SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue, Beaumont, CA
Board of Directors Meeting
Agenda
March 6, 2017 at 6:00 p.m.
(Meeting begins one hour earlier than usual starting time).

1. Call to Order, Flag Salute, and Roll Call

2. Invocation

3. Adoption and Adjustment of Agenda

4. Public Comment: Members of the public may address the Board at this time concerning items relating to any matter within the Agency's jurisdiction. To comment on specific agenda items, please complete a speaker's request form and hand it to the board secretary.

5. Consent Calendar: If any board member requests that an item be removed from the Consent Calendar, it will be removed so that it may be acted upon separately.

A. Approval of the Minutes of the Regular Board Meeting, February 21, 2017* (Page 2)
B. Approval of the Minutes of the Finance and Budget Workshop, February 27, 2017,* (Page 6)
C. Approval of the Finance and Budget Workshop Report, February 27, 2017* (Page 8)

6. Reports:

A. General Manager's Report
    1. Operations Report
    2. General Agency Updates
B. General Counsel Report
C. Directors' Reports

7. New Business:

A. Public Hearing on Draft Urban Water Management Plan* (Page 29)
B. Status Report on Facility Capacity Fee – History of Adoption and Efforts to Collect Fee through Cities and Retailers* (Page 114)
C. Consideration and Possible Action of Invocation Policy* (Page 170)

8. Topics for Future Agendas

9. Announcements:

A. Engineering Workshop, March 13, 2017 at 4:00 p.m.
B. Regular Board Meeting, March 20, 2017 at 7:00 p.m.
C. San Gorgonio Pass Regional Water Alliance, March 22, 2017
    1. IRWMP at 4:30 p.m. – Banning City Council Chambers
    2. Regular Meeting at 5:30 p.m. – Banning City Council Chambers

10. Adjournment

***Information included in Agenda Packet**

(1) Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the Agency's office at 1210 Beaumont Avenue, Beaumont during normal business hours. **(2)** Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Agency's office, located at 1210 Beaumont Avenue, Beaumont, California 92223, during regular business hours. When practical, these public records will also be made available on the Agency's Internet Web site, accessible at: www.sgpwa.com **(3)** Any person with a disability who requires accommodation in order to participate in this meeting should telephone the Agency (951 845-2577) at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation.

SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue, Beaumont, California 92223
Minutes of the
Board of Directors Meeting
February 21, 2017

Directors Present: David Fenn, President
Ron Duncan, Vice President
Lenny Stephenson, Treasurer
Blair Ball, Director
David Castaldo, Director
Stephen Lehtonen, Director
Michael Thompson, Director

Staff Present: Jeff Davis, General Manager
Thomas Todd, Finance Manager
Cheryle Rasmussen, Executive Assistant
Jeff Ferre, General Counsel

1. **Call to Order, Flag Salute, Moment of Silence and Roll Call:** The meeting of the San Gorgonio Pass Water Agency Board of Directors was called to order by Board President David Fenn at 7:00 p.m., February 21, 2017 in the Agency Boardroom at 1210 Beaumont Avenue, Beaumont, California. Director Lehtonen led the Pledge of Allegiance to the flag. President Fenn requested a moment of silence. A quorum was present.

2. **Adoption and Adjustment of Agenda:** *President Fenn asked if there were any adjustments to the agenda.* There being none the agenda was adopted as published.

3. **Public Comment:** *President Fenn asked if there were any members of the public that wished to make a public comment on items that are within the jurisdiction of the Agency.* There were no other members of the public that wished to comment at this time.

4. **Consent Calendar:**
   A. Approval of the Minutes of the Regular Board Meeting, February 6, 2017
   B. Approval of the Minutes of the Engineering Workshop, February 13, 2017

   Director Stephenson made a motion, seconded by Director Duncan, to adopt the consent calendar as presented. Motion passed 7-0.

5. **Reports:**

A. General Manager's Report:

(1) Operations Report: (a) SWP Water Deliveries: The Agency delivered a total of 157 acre-feet to the Noble Creek connection, so far this month. **(b)** Deliveries of 10 cfs are being made to the Noble Creek connection while Beaumont Cherry Valley Water District does maintenance on their facility.

(2) Report on Oroville Spillway: General Manager Davis provided an in-depth report on the damage that has taken place on the Lake Oroville concrete spillway and the usage of the emergency spillway and its erosion. He provided a slide presentation that showed the damage that has occurred to the concrete spillway. He informed the

Board that the dam is under the jurisdiction of FERC and that DWR owns and operates it. The flood control operations are overseen by the Army Corps of Engineers. The dam has multiple functions, water conservation, recreation, and flood control. State Water Contractors are responsible for water conservation and recreation costs. The spillway is not part of the dam. Spillways are to prevent dams from overtopping in an uncontrolled manner. General Manager Davis provided a timeline of the recent events that took place just prior to the emergency evacuation, during the evacuation and post-evacuation. Oroville Dam has passed all annual and independent inspections regarding the adequacy, stability, and structural integrity of the facilities. Currently, the cause of the damage to the concrete spillway is unknown. DWR has begun repairs to the erosion areas below the emergency spillway. The media has erroneously reported that SWC have stated that it would be too expensive to armor this and we don't want to do this. Key Points:

- The gated spillway, once damaged, has continued to operate without any significant further damage, despite high flows.
- The earth above the emergency spillway did erode; however that does not mean that the spillway would fail if it's continued to be used.
- This should not have any impact on our water supply for the year – we are currently getting our water out of the San Luis Reservoir, not Lake Oroville.

(3) General Agency Updates: (1) General Manager Davis stated that this looks like this will likely be the wettest year on record in California. Northern California got hit with three storms this past weekend. (2) Terry Erlewine is retiring from State Water Contractors Inc. He will be replaced with Jennifer Pierre, a fish biologist. (3) Riverside County Water Task Force Speaker Series will be held this Friday morning at 7:30 a.m. General Manager Davis encouraged the board members to attend.

B. General Counsel Report: (a) General Counsel Jeff Ferré deferred from reporting

C. Directors Reports: (1) Director Duncan reported that he attended the Banning Chamber Sunrise Breakfast (changed to once every other month) and the City of Banning Council meeting. Director Duncan spoke at the Banning Rotary on water with forty people in attendance. **(2) Director Fenn** reported on the City of Beaumont Council meeting that he attended.

6. New Business:

A. Public Hearing on Draft Urban Water Management Plan: A staff report and a copy of the Draft Urban Water Management Plan were included in the agenda packet. General Counsel Ferre stated that the Agency's consultant Mary Lou Cotton is unable to attend tonight's meeting due to storms up north; Ms. Cotton lives in Reno Nevada. The Draft UWMP is her work product and she has a responsibility to present and answer any questions from the board and the public. To ensure that everyone hears the same presentation from the person that developed the UWMP it is recommended that this item be continued to the March 6, 2017 Board meeting. The Agency will continue with tonight's Public Hearing and has met the legal requirements to do so. He recommended opening the Public Hearing, calling the Public Hearing to order, and receiving and oral or written comments. Afterward the Public Hearing it is recommended that a motion be made to continue the Public Hearing to March 6th in order to provide more opportunities for the same, and to different people, to provide public comment. (*President Fenn opened the Public Hearing at 7:47 p.m.)* President

Fenn requested public comment. Michael Thornton (City of Calimesa, Engineer) requested to speak. Mr. Thornton made comment that that the City of Calimesa is faced with a number of challenges and one of the significant challenges is growth. In order to be able to grow the city needs water. The City was pleased during its review of the UWMP that it indicates a plan to meet growth projections from Yucaipa Valley Water District. Mr. Thornton wanted to make it clear that the City is working on the water issues; however the developers are running out of patience. The City has been in a non-progress mode for almost a year with two large developers. He asked that the Board pass onto staff the importance to work out an agreement with YVWD, so that those projects have a path forward. President Fenn called upon Eric Fraser (BCVWD General Manager) for his public comment. Mr. Fraser stated that the District provided written comment dated February 14th, and that he hoped that the Board would consider those issues that had been identified in that letter. One of the primary concerns is some of the estimates that were utilized, not taking into account the actual water that is needed to meet the demands. The Plan as drafted reflected the water that is delivered to the District. During stated period of time there was limited availability of water, therefore it does not really reflect the actual amount of demand that the District has, the District ended up using stored basin water to meet the actual demands. President Fenn requested if there were any other comments from the public. There being none President Fenn asked if there is a motion to continue the Public Hearing to March 6th. Director Duncan made a motion, seconded by Director Castaldo, to continue the Public Hearing on the Draft Urban Water Management Plan to March 6, 2017. Motion passed 7-0. President Fenn gave instruction to staff to call the meeting at 6:00 p.m. on March 6th. President Fenn suspended the Public Hearing at 7:52 p.m.

B. Consideration and Possible Action of USGS Program Letter. A staff report and related material to the Joint Funding Agreement 16WSCA600096710_A1 were included in the agenda packet. General Manager Davis stated that the USGS Program letter was discussed at length at the last Engineering workshop. This is continuation of work that has been done for the Agency over the course of a number of years. This is work that the Agency has committed to do under the region's Maximum Benefit Standards, as well as data that is included in the Agency's Annual Water Conditions Report. At the Engineering meeting the Board did not express any concerns about signing the agreement. Most of the work will be done during the next fiscal year. Director Stephenson made a motion, seconded by Director Duncan to approve the USGS Program Letter. Motion passed 7-0.

C. Further Discussion and Possible Action regarding Invocation Policy (Requested by Director Thompson) President Fenn turned the discussion over to Director Thompson. Director Thompson stated that he contacted 22 local and governmental entities to inquire what their policy was on an invocation. He explained that a moment of silence is typically held for grieving or in remembrance of. He questioned who we were grieving when we are observing the "Moment of Silence". Director Thompson reported that most cities and water districts do an invocation. He also stated that Metropolitan has an invocation as well as an invocation policy. Director Thompson recommended that the Agency move away from the "Moment of Silence" and invoke an Invocation policy. General Counsel Ferre reiterated that his legal concern still stands, however it is up to the board to make this decision as the policymakers. Director Thompson made the point that even Congress, State Assembly, and the White House prays without repercussion. Director Thompson made a motion, seconded by Director Duncan to remove the Moment of Silence and move in the direction of having an

invocation in the form of a prayer, prior to the meetings. Director Stephenson stated that before he votes for something he would want to see a policy in writing. He asked that Director Thompson draft a policy to present to the Board at a future meeting. Director Thompson rescinded his motion, Director Duncan was in agreement. Director Thompson made a motion, seconded by Director Duncan to remove the Moment of Silence and to present the Board with a written policy at the March 6th Board meeting for possible consideration and action. Motion passed 7-0. Director Castaldo made a motion, seconded by Director Duncan, to include an invocation after the Pledge of Allegiance until an invocation policy has been developed. Motion passed 6-1, with Director Stephenson opposed.

7. Topics for Future Agendas: Review of Capacity Fee Agreement, UWMP, Wheeling Policy, Desalination, and Beaumont Avenue Recharge Facility.

8. Announcements

A. San Gorgonio Pass Regional Water Alliance, February 22, 2017
   1. IRWMP at 4:30 p.m. – Banning City Council Chambers
   2. Regular Meeting at 5:30 p.m. – Banning City Council Chambers
B. Finance and Budget Workshop, February 27, 2017 at 4:00 p.m.
C. Regular Board Meeting, March 6, 2017 at 7:00 p.m.

9. Adjournment **Time: 8:13 p.m.**

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Jeffrey W. Davis, Secretary of the Board

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SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue
Beaumont, California 92223
Minutes of the
Board Finance and Budget Workshop
February 27, 2017

Directors Present: David Fenn, President
Ron Duncan, Vice President
Lenny Stephenson, Treasurer
Blair Ball, Director (arrived at 4:20 pm)
David Castaldo, Director
Steve Lehtonen, Director
Mike Thompson, Director

Staff and Consultants Present:
Jeff Davis, General Manager
Tom Todd, Jr., Finance Manager

1. **Call to Order, Flag Salute and Roll Call:** The Finance and Budget workshop of the San Gorgonio Pass Water Agency Board of Directors was called to order by Treasurer Lenny Stephenson at 4:00 p.m., February 27, 2017, in the Agency Conference Room at 1210 Beaumont Avenue, Beaumont, California. President Fenn led the Pledge of Allegiance to the flag. A quorum was present.

2. **Adoption and Adjustment of Agenda**: The agenda was adopted as published.

3. **Public Comment:** No members of the public requested to speak at this time.

4. **New Business:**
   A. Ratification of Paid Invoices and Monthly Payroll for January, 2017 by Reviewing Check History Reports in Detail: After review and discussion, a motion was made by President Fenn, seconded by Director Duncan, to recommend that the Board ratify paid monthly invoices of $1,387,210.71 and payroll of $33,470.83 for the month of January, 2017, for a combined total of $1,420,681.54. The motion passed 6 in favor, no opposed, with Director Ball not yet present.

   B. Review Pending Legal Invoices: After review and discussion, a motion was made by Director Duncan, seconded by Director Lehtonen, to recommend that the Board approve payment of the pending legal invoices for January, 2017. The motion passed 6 in favor, no opposed, with Director Ball not yet present.

   C. Review of January, 2017 Bank Reconciliation: After review and discussion, a motion was made by Director Duncan, seconded by Director Thompson, to recommend that the Board acknowledge receipt of the Wells Fargo bank reconciliation for January, 2017 as presented. The motion passed 6 in favor, no opposed, with Director Ball not yet present.

D. Review of Budget Report for January, 2017: After review and discussion, a motion was made by Director Castaldo, seconded by Director Duncan, to recommend that the Board acknowledge receipt of the Budget Report for January, 2017. The motion passed 6 in favor, no opposed, with Director Ball not yet present.

E. Review of Resolution 2008-03 Establishing Guidelines for Compensation of Directors: General Manager Jeff Davis introduced the subject by reviewing the history of Board decisions about director compensation. This item was presented as a review for the benefit of new Board members. No action was taken.

F. Review of Board Travel and Reimbursement Policy. General Manager Davis introduced the subject by referring to the policy contained in the agenda packet. This item was also presented as a review for the benefit of new Board members. No action was taken.

5. **Announcements:**
   A. Regular Board Meeting, March 6, 2017. 6:00 pm **(Note time change)**
   B. Engineering Workshop, March 13, 2017, 4:00 pm

6. **Adjournment:** The Finance and Budget workshop of the San Gorgonio Pass Water Agency Board of Directors was adjourned at 5:17 pm.

Draft - Not Approved

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Jeffrey W. Davis, Secretary of the Board

Finance and Budget Workshop Report

From Treasurer Lenny Stephenson, Chair of the Finance and Budget Committee

The Finance and Budget Workshop was held on February 27, 2017. The following recommendations were made:

1. The Board ratify payment of Invoices of $1,387,210.71 and Payroll of $33,470.83 as detailed in the Check History Report for Accounts Payable and the Check History Report for Payroll for January, 2017 for a combined total of $1,420,681.54

2. The Board authorize payment of the following vendor's amounts:

Best, Best & Krieger LLP	$26,134.89

3. The Board acknowledge receipt of the following:
   A. Wells Fargo bank reconciliation for January, 2017
   B. Budget Report for January, 2017

SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Ave, Beaumont, CA 92223
Board Finance & Budget Workshop
Agenda
February 27, 2017, at 4:00 p.m.

1. **Call to Order, Flag Salute**

2. **Adoption and Adjustment of Agenda**

3. **Public Comment**
   Members of the public may address the Board at this time concerning items not on the agenda. To comment on specific agenda items, please complete a speaker's request form and hand it to the Board secretary.

4. **New Business (Discussion and possible recommendations for action at a future regular Board meeting)**
   A. Ratification of Paid Invoices and Monthly Payroll for January, 2017 by Reviewing Check History Reports in Detail*
   B. Review of Pending Legal Invoices*
   C. Review of January, 2017 Bank Reconciliation*
   D. Review of Budget Report for January, 2017*
   E. Review of Resolution 2008-03 Establishing Guidelines for Compensation of Directors
   F. Review of Board Travel and Reimbursement Policy

5. **Announcements**
   A. Regular Board Meeting, March 6, 2017, 7:00 pm
   B. Engineering Workshop, March 13, 2017, 4:00 pm

6. **Adjournment**

*Information Included In Agenda Packet

1. Materials related to an item on this agenda submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the Agency's office at 1210 Beaumont Ave., Beaumont, CA 92223 during normal business hours. 2. Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection at the Agency's office, during regular business hours. When practical, these public records will also be available on the Agency's Internet website, accessible at http://www.sgpwa.com. 3. Any person with a disability who requires accommodation in order to participate in this meeting should telephone the Agency (951-845-2577) at least 48 hours prior to the meeting to make a request for a disability-related modification or accommodation.

