

## **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 Geronio 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 16<sup>th</sup> Memorandum"), and the Kennedy/Jenks Consultants Memorandum dated January 2, 2009, on water reliability ("January 2<sup>nd</sup> 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 16<sup>th</sup> Memorandum and in the January 2<sup>nd</sup> 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.

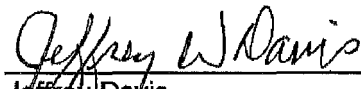


- 12) This Resolution shall become effective immediately ("effective date"), and the wholesale water rates provided herein shall apply to all water delivered from the effective date and thereafter until such time as the rates are changed by action of the Board. It is the intent of the Board that the 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.

  
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Jeffrey Davis  
Secretary of the Board

## EXHIBIT “A”

### FINDINGS

#### SUPPORTING THE ADOPTION OF WHOLESALE WATER RATES

##### I. Introductory Findings

- a. The San Geronio Pass Water Agency (“Agency”) is one of 29 State Water Contractors, and is a special act district formed, existing and exercising its powers and purposes pursuant to specific enactment by the California Legislature. (San Geronio Pass Water Agency Law, Wat. Code-App. §101-1, *et seq.*, hereinafter referred to as the “Agency Act.”). Its boundaries extend through the cities of Calimesa, Beaumont, and Banning and Riverside County areas from Cherry Valley to Cabazon.
- b. The Agency is mandated by the Legislature to import supplemental water and to protect and enhance local water supplies to serve the needs of present and future water users and to sell imported water to local water districts within the Agency service area, and in so doing to give the highest priority to eliminating groundwater overdraft conditions within any agency or district receiving State Water Project (“SWP”) water delivered by the Agency. (Cal. Wat. Code-App. §§ 101-15 & 15.5; *see also Swanson v. Marin Municipal Water Dist.* (1976) 56 Cal.App.3d 512, 524 [water district has a “continuing obligation to exert every reasonable effort to augment its available water supply in order to meet increasing demands”]; *Glenbrook Development Co. v. City of Brea* (1967) 253 Cal.App.2d 267, 277 [“county water district has a mandatory duty of furnishing water to inhabitants within the district’s boundaries.”])
- c. For purposes of implementation of this water rate, the Beaumont Storage Unit (BSU), one of the major groundwater basins in the Agency’s service area, is deemed in overdraft as defined in Agency Ordinance No. 8.
- d. The Agency’s current SWP Table A Amount is 17,300 acre-feet per year (“AFY”). While the Agency Act encourages the Agency to import supplemental water from any source providing the highest quality at the lowest price, currently the Agency has only SWP water as its water supply.

##### II. Cost of Delivery

- a. The common terminology for costs paid 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.”

- b. The terminology “cost of delivery” refers to a limited group of costs falling within the broad definition of “cost of service.” The San Geronio Pass Water Agency’s (“Agency”) costs discussed in the Draft Water Rate Study for San Geronio Pass Water Agency, dated February 2, 2009, are limited to “cost of delivery,” which include costs related to operations, administrative overhead, SBVMWD pass-through, dry year transfers, rate stabilization surplus reserves, new water purchase surplus reserve contributions, and DWR imported water purchases. Dry year transfers operate as a means to ensure water reliability.

### III. Lost Reliability

- a. In 2005, the Department of Water Resources (“DWR”) issued its State Water Project Delivery Reliability Report 2005 (“2005 Reliability Report”), which used a computer simulation model to project long-term reliability of SWP water supply delivery to be 77 percent. Therefore, in 2005, the Agency could expect average annual deliveries of 77 percent of its SWP Table A Amount, or less than 13,500 AFY.
- b. The reliability of SWP deliveries was last fully analyzed by California Department of Water Resources (“DWR”) in its State Water Project Delivery Reliability Report 2007 (2007 Reliability Report). The report estimates SWP delivery reliability based on anticipated regulatory standards, population growth, levels of water conservation and recycling, water transfers, hydrology, and climate change.
- c. The 2007 Reliability Report presents a statistical analysis of SWP delivery reliability using 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 flow targets for the Old River and Middle River. The scenarios also reflect the pumping limitations imposed by Interim Order of the United States District Court for the Eastern District of California to protect the delta smelt until completion of a new Biological Opinion by the United States Fish and Wildlife Service.
- d. The Kennedy/Jenks Memorandum dated January 2, 2009, concerning water supply reliability (“January 2<sup>nd</sup> Memorandum”) recommends that the Agency utilize the most conservative projection from the 2007 Reliability Report of the average annual SWP Table A delivery reliability, which is 63 percent. Substantial evidence supports this recommendation and the Board finds that utilization of 63

percent is appropriate under the current circumstances for the Agency for the following reasons:

