



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** July 14, 2015

**TO:** Mayor and Councilmembers

**FROM:** Water Resources Division, Public Works Department

**SUBJECT:** Policy Direction Regarding Acquisition Of Additional State Water Project Water Rights

### **RECOMMENDATION:**

That Council receive a presentation regarding the potential to reacquire Santa Barbara County Suspended Table A Water and direct staff on whether to pursue the opportunity any further.

### **DISCUSSION:**

#### Executive Summary

In 1963, the County of Santa Barbara executed a contract for the delivery of up to 57,700 acre feet per year (AFY) of State Water Project (SWP) Table A water. However, construction of facilities for delivery of the water to Santa Barbara County did not commence until 1991, at which time the water purveyors in Santa Barbara County only contracted for 45,486 AFY of water rights. The remaining 12,214 AFY was suspended and reserved for future re-acquisition within Santa Barbara County.

At this time, the City of Santa Maria is interested in reacquiring the water rights to the remaining 12,214 AFY. As such, all members of the Central Coast Water Authority, including the City of Santa Barbara, have been requested to indicate their interest in reacquiring these water rights so that they can be apportioned appropriately among the interested agencies.

Over the last 10 years, the average deliveries of SWP water have been 44 percent of contract water rights, with deliveries ranging from 5 percent to 67 percent of the contract amounts. In recent drought years, deliveries have been 35 percent in 2013, 5 percent in 2014, and 20 percent in 2015. During this time, the City has received 1,980 AF of allocation out of a maximum of 9,900 AF, if full contract deliveries had been made.

While there is value to having additional allocations when supplies are limited, any additional water rights allocations would be of greatest benefit from a reliability standpoint if the water available in normal to wet years could be stored (or banked) for use in drought years. However, opportunities to increase storage have not been developed for Santa Barbara County water purveyors at this time. It should also be noted that additional costs are associated with the right to store water, and banking water results in additional water losses from the water system. (The water taken out of groundwater storage is typically less than what was put in).

Thus, since banking the additional allocations during normal and wet years is not currently an option, the overall cost of the Table A water rights, increased responsibility for future SWP costs, and lack of reliability of the SWP water deliveries lead staff to recommend against continuing to pursue additional SWP water rights. However, because this is the last unallocated water in the state water project, it is unlikely that there will be a future opportunity to acquire additional SWP water rights.

### Background

The State Department of Water Resources (DWR) has rights for water deliveries through the State Water Project. When an agency contracts with the DWR to receive the water rights, Table A of the contract refers to the maximum annual delivery amount. These Table A contracts are given first priority in allocating deliveries to the various SWP contractors. When insufficient water is available to meet all of the SWP obligations, water is allocated proportional to Table A amounts. Thus, additional water rights would likely result in an increased allocation to Santa Barbara County agencies.

In 1963, the County executed a water supply contract with the DWR for a Table A amount of up to 57,700 AFY from the State Water Project. After a 1979 bond election for construction of in-county water conveyance facilities failed, the County sought financing through agreements with local water purveyors to pay for the County's cost to maintain future water supplies. Contracts with local water purveyors total 45,486 AFY of the 57,700 AFY Table A amount, leaving the remaining 12,214 AFY to be suspended or relinquished. Of the 45,486 AFY, the City's contracted Table A amount is 3,300 AFY.

Payments to DWR for the remaining Table A amount of 12,214 acre feet (AF) were suspended under Amendment 9 of the SWP contract. In a 1987 settlement agreement between the County and the DWR, the DWR granted an option for the County to reacquire all or part of the 12,214 AF suspended in Amendment 9.

The Central Coast Water Authority (CCWA) was formed to manage SWP operations on behalf of its members. An agreement transferring most authorities from the County to CCWA was executed in return for CCWA (and its members) accepting responsibility for all SWP related costs. However, the full assignment of the contract could not be

transferred because the SWP water supply contract with the DWR requires the contracting agency to have taxing ability. As a result, the County must act in certain SWP contract relations.

Over the years, CCWA has pursued reacquisition of the suspended Table A water. The most recent pursuit occurred in 2008 and 2009. However, the request was withdrawn because of financial concerns brought about by the recession.

At the request of the City of Santa Maria, CCWA is currently reinitiating the process of reacquiring the suspended 12,214 AF as an additional drought buffer for those CCWA project participants who wish to participate in the reacquisition.