San Gorgonio Pass Water Agency
Check History Report
January 1 through January 31, 2017

ACCOUNTS PAYABLE

Date	Number	Name	Amount
01/04/2017	118273	ACWA JPIA	958.00
01/04/2017	118274	AT&T MOBILITY	254.48
01/04/2017	118275	BEAUMONT-CHERRY VALLEY WATER DISTRICT	419.20
01/04/2017	118276	BDL ALARMS, INC.	78.00
01/04/2017	118277	CALIFORNIA SECRETARY OF STATE	390.00
01/04/2017	118278	ERNIE & SONS HEATING PLUMBING A/C	1,847.00
01/04/2017	118279	JOHN R. JETER	381.05
01/04/2017	118280	OFFICE SOLUTIONS	93.45
01/04/2017	118281	CHERYLE M. RASMUSSEN	162.96
01/04/2017	118282	SOUTHERN CALIFORNIA EDISON	139.53
01/04/2017	118283	UNDERGROUND SERVICE ALERT	10.50
01/04/2017	118284	UNLIMITED SERVICES BUILDING MAINT.	295.00
01/04/2017	118285	VALLEY OFFICE EQUIPMENT, INC.	148.47
01/04/2017	118286	WASTE MANAGEMENT INLAND EMPIRE	94.80
01/13/2017	118287	CALPERS RETIREMENT	4,458.02
01/13/2017	118288	CALPERS 457-SIP	1,150.00
01/17/2017	118289	ACWA BENEFITS	748.93
01/17/2017	118290	ALBERT WEBB ASSOCIATES	402.50
01/17/2017	118291	BEST BEST & KRIEGER	12,906.43
01/17/2017	118292	JEFFREY W. DAVIS	307.36
01/17/2017	118293	RONALD A. DUNCAN	227.99
01/17/2017	118294	DAVID L. FENN	335.00
01/17/2017	118295	FRONTIER COMMUNICATIONS	1,202.15
01/17/2017	118296	GOPHER PATROL	48.00
01/17/2017	118297	INCONTACT, INC.	79.47
01/17/2017	118298	JACK'S ART & FRAMING	553.65
01/17/2017	118299	ROY McDONALD	4,287.50
01/17/2017	118300	PETTY CASH	78.77
01/17/2017	118301	THE RECORD-GAZETTE	424.80
01/17/2017	118302	SINGER LEWAK - AHERN ADCOCK DEVIL.IN	6,220.82
01/17/2017	118303	SOUTHERN CALIFORNIA GAS	210.85
01/17/2017	118304	MICHAEL D. THOMPSON	454.00
01/17/2017	118305	THOMAS W. TODD, JR.	546.43
01/17/2017	118306	U. S. GEOLOGICAL SURVEY	51,172.89
01/17/2017	118307	WATER RESOURCES CONSULTING	3,465.04
01/17/2017	118308	WELLS FARGO REMITTANCE CENTER	2,826.22
01/24/2017	118309	CALPERS HEALTH	7,746.27
01/24/2017	118310	KENNEDY JENKS CONSULTANTS	2,897.70
01/24/2017	118311	MATTHEW PISTILLI LANDSCAPE SERVICES	325.00
01/24/2017	118312	PROVOST & PRITCHARD	1,128.00
01/24/2017	118313	SOUTHERN CALIFORNIA EDISON	161.11
01/24/2017	118314	VALLEY OFFICE EQUIPMENT, INC.	192.28
01/27/2017	118315	AT&T MOBILITY	255.91
01/27/2017	118316	CUSTOM TROPHIES & U-NEEK AWARDS	26.13
01/29/2017	118317	CALPERS RETIREMENT	4,703.39
01/29/2017	118318	CALPERS 457-SIP	1,150.00
01/29/2017	118319	STANDARD INSURANCE COMPANY	436.03

San Gorgonio Pass Water Agency
Check History Report
January 1 through January 31, 2017

ACCOUNTS PAYABLE (CON'T)

Date	Number	Name	Amount
01/13/2017	571226	EMPLOYMENT DEVELOPMENT DEPARTMENT	1,084.16
01/13/2017	541007	ELECTRONIC FEDERAL TAX PAYMENT SYSTEM	6,170.49
01/29/2017	543395	EMPLOYMENT DEVELOPMENT DEPARTMENT	1,190.06
01/29/2017	586131	ELECTRONIC FEDERAL TAX PAYMENT SYSTEM	7,756.92
01/14/2017	900130	DEPARTMENT OF WATER RESOURCES	335,811.00
01/31/2017	900131	DEPARTMENT OF WATER RESOURCES	918,797.00
		TOTAL ACCOUNTS PAYABLE CHECKS	1,387,210.71

PAYROLL

Date	Number	Name	Amount
01/12/2017	801313	JEFFREY W. DAVIS	4,429.92
01/12/2017	801314	KENNETH M. FALLS	3,102.17
01/12/2017	801315	CHERYLE M. RASMUSSEN	2,117.51
01/12/2017	801316	THOMAS W. TODD, JR.	3,286.77
01/28/2017	801317	BLAIR M. BALL	934.32
01/28/2017	801318	DAVID J. CASTALDO	934.32
01/28/2017	801319	JEFFREY W. DAVIS	4,426.15
01/28/2017	801320	RONALD A. DUNCAN	1,167.90
01/28/2017	801321	KENNETH M. FALLS	3,696.62
01/28/2017	801322	DAVID L. FENN	1,167.90
01/28/2017	801323	STEPHEN J. LEHTONEN	467.17
01/28/2017	801324	CHERYLE M. RASMUSSEN	2,117.51
01/28/2017	801325	LEONARD C. STEPHENSON	1,167.90
01/28/2017	801326	MICHAEL D. THOMPSON	1,167.90
01/28/2017	801327	THOMAS W. TODD, JR.	3,286.77
		TOTAL PAYROLL	33,470.83
		TOTAL DISBURSEMENTS FOR JANUARY, 2017	1,420,681.54

SAN GORGONIO PASS WATER AGENCY

New Vendors List

February, 2017

Vendor - Name and Address	Expenditure Type
Dan Lyman construction, Inc. 346 Sout 'l' Street', San Bernardino, CA 92410	Building Maintenance

SAN GORGONIO PASS WATER AGENCY

LEGAL INVOICES
ACCOUNTS PAYABLE INVOICE LISTING

VENDOR	INVOICE NBR	COMMENT	AMOUNT
BEST, BEST & KRIEGER	170131	LEGAL SERVICES JAN17	26,134.89
TOTAL PENDING INVOICES FOR JANUARY 2017			26,134.89

SAN GORGONIO PASS WATER AGENCY
BANK RECONCILIATION
January 31, 2017

BALANCE PER BANK AT 01/31/2017 - CHECKING ACCOUNT			233,778.88
LESS OUTSTANDING CHECKS			
CHECK NUMBER	AMOUNT	CHECK NUMBER	AMOUNT
118315	255.91	118318	1150.00
118317	4703.39	118319	436.03
	4,959.30		1,586.03
TOTAL OUTSTANDING CHECKS			(6,545.33)
BALANCE PER GENERAL LEDGER			227,233.55
BALANCE PER GENERAL LEDGER AT 12/31/2016			464,624.66
CASH RECEIPTS FOR JANUARY			6,783,371.07
CASH DISBURSEMENTS FOR JANUARY			
ACCOUNTS PAYABLE - CHECK HISTORY REPORT		(1,387,210.71)	
NET PAYROLL FOR JANUARY		(33,470.83)	(1,420,681.54)
BANK CHARGES			(80.64)
TRANSFER TO LAIF			(5,600,000.00)
BALANCE PER GENERAL LEDGER AT 01/31/2017			227,233.55

REPORT PREPARED BY:

Cheryle Rasmussen

Cheryle Rasmussen

SAN GORGONIO PASS WATER AGENCY
DEPOSIT RECAP
FOR THE MONTH OF JANUARY 2017

DATE	RECEIVED FROM	DESCRIPTION	AMOUNT	TOTAL DEPOSIT AMOUNT
DEPOSIT TO CHECKING ACCOUNT				
1/4/17	BANNING HEIGHTS MWC	COST-SHARING AGREEMENTS	42,975.49	42,975.49
1/10/17	RIVERSIDE COUNTY	PROPERTY TAXES	214,033.04	214,033.04
1/10/17	RIVERSIDE COUNTY	PROPERTY TAXES	76,444.52	76,444.52
1/18/17	BCVWD	WATER SALES	388,325.00	388,325.00
1/20/17	RIVERSIDE COUNTY	PROPERTY TAXES	3,018,507.06	3,018,507.06
1/23/17	RIVERSIDE COUNTY	PROPERTY TAXES	61,519.73	61,519.73
1/23/17	RIVERSIDE COUNTY	PROPERTY TAXES	88,713.42	88,713.42
1/23/17	RIVERSIDE COUNTY	PROPERTY TAXES	6,379.88	6,379.88
1/25/17	RIVERSIDE COUNTY	PROPERTY TAXES	2,801,918.31	2,801,918.31
1/25/17	YVWD	WATER SALES	13,503.30	13,503.30
1/26/17	TVI	CD - BOND INTEREST	9,236.32	9,236.32
1/30/17	CITY OF BANNING	WATER SALES	61,815.00	61,815.00
	TOTAL FOR JANUARY 2017		6,783,371.07	6,783,371.07

SAN GORGONIO PASS WATER AGENCY
BUDGET REPORT FY 2016-17
BUDGET VS. REVISED BUDGET VS. ACTUAL
FOR THE SEVEN MONTHS ENDING ON JANUARY 31, 2017

	FOR THE FISCAL YEAR JULY 1, 2016 - JUNE 30, 2017				
	ADOPTED BUDGET	REVISIONS TO BUDGET	TOTAL REVISED BUDGET	ACTUAL YTD	REMAINING PERCENT OF BUDGET
GENERAL FUND - INCOME					Compare: 42%
INCOME					
WATER SALES	3,993,000		3,993,000	2,419,305.87	39.41%
TAX REVENUE	2,240,000		2,240,000	1,331,784.94	40.55%
INTEREST	64,000		64,000	59,231.23	7.45%
CAPACITY FEE	0		0	0.00	0.00%
GRANTS	0		0	0.00	0.00%
OTHER (REIMBURSEMENTS, TRANSFERS)	69,000		69,000	43,601.14	36.81%
TOTAL GENERAL FUND INCOME	6,366,000	0	6,366,000	3,853,923.18	39.46%
GENERAL FUND - EXPENSES					
COMMODITY PURCHASE					
PURCHASED WATER	3,875,000		3,875,000	1,539,174.00	60.28%
TOTAL COMMODITY PURCHASE	3,875,000	0	3,875,000	1,539,174.00	60.28%
SALARIES AND EMPLOYEE BENEFITS					
SALARIES	431,000		431,000	251,806.70	41.58%
PAYROLL TAXES	39,000		39,000	20,058.51	48.57%
RETIREMENT	108,000		108,000	72,012.27	33.32%
OTHER POST-EMPLOYMENT BENEFITS (OPEB)	23,000		23,000	14,994.58	34.81%
HEALTH INSURANCE	52,000		52,000	35,424.13	31.88%
DENTAL INSURANCE	4,500		4,500	2,860.16	36.44%
LIFE INSURANCE	1,100		1,100	826.86	24.83%
DISABILITY INSURANCE	4,500		4,500	2,588.95	42.47%
WORKERS COMP INSURANCE	3,700		3,700	1,739.00	53.00%
SGPWA STAFF MISC. MEDICAL	10,000		10,000	3,027.67	69.72%
EMPLOYEE EDUCATION	1,000		1,000	0.00	100.00%
TOTAL SALARIES AND EMPLOYEE BENEFITS	677,800	0	677,800	405,338.83	40.20%

SAN GORGONIO PASS WATER AGENCY
BUDGET REPORT FY 2016-17
BUDGET VS. REVISED BUDGET VS. ACTUAL
FOR THE SEVEN MONTHS ENDING ON JANUARY 31, 2017

	FOR THE FISCAL YEAR JULY 1, 2016 - JUNE 30, 2017				
	ADOPTED BUDGET	REVISIONS TO BUDGET	TOTAL REVISED BUDGET	ACTUAL YTD	REMAINING PERCENT OF BUDGET
GENERAL FUND - EXPENSES					Compare: 42%
ADMINISTRATIVE & PROFESSIONAL					
DIRECTOR EXPENDITURES					
DIRECTORS FEES	105,000		105,000	57,680.18	45.07%
DIRECTORS TRAVEL & EDUCATION	20,000		20,000	2,350.95	88.25%
DIRECTORS MISC. MEDICAL	32,000		32,000	9,789.72	69.41%
OFFICE EXPENDITURES					
OFFICE EXPENSE	18,000		18,000	11,489.76	36.17%
POSTAGE	1,000		1,000	530.05	47.00%
TELEPHONE	10,000		10,000	6,078.42	39.22%
UTILITIES	5,000		5,000	2,378.09	52.44%
SERVICE EXPENDITURES					
COMPUTER, WEB SITE AND PHONE SUPPORT	9,000		9,000	1,704.50	81.06%
GENERAL MANAGER & STAFF TRAVEL	20,000		20,000	11,289.40	43.55%
INSURANCE & BONDS	23,000		23,000	19,692.00	14.38%
ACCOUNTING & AUDITING	22,000		22,000	21,301.17	3.18%
STATE WATER CONTRACT AUDIT	5,000		5,000	5,012.00	-0.24%
DUES & ASSESSMENTS	29,000		29,000	29,767.50	-2.65%
SPONSORSHIPS	8,000		8,000	1,000.00	87.50%
OUTSIDE PROFESSIONAL SERVICES	650		650	650.00	0.00%
BANK CHARGES	1,600		1,600	915.03	42.81%
MISCELLANEOUS EXPENSES	1,000		1,000	2.79	99.72%
MAINTENANCE & EQUIPMENT EXPENDITURES					
TOOLS PURCHASE & MAINTENANCE	3,500		3,500	28.38	99.19%
VEHICLE REPAIR & MAINTENANCE	9,000		9,000	3,123.38	65.30%
MAINTENANCE & REPAIRS - BUILDING	11,000		11,000	8,923.58	18.88%
MAINTENANCE & REPAIRS - FIELD	6,500		6,500	2,812.27	56.73%
CONTRACT OPERATIONS AND MAINTENANCE	150,000		150,000	0.00	100.00%
COUNTY EXPENDITURES					
LAFCO COST SHARE	5,000		5,000	4,440.49	11.19%
ELECTION EXPENSE	175,000		175,000	0.00	100.00%
TAX COLLECTION CHARGES	9,500		9,500	7,574.08	20.27%
TOTAL ADMINISTRATIVE & PROFESSIONAL	679,750	0	679,750	208,533.74	69.32%

SAN GORGONIO PASS WATER AGENCY
BUDGET REPORT FY 2016-17
BUDGET VS. REVISED BUDGET VS. ACTUAL
FOR THE SEVEN MONTHS ENDING ON JANUARY 31, 2017