- i. There is significant uncertainty in DWR's modeling analysis. This uncertainty is discussed in detail in the 2007 Reliability Report.
- ii. 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).
- iii. In addition to the pumping restrictions imposed to protect the delta smelt, the California Fish and Game Commission imposed new emergency regulations to protect the longfin smelt. The emergency regulations were imposed after the 2007 Reliability Report was issued, and were not included in the modeling scenarios. The SWP operational changes resulting from the emergency regulations are expected to further reduce SWP delivery reliability.
- iv. Additional reductions in long-term SWP delivery reliability are expected as a result of further SWP pumping limitations imposed to protect Delta smelt as part of the implementation of the new Biological Opinion for the Proposed Coordinated Operations of the Central Valley Project (CVP) and SWP which was recently issued by the United States Fish and Wildlife Service. The pumping limitations that will result from the implementation of the new Biological Opinion will be much greater than those previously imposed as an interim remedy by the United States District Court for the Eastern District of California in the legal challenge to the earlier Biological Opinion. The new Biological Opinion was issued after the 2007 Reliability Report was issued, and the resulting SWP pumping limitations from its implementation were not included in the modeling scenarios. Once implemented, these pumping limitations will result in 30% reductions in SWP supply on average, and under dry-year conditions, as much as 50% reductions.
- v. Additional pumping limitations to protect the Fall Run Chinook salmon are expected in 2009. These limitations were also not included in the modeling scenarios, and are expected to further reduce SWP delivery reliability.
- vi. To achieve the most conservative estimated delivery reliability in the 2007 Reliability Report of 63 percent, 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, the Agency is unable to receive and utilize its full SWP Table A Amount. To the extent that the Agency is unable to

maximize receipt and utilization of the SWP water made available, its delivery reliability must be further reduced from 63 percent accordingly.

- e. The Agency currently can expect average annual deliveries of less than 63 percent of its SWP Table A Amount, or less than 11,000 AFY.
- f. The Agency needs to replace the reduced water supply with new water supplies to repair the lost reliability of the SWP.

IV. Relying both on the Kennedy/Jenks Consultants Memorandum dated July 16, 2008, on probable cost of water transfers ("July 16<sup>th</sup> Memorandum"), and on the January 2<sup>nd</sup> Memorandum, the Draft Water Rate Study dated February 2, 2009 ("Study"), concludes that it is reasonable and prudent for the Agency to acquire 10,000 acre-feet of new water supplies for reliability and that the 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 forces. The Board adopts these conclusions from the Study, and finds that the conclusions are supported by substantial evidence for the following reasons:

- a. Recognizing that with annual SWP Table A average delivery reliability at 63 percent, the January 2<sup>nd</sup> Memorandum determines that the Agency will require 10,200 AFY of additional SWP supplies (the equivalent of 6,400 AFY of a firm supply) in order to compensate for the reduction in the annual delivery reliability of its SWP Table A Amount.
- b. The July 16<sup>th</sup> Memorandum utilized the comparable sales method of valuation to determine the expected costs of acquiring additional new water supplies. Three comparable sales were identified, and using the key provisions of the comparable water sales and consideration to current market factors, an economic evaluation of the probable costs of water transfers to the Agency was performed, which was adjusted for present day value. The Memorandum provides an opinion on the probable cost of a water transfer to the Agency, excluding the cost of banking and conveyance, in the range of \$450 to \$550 per AF annually.
- c. By taking the cost range determined in the July 16<sup>th</sup> Memorandum of \$450 to \$550 per AF annually, and assuming an average cost of \$500 per AF, the January 2<sup>nd</sup> Memorandum concludes that the anticipated costs of an additional water supply for the Agency to account for lost SWP Table A delivery reliability is \$3.2 million per year in 2008 dollars.
- d. Using an average cost of \$500 per AF, the January 2<sup>nd</sup> Memorandum concludes that the anticipated costs to secure an additional water supply for the Agency to repair lost SWP Table A delivery reliability would be \$3.2 million per year in 2008 dollars. It is, therefore, reasonable to conclude, given that the current SWP water supply contract between the Agency and DWR will terminate in 2035, and

assuming likely extensions or renewals of that contract, and adjusting to 2008 dollars, that it will cost the Agency at least \$40 million to repair its SWP delivery reliability already lost.