Staff is requesting direction from Council regarding participation in the next phase of the reacquisition process, which would commit the City to the administrative and legal costs for developing contracts. It would not commit the City to the actual reacquisition, which would be determined at the time of signing a future agreement. The administrative and legal expenses have not been estimated. However, this report analyzes the estimated costs of a potential reacquisition to determine whether further pursuit is warranted.

#### Reliability of Table A Water Deliveries

The existing Coast Branch pipeline, constructed to deliver water to Santa Barbara County, is designed for a capacity of 45,486 AFY. Since there is no physical capacity for the 12,214 AF in the Coastal Branch pipeline, the water would act as a drought buffer to increase the amount of water allocated to CCWA when deliveries are less than 100 percent of the contract.

Table A deliveries are hydrology dependent (primarily dependent on the snow pack), which causes significant variation in the amount of water actually received from year to year. DWR prepares a biannual State Water Project Delivery Capability Report, which provides modeling estimates for the projected Table A deliveries. Based on the DWR's Draft 2015 Report, the average future Table A deliveries are projected to range between 43 percent and 69 percent. This is based on a number of factors, such as environmental needs and conveyance infrastructure. With alternative conveyance infrastructure (known as the Twin Tunnels Project), as proposed in the Bay Delta Conservation Plan (BDCP), average Table A deliveries are estimated on the higher end at 69 percent.

Over the last 10 years, the average Table A deliveries has been 44 percent of contract, ranging from 5 percent to 67 percent. In recent drought years, the Table A deliveries were 35 percent in 2013, 5 percent in 2014, and 20 percent in 2015. During this time, the City received a total Table A supply of 1,980 AF (out of 9,900 AF max, based on a contract amount of 3,300 AFY over a 3-year period). Because of its limited availability

during droughts, any additional Table A water would have the greatest reliability benefit if the water that is delivered in normal to wet years could be stored (or banked) for use in drought years. However, a banking opportunity to increase storage has yet to be developed in terms of feasibility and cost.

Cost of Additional Table A Water

While the actual terms of acquisition have yet to be negotiated, preliminary estimates of a one-time acquisition cost are \$2,550/AF, plus fixed annual costs of \$150/AF. These costs do not include the variable cost to convey or treat the water.

For the purpose of analysis, a proposed acquisition of 3,000 AFY of suspended Table A water is evaluated for the City. This would result in a one-time cost of \$7,650,000. Assuming this amount is financed over 10 years, with a 6 percent interest rate, the annual payment would be approximately \$1 million. Annual fixed expenses would be \$150/AFY X 3000 AFY = \$450,000. Total annual costs for 10 years would be \$1.45 million. Assuming an average Table A delivery reliability of 50 percent (based on assumptions of the Long Term Water Supply Plan), the City would receive an average annual yield of 1,500 AFY, at an average cost of \$967/AF.

Annual Cost to Acquire (based on 10-year loan at 6%)	Annual Fixed Costs to DWR (3,000 AF at \$150/AFY)	Total Annual Costs	Projected Average Yield (based on 50% average delivery)	Unit Cost, \$/AF
\$1,000,000	\$450,000	\$1,450,000	1,500 AF	\$967

An important consideration with acquiring Table A water is that it increases the City's proportional share of future State Water Project costs, including any project to fix issues related to water flow through the Delta and other DWR expenses, which are currently unknown. This makes it difficult to quantify the true long-term expense of acquiring additional Table A water. In addition, the Water Fund may not have the capacity to finance the \$7.65 million one-time cost through conventional debt (e.g., revenue bonds) without further increases to water rates, and the use of reserves to this degree may not be advisable.

Comparison of Additional Table A with Short-Term Water Purchases

As discussed above, preliminary estimates suggest that an additional Table A contract of 3,000 AF could be purchased for \$967/AF, with an average yield of 1,500 AFY and a 3-year drought yield of 1,800 AF (based on 2013-2015). In comparison, the City was able to secure short-term water purchases of 7,203 AF in 2014-2015 for a total of \$4.5 million, resulting in a unit purchase price of roughly \$625/AF. Therefore, the unit cost of additional Table A water could be more expensive than the recent water purchases. It

should be noted that there is no guarantee that the City will be able to secure future water purchases when needed. This is a function of water availability and price.

Recommendation

Staff recommends discontinuing the pursuit of additional Table A allocation.

The limited reliability of Table A water during droughts, compounded by the current limitations on the ability to store SWP water for times of drought, and unknown issues related to future SWP costs such as the Twin Tunnels Project, all lead staff to recommend that the City instead pursue short-term water purchases, as needed.