	FOR THE FISCAL YEAR JULY 1, 2016 - JUNE 30, 2017				
	ADOPTED BUDGET	REVISIONS TO BUDGET	TOTAL REVISED BUDGET	ACTUAL YTD	REMAINING PERCENT OF BUDGET
GENERAL FUND - EXPENSES					Compare: 42%
GENERAL ENGINEERING					
RECHARGE					
B.A.R.F. DESIGN + CONSTRUCTION	CAPITAL EXPENDITURE				
B.A.R.F. ENVIRONMENTAL MITIGATION	CAPITAL EXPENDITURE				
FERC/FLUME					
FLUME SUPPORT	40,000		40,000	29,199.57	27.00%
NEW WATER					
PROGRAMATIC EIR	75,000		75,000	0.00	100.00%
UPDATED STUDY ON AVAILABLE SOURCES	45,000		45,000	17,906.45	60.21%
SITES RESERVOIR	300,000		300,000	0.00	100.00%
BCVWD CONNECTION					
ENGINEERING	30,000		30,000	5,200.00	82.67%
CEQA	15,000		15,000	0.00	100.00%
INTEGRATED REGIONAL WATER MANAGEMENT PLAN (IRWMP)	5,000		5,000	0.00	100.00%
SGMA SUPPORT	15,000		15,000	0.00	100.00%
STUDIES					
USGS	100,000		100,000	80,227.01	19.77%
WATER RATE NEXUS STUDY	50,000		50,000	0.00	100.00%
WATER RATE FINANCIAL MODELING	30,000		30,000	0.00	100.00%
CAPACITY FEE NEXUS STUDY UPDATE	0		0	0.00	0.00%
SUPPORT - CAPACITY FEE & AGREEMENTS	0		0	0.00	0.00%
UPDATED UWMP	10,000		10,000	32,907.05	-229.07%
OTHER PROJECTS					
BASIN MONITORING TASK FORCE	21,000		21,000	20,180.00	3.90%
BUNKER HILL CONJUNCTIVE USE PROJECT	20,000		20,000	0.00	100.00%
GENERAL AGENCY - CEQA AND GIS SERVICES	35,000		35,000	30,147.72	13.86%
TOTAL GENERAL ENGINEERING	791,000	0	791,000	215,767.80	72.72%

SAN GORGONIO PASS WATER AGENCY
BUDGET REPORT FY 2016-17
BUDGET VS. REVISED BUDGET VS. ACTUAL
FOR THE SEVEN MONTHS ENDING ON JANUARY 31, 2017

	FOR THE FISCAL YEAR JULY 1, 2016 - JUNE 30, 2017				
	ADOPTED BUDGET	REVISIONS TO BUDGET	TOTAL REVISED BUDGET	ACTUAL YTD	REMAINING PERCENT OF BUDGET
GENERAL FUND - EXPENSES					Compare: 42%
LEGAL SERVICES					
LEGAL SERVICES - GENERAL	175,000		175,000	113,005.81	35.43%
TOTAL LEGAL SERVICES	175,000	0	175,000	113,005.81	35.43%
CONSERVATION & EDUCATION					
SCHOOL EDUCATION PROGRAMS	10,000		10,000	0.00	100.00%
ADULT EDUCATION PROGRAMS	5,000		5,000	0.00	100.00%
OTHER CONSERVATION, EDUCATION AND P. R.	20,000	15,000	35,000	21,263.87	39.25%
TOTAL CONSERVATION & EDUCATION	35,000	15,000	50,000	21,263.87	57.47%
GENERAL FUND CAPITAL EXPENDITURES					
BUILDING	15,000		15,000	0.00	100.00%
FURNITURE & OFFICE EQUIPMENT	5,000		5,000	0.00	100.00%
OTHER EQUIPMENT	0		0	0.00	0.00%
TRANSPORTATION EQUIPMENT	37,000		37,000	0.00	100.00%
MT. VIEW TURNOUT + B.A.R.F. CONSTRUCTION	0		0	31,125.01	
SBVMWD PIPELINE CAPACITY PURCHASE	330,000		330,000	0.00	100.00%
TOTAL GENERAL FUND CAPITAL EXPENDITURES	387,000	0	387,000	31,125.01	91.96%
TRANSFERS TO OTHER FUNDS	0	0	0	0.00	
TOTAL GENERAL FUND EXPENSES	6,620,550	15,000	6,635,550	2,534,209.06	61.81%
TRANSFERS FROM RESERVES	300,000		300,000		
TOTAL TRANSFERS FROM RESERVES	300,000	0	300,000	0	
GENERAL FUND NET INCOME YEAR TO DATE	45,450	-15,000	30,450	1,319,714.12	

SAN GORGONIO PASS WATER AGENCY
BUDGET REPORT FY 2016-17
BUDGET VS. REVISED BUDGET VS. ACTUAL
FOR THE SEVEN MONTHS ENDING ON JANUARY 31, 2017

	FOR THE FISCAL YEAR JULY 1, 2016 - JUNE 30, 2017				
	ADOPTED BUDGET	REVISIONS TO BUDGET	TOTAL REVISED BUDGET	ACTUAL YTD	REMAINING PERCENT OF BUDGET
DEBT SERVICE FUND - INCOME					Compare: 42%
INCOME					
TAX REVENUE	19,350,000		19,350,000	11,253,525.53	41.84%
INTEREST	170,000		170,000	157,431.29	7.39%
GRANTS	0		0	0.00	0.00%
DWR CREDITS - BOND COVER, OTHER	3,170,000		3,170,000	1,837,143.66	42.05%
TOTAL DEBT SERVICE FUND INCOME	22,690,000	0	22,690,000	13,248,100.48	41.61%
DEBT SERVICE FUND - EXPENSES					
EXPENSES					
SALARIES	52,000		52,000	31,551.68	39.32%
PAYROLL TAXES	4,000		4,000	2,413.66	39.66%
BENEFITS	28,000		28,000	17,345.77	38.05%
SWC CONTRACTOR DUES	33,000		33,000	40,558.00	-22.90%
STATE WATER CONTRACT PAYMENTS	18,600,000		18,600,000	11,970,730.00	35.64%
PURCHASED WATER	5,000		5,000	329.00	93.42%
STATE WATER PROJECT LEGAL SERVICES	0		0	0.00	0.00%
USGS	0		0	0.00	0.00%
CONTRACT OPERATIONS AND MAINTENANCE	120,000		120,000	2,033.22	98.31%
SWP ENGINEERING	30,000		30,000	477.86	98.41%
DEBT SERVICE UTILITIES	10,000		10,000	5,965.38	40.35%
TAX COLLECTION CHARGES	60,000		60,000	42,946.72	28.42%
TOTAL DEBT SERVICE FUND EXPENSES	18,942,000	0	18,942,000	12,114,351.29	36.05%
TRANSFERS FROM RESERVES			0	0.00	
DEBT SERVICE NET INCOME YEAR TO DATE	3,748,000	0	3,748,000	1,133,749.19	

RESOLUTION NO. 2008-03

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN GORGONIO PASS WATER AGENCY ESTABLISHING GUIDELINES FOR COMPENSATION OF DIRECTORS AND RESCINDING RESOLUTION NO. 2007-08

WHEREAS, on May 18, 1998, The Board of Directors adopted Ordinance No. 7 which provides for the compensation to be received by the Directors of San Gorgonio Pass Water Agency (hereinafter Agency) in accordance with Chapter 2 of Division 10 of the Water Code of the State of California (Water Code Section 20200 et seq.);

WHEREAS, the Water Code of the State of California, Section 20202 allows for members of the Board to be compensated for up to a total of ten (10) days in any calendar month, and;

WHEREAS, the Agency's Directors are regularly called upon to spend in excess of five (5) days per month in the performance of their duties, including the attendance of Board meetings, committee meetings, and other functions related to carrying on the business of the Agency; and

WHEREAS, it is the policy of the Board that the Directors receive fair and reasonable compensation for their service to the Agency so that they may devote as much time as is necessary or beneficial to the full performance of their roles:

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the San Gorgonio Pass Water Agency as follows:

1. That the Board of Directors rescinds Resolution No. 2007-08 regarding Compensation of Directors.

2. That Resolution No. 2008-03 is effective March 3, 2008.

3. That the maximum number of days per month which a Director of the Agency may receive compensation and reimbursement of expenses for each day's service rendered as a member of the Board of Directors is set forth in Ordinance No. 7.

4. That the definition of a day of service shall be:

   a. Attendance at any meeting of the San Gorgonio Pass Water Agency that requires public notice in accordance with the Brown Act.

   b. Attendance at any meeting of a San Gorgonio Pass Water Agency ad hoc committee, that committee having been established by the president of the Board.

   c. Attendance at regular, special or committee meetings of any organization in which San Gorgonio Pass Water Agency is a member.

d. Attendance at Beaumont Basin Watermaster meetings, San Timoteo Watershed Management Authority Commission meetings, Santa Ana Watershed Project Authority Commission meetings and Regional Coordination Conferences of Pass Water Officials Serving Pass Area Communities.

e. Attendance at special events, programs, or symposiums (not to exceed 1 day) or conferences (not to exceed 3 days) for the following organizations:

1. Association of California Water Agencies
2. Special District Association of Riverside County
3. State Water Contractors
4. Water Education Foundation
5. Special District's Board Management Institute
6. Riverside County Water Symposium
7. American Water Works Association
8. Association of Ground Water Agencies

f. Attendance at any meeting related to or informing the Board members on matters within the jurisdiction of the statutory powers of the Agency, provided that such meetings deal with substantive issues and consume more than a minor amount of the Board member's time.

g. Attendance of any meeting submitted for consideration and approved as a day of service by the Agency's Board of Directors.

5. That the Finance and Budget Committee of the Agency shall determine by examination and vote, that the meetings submitted for payment of Director's fees are in accordance with these guidelines. The Directors shall have the right to appeal the decision of the Finance & Budget Committee to the Board of Directors.

Resolution #2008-03 was adopted upon roll call by the following vote:

AYES:	Larsen, Voigt, Morris, Andersen, Snyder, Mann and Jeter
NOES:	None
ABSTAIN:	None
ABSENT:	None

I certify that the foregoing is a true, full and correct copy of Resolution #2008-03 adopted by the Board of Directors of the San Gorgonio Pass Water Agency at its regular meeting held on March 3, 2008.

Jeffrey W. Davis, Secretary to the Board
San Gorgonio Pass Water Agency 22/170

SAN GORGONIO PASS WATER AGENCY

DIRECTORS' TRAVEL AND EXPENSE REIMBURSEMENT POLICY

(Revised January 3, 2011)

1. GENERAL STATEMENT OF POLICY

The Board of Directors of San Gorgonio Pass Water Agency is charged with establishing and maintaining the policies of the Agency as set forth by State Law, and with providing general oversight of the administration of the Agency. The day-to-day operation of the Agency has been delegated to the General Manager who is responsible to the Board.

Each Director whether elected at large or by division is responsible to the members of the general public within the Agency as well as the public in his or her own division for the proper conduct of Agency affairs. Each Director is also responsible to the Board itself. In the fulfillment of these responsibilities, Directors must be informed of and familiar with the San Gorgonio Pass Water Agency law, its statutory powers and duties, and the general programs and policies of the Agency.

The Agency policy for travel and expense reimbursement is premised on a finding by the Board of Directors that activities which fulfill the Director's obligation to be informed are of benefit to the Director, the Board, the Agency, and the members of the public, and that the activities listed below are directly related to furthering of the Agency's purpose. Agency Directors must be informed about national, state-wide, and local water, groundwater, wastewater programs and issues. Ordinary and necessary business expenses are expenses that have a direct benefit to fulfill the legislative duties of the Agency.

2. GENERAL RULES REGARDING TRAVEL AND EXPENSE REIMBURSEMENT

Agency rules with respect to reimbursement for actual, ordinary, and necessary business expenses (including travel expenses) incurred in such activities and subject to annual budget limitations set by the Board shall be as follows:

a) Each Director shall be allocated a total amount per year for expenses subject to appropriation in the budget by the Board, however newly elected directors will be allocated a total of $3,000 for travel and education. This amount shall be clearly indicated in the budget under Directors Travel and Education. This amount may be revised from time to time as approved by the Board of Directors. Any expenses incurred for the purposes as set forth herein within the budgeted amount shall be reviewed, ratified for payment by the Finance and Budget Committee and recommended for approval by the Board of Directors. Subsequent to the reimbursement for travel being paid, any payment not approved by the Board of Directors for any reason will be deducted from the director's next check.

b) Any Expense (including travel expenses) incurred in excess of the budgeted amount shall not be paid unless authorized by the Board of Directors prior to the expense being incurred. In the event that prior Board approval is not possible, then the President of the Board can authorize such expense.

3. ORDINARY AND NECESSARY BUSINESS EXPENSES.

Those ordinary, necessary and reasonable business expenses incurred as a result of activities directly related to Agency purposes are reimbursable. Expenses incurred as a result of a bona fide personal, family, or medical emergency that would not have been incurred were it not for Agency business are also reimbursable. Because the Pass Agency is a public agency, such expenses should be carefully considered, bearing in mind that these are public funds and that only a reasonable level of expense is warranted. For example, ordinary expenses incurred in traveling by personal automobile, including gas mileage and repairs, maintenance, etc directly related to use

of a car, for Agency purposes, shall be allowed at the Agency's then prevailing rate in accordance with the standard mileage rate set by the Internal Revenue Service. Air travel shall ordinarily be reimbursed at the advance purchase or coach fare unless such fares are unavailable. Hotel expenses incurred by overnight travel on behalf of the Agency shall be reimbursed, but such accommodations should be reasonable in nature, rather than extravagant. Business meals incurred as a result of travel out of town, or meals in town which are engaged in for bona fide Agency purposes and in which substantial business discussions involving the Agency take place, shall also be reimbursed, but only at a reasonable level of expense. Business telephone calls shall be reimbursed and telephone calls made by Directors to their residences (maximum of one call per day) or places of business when traveling on Agency business shall be reimbursed. Automobile rental, baggage handling, tips, etc., are reimbursable expenses. This listing is intended to be representative, but not exclusive. The Agency shall not pay for any alcoholic beverage of any type consumed by directors, staff or their guests. Actual, reasonable, ordinary and necessary business expenses incurred by attendance of events approved by the Board as days of service, and at educational events related to water issues in the area, region, or state, is necessary for education of the directors and shall be reimbursed by the Agency upon presentation of satisfactory evidence (receipts, including travel expense receipts) of the expenditures. Attendance at these events include, regular or special meetings of any organization in which San Gorgonio Pass Water Agency is a member, or at special events, programs, conferences, symposiums or seminars as deemed necessary by the director (s) for their continuing education and information.

4. SPECIFIC TRAVEL REIMBURSEMENT RULES:

Travel is a necessary operation of the Agency. The Agency has no intention of denying any director reimbursement for official Agency travel. The Agency will reimburse each director for their actual travel expenses associated with performing their duties.

1) Reimbursement for the use of a personal automobile will be made on the basis of actual mileage at the official mileage rate. The official mileage rate for the Agency is the

Standard Mileage Rate set annually by the Internal Revenue Service. Mileage between a director's residence and the Agency's administration building is not reimbursed.

a) The Agency assumes no responsibility for any maintenance, operational costs, accidents, fines, etc., incurred by the owner of the vehicle while on official business.

b) The Agency is responsible for determining whether the traveler is properly insured while using a privately owned vehicle on official business. The traveler may be required to provide proof of adequate insurance before being allowed to use privately owned vehicle on official business.

c) The Agency will not reimburse for mileage driven within the Agency's boundaries. In the event the destination of travel is outside the Agency's boundaries the actual miles will be calculated from the Director's residence to the destination.

d) When travelers interrupt travel or deviate from the direct route for personal convenience or personal leave, they will be reimbursed only at the rate for uninterrupted travel by the most direct route.

e) Allowable mileage will be determined and verified by going to www.mapquest.com, www.randmcnally.com, or a similar internet mileage calculator or by actual recorded odometer readings.

f) When travelers must use premium transportation, such as first class, for health or other medical reasons, those reasons must be affirmed in a statement by the director on the Request for Reimbursement Form.

g) A copy of the official conference brochure, registration form, or other documentation of the conference, showing information about designated conference hotels, must be attached to the Request for Reimbursement Form when requesting reimbursement. After attending the conference,

meeting, etc, the director shall present an oral report of the event at the next Board meeting.

2) Car rental shall be limited to official business only and shall be allowed only for those situations when this mode of travel is more economical than taxi, airport shuttle, etc. Reimbursement for rental car shall be only for use on official business. Any portion of car rental expense that is determined to be personal in nature will be the responsibility of the traveler and the Agency will not reimburse the director for such expenses.

3) Expense reimbursement for hotel and meals while traveling out of town will be paid only with original receipts for lodging, registration fees, rental cars, parking, phone calls, taxis and shuttles, and commercial travel and based on dates of travel.

a) An agency director is, normally, not entitled to lodging when travel distance is less than thirty-five miles (one-way mileage). The thirty-five mile radius starts from the Administration Building of the Agency. All exceptions to the thirty-five-mile limitation policy must be approved by the Board of Directors at a regularly scheduled Board meeting prior to travel.

b) Meals on the day of travel will be reimbursed to and from the event.

c) If a meal is provided by a common carrier without charge, such as on an airplane, reimbursement is not allowed for that meal.

d) Reimbursement is not allowed for personal entertainment, alcoholic beverages, valet services, flowers, laundry, cleaning or printed items.

e) Reimbursement may not be claimed for meals, lodging or any items provided free of charge by individuals or organizations.

f) Reimbursement may not be made for lodging in a private home. If the traveler stays overnight at no cost to the Agency, such as with family or friends, meals may be claimed.