## V. DWR's Pass Through Cost

- a. The largest component of the water rate is DWR's pass through cost, which includes energy and transmission costs, that DWR charges the Agency as part of its water rate under its SWP Contract. The following substantial evidence supports concluding that DWR's energy and transmission related pass through costs will increase in the next few years:
  - i. General inflation will raise costs as raw materials, transportation, and labor costs increase.
  - ii. 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.
  - iii. The least expensive energy sources have already been utilized. 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.
- b. 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. This price differential is due to DWR's lower energy and transmission costs upstream of Cherry Valley Pump Station.

## VI. Agency Operational Expenses

- a. Agency 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.
- b. The Study concludes that it is reasonable to charge 50% of the Operations Manager's salary and benefit cost to revenues collected by the Agency from water

rates. The Board finds that this conclusion is supported by substantial evidence and adopts this conclusion for the following reasons:

- i. The Study's conclusion 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.
  - ii. 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.
- c. For the base year, the Agency's Finance Department estimates the salary and benefit cost of the Operations Manager to be \$132,200.
- d. Assuming 50% of the Operations Manager's costs are paid from revenues collected from rates, the Study concludes that the Agency will need to collect \$10 per acre-foot based on sales of 6,479 acre-feet (or  $50\% \times \$132,200 = \$66,100$  or approximately \$10 per acre-foot based on sales of 6,479 acre-feet). The Agency adopts this conclusion and finds that it is based on substantial evidence.
- e. Budget increases in subsequent years for Operations Manager's costs are largely dependent on industry wide increases in labor costs. The Study recommends that in subsequent years the 50% allocation of the Operations Manager's salary and benefit budget should be escalated at 3.9% annually. The recommendation 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. The Board adopts the Study's recommendation and finds that it is based on substantial evidence.

## VII. Agency Administration Cost

- a. The Agency charges a portion of direct and indirect costs of administrative overhead to revenues collected from water rates. The Study recommends a 5% allocation of the total salary and benefit budget to the water rate, which will result in an approximately \$3.50 per acre-foot water rate charge based on water sales of 6,479 acre-feet in the base year (or  $5\% \times \$455,383 = \$22,769$  or approximately \$3.50 per acre-foot based on water sales of 6,479 acre-feet in the base year). The Board adopts the recommendation and finds that it is supported by substantial evidence for the following reasons:
  - i. 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.

- ii. This amounts to approximately 10% of the SGPWA salary and benefit budget on an annual basis.
  - iii. Since the total percentage 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.
- b. The Study further recommends that as with annual escalations for Operational Expenses discussed above, Administrative Overhead is labor intensive and the same 3.9% escalation rate should, therefore, be used. The Board adopts this recommendation and finds that it is supported by substantial evidence.

#### VIII. SBVMWD Pass Through

- a. To reach the Agency service area, SWP water must be 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 the Agency’s capacity rights.
- b. 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. The results of continuing this allocation would be an approximately \$8 per acre-foot water rate charge based on water sales of 6,479 acre-feet in the base year (or  $50\% \times \$95,206 = \$47,603$ , or approximately \$8 per acre-foot based on water sales of 6,479 acre-feet in the base year). The Board finds the current 50/50 allocation of SBVMWD pass through costs is a reasonable allocation of costs and is based upon substantial evidence, and the Board further finds that this allocation shall continue to be the allocation used by the Agency for SBVMWD pass through costs.
- c. The Study recommends that as with annual escalations for Operational Expenses discussed above, this pass through component is labor intensive and the Agency should use the same 3.9% escalation. The Board adopts the recommendation of the Study and finds that it is supported by substantial evidence.