If it is desirable to increase imported water deliveries in the future (e.g., for a groundwater banking program), the City could pursue short-term or long-term water purchases in normal to wet years, when the purchase price is anticipated to be significantly less expensive. It should be noted that groundwater storage generally involves additional delivery costs and water losses.

**BUDGET/FINANCIAL INFORMATION:**

The Fiscal Year 2016 budget does not include the cost to acquire or pursue additional Table A water. Any costs would need to be funded by Water Fund Reserves or through debt financing.

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**SUBMITTED BY:** Rebecca J. Bjork, Public Works Director

**APPROVED BY:** City Administrator's Office



# Suspended Table A



City Council  
July 14, 2015



# Purpose

- ◆ Receive policy direction regarding pursuit of additional water rights from the State Water Project

# Overview

- ◆ State Water Project (SWP) Overview
- ◆ SWP Reliability
- ◆ Suspended Table A Cost
- ◆ Comparison with Water Purchases
- ◆ Recommendation





# SWP Overview

- ◆ Constructed 1960s
- ◆ 29 State Water Project Contractors
  - 25 Million People
  - 750,000 Acres of Farmland
- ◆ Total contracts of ~4.2 Million AFY



# Lake Oroville



# 444 Mile Aqueduct



# Coastal Branch





# Santa Barbara County

- ◆ County contracted with State DWR for up to 57,700 AFY in 1963
- ◆ Coastal Branch constructed 1991-1997
  - SB water purveyor contracts total 45,486 AFY
  - City's portion currently 3,300 AFY
  - Remaining 12,214 AFY was suspended, with option to re-acquire



# Acquisition Opportunity

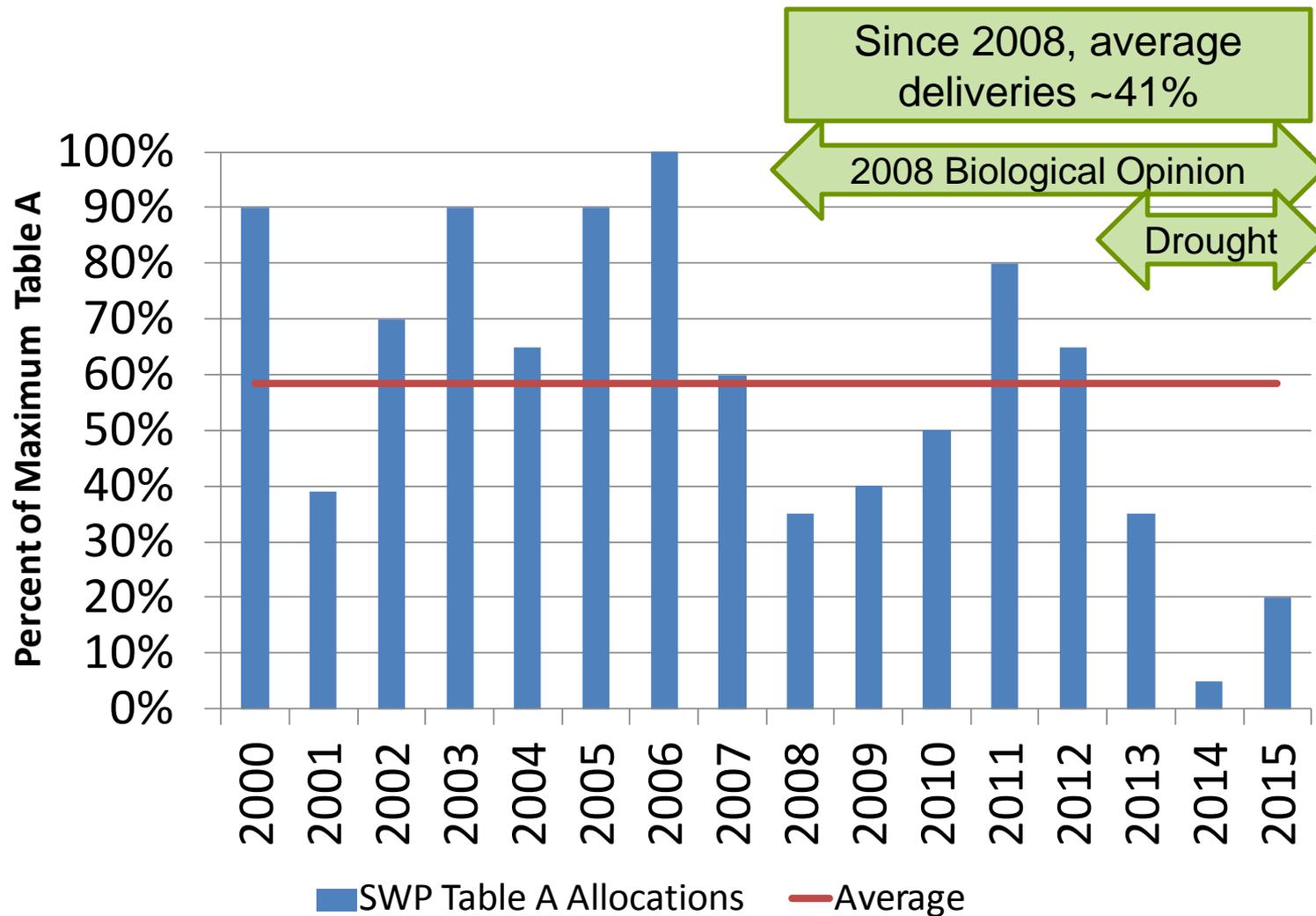
- ◆ All CCWA members requested to indicate level of interest
- ◆ Expressing interest commits to admin/legal expenses for developing contracts
- ◆ Actual acquisition decided at later time; requires County Board of Supervisors approval