4) Reimbursement for expenses incurred under any other circumstances may be made by the Board of Directors only after a specific finding that the expenses were reasonable, ordinary and necessary, and directly related to Agency purposes.

5) Directors are authorized to travel anywhere within the State of California, or to participate in any Water Education Foundation tour. Travel to other states outside of a WEF tour is allowed if approved in advance by the Board of Directors at a regularly scheduled Board meeting.

5. EXPENSES INCURRED BY PERSONS OTHER THAN DIRECTORS

The additional travel expenses of spouses, family members or guests who accompany Directors are not reimbursable by the Agency, unless that person's presence on the trip has a bona fide Agency purpose; that is, that such person's presence is essential to the performance of a Director's duties. Nevertheless, for those expenses which remain the same regardless of the family member's or guest's presence, such as vehicle or hotel expenses, the Director shall be reimbursed the full amount even though the family member or guest may have received an incidental benefit.

MEMORANDUM

TO: Board of Directors

FROM: General Manager

RE: Public Hearing for Draft Urban Water Management Plan

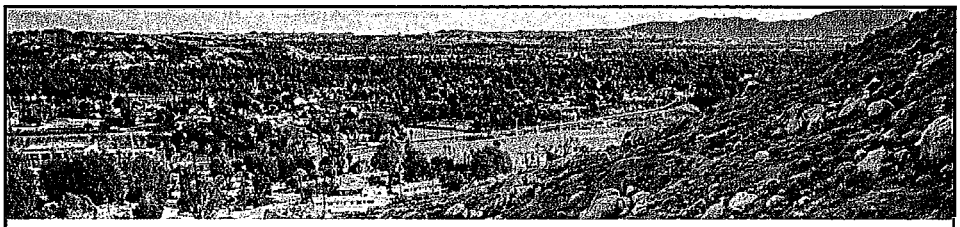
DATE: March 6, 2017

Summary:
The Board continued the public hearing on the Agency draft urban water management plan at the February 21 Board meeting. The purpose of this agenda item is to complete the public hearing.

Detailed Report:
The Agency's consultant, Mary Lou Cotton, will be at the Board meeting to present the draft urban water management plan. She was not able to attend the February 21 Board meeting; hence the continuance.

The Agency has received a letter with a series of comments on the draft plan. Agency staff and the consultant are reviewing the letter. If any revisions are warranted based on the letter, they will be incorporated into the final report prior to adoption by the Board.

Recommendation:
No action is being requested at the Board meeting. All public comments will be discussed with the consultant, revisions made to the draft as appropriate, and a final plan will be brought to the Board for adoption at a future meeting.



2015 Urban Water Management Plan

SAN GORGONIO PASS
WATER AGENCY
• Established 1961 •

February 21, 2017

Kennedy/Jenks Consultants

Urban Water Management Plan Public Hearing Agenda

- UWMP Act Overview and Legislative Update
- Population Projections
- Water Supply and Demand Projections
- Water Quality and Reliability
- Water Shortage Contingency Planning
- Next Steps
- Public Comment Period and Q&A

Kennedy/Jenks Consultants

What is an Urban Water Management Plan?

- Plan that provides a general framework for long-term water resource planning (20 to 25 years)
- Required by all urban water suppliers with ≥ 3,000 service connections or supplying ≥ 3,000 acre-feet per year (AFY)
- Completion required for State grant and loan eligibility
- Update required every five years
- UWMP Submittal Date: July 1, 2016 (no penalties for late submittal)

Kennedy/Jenks Consultants

Why are UWMPs Developed?

- 1983 Urban Water Management Planning Act
- To identify relationships between supply and demand
- To provide detailed description of all supply sources
- To identify conservation programs and progress
- To present Water Shortage Contingency Plan
- To address water quality issues
- To describe how demand will be met through time, in all hydrologic year types

Kennedy/Jenks Consultants

UWMP Requirements

- Description of existing and planned water supplies
- Demonstrate how demands will be met in all hydrologic year types
- Assessment of water quality conditions
- Demand Management Measures (water conservation programs) – past, present, future
- Report progress in meeting 20x2020 targets (not applicable to SGPWA)
- Description of water shortage contingency planning

Kennedy/Jenks Consultants

New and Different for Wholesaler 2015 UWMPs

- UWMP Submittal Date: July 1, 2016
- Plan and Data Submittal Format (electronic)
- Demand Management Measures*
- Water Loss Reporting*
- Estimation of future water savings in demand projections (voluntary)

Kennedy/Jenks Consultants

New and Different for Wholesaler 2015 UWMPs Cont'd

- In general, wholesale agencies like SGPWA have different and less specific requirements under the UWMP Act (and DWR Guidebook) than do retail agencies.
- SGPWA UWMP makes clear (Chapter 1) that the Agency is comporting with the UWMP Act by describing potential projects and programs for purposes of a planning document; any specific projects would be subject to environmental analysis and Board approval before implementation.
- SGPWA UWMP is consistent with 2015 UWMPs of other SWP Contractors statewide, utilizing protocols developed in the DWR Delivery Capability report and other documents.
- UWMP's are required to be updated every five years to account for changed conditions.

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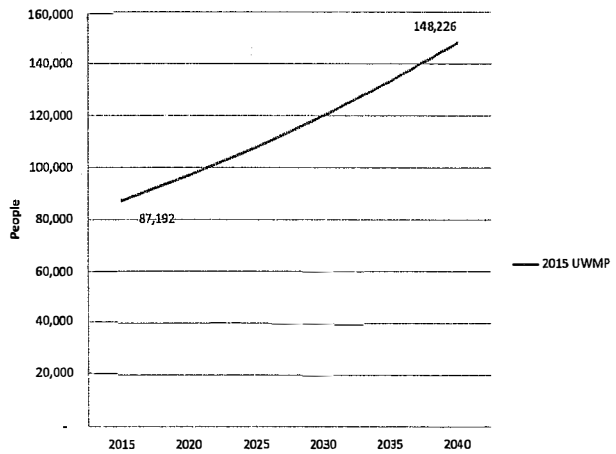
Projected Population



The 2015 population is based on a 5-year American Community Survey (ACS) estimate for 2010-2014. Projections to 2040 were estimated using an average growth rate for the area based on available population projections for agencies within the SGPWA service area.

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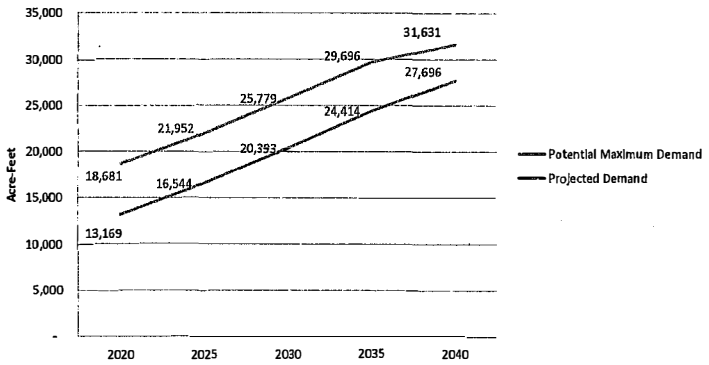
Kennedy/Jenks Consultants

Demand Projections



Demands from BCVWD (2015 UWMP Tables 4-2 and 6-26), City of Banning (2015 UWMP Tables 3-1, 3-3, and 5-4), and Yucaipa (2015 San Bernardino Regional UWMP Table 12-15). Also includes conservative projections of future demand from agencies that don't currently have demands on the Agency.

Water Supply Portfolio

SUMMARY OF CURRENT AND PLANNED WATER SUPPLIES (AFY)

Water Supply Source	2015	2020	2025	2030	2035	2040
Existing Supplies						
Imported SWP[a]	10,700	10,700	10,700	10,700	10,700	10,700
Yuba Accord[b]	300	300	300	300	300	300
Total Existing Supplies	11,000	11,000	11,000	11,000	11,000	11,000
Planned Supplies						
SBVMWD Purchased Supply[c]	-	2,000	2,000	2,000	2,000	2,000
Available Purchases of Supply[d]	-	1,500	3,800	7,700	11,700	15,000
Total Planned Supplies	-	3,500	5,800	9,700	13,700	17,000
Total Existing and Planned Supplies	11,000	14,500	16,800	20,700	24,700	28,000

Notes: Values are rounded to the nearest hundred.

(a) Assumes 62% of Table A amount (17,300 AFY) based on the California Department of Water Resources Final Delivery Capability Report 2015 (DWR 2015 DCR).

(b) See Section 3.2.4.1.

(c) An average of 2,000 AF is assumed over a five year period through a future agreement with SBVMWD. See Section 3.3.3.2.

(d) The Agency has a financial plan in place to obtain additional supplies necessary to meet projected demands within its service area (shown in Table 2-5). These future supplies are described in Section 3.3. Sources include the dry-year water purchase program, exchanges with CLAWA, and other supplemental water as available. The Agency is expected to purchase additional supplies by 2020 in order to meet demands shown in Table 2-5. Volumes shown assume the DWR 2015 DCR average reliability of 62%.

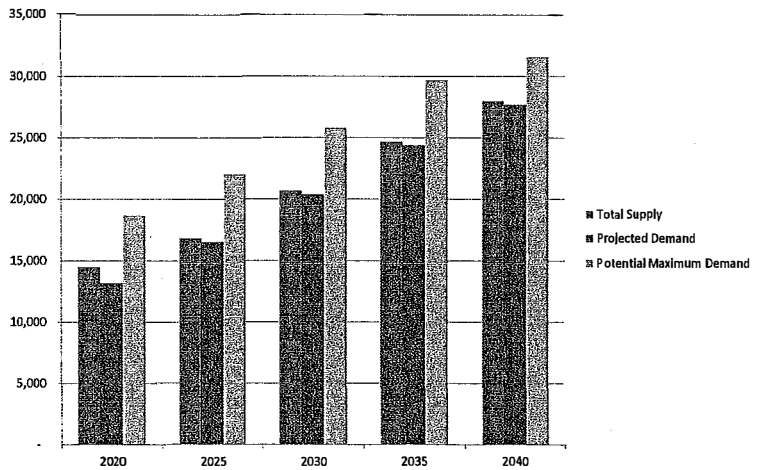
SGPWA 2015 UWMP, Table 3-1

Potential Transfer and Exchange Opportunities

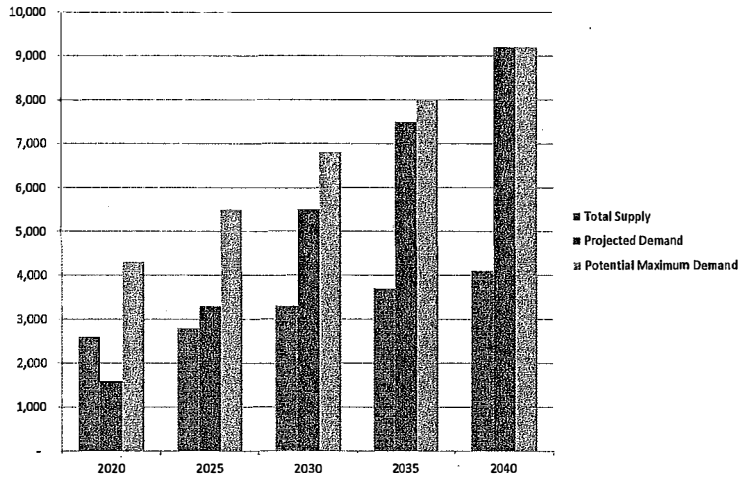
Supplemental Water Source	Description	Type and Reliability	Potential Partners
Table A Transfers	Purchase of Table A allocations from agencies with allocations in excess of demand	Permanent, 60%	Kern County Water Agency (KCWA); Tulare Lake Basin Water District; Dudle Ridge Water District; Empire West Side Irrigation District; MWDSC; San Bernardino Valley Municipal Water District
Kern River Exchanges	Water agencies obtain diversion rights from the Kern River, making available Table A SWP supplies for exchange	Permanent, 100%	Nickel Family Farms via KCWA exchange; Buena Vista Water Storage District (WSD) via Buena Vista WSD or Rosedale-Rio Bravo WSD exchange
Banked Groundwater Exchanges	Purchases of banked groundwater delivered in-lieu from unused Table A deliveries	Short-term, 100%	Rosedale-Rio Bravo WSD; Water agencies participating in the Semitropic WSD Groundwater Storage Program; Water agencies south of Edmonston Pumping Plant
Banked Groundwater Pumpback	Purchase of banked groundwater delivered via a "pumpback" to the California aqueduct	Short-term, 100%	Rosedale-Rio Bravo WSD; Kern Delta Water District; Semitropic WSD -Stored Water Recovery Unit
Excess SWP Purchases	Purchase excess SWP supply from SWP or water agencies with a surplus	Short-term, 100%	SWP Article 21; SWP Turnback Pool (Table A); San Bernardino Valley Municipal Water District; Crestline-Lake Arrowhead Water Agency; Westside Districts
Dry Year Water Purchases or Transfer Programs	Purchase or transfer of unused water from water agencies with a surplus to water agencies requesting supplemental dry year supply	Short-term in dry years, 100%	SWP Contractors (buyers and sellers are treated as singular entities); SWP Turnback Pool (Table A); Western Canal Water District; Yuba Dry Year Water Transfer Program

SGPWA 2015 UWMP, Table 3-4

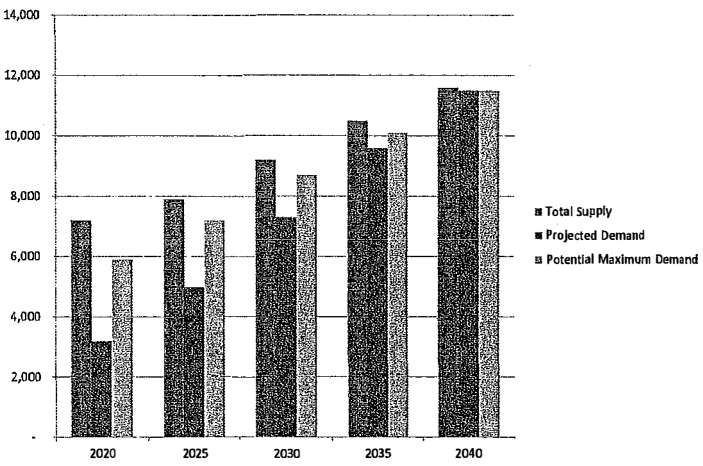
Normal Year Supply and Demand



Single-Dry Year Supply and Demand



Multiple-Dry Year Supply and Demand



*Demand Management Measures Requirements

- SGPWA must describe the Foundational DMMs:
  - Metering
  - Public Education and Outreach
  - Water Conservation Program Coordination and Staffing Support
  - Wholesale Supplier Assistance Programs
  - *Programs to Assess and Manage Distribution System Real Loss
    - ✓ Done through the AWWA Water Loss Audit
  - Other DMMs that may have a significant effect on water use