IX. Dry Year Transfer Program Cost

- a. The Agency has the ability to purchase additional water through an agreement to purchase supplemental water from Yuba County Water District at clearly defined prices. Presently this is the least expensive supplemental water available to SGPWA.
- b. The Study assumes that Yuba water costs will be at the conservative price of \$125 per acre-foot, and that the Agency will annually purchase approximately 200 acre-feet of additional water through the Yuba Dry Year Transfer Program. The Board finds that the assumptions made by the Study with respect to Yuba water costs and annual amount are supported by substantial evidence for the following reasons:
  - i. There are four categories of water in the Yuba Dry Year Transfer Program agreement (*i.e.*, Component 1, Component 2, Component 3, and Component 4) with each category of water having its own specific price per acre-foot. The price depends upon whether that particular year's conditions are considered dry, normal, wet or critical year conditions.
  - ii. The critical year price for water under the agreement for water is \$125 per acre-foot, which is the most expensive price for water.
  - iii. This past year the Agency 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.
- c. Based upon the above, and as the delivery costs attributable to Dry Year Transfers are already included in DWR pass through costs, the Study recommends charging \$3.86 per acre-foot based on water sales of 6,479 acre-feet (or \$125 x 200 acre-feet = \$25,000, or \$3.86 per acre-foot based on water sales of 6,479 acre-feet). The Board adopts this recommendation and finds that it is supported by substantial evidence.

X. The Agency's existing water rate revenues are inadequate to meet the short-term and long-term needs of the Agency's cost of service, including operations, administrative overhead, pass-through costs, dry year transfer costs, rate stabilization surplus reserves and new water purchase surplus reserve contributions.

- a. Revenues from the general fund have been used to subsidize the water rate account to meet any short falls. (p. 8)
- b. The water rates set forth herein are set at a constant rate with the intent that no subsidy from the general fund will be needed. (p. 8)

XI. The Agency's retail customers share common major goals, such as BSU replenishment and long term reliability of water sources.

XII. Need for and Reasonableness of Water Rates

- a. There is a reasonable relationship between the established water rates and the benefit to each retail water purveyor within the Agency's service area, including, but not limited to, the need to ensure water reliability within each retail water purveyor's service area, the need for water rate stabilization, and the need to replenish overdrafted groundwater basins, particularly as a result of drought conditions, increased pumping from the groundwater basin, and uncertainty of imported water.
- b. The water rate set forth in the Resolution does not exceed the funds required to provide the related services, including the estimated reasonable cost to meet operational expenses, avoid subsidies from the general fund, adequately fund water rate reserves, purchase new water, and/or provide the service for which the water rate is being imposed.
- c. The allocation of costs to existing water users to pay for a portion of the costs of repairing and replacing the lost water reliability of the SWP through new water purchases is fair and equitable and will benefit existing water users.
- d. The water rate set forth herein will not be used for any purpose other than that for which the rate is imposed. None of the revenue from the proposed water rates set by this Resolution will be nor shall be used in connection to fund new development.
- e. The purchase of new water, estimated to cost \$40 million will be funded by other sources of revenue in addition to a portion of the water rate set forth herein.
- f. The water rate set forth herein will provide a surplus reserve to accumulate for contribution to a rate stabilization reserve of \$11 per acre-foot of water sold. The rate stabilization fund will be capped at 150% of the maximum annual revenue shortfall year in the five year study, which equates to \$150,000 as discussed in the Study. Any rate stabilization contribution over and above the cap will flow over into the reserve fund for the purchase of new water. (Study, p. 15.)
- g. The water rate set forth herein will provide a surplus reserve to accumulate for contribution to the future purchase of new water, the purchase of rights to new water supplies, or both at the rate of \$22 per acre-foot of water sold. As the rate stabilization contribution reaches over and above the cap of 150% of the maximum annual revenue shortfall year in the five year study, the full \$33 per

acre-foot contribution will flow to the surplus reserve for the purchase of new water. (Study, p. 15.)

### XIII. Surplus Reserves

- a. The rate stabilization surplus reserve will be implemented in order to manage the effects of fluctuations in energy costs, delivery costs, facility maintenance costs and sales volume on the ability of the Agency to meet expenses on an annual basis. The rate stabilization surplus reserves will also be used to meet obligations in dry years.
  - i. Consistent with Resolution No. 2009-2, enacted concurrently with the Resolution and Findings herein, and which rescinds Resolution #2007-16, the rate stabilization fund will be capped at 150% of the maximum annual revenue shortfall year in the five year study, which equates to \$150,000 as discussed in the Study. Any rate stabilization contribution over and above the cap will flow over into the reserve fund for the purchase of new water. (Study, p. 15.)
  - ii. This surplus reserve avoids as much as practical any Agency rate fluctuations that would otherwise result from DWR's variable costs and from fluctuations in sales.
  - iii. This surplus reserve fully complies with the Agency's reserve policy and pursuant to that policy cannot be used for any purpose other than its stated purpose.
- b. As the rate stabilization contribution reaches over and above the cap of 150% of the maximum annual revenue shortfall year in the five year study, the full \$33 per acre-foot contribution will flow to the surplus reserve for the purchase of new water.
- c. The surplus reserve for the purchase of new water will be used for the purchase of new water, the purchase of rights to new water supplies, or both, in order to repair the SWP delivery reliability that has been lost, meet future increased demand from retail agencies and meet groundwater replenishment goals. (Study, pp. 16-17.)
- d. Consistent with Resolution No. 2009-2, enacted concurrently with the Resolution and Findings herein, and which rescinds Resolution #2007-16, the surplus reserve for the purchase of new water may continue to accumulate for contribution together with other Agency funds for the future purchase of new water, the purchase of rights to new water supplies, or both.

