry Valley Boulevard and Brookside Avenue. Phase I is approximately 28.5 acre and is accessible to the public (vehicle traffic is restricted at the end of every business day) 24 hours a day. Phase 2 is approximately 53.5 acres, consisting of both spreading basins and a 2.0 mg reservoir.

Phase 1 is open to the public from sunrise to sunset. The intent of the BCVWD was to allow day use of the property for community park purposes. The northwest corner of the property is open space, with picnic tables and barbecues. The interior of the recharge facility is also open to vehicle and foot traffic, with pathways among the ponds, more picnic benches, trashcans and a park-like walkway along the edge of Noble Creek.





Summary

During the last few years, both directors and staff have noticed increasing problems with site security, site use, and/or undesirable activity at the Noble Creek facility.

District staff placed large boulders intermittently along the northern edge of the property to help increase site access restrictions after hours, but vehicles are still gaining after-hours entry by moving the boulders.

The Board has asked staff to propose remedies to mitigate the undesirable activity and increase safety at the Recharge Facility Phase I.

Staff believes that some form of fencing or other site restriction may be necessary for this area in order to more securely close the park after hours. Staff recommends use of chain link fencing, wrought iron fencing or possibly block walls. This workshop item presentation will set forth some options that are available to the District and includes handouts that set forth preliminary planning cost estimates for different solutions that might be used. Some areas of concern include site aesthetics considering the setting and the close proximity of the existing white, split rail fencing in place around the ponds.

Gates that allow equipment access and site maintenance will need to be strategically installed and will be operated by staff at park opening and closing times, as is the current procedure.

The northwest triangle of the property is currently unfenced and accessible by vehicle or on foot. New fencing would most likely begin at Point A as shown on Figure 1 located approximately 530 linear feet north of the intersection of Beaumont Avenue and Brookside Avenue, continuing north approximately 2,100 feet to the northeast corner of Beaumont Avenue and Cherry Valley Boulevard, thence eastward to Point B, the existing wrought iron fence enclosing the reservoir, approximately 950 feet to the District's existing wrought iron fence located at the northeast corner of the Phase 1 Recharge Facility, or about 3,050 feet total. (See Figure 1 attached.)



Fiscal Impact

Preliminary options and planning estimates will be presented at the engineering workshop for discussion purposes.

Report prepared by Dan Jaggars, General Manager – April 12, 2018



Figure 1
Noble Creek Recharge Facility Site Map and Proposed Fence Location