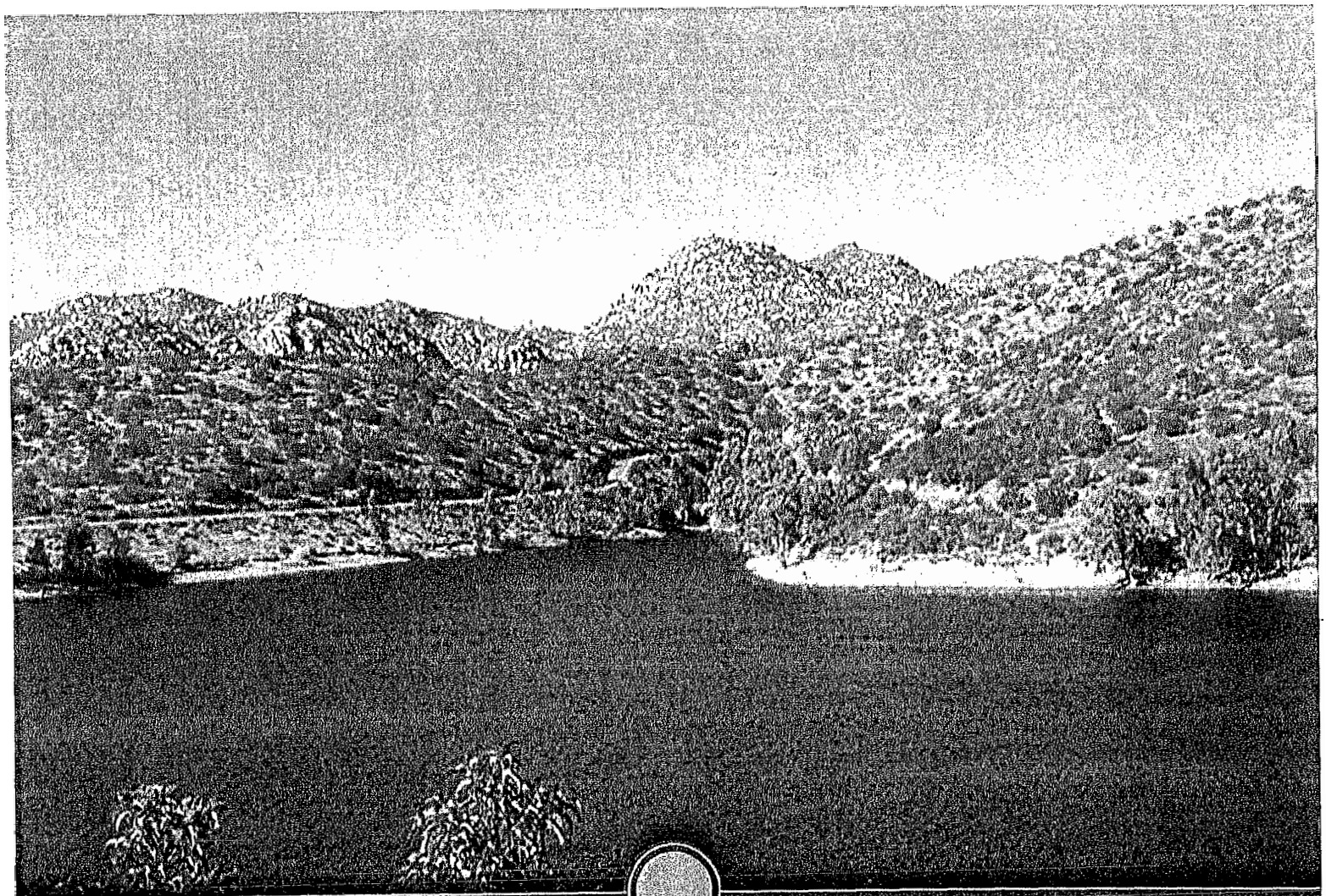
Water Shortage Contingency Planning

- Plan must have stages of action that address up to a 50% reduction in water supply
- Draft Ordinance/Resolution adopting the WSCP
- Must show minimum supply for the next three years
- SWP Emergency Outage Scenarios
- Assess Worst-Case Scenario
- Regional Emergency and Power Outage Scenarios

Next Steps

- Public Comment Period
- Consider Adoption
- Submittal to:
  - ✓ Department of Water Resources
  - ✓ State Library
  - ✓ Cities of Calimesa, Banning, and Beaumont
  - ✓ Riverside County Planning Department
- Q&A

Public Comment Period and Q&A



A PUBLIC DRAFT

2015 Urban Water Management Plan *for* **San Gorgonio Pass Water Agency**

January 2017

Prepared by

Kennedy/Jenks Consultants

Kennedy/Jenks Consultants

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2015 San Gorgonio Pass Water Agency Urban Water Management Plan

Public Draft

5 January 2017

Prepared for

San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223

K/J Project No. 1544217*00

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List of Acronyms

µg/L	micrograms per liter
AB	Assembly Bill
ACS	American Community Survey
AF	acre-feet
AFY	acre-feet per year
AWWA	American Water Works Association
BCVWD	Beaumont-Cherry Valley Water District
BDCP	Bay Delta Conservation Plan
BHMWC	Banning Heights Mutual Water Company
BO	Biological Opinion
Cal OES	California Office of Emergency Services
CEQA	California Environmental Quality Act
CFS	cubic feet per second
CIMIS	California Irrigation Management Information System
CLAWA	Crestline-Lake Arrowhead Water Agency
CVP	Central Valley Project
CWC	California Water Code
CWD	Cabazon Water District
CWP	California Water Plan
DCR	Delivery Capability Report
DDW	Division of Drinking Water
DMM	Demand Management Measure
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ELT	Early Long Term
ETo	evapotranspiration
F	Fahrenheit
GSP	Groundwater Sustainability Plan
HVWD	High Valley Water District
MG	million gallons
mg/L	milligrams per liter
MGD	million gallons per day
MSWD	Mission Springs Water District
MWQI	Municipal Water Quality Investigations
NMFS	National Marine Fishery Service
PHG	Public Health Goal

ppm	parts per million
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBVMWD	San Bernardino Valley Municipal Water District
SGMA	Sustainable Groundwater Management Act
SGPWA	San Gorgonio Pass Water Agency
SMWC	South Mesa Water Company
SWP	State Water Project
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan
YVRWFF	Yucaipa Valley Regional Water Filtration Facility
YVWD	Yucaipa Valley Water District

Section 1: Introduction

1.1 Overview

This document presents the wholesale Urban Water Management Plan 2015 (Plan) for the San Gorgonio Pass Water Agency (Agency, SGPWA) service area. This chapter describes the general purpose of the Plan, discusses Plan implementation, and provides general information about SGPWA, retail water purveyors, and service area characteristics.

The State of California mandates that all urban water suppliers within the state prepare an Urban Water Management Plan (UWMP). Detailed information on what must be included in these plans as well as who must complete them can be found in California Water Code sections 10610 through 10657. According to the UWMP Act of 1983, an urban water supplier is defined as a supplier, either public or private, that provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplies more than 3,000 acre-feet (AF) annually.

1.2 Purpose

An UWMP is a planning tool that generally guides the actions of water management agencies. It provides managers and the public with a broad perspective on a number of water supply issues. It is not a substitute for project-specific planning documents, nor was it intended to be when mandated by the State Legislature. For example, the Legislature mandated that a plan include a Section which "describes the opportunities for exchanges or water transfers on a short-term or long-term basis." (California Urban Water Management Planning Act, Article 2, Section 10630(d).) The identification of such opportunities, and the inclusion of those opportunities in a general water service reliability analysis, neither commits a water management agency to pursue a particular water exchange/transfer opportunity, nor precludes a water management agency from exploring exchange/transfer opportunities not identified in the plan. When specific projects are chosen to be implemented, detailed project plans are developed, environmental analysis, if required, is prepared, and financial and operational plans are detailed.

"A plan is intended to function as a planning tool to guide broad-perspective decision making by the management of water suppliers." (*Sonoma County Water Coalition v. Sonoma County Water Agency* (2010) 189 Cal. App. 4th 33, 39.) It should not be viewed as an exact blueprint for supply and demand management. Water management in California is not a matter of certainty and planning projections may change in response to a number of factors. "[L]ong-term water planning involves expectations and not certainties. The State Supreme Court has recognized the uncertainties inherent in long-term land use and water planning and observed that the generalized information required . . . in the early stages of the planning process are replaced by firm assurances of water supplies at later stages." (*Id.*, at 41.) From this perspective, it is appropriate to look at the UWMP as a general planning framework, not a specific action plan. It is an effort to generally answer a series of planning questions including:

- What are the potential sources of supply and what is the reasonable probable yield from them?

- What is the probable demand, given a reasonable set of assumptions about growth and implementation of good water management practices?

- How well do supply and demand figures match up, assuming that the various probable supplies will be pursued by the implementing agency?

Using these "framework" questions and resulting answers, the implementing agency will pursue feasible and cost-effective options and opportunities to meet demands. SGPWA will explore enhancing basic supplies from traditional sources such as the State Water Project (SWP) as well as other options.

The California Urban Water Management Planning Act (Act) requires preparation of a plan that:

- Accomplishes water supply planning over a 20-year period in five year increments. (SGPWA is going beyond the requirements of the Act by developing a plan which spans 25 years.)

- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single dry, and multiple dry years.

- Implements conservation and efficient use of urban water supplies.

Significant new requirements for quantified demand reductions have been added by the enactment of SBX7-7, which amends the Act; a portion of this law applies to SGPWA. In addition, a number of changes to the Water Code have been enacted since 2010 that affect implementation of the 2015 Plan updates. These changes apply to:

- Demand Management Measures CWC (CWC) Section 10631(f)(1) and (2) Assembly Bill (AB) 2067, 2014

- Submittal Date CWC Section 10621 (d) AB 2067, 2014

- Electronic Submittal CWC Section 10644 (a)(2) Senate Bill (SB) 1420, 2014

- Standardized Forms CWC Section 10644(1)(2) SB 1420, 2014

- Water Loss CWC Section 10631 (e)(1)(J) and (e)(3)(A) and (B) SB 1420, 2014

- Estimating Future Water Savings CWC Section 10631 (e)(4) SB 1420, 2014

- Voluntary Reporting of Energy Intensity CWC Section 10631.2 (a) and (b) Senate Bill 1036, 2014

- Defining Water Features CWC Section 10632 (b) Assembly Bill 2409, 2014

A checklist to ensure compliance of this Plan with the Act requirements is provided in Appendix A. A copy of the required standardized data tables is provided as Appendix B.

In short, the Plan answers the question: *Will there be enough water for the communities within the SGPWA service area in future years?* It also addresses what mix of programs should be explored for making this water available, and sets a framework for discussion of the priority of these programs.

It is the stated goal of SGPWA 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 at wholesale to local retail water purveyors within its service area. Based on conservative water supply and demand assumptions over the next 25 years in combination with conservation of non-essential demand during certain dry years, the Plan successfully achieves this goal. It is important to note that this document has been completed to address regional resource management and does not address the particular conditions of any specific retail water agency or entity within the SGPWA service area. The retail urban water suppliers within SGPWA service area are preparing their own separate UWMPs, but SGPWA has coordinated with the retailers during development of this Plan to ensure a level of consistency with the retailers to the extent possible.

1.3 Basis for preparing a plan

In accordance with the California Water Code, urban water suppliers with 3,000 or more service connections, or supplying 3,000 or more AF of water per year, are required to prepare a UWMP every five years. The 2015 UWMP shall be updated and submitted to the California Department of Water Resources (DWR) by July 1, 2016.

1.4 Implementation of the Plan

The SGPWA service area encompasses a number of different local water agencies, three (3) of which are required to prepare individual UWMPs because they meet the threshold requirement. The three retail purveyors within SGPWA service area required to prepare their own UWMP include:

- City of Banning
- Beaumont-Cherry Valley Water District (BCVWD)
- Yucaipa Valley Water District (YVWD)

Other retail water agencies within the SGPWA service area that fall under the threshold for preparation of an UWMP (less than 3,000 connections or provide less than 3,000 AFY) include the following:

- South Mesa Water Company (SMWC)
- Cabazon Water District (CWD)
- Banning Heights Mutual Water Company (BHMWC)
- High Valleys Water District (HVWD)

- Mission Springs Water District (MSWD)
- Morongo Band of Mission Indians

1.5 Cooperative Preparation of the Plan

Wholesale water agencies are permitted by the State to either work independently to develop a wholesale UWMP or they can coordinate their planning with retail agencies within their service area to develop a cooperative regional plan. The former approach has been adopted by the SGPWA; however, the Plan was developed in coordination with the retail water agencies within the SGPWA service area. Water resource specialists with expertise in water resource management were retained to assist the local water agencies in preparing the details of their Plans. Agency coordination for this Plan is summarized in Table 1-1.

TABLE 1-1

AGENCY COORDINATION SUMMARY

	Participated in UWMP Development	Received Copy of Draft	Commented on Draft	Attended Public Meetings	Contacted for Assist	Sent Notice of Intent to Adopt
City of Banning Water Department	✓	✓			✓	
Beaumont-Cherry Valley Water District	✓	✓			✓	
Yucaipa Valley Water District	✓	✓			✓	
Cabazon Water District	✓	✓			✓	
South Mesa Water Company	✓	✓			✓	
Banning Heights Mutual Water Company	✓	✓			✓	
High Valleys Water District	✓	✓			✓	
Mission Springs Water District	✓	✓			✓	
Morongo Band of Mission Indians	✓	✓			✓	
City of Calimesa		✓				
City of Beaumont		✓				
Riverside County		✓				
San Bernardino County		✓				

1.5.1 Plan Adoption

SGPWA began preparation of this Plan for its service area in October 2015. The final draft of the Plan was adopted by the SGPWA Board in March 2017 and submitted to DWR within 30 days of Board approval. This Plan includes all information necessary to meet the requirements of Water Conservation Act of 2009 (Wat. Code, §§ 10608.12-10608.64) and the Urban Water Management Planning Act (Wat. Code, §§ 10610-10656).

1.5.2 Public Outreach

The SGPWA has encouraged community participation in water planning. Interested groups were informed about the development of the Plan along with the schedule of public activities. Notices of the Public Hearing were published in the local press. Copies of the Draft Plan were made available at the water agency's office, local public libraries and sent to the County of San Bernardino as well as interested parties.

SGPWA coordinated the preparation of the Plan with the local land use planning agencies; SGPWA notified the cities and counties within its service area of the opportunity to provide input regarding the Plan. Table 1-2 presents a timeline for public participation during the development of the Plan. A copy of the public outreach materials are provided in Appendix C.

TABLE 1-2

PUBLIC PARTICIPATION TIMELINE

Date	Event	Description
October 20, 2015	UWMP Kick-off	Describe UWMP requirements and process
January 17, 2017	Draft UWMP	Draft UWMP released to solicit input
February 21, 2017	Public Hearing	Review contents of Draft UWMP and take comments
March 6, 2017	Board Adoption	Final Draft UWMP considered for approval by the Board of Directors

The components of public participation include local media, water agency public participation, city and county government outreach, and public availability of documents.

Local Media

- Paid advertisements in local newspapers

Water Agencies Public Participation

- Draft UWMP sent to retail purveyors for review (see Table 1-1)

City/County and Other Government Outreach

- Notice sent to various Local, County, and State agencies

Public Availability of Documents

- SGPWA website
- Local libraries

1.5.3 Resources Maximization

Several documents were developed to enable the water suppliers to maximize the use of available resources and minimize use of imported water, including the 2010 SGPWA UWMP, the Integrated Regional Water Management Plan for the Upper Santa Ana River Watershed (2015), DWR's 2015 State Water Project Delivery Capability Report (2015 DCR), SGPWA's Reports on Water Conditions (2010 to 2014), the 2012 SGPWA Strategic Plan, and discussions with SGPWA staff. Chapter 3 of this Plan describes in detail the water resources available to SGPWA and the retail purveyors for the twenty-five-year period covered by the Plan. A complete reference list is provided in Section 8 of this Plan.

1.5.4 Fiscal or Calendar Year

A water supplier may report on a fiscal year or calendar year basis, but must clearly state in its UWMP the type of year that is used for reporting. The type of year should remain consistent throughout the Plan. This plan provides data consistent with a calendar year, in acre-feet per year (AFY).