- XIV. 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.").
- XV. A surplus reserve for the purchase of new water is complementary to and will assist the Watermaster in fulfilling its duty under the Judgment in *San Timoteo Watershed Management Authority v. City of Banning* (RCSC Case No. RIC 389197) to replenish the Beaumont Storage Unit. This surplus reserve will permit the Agency to secure supplemental water that will be available when needed by the Watermaster.
- XVI. There are other spreading grounds within the Agency service area controlled by other agencies with the authority and capability to spreading water imported by the Agency, and the Agency is reviewing these additional opportunities to spread water at this time.
- XVII. Notwithstanding the foregoing, the Board shall review the wholesale water rate annually, as a part of its budget process, and may increase or decrease the wholesale water rate any time if it determines that an adjustment is necessary.
- XVIII. The Agency only sells water to retail water purveyors and does not sell water to landowners; therefore, the wholesale water rate set forth herein is not a property-related service, and the requirements of Proposition 218 and Government Code section 53750, et. seq., do not apply.
- XIX. Because the procedural and substantive requirements of Proposition 218 and Government Code section 53750, et. seq., do not apply, the Resolution and Findings herein shall become effective immediately.

DAVID  
**TAUSSIG**  
& Associates, Inc.

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**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**  
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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 M1<sup>1</sup> 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.

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<sup>1</sup> 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 Amount<sup>2</sup> capacity in the SWP, which is currently 17,300 acre-ft per year (“AFY”) to bring supplemental water to the SGPWA service area<sup>3</sup>. 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.<sup>4</sup>

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.<sup>5</sup> 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.

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<sup>2</sup> 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 16<sup>th</sup> day of November, 1962, and its subsequent Amendments

<sup>3</sup> 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

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

<sup>5</sup> 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 rates<sup>6</sup>. 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.

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<sup>6</sup> 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 conditions<sup>7</sup>. 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, \$54.1<sup>8</sup> 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 forces<sup>9</sup>. 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

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<sup>7</sup> Draft Supplemental Water Plan by Albert Webb and Assoc., 2008

<sup>8</sup> 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.

<sup>9</sup> 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 overlayers 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 STATION<sup>8</sup>