# Coastal Branch Capacity

- ◆ Capacity designed for 45,486 AFY
- ◆ No capacity for additional 12,214 AFY in wet years
- ◆ Additional water is “drought buffer” when allocations are less than 100%

# Historical SWP Table A Reliability



# State Water Delivery Challenges

- ◆ Salinity Management
- ◆ Climate change
  - Increased variability in flood and droughts
  - Sea level rise affecting salinity levels in Delta
- ◆ Protection of endangered and threatened fish species (e.g. Delta smelt)
- ◆ Catastrophic Levee Failure

# California Water Fix & EcoRestore

- ◆ [www.BayDeltaConservationPlan.com](http://www.BayDeltaConservationPlan.com)
- ◆ Draft EIR/EIS released July 10, 2015
- ◆ Water supply delivery upgrades currently estimated at \$15 billion

# Projected Reliability

- ◆ DWR State Water Project Delivery Capacity Report, 2015 Draft

Time Period	Percent Delivery
Modeled Current Condition Average (1922-2003)	62%
Modeled Future Condition Average (1922-2003)	43-69%

- ◆ Assume future deliveries of 50%, consistent with 2011 Long Term Water Supply Plan



# Suspended Table A

- ◆ For 3,000 AFY Contract
  - 1,500 AFY long-term average
  - 1,800 AF 3-year drought yield (2013-2015)

# Suspended Table A Cost (Preliminary)

- ◆ Acquisition Cost
  - \$31 million for 12,214 AF ~ \$2,550/AF
  - \$7.65 million for 3,000 AF to City
  - Annual debt payment = \$1.0 million  
(assumes 10-year loan at 6% interest)
- ◆ Annual fixed cost = \$450K (\$150/AF for 3,000 AF)
- ◆ \$1.45 million annual obligation
  - Owed regardless of how much water is used

# Suspended Table A Cost (Preliminary)

- ◆ Unit Cost = \$967/AF for 1,500 AFY average
- ◆ Does not include variable costs
- ◆ Does not account for increased proportional share of future State Water Project fixed costs



# City Water Purchases

- ◆ Spot Market Purchases in 2014-2015
- ◆ Drought Yield: 7,203 AF
- ◆ Cost
  - Purchase Cost: \$4.5 million
  - Unit Cost = \$625/AF
  - Does not include variable cost
- ◆ Future availability and price uncertain

# Preliminary Comparison

Factor	Suspended Table A	Water Purchases
<b>Yield</b>		
Drought Yield, AFY (2013-2015)	1,800	7,200
Long-term Yield, AFY	1,500 (average)	As needed/ available
<b>Cost</b>		
Annual Obligation	\$1.45 million	\$0
Unit Cost*, \$/AF	\$967 (average)	\$625
Increase Proportional Share of Future SWP Costs	Yes	No

*\*Does not include variable cost*

The background of the slide is a collage of two images. On the left, two construction workers wearing hard hats and safety vests are working on a site. On the right, a man in a white lab coat is looking down at something in a laboratory setting.

# Recommendation

- ◆ Discontinue further pursuit of Suspended Table A