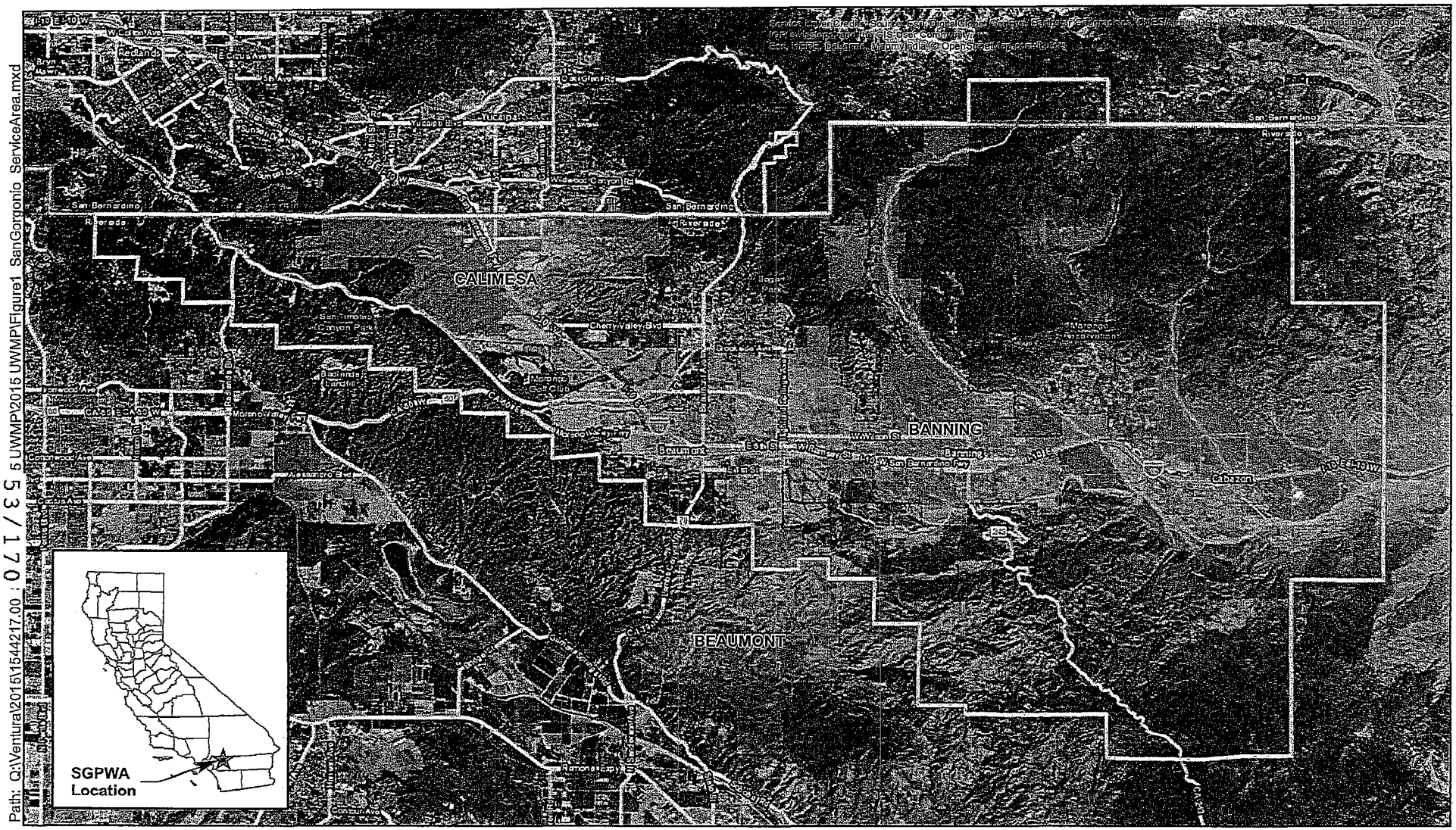
1.6 Water Management within the SGPWA Service Area

1.6.1 San Gorgonio Pass Water Agency

The SGPWA was established by the SGPWA Act, passed by the California Legislature in 1961 and signed by Governor Pat Brown in July of 1961. At its inception, the agency service area had a population of approximately 21,000 (today is closer to 95,000).

The San Gorgonio Pass is located between the San Bernardino Mountains on the north and the San Jacinto Mountains on the south, connecting the San Bernardino Valley on the west to the Coachella Valley on the east. The Cities of Calimesa, Beaumont, and Banning are within the SGPWA's service area (Figure 1-1). The municipalities located within the service areas of water agencies in the SGPWA service area are summarized below.

The principle drainage basins and streams within the service area are shown on Figure 1-2.



Path: Q:\Ventura\2015\1544217.00 : 5 UWMP\2015 UWMP\Figure1 SanGorgonio ServiceArea.mxd 5 3 / 1 7 0

Legend

- San Gorgonio Pass Water Agency (SGPWA) Boundary
- County Boundary
- City of Banning
- City of Beaumont
- City of Calimesa

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Miles

Kennedy/Jenks Consultants

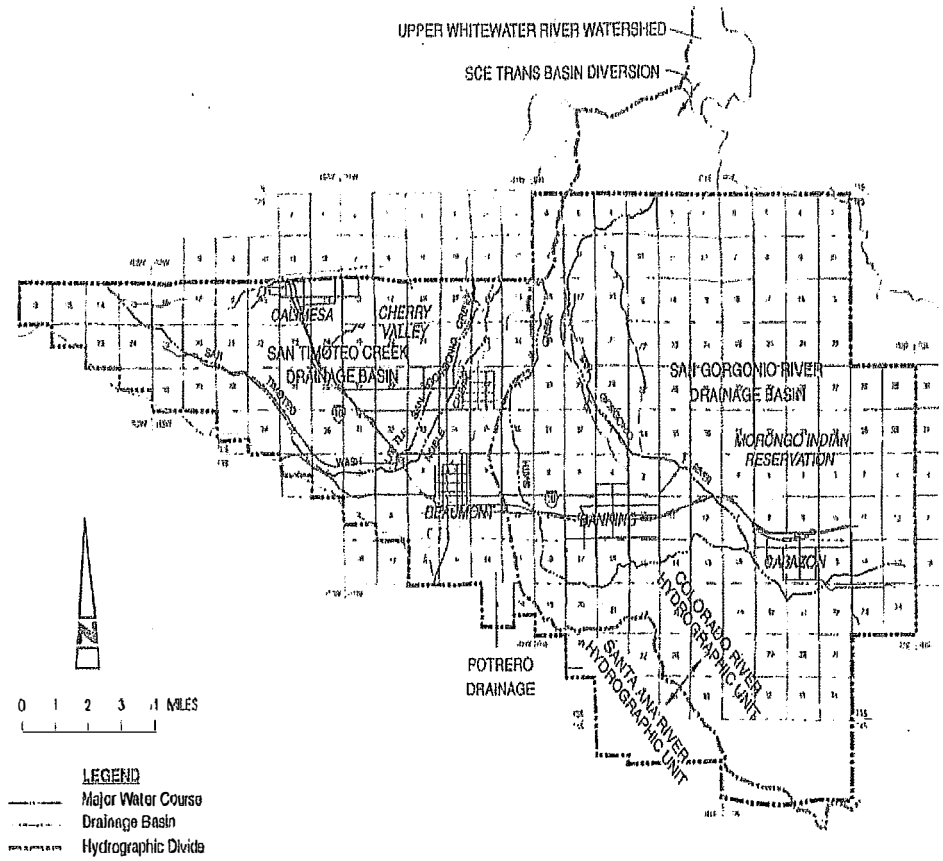
San Gorgonio Pass Water Agency
2015 Urban Water Management Plan
Riverside County, California

San Gorgonio Pass Water Agency Service Area Boundary

KJ 1544217*00
January 2016

Figure 1-1

FIGURE 1-2 PRINCIPLE DRAINAGE BASINS AND STREAMS



Source: SGPWA 2014 Report on Water Conditions

1.6.2 Exclusively or Primarily Wholesale Urban Water Supplier

If an urban water supplier meets the definition of an urban wholesale water supplier, as found in 10608.12 (r), it is considered a wholesale urban water supplier. Only the water code requirements that apply to wholesale suppliers must be addressed. SGPWA is a wholesale urban water supplier.

1.6.3 Retail Water Purveyors

Nine retail purveyors provide water services to most residents and businesses within the SGPWA service area. While only the City of Banning, BCVWD, and YVWD currently receive SWP water directly from the SGPWA, all nine retailers supply water to their customers from

local groundwater, which is replenished by SWP water imported by SGPWA. In addition, the YVWD serves water to its customers through direct deliveries from its surface water filtration plant.

City of Banning supplies water and wastewater services to the City of Banning. The City currently comprises a total land area of approximately 23 square miles in northern Riverside County. The City's water system is currently part of the City of Banning Public Works Department and Water Division.

Beaumont-Cherry Valley Water District's service area covers approximately 28 square miles, in Riverside and San Bernardino Counties, and includes the City of Beaumont and the community of Cherry Valley. The District purchases imported water from the SWP through the SGPWA for recharge of the Beaumont groundwater basin. The District also jointly owns and operates three groundwater wells with the City of Banning.

Yucaipa Valley Water District provides drinking water, recycled water, sewer collection, sewer treatment, and brine disposal services to the City of Yucaipa and the City of Calimesa in both San Bernardino and Riverside Counties. Yucaipa's service area encompasses approximately 40 square miles. YVWD also receives water from the San Bernardino Valley Municipal Water District (SBVMWD). Water demands and supplies within this portion of YVWD's service area are excluded from this UWMP.

South Mesa Water Company's service area includes parts of both the City of Calimesa and the City of Yucaipa.

Cabazon Water District's service area includes the unincorporated community of Cabazon in the eastern portion of SGPWA's service area.

Banning Heights Mutual Water Company's service area is the unincorporated community of Banning Bench, north of the City of Banning.

High Valleys Water District provides service to residents of the Twin Pines and Poppet Flats communities. HVWD receives all of its water from the City of Banning.

Mission Springs Water District's service area includes Desert Hot Springs and surrounding areas.

Morongo Band of Mission Indians' service area is approximately 35,000 acres northeast of the City of Banning.

1.6.4 Public Water Systems

Public water systems are the systems that provide drinking water for human consumption and these systems are regulated by the State Water Resources Control Board (SWRCB), Division of Drinking Water. Reporters file electronic Annual Reports to the Drinking Water Program to the Board, which include annual reports of water usage and other information.

The service areas of SGPWA and the major retail water purveyors are shown on Figure 1-3. As of 2015, retail water purveyors with demands on SGPWA, which are also agencies required to complete UWMPs, served approximately 25,000 connections, as presented in Table 1-3.

TABLE 1-3

RETAIL PUBLIC WATER SYSTEMS[a]

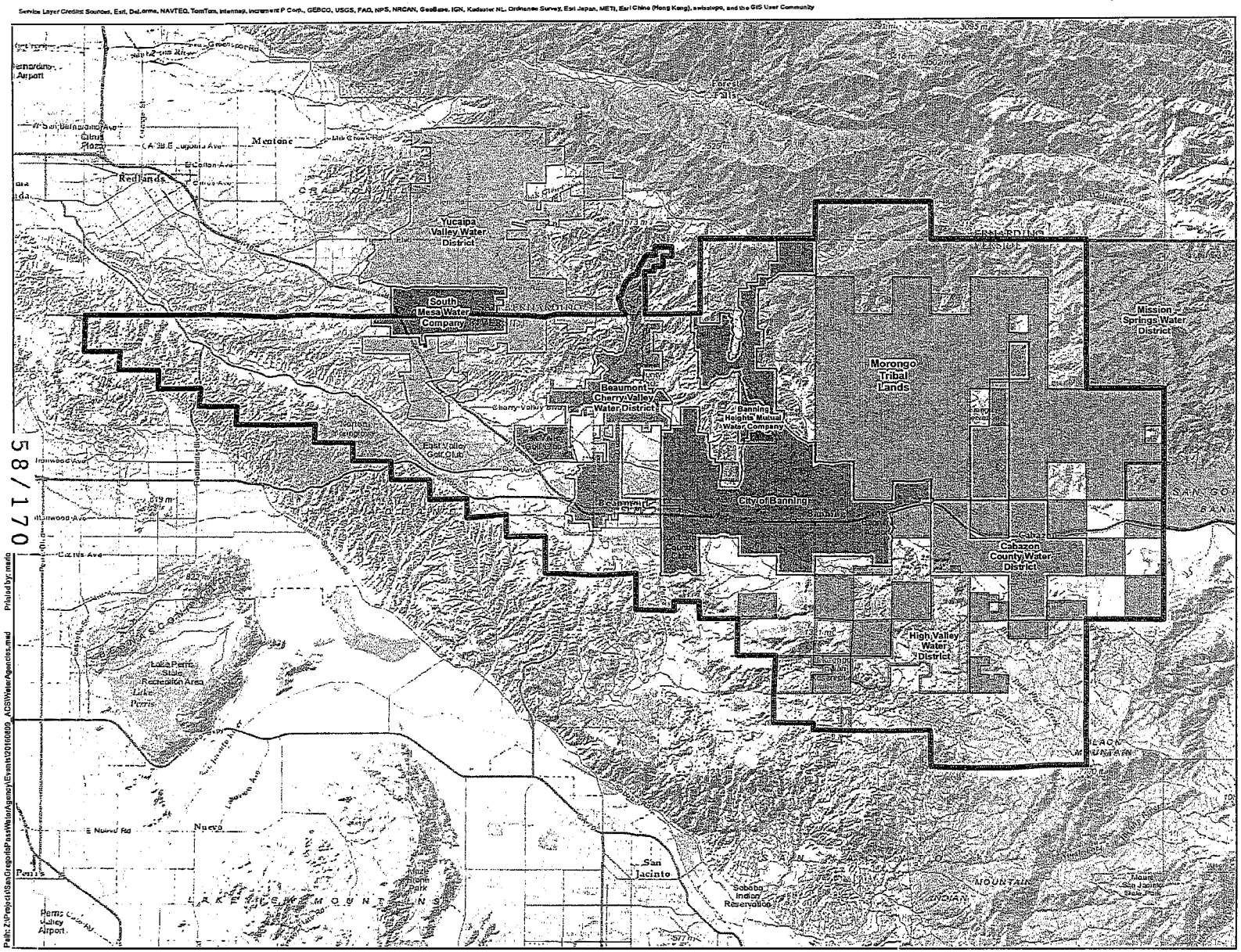
Public Water System Number	Public Water System Name	Number of Municipal Connections 2015	Volume of Water Supplied 2015 (AFY)
3310002	BCVWD[b]	16,799	9,293
3310006	City of Banning[c]	10,650	5,971
3610055	YVWD[d]	12,304	9,595
Total		39,753	24,859

Notes:
(a) Data provided only for those retail agencies with 2015 demands on SGPWA
(b) BCVWD 2015 UWMP
(c) City of Banning 2015 UWMP
(d) San Bernardino Valley Regional 2015 UWMP; includes supply from both SGPWA and San Bernardino Valley Municipal Water District.

1.7 Climate

The SGPWA service area experiences a semi-arid climate with hot, dry summers and cool winters (Table 1-3). Temperatures in the summer can exceed 95 degrees Fahrenheit (F), but with low humidity. In the winter, high temperatures may not rise above 55 degrees F during rainy days. On average, January is the coldest month with an average high/low of 61degrees F/39 degrees F while August is the hottest with a high/low of 96 degrees F/58 degrees F. SGPWA receives about 17 inches of precipitation annually with most of it occurring from January through March, with February being the wettest month. Average rainfall within the lower lying areas of the region is roughly five to seven inches per year. The large variation in annual rainfall within the surrounding mountains directly affects the annual water supply of the region. During El Niño years, southern California can receive considerably more precipitation and cooler temperatures than average. Evapotranspiration follows a similar trend as temperature, peaking in July, and decreasing in December.

Representative precipitation, temperature, and average evapotranspiration (ETo) data are reported in Table 1-4, as recorded at Beaumont Station (040609) and Hemet Station (Station 239).



Legend

- San Gorgorio Pass Water Agency Service Area
- City of Banning
- Beaumont Cherry Valley Water District
- Cabazon County Water District
- South Mesa Water Company
- Yucaipa Valley Water District
- Banning Heights Mutual Water Company
- High Valley Water District
- Mission Springs Water District
- Morongo Tribal Lands

N

0 1.25 2.5
Miles

Kennedy/Jenks Consultants

San Gregorio Pass Water Agency
Riverside County, California

Water Agencies within San Gorgorio Pass Water Agency Service Area

1544217*00
September 2016
Figure 1-3

TABLE 1-4

MONTHLY AVERAGE CLIMATE DATA SUMMARY

Month	Standard Monthly Average ETo (inches)[a]	Average Total Rainfall (inches) [b]	Average Temperature (degrees Fahrenheit)[b]	
			Max	Min
January	2.3	4.5	60	38
February	2.6	3.8	63	39
March	4.2	3.3	67	40
April	5.0	1.4	72	43
May	6.7	0.6	79	48
June	7.2	0.1	88	52
July	7.9	0.2	96	58
August	7.6	0.3	95	59
September	6.1	0.5	90	56
October	4.1	0.7	80	49
November	2.6	1.8	69	43
December	1.9	2.5	62	39

Notes:

(a) ETo data was obtained from the California Irrigation Management Information System (CIMIS) website at http://www.cimis.water.ca.gov/ for the Hemet Station (Station 239).

(b) Average rainfall data and average temperature data were obtained from the Western Regional Climate Center website at http://www.wrcc.dri.edu/ for the Beaumont #2 Station (040609) for the period of record 08/01/1939 to 1/20/2015.