Fiscal Year	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Water Sales (acre-ft)	6,479	4,000	7,000	8,000	12,000
Water Rate (\$ per acre-ft)	\$ 238.11	\$ 317.00	\$ 317.00	\$ 317.00	\$ 317.00
(annual rate increase)		33.13%	0.00%	0.00%	0.00%
<b>REVENUE</b>					
water sales	\$ 1,542,896	\$ 1,268,000	\$ 2,219,000	\$ 2,536,000	\$ 3,804,000
general fund revenue contribution	\$ 94,126	\$ -	\$ -	\$ -	\$ -
Total Revenue	\$ 1,638,821	\$ 1,268,000	\$ 2,219,000	\$ 2,536,000	\$ 3,804,000
<b>OPERATIONAL EXPENSES:</b>					
SGPWA Operations <sup>1</sup>	\$ 68,100	\$ 68,678	\$ 68,678	\$ 68,678	\$ 68,678
SGPWA Administrative Overhead Allocation <sup>2</sup>					
5% of Total Administrative Overhead <sup>3</sup>	\$ 22,769	\$ 23,657	\$ 24,580	\$ 25,638	\$ 26,534
Salaries	\$ 275,000	\$ 285,725	\$ 298,868	\$ 308,448	\$ 320,476
Payroll Taxes	\$ 18,591	\$ 19,316	\$ 20,089	\$ 20,852	\$ 21,665
Workman's Comp Insurance	\$ 4,000	\$ 4,158	\$ 4,318	\$ 4,466	\$ 4,661
PERS	\$ 103,860	\$ 107,911	\$ 112,119	\$ 116,492	\$ 121,035
Health Insurance	\$ 42,840	\$ 44,511	\$ 46,247	\$ 48,060	\$ 49,924
Dental Insurance	\$ 4,661	\$ 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	\$ 491,598	\$ 510,766	\$ 530,688
SAN BERNARDINO VALLEY MUNICIPAL PASS THROUGH <sup>4</sup>	\$ 47,603	\$ 49,460	\$ 51,388	\$ 53,393	\$ 55,475
CALIF. DEPT. OF WATER RESOURCES PASS THROUGH <sup>5</sup> :					
Energy	\$ 1,326,653	\$ 948,614	\$ 1,659,900	\$ 1,897,029	\$ 3,130,098
Transmission	\$ 96,952	\$ 59,875	\$ 104,781	\$ 119,750	\$ 197,587
Prior Year Adjustments <sup>6</sup>	\$ (36,300)	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 1,387,635	\$ 1,008,389	\$ 1,764,681	\$ 2,016,779	\$ 3,327,685
ADDITIONAL WATER - YUBA DRY YEAR TRANSFER PROGRAM <sup>6</sup>					
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	\$ 264,000	\$ 396,000
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 <sup>7</sup>	\$ 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	\$ 150,000				
Reserves for Purchase of New Water @ \$22/acre-ft <sup>7</sup>	\$ 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	\$ 146,642	\$ 354,215	\$ 661,915	\$ 1,067,915

## 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 \$196.729 for energy and \$14.568 for transmission. Therefore, for example, energy costs in 2008 = \$196.73/acre-ft X 6,479 acre-ft = \$1,274,607.
- 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 depended 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 prorated 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
<b>\$238.11</b>	<b>12.00</b>	<b>100.00%</b>	<b>6,479</b>	<b>\$ 1,542,696</b>

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)	6,479		4,000	
Water Rate (\$ per acre-ft)	\$ 238.11		\$ 317.00	
<b>REVENUE</b>				
water sales	\$ 1,542,698	\$ 238	\$ 1,268,000	\$ 317
general fund revenue contribution	\$ 94,125	\$ 15	\$ -	\$ -
<b>Total Revenue</b>	<b>\$ 1,636,821</b>	<b>\$ 253</b>	<b>\$ 1,268,000</b>	<b>\$ 317</b>
<b>OPERATIONAL EXPENSES:</b>				
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	\$ 47,803	\$ 7	\$ 49,460	\$ 12
CALIF. DEPT. OF WATER RESOURCES PASS THROUGH				
Energy	\$ 1,326,853	\$ 205	\$ 948,514	\$ 237
Transmission	\$ 96,982	\$ 15	\$ 59,875	\$ 15
Prior Year Adjustments	\$ (36,300)	\$ (6)	\$ -	\$ -
<b>Sub Total</b>	<b>\$ 1,387,535</b>	<b>\$ 214</b>	<b>\$ 1,008,389</b>	<b>\$ 252</b>
ADDITIONAL WATER - YUBA DRY YEAR PROGRAM	\$ -		\$ -	
<b>Sub Total</b>	<b>\$ 25,000</b>	<b>\$ 4</b>	<b>\$ 25,000</b>	<b>\$ 6</b>
Rate Stabilization Surplus Reserves @ \$11 max per acre-ft	\$ 29,271	\$ 5	\$ 44,000	\$ 11
Reserves for Purchase of New Water @ \$22/acre-ft	\$ 68,542	\$ 9	\$ 88,000	\$ 22
<b>TOTAL EXPENSES</b>	<b>\$ 1,636,821</b>	<b>\$ 253</b>	<b>\$ 1,307,184</b>	<b>\$ 327</b>
<b>Net Revenue (short fall)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ (39,184)</b>	<b>\$ (10)</b>



## 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 manual<sup>10</sup>. 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.<sup>11</sup> 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).

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

<sup>11</sup> "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)<sup>1</sup>

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 agreement<sup>12</sup> 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

<sup>12</sup> 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 nation's 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 sources<sup>13</sup>, 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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<sup>13</sup> Managing Greenhouse Gas Emissions in California, The Californian Climate Change Center at UC Berkeley, January 2006, Chapter 4, Section 2.3 “Renewable Energy”