1.8 Potential Effects of Climate Change

DWR's California Water Plan Update 2013 (CWP) considers how climate change may affect water availability, water use, water quality, and the ecosystem.[1]

Volume 1, Chapter 5 of the CWP, "Managing an Uncertain Future," evaluated how statewide and regional water demands that might change by 2050 in response to uncertainties both gradual and sudden. Gradual or long term factors include population growth, land use changes, and climate change. Sudden or short term changes include drought, flooding, earthquakes, the vulnerable condition of the Delta, fire, the economy, accidents, terrorist acts, and changes in policies, regulations, and laws. The uncertainties will play out differently across the regions of California. Each region will need to develop a portfolio of resource management strategies that consider regional water-management challenges and can be implemented to address regional issues.

In its 2015 State Water Project Delivery Capability Report (DCR), DWR included the potential effects of climate change in its analysis of SWP delivery reliability under future conditions. For that report, DWR selected a climate change scenario with median effects out of a number of climate change scenarios it analyzed in 2014.

[1] California Water Plan Update 2013 Investing in Innovation & Infrastructure: Bulletin 160-13.

Even without population changes, water demand could increase. Precipitation and temperature influence water demand for outdoor landscaping and irrigated agriculture. Outdoor water use is a large component of water demands in the service area. Lower spring rainfall increases the need to apply irrigation water. Further, warmer temperatures increase crop evapotranspiration, which increases consumptive use of water.

These effects and their potential to impact the supplies available to SGPWA have been evaluated indirectly in the DWR 2015 DCR, and their potential to impact demand is considered in SGPWA's assessment of demands in Chapter 2 of this UWMP.

1.9 Climate Change Vulnerability Analysis

Identification of watershed characteristics that could potentially be vulnerable to future climate change is the first step in assessing the climate change vulnerabilities in the Region. In the context of this analysis, vulnerability is defined as the degree to which a system is exposed to, susceptible to, and able to cope with and adapt to, the adverse effects of climate change, consistent with the definition in the recently issued Climate Change Handbook for Regional Water Planning (USEPA and DWR, 2011).

Water-related resources that are considered important in the Region and potentially sensitive to future climate change include water demands, water supplies, water quality, sea level rise, flooding, and ecosystem and habitat. A qualitative assessment of each of these resources with respect to anticipated climate change impacts has been prepared in the 2015 Integrated Regional Water Management Plan for the Upper Santa Ana River Watershed, in which SGPWA is a participant. The assessment follows the climate change vulnerability checklist assessment as defined in the Climate Change Handbook for Regional Water Planning and highlights those water-related resources that are important to the Region and are sensitive to climate change. This checklist is provided as Appendix D.

1.10 Other Demographic Factors

The past several years have been marked by both an economic recession and drought conditions in California, which have combined to substantially reduce water consumption in the SGPWA service area. The Governor issued an Executive Order in 2015 for mandatory water conservation calling for a 25 percent reduction in water consumption across the state in response to the severity of the drought.

It is anticipated that per capita water consumption will continue to decrease in the future, even with an economic recovery. This is due to the actions taken by local and state water agencies in response to the drought and the Governor's mandate, which are anticipated to remain in place moving into the future, as well as passive savings that will be realized through legislated codes, fixture and appliance standards, ordinances and education coupled with changing water use habits. Overall water consumption may stay relatively flat in the future as lower per capita water consumption is offset by increased population and economic activity.

Section 2: Water Use

2.1 Overview

This chapter describes past, current and projected water demands on SGPWA, including the methodology used to project future demands. Sales to other agencies, specifically BCVWD, City of Banning, and YVWD currently account for 100 percent of SGPWA's water demands. Additional smaller agencies and the Morongo Band of Mission Indians do not currently purchase water from the SGPWA, but may potentially request supplies in the future.

Numerous factors, including but not limited to, weather, conservation, population growth and land use changes, can affect the amount of water needed, as well as the timing of when it is needed. In addition, during an economic recession, there is a major downturn in development and a subsequent slowing of the projected demand for water. The projections in this Plan do not attempt to forecast recessions or droughts. Likewise, no speculation is made about future building and plumbing codes or other regulatory changes.

To the extent possible, relevant data was obtained from individual purveyor UWMPs that were completed for the 2015 cycle.

2.2 Demographics

Water service within the SGWPA service area is provided by retail purveyors to residential, commercial, industrial, institutional, recreational, and agricultural customers and for environmental and other uses, such as fire protection and landscaping. The total water demand trend is expected to continue to rise within the SGPWA's service area (along with most of California) because of population growth, economic activity, environmental and water quality needs and regulatory requirements.

2.3 Population

Table 2-1 shows the population projections for the SGPWA service area through 2040. The 2015 population is based on a 5-year American Community Survey (ACS) estimate for 2010-2014. Projections to 2040 were estimated using an average growth rate for the area based on available population projections for agencies within the SGPWA service area. When looking at individual agency projections, including BCVWD, City of Banning, YVWD and SMWC, projections are collectively higher than population projections estimated for the SGPWA service area using ACS data. This could be based on higher 2015 estimates for the individual agencies, as well as the fact that the SGPWA service area does not fully encompass the boundaries of all the individual agencies. Refer to Figure 1-1 for the purveyor service area boundaries.

TABLE 2-1
POPULATION PROJECTIONS FOR THE SGPWA SERVICE AREA

Subarea	2015	2020	2025	2030	2035	2040
SGPWA	87,192[a]	96,954	107,809	119,880	133,302	148,226

Notes:
(a) 2015 population based on 2010-2014 ACS 5-year estimate.

2.4 Historic Water Use, Sales to Other Agencies

SGPWA is a State Water Project Contractor and provides imported SWP water to the retail water purveyors within its service area. Purveyor demands on SGPWA generally showed a significant decrease between 2010 and 2015, primarily as a result of severe drought conditions and implementation of effective conservation measures. Table 2-2 shows historical (2010) and current (2015) water demands on SGPWA.

TABLE 2-2
HISTORICAL (2010) AND CURRENT (2015) WATER DEMANDS ON SGPWA (AF)[a]

Agency Name	2010	2015
BCVWD[b][c]	5,727	2,773
City of Banning[c]	1338	694
YVWD[c]	713	454
Total Demands	7,778	3,921

Notes:
(a) Volumes shown are actual deliveries.
(b) 2010 Data provided by BCVWD; 2015 data from BCVWD 2015 UWMP.
(c) Data from retailer 2015 UWMPs.

2.4.1 Historical Other Water Uses

In general, distribution systems experience system losses, being the difference between the amount of water supplied and the amount of authorized consumption. New legislation requires the analysis for the 2015 UWMP to include the reporting of distribution system water loss for the most recent 12-month period available. For future UWMP updates (i.e., 2020, 2025, etc.) the distribution system water loss shall be quantified for each of the five years preceding the plan update. It should be noted that recent legislation requires that as of January 1, 2017, distribution water loss must be reported on an annual basis. The data from these audits will be reported in future UWMP cycles.

SGPWA does not own or operate a distribution system; the water received from the SWP goes directly into groundwater recharge without treatment or distribution. However, in compliance with UWMP guidelines, SGPWA completed a water audit using the American Water Works Association (AWWA) water audit tool (provided in Appendix E), which is summarized in Table 2-3.

TABLE 2-3
12 MONTH WATER LOSS AUDIT REPORT SUMMARY

Reporting Period Start Date	Volume of Water Loss (AFY)[(a)]
January 2015	5

Notes:
(a) Sum of real and apparent losses based on AWWA water audit software output.

The SGPWA does not have any other sales to other water agencies to report in this UWMP.

2.5 Projected Water Use, Sales to Other Agencies

Table 2-4, below, shows retail purveyor demands that reflect reasonably anticipated demands on SGPWA supplies through the planning period. The distribution of water demands by water use sectors was not performed in this wholesale UWMP, but is detailed in each of the retail water purveyors' UWMPs. These demands take into account non-SGPWA supplies available to retail purveyors, such as local groundwater, local surface water, recycled water, and other imported water sources.

As discussed in Section 2.4, only three retail agencies within the SGPWA service area had demands on SGPWA in 2015, as noted in their respective UWMPs. However, additional retail agencies within the service area such as SMWC, CWD, BHMWC, HVWD, MSWD, and the Morongo Band of Mission Indians may have demands on the SGPWA in the future. Collective demands from those entities are estimated at 5,000 AF by 2040, as shown in Table 2-4 under "Other". These estimates will be revised every five years as the UWMP is updated.

Table 2-5, below, shows the projected imported water demands on SGPWA through the planning period, based on the potential maximum that can be expected. Future retail purveyor demands on SGPWA may differ based on the availability and actual use of non-SGPWA supplies, as well as actual "Other" demands.

TABLE 2-4
PROJECTED WATER DEMANDS ON SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[a]	10,860	12,476	14,087	15,886	17,334
City of Banning[b]	-	501	1,344	2,237	2,718
YVWD[c]	1,809	1,967	2,162	2,391	2,644
Other[d]	500	1,600	2,800	3,900	5,000
Total Water Demands	**13,169**	**16,544**	**20,393**	**24,414**	**27,696**

Notes:

(a) These demands are calculated by subtracting total BCVWD demands (BCVWD 2015 UWMP Table 4-2) from total non-SGPWA supplies (BCVWD 2015 UWMP Table 6-26 less the assumed imported supply from SGPWA). The remainder is assumed to be the demand for SGPWA supplies only. For example, for year 2025 demands were 20,450 AF (Table 4-2). Total supply in 2025 was 20,881 AF (Table 6-26) less 12,907 AF (Table 6-26) assumed supply from SGPWA for 7,974 AF. Total adjusted supply 7,974 AF less total adjusted demand 20,450 is -12,476 AF; therefore 12,476 AF is the assumed demand for imported SGPWA supplies. This assumes that BCVWD will prioritize non-SGPWA supplies, hence using SGPWA imported water to meet demands in excess of non-SGPWA supplies. Drinking water and banking demands are lumped together for purposes of this table, as the split for these demands is unknown.

(b) These demands are calculated by subtracting total adjusted Banning demands (City of Banning 2015 UWMP Table 3-3 plus system water losses from Table 3-1) from total non-SGPWA supplies, (City of Banning 2015 UWMP Table 5-4 less the assumed 2,718 AF from SGPWA). The remainder is assumed to be the demand for SGPWA supplies only. For example, for year 2025 demands were 10,199 AF (Table 3-1) plus 1,122 AF system water loss (Table 3-2) for 11,321 AF. Total supply in 2025 was 13,538 AF (Table 5-4) less 2,718 AF assumed supply from SGPWA for 10,820 AF. Total adjusted supply 10,820 AF less total adjusted demand 11,321 is -501 AF; therefore 501 AF is the assumed demand for imported SGPWA supplies. It assumed that City of Banning demands shown in UWMP Table 3-3 are accurate and calculations assume that the City of Banning will prioritize non-SGPWA supplies, hence using SGPWA imported water to meet demands in excess of non-SGPWA supplies.

(c) Projected imported SGPWA supply needs to meet drinking water demands from the Yucaipa Valley Water Filtration Facility and drinking water demands (referred to in the SBVRUWMP as conjunctive use demands) from 2015 SBVRUWMP, Table 12-15.

(d) Conservative projections of future demand on SGPWA from agencies within the service area that do not have current demands on the Agency, including SMWC, CWD, BHMWC, HVWD, MSWD, and Morongo Band of Mission Indians. This value may increase through time as service area demands are re-evaluated.

TABLE 2-5
PROJECTED MAXIMUM WATER DEMANDS ON SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[a]					
Drinking Water Demands	10,150	11,127	12,503	13,843	15,362
Banking Demands	1,000	1,500	2,000	2,500	2,500
City of Banning[b]	2,718	2,718	2,718	2,718	2,718
YVWD[c]					
Drinking Water Demands	609	767	962	1,191	1,444
Conjunctive Use Demands	1,200	1,200	1,200	1,200	1,200
New Development Supply Sustainability Program	2,504	3,040	3,596	4,344	3,407
Other[d]	500	1,600	2,800	3,900	5,000
Total Water Demands	**18,681**	**21,952**	**25,779**	**29,696**	**31,631**

Notes:
(a) From BCVWD 2015 UWMP, Table 6-26 (DWR Table 6-9).
(b) Total imported SGPWA supply projections from City of Banning 2015 UWMP; based on draft "Regional Water Allocation Agreement" for Water Imported by the SGPWA.
(c) Total imported SGPWA supply projections from 2015 SBVRUWMP, Table 12-15.
(d) Same as Table 2-4.

Table 2-5 shows demands on SGPWA that are considered to be potential maximum water demands, as they incorporate demand management assumptions beyond the need to only meet municipal demands, as described in the following.

BCVWD in its 2015 UWMP shows projections for SGPWA supplies needing to meet municipal demands and also to meet groundwater banking needs. The demands are based on the District's 2015 Potable Water Master Plan Update. BVCWD intends to use imported SGPWA supplies to supplement groundwater recharge to build-up or maintain BCVWD's Beaumont Basin groundwater storage account. If imported water from SGPWA is not available in a given year, the District says no groundwater recharge would occur. But when imported water is available, any deficiencies from previous years would be "carried over" and made up (BCVWD 2015 UWMP pg. 4-8).

In its 2015 UWMP, the City of Banning shows projections for SGPWA supplies based on a draft "Regional Water Allocation Agreement for Water Imported by SGPWA." The draft allocation agreement states that the City of Banning would receive 27.3% of the SGPWA Annual Table A Amount allocation, assuming 58% SWP delivery reliability (City of Banning 2016). The draft allocation agreement has not been adopted by SGPWA. Those demands are shown in Table 2-5.

YVWD demand projections in its 2015 UWMP are based on various potential needs, including drinking water demands, conjunctive use demands for local water banking, and demands by new development projects as part of the District's "New Development Supply Sustainability Program." The sustainability program requires developers to purchase a 20-year water supply for each new house built, in order to ensure that long-term supplies will be available for new developments prior to construction. These sustainability demands would be contingent upon

availability of supplies and the timing of such supplies (J. Zoba, personal communication 2016). These demand projections are also shown as potential maximum demands in Table 2-5.

Demands shown in Tables 2-4 and 2-5 are anticipated demands in average/normal hydrologic years.

2.6 Demands in Dry Years

Tables 2-6 through 2-9 show anticipated retail water demands on SGPWA in single-dry and multiple-dry years.

TABLE 2-6
PROJECTED WATER DEMANDS ON SGPWA – SINGLE-DRY YEAR (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[(a)]	520	570	630	690	770
City of Banning[(b)]	-	501	1,344	2,237	2,718
YVWD[(c)]	600	600	700	700	700
Other[(d)]	500	1,600	2,800	3,900	5,000
Total Water Demands	**1,620**	**3,271**	**5,474**	**7,527**	**9,188**

Notes:
(a) From BCVWD 2015 UWMP, Table 7-9.
(b) City of Banning dry year supplies and demands are the same as normal years (City of Banning 2015 UWMP Tables 6-4 to 6-6). Demands here are the same as water demands for normal years (Table 2-4).
(c) YVWD demand projections in dry years are based on demands shown in the YVWD 2015 UWMP, Table 12-18, and assuming 10% of all of YVWD's demands are met through SGPWA.2
(d) Projections of future demand from "other" agencies is assumed to be the same as during normal/average water years.

TABLE 2-7
PROJECTED MAXIMUM WATER DEMANDS ON SGPWA – SINGLE-DRY YEAR (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[(a)]	520	570	630	690	770
City of Banning[(b)]	2,718	2,718	2,718	2,718	2,718
YVWD[(c)]	600	600	700	700	700
Other[(d)]	500	1,600	2,800	3,900	5,000
Total Water Demands	**4,338**	**5,488**	**6,848**	**8,008**	**9,188**

Notes:
(a) From BCVWD 2015 UWMP, Table 7-9.
(b) City of Banning dry year supplies and demands are the same as normal years (City of Banning 2015 UWMP Tables 6-4 to 6-6). Demands here are the same as projected maximum water demands for normal years (Table 2-5).
(c) YVWD demand projections in dry years are based on demands shown in the YVWD 2015 UWMP, Table 12-18, and assuming 10% of all of YVWD's demands are met through SGPWA.[2]
(d) Projections of future demand from "other" agencies is assumed to be the same as during normal/average water years.

TABLE 2-8
PROJECTED WATER DEMANDS ON SGPWA – MULTIPLE-DRY YEAR (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[(a)]	2,060	2,280	2,500	2,780	3,070
City of Banning[(b)]	-	501	1,344	2,237	2,718
YVWD[(c)]	600	600	700	700	700
Other[(d)]	500	1,600	2,800	3,900	5,000
Total Water Demands	**3,160**	**4,981**	**7,344**	**9,617**	**11,488**

Notes:
(a) From BCVWD 2015 UWMP, Table 7-11 and Appendix C UWMP Table 7-4.
(b) City of Banning dry year supplies and demands are the same as normal years (City of Banning 2015 UWMP Tables 6-4 to 6-6). Demands here are the same as water demands for normal years (Table 2-4).
(c) YVWD demand projections in dry years are based on demands shown in the YVWD 2015 UWMP, Table 12-18, and assuming 10% of all of YVWD's demands are met through SGPWA.2
(d) Projections of future demand from "other" agencies is assumed to be the same as during normal/average water years.

[2] Approximately 10% of YVWD's supplies are provided by SGPWA; the remaining 90% is supplied by SBVMWD.

TABLE 2-9
PROJECTED MAXIMUM WATER DEMANDS ON SGPWA – MULTIPLE-DRY YEAR (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[a]	2,060	2,280	2,500	2,780	3,070
City of Banning[b]	2,718	2,718	2,718	2,718	2,718
YVWD[c]	600	600	700	700	700
Other[d]	500	1,600	2,800	3,900	5,000
Total Water Demands	**5,878**	**7,198**	**8,718**	**10,098**	**11,488**

Notes:

(a) From BCVWD 2015 UWMP, Table 7-11 and Appendix C UWMP Table 7-4.
(b) City of Banning dry year supplies and demands are the same as normal years (City of Banning 2015 UWMP Tables 6-4 to 6-6). Demands here are the same as potential maximum water demands for normal years (Table 2-5).
(c) YVWD demand projections in dry years are based on demands shown in the YVWD 2015 UWMP, Table 12-18, and assuming 10% of all of YVWD's demands are met through SGPWA.2
(d) Projections of future demand from "other" agencies is assumed to be the same as during normal/average water years.

2.7 Conservation Effects on Water Usage

Major factors that can affect water usage include weather and demand reducing behaviors. Historically, when the weather is hot and dry, water usage generally increases. The amount of increase varies according to the number of consecutive years of hot, dry weather and the conservation activities imposed. During cool, wet years, water usage generally decreases, reflecting less water usage for exterior landscaping.

In recent years, water conservation has become an increasingly important factor in water supply planning and management in California. Over the past ten years there have been a number of regulatory changes related to conservation including new standards for plumbing fixtures, a new landscape ordinance, a state universal retrofit ordinance, new Green Building standards, mandatory demand reduction goals and more. The California plumbing code has also instituted requirements for new construction that mandate the installation of ultra-low-flow toilets and low-flow showerheads.

During the 1987 to 1992 drought period, overall demands due to the effects of hot, dry weather were projected to increase by approximately ten percent. As a result of extraordinary conservation measures enacted during the period, the overall water demand actually decreased by more than ten percent.

During the current drought, Governor Brown issued a January 2014 drought proclamation and April 2014 emergency declaration, calling on urban water suppliers to implement their local water shortage contingency plans. In April 2015, following the lowest snowpack ever recorded, Governor Brown directed the SWRCB to implement mandatory water reductions to reduce water usage by 25 percent.

In May 2015, the SWRCB adopted an emergency regulation requiring an immediate 25 percent reduction in overall potable urban water use. (See SWRCB Resolution No. 2015-0032.) The SWRCB began to track water conservation for each of the state's larger urban retail water suppliers (those with more than 3,000 connections) on a monthly basis; compliance with individual water supplier conservation requirements and the statewide 25 percent mandate is based on cumulative savings.

In February 2016, the SWRCB approved an updated and extended emergency regulation that will continue mandatory reductions through October 2016, unless revised before then. The extended regulation provides more flexibility to urban water suppliers in meeting their conservation requirements and provides credits for certain factors that affect water use such as hotter-than-average climates, population growth, and significant investments in new local drought resilient water sources such as recycled water. Locally, these mandates translated into water conservation standards ranging from 28 to 36 percent for the retail purveyors.

In 2015, the three retailers (BCVWD, City of Banning, and YVWD) reduced their total groundwater production by 24.5% over the previous year (2014). Assuming the focus on conservation continues it is conceivable that demands would continue to be reduced.

On May 18, 2016, the SWRCB adopted a new approach, which replaced the percentage reduction-based water conservation standard with a localized "stress test" approach. The new approach mandated urban water suppliers to ensure a three year supply of water under drought conditions. The regulation requires locally developed conservation standards based on each agency's specific circumstances and is currently in effect through January 2017.

In addition to, and in combination with, statewide regulations and mandates, demand management measures implemented by SGPWA and purveyors are contributing to increased water conservation in the service area. Details on ongoing and future water conservation actions are provided in Section 7, Demand Management Measures.

2.8 SBX7-7 Baseline and Targets

This section is not required for SGPWA as a wholesale water supplier. Measures, programs, and policies that SGPWA has adopted to help the retail water suppliers within its service area to achieve their SBX7-7 water use reduction targets are discussed in Section 7.

Section 3: Water Resources

3.1 Overview

This section describes the water resources available to SGPWA for the 25-year period covered by the Plan and provides a high-level overview of the local water supplies used by purveyors within the SGPWA service area. SGPWA receives exclusively water supplies from the SWP to meet purveyor demands. Retail agencies within the SGPWA service area also use local water supplies, including surface water, groundwater, and recycled water. SGPWA supplies are summarized in Table 3-1 and discussed in more detail below.

TABLE 3-1
SUMMARY OF CURRENT AND PLANNED WATER SUPPLIES (AFY)

Water Supply Source	2015	2020	2025	2030	2035	2040
Existing Supplies						
Imported SWP[(a)]	10,700	10,700	10,700	10,700	10,700	10,700
Yuba Accord[(b)]	300	300	300	300	300	300
Total Existing Supplies	**11,000**	**11,000**	**11,000**	**11,000**	**11,000**	**11,000**
Planned Supplies						
SBVMWD Purchased Supply[(c)]	-	2,000	2,000	2,000	2,000	2,000
Available Purchases of Supply[(d)]	-	1,500	3,800	7,700	11,700	15,000
Total Planned Supplies	**-**	**3,500**	**5,800**	**9,700**	**13,700**	**17,000**
Total Existing and Planned Supplies	**11,000**	**14,500**	**16,800**	**20,700**	**24,700**	**28,000**

Notes: Values are rounded to the nearest hundred.

(a) Assumes 62% of Table A amount (17,300 AFY) based on the California Department of Water Resources Final Delivery Capability Report 2015 (DWR 2015 DCR).

(b) See Section 3.2.4.1.

(c) An average of 2,000 AF is assumed over a five year period through a future agreement with SBVMWD. See Section 3.3.1.2.

(d) The Agency has a financial plan in place to obtain additional supplies necessary to meet projected demands within its service area (shown in Table 2-5). These future supplies are described in Section 3.3. Sources include the dry-year water purchase program, exchanges with CLAWA, and other supplemental water as available. The Agency is expected to purchase additional supplies by 2020 in order to meet demands shown in Table 2-5. Volumes shown assume the DWR 2015 DCR average reliability of 62%.

This section assesses supplies in an average year, a single dry year, and during multiple dry years.

- An average year (also called a normal year) is the average supply over a range of years and represents the median water supply available to SGPWA.
- The single-dry year is the year that represents the lowest water supply available to SGPWA.
- The multiple-dry year period is the lowest average water supply available to SGPWA for three or more consecutive dry years.

The term "dry" is used throughout this section and in subsequent sections concerning water resources and reliability as a measure of supply availability. As used in this Plan, dry years are those years when supplies are the lowest and demands are the highest, which occurs primarily when precipitation is lower than the long-term average precipitation. The impact of low precipitation in a given year on a particular source of supply may differ based on how low the precipitation is, or whether the year follows a high-precipitation year or another low-precipitation year. For the SWP, a low-precipitation year may or may not affect supplies, depending on how much water is in SWP storage at the beginning of the year. Also, dry conditions can differ geographically. For example, a dry year can be local to the San Gorgonio Pass Area (thereby affecting local groundwater replenishment and production), local to northern California (thereby affecting SWP water deliveries), or statewide (thereby affecting both local groundwater and the SWP). When the term "dry" is used in this Plan, statewide drought conditions are assumed, affecting both local groundwater and SWP supplies at the same time.

3.2 Imported Water Supplies

3.2.1 SWP Facilities

Water supplies available to SGPWA are imported from the SWP – the largest state-built, multi-purpose water project in the country. It was authorized by the California State Legislature in 1959, with the construction of most facilities completed by 1973. Today, the SWP includes 28 dams and reservoirs, 26 pumping and generating plants, and approximately 660 miles of aqueducts. The primary water source for the SWP is the Feather River, a tributary of the Sacramento River. Storage released from Oroville Dam on the Feather River flows down natural river channels to the Sacramento-San Joaquin River Delta (Delta). While some SWP supplies are pumped from the northern Delta into the North Bay Aqueduct, the vast majority of SWP supplies are pumped from the southern Delta into the 444-mile-long California Aqueduct. The California Aqueduct conveys water along the west side of the San Joaquin Valley to Edmonston Pumping Plant, where water is pumped over the Tehachapi Mountains and the California Aqueduct then divides into the East and West Branches. SGPWA delivers its SWP supplies through the East Branch to use within the local groundwater basins through extensive transmission pipeline systems and direct releases from Silverwood Lake, a SWP regulating reservoir.

3.2.2 SWP Supplies Available to SGPWA

In the early 1960s, DWR began entering into individual SWP Water Supply Contracts with urban and agricultural public water supply agencies located throughout northern, central, and southern California for SWP water supplies. SGPWA is one of 29 water agencies (commonly referred to as “contractors”) that have a SWP Water Supply Contract with DWR.

The SWP Contracts entered into in the 1960s had initial 75-year terms, which thus would begin to expire in 2035. While the SWP Contracts provide for continued water service to the contractors beyond the initial term, efforts are currently underway to extend the SWP Contracts to improve financing for the SWP.

Negotiations on extending the SWP Contracts took place between DWR and the contractors during 2013 and 2014, and were open to the public. The following terms were agreed to and

are currently the subject of analysis under the requirements of the California Environmental Quality Act (CEQA) (Notice of Preparation dated September 12, 2014):

- Extend the term of the 29 SWP Contracts to December 31, 2085.
- Provide for increased SWP financial operating reserves during the extended term of the SWP Contracts.
- Provide additional funding mechanisms and accounts to address SWP needs and purposes.
- Develop a revised payment methodology with a corresponding billing system that better matches the timing of future SWP revenues to future expenditures.

It is anticipated that the term of the SWP Contracts will be extended to December 31, 2085. The Contracts and associated amendments are scheduled to be finalized summer 2017. To improve coordination between supply and demand projections beyond the year 2035, the data and information contained in this UWMP reflect that assumption, as provided in the Urban Water Management Planning Act. (CWC Section 10631(b).)

Each SWP contractor's SWP Water Supply Contract contains a "Table A," which lists the maximum amount of water an agency may request each year throughout the life of the contract. Table A is used in determining each contractor's proportionate share, or "allocation," of the total SWP water supply DWR determines to be available each year. The total planned annual delivery capability of the SWP and the sum of all contractors' maximum Table A amounts was originally 4.23 million acre-feet (AF). The initial SWP storage facilities were designed to meet contractors' water demands in the early years of the SWP, with the construction of additional storage facilities planned as demands increased. However, essentially no additional SWP storage facilities have been constructed since the early 1970s. SWP conveyance facilities were generally designed and have been constructed to deliver maximum Table A amounts to all contractors. After the permanent retirement of some Table A amount by two agricultural contractors in 1996, the maximum Table A amounts of all SWP contractors now totals about 4.17 million AF.

While Table A identifies the maximum annual amount of water an SWP contractor may request, the amount of SWP water actually available and allocated to SWP contractors each year is dependent on a number of factors and can vary significantly from year to year. The primary factors affecting SWP supply availability include hydrology, the amount of water in SWP storage at the beginning of the year, regulatory and operational constraints, and the total amount of water requested by SWP contractors.

According to the water supply contract between DWR and the SGPWA, SGPWA's maximum annual entitlement from the SWP ("Table A Amount") is 17,300 AFY. Table 3-2 presents historical SWP deliveries to SGPWA.

TABLE 3-2
HISTORICAL SWP DELIVERIES TO SGPWA

Year	Deliveries (AFY)
2003	116
2004	814
2005	687
2006	4,420
2007	4,815
2008	4,905
2009	6,609
2010	8,403
2011	10,730
2012	10,974
2013	9,695
2014	5,131
2015	3,930

Notes:
(a) Source: 2014 San Gorgonio Pass Water Agency Report on Water Conditions; 2015 data provided by SGPWA.

In addition to Table A supplies, the SWP Contracts provide for additional types of water that may periodically be available, including "Article 21" water and Turnback Pool water. Article 21 water (which refers to the SWP Contract provision defining this supply) is water that may be made available by DWR when excess flows are available in the Delta (i.e., when Delta outflow requirements have been met, SWP storage south of the Delta is full and conveyance capacity is available beyond that being used for SWP operations and delivery of allocated and scheduled Table A supplies). Article 21 water is made available on an unscheduled and interruptible basis and is typically available only in average to wet years, generally only for a limited time in the late winter. The Turnback Pool is a program through which contractors with allocated Table A supplies in excess of their needs in a given year may "turn back" that excess supply for purchase by other contractors who need additional supplies that year. The Turnback Pool can make water available in all types of hydrologic years, although generally less excess water is turned back in dry years. As urban contractor demands have increased, the amount of water turned back and available for purchase has diminished.

The availability of Article 21 water and Turnback Pool water is uncertain. When available, these supplies provide additional water that SGPWA may be able to use, either directly to meet demands or for later use after storage in its groundwater banking programs. Due to the uncertainty in availability of Article 21 water and Turnback Pool water, supplies of these types of SWP water are not included in this report. However, to the extent SGPWA is able to make use of these supplies when available, SGPWA may be able to improve the reliability of its SWP supplies beyond the values used throughout this Plan.

While not specifically provided for in the SWP Contracts, DWR has in critically dry years created Dry Year Water Purchase Programs for contractors needing additional supplies. Through these programs, water is purchased by DWR from willing sellers in areas that have available supplies and is then sold by DWR to agencies willing to purchase those supplies. The availability of these supplies is generally uncertain. However, SGPWA's access to these supplies when they

are available would enable it to improve the reliability of its dry-year supplies beyond the values used throughout this report.

3.2.3 Factors Affecting SWP Table A Supplies

Primary factors affecting SWP supply availability include: the availability of water at the source of supply in northern California, the ability to transport that water from the source to the primary SWP diversion point in the southern Delta and the magnitude of total contractor demand for that water, as summarized below.

Availability of SWP Source Water

SWP supplies originate in northern California, primarily from the Feather River watershed. The availability of these supplies is dependent on the amount of precipitation in the watershed, the amount of that precipitation that runs off into the Feather River, water use by others in the watershed and the amount of water in storage in the SWP's Lake Oroville at the beginning of the year. Variability in the location, timing, amount and form (rain or snow) of precipitation, as well as how wet or dry the previous year was, produces variability from year to year in the amount of water that flows into Lake Oroville. However, Lake Oroville acts to regulate some of that variability, storing high inflows in wetter years that can be used to supplement supplies in dry years with lower inflows.

As discussed in Section 1.8 and in DWR's 2015 State Water Project Delivery Capability Report (2015 DCR), climate change adds another layer of uncertainty in estimating the future availability of SWP source water. Current literature suggests that global warming may change precipitation patterns in California from the patterns that occurred historically. While different climate change models show differing effects, potential changes could include more precipitation falling in the form of rain rather than snow and earlier snowmelt, which would result in more runoff occurring in the winter rather than spread out over the winter and spring.

Ability to Convey SWP Source Water

As discussed previously, water released from Lake Oroville flows down natural river channels into the Delta. The Delta is a network of channels and reclaimed islands at the confluence of the Sacramento and San Joaquin rivers. The SWP and the federal Central Valley Project (CVP) use Delta channels to convey water to the southern Delta for diversion, making the Delta a focal point for water distribution throughout the state.

A number of issues affecting the Delta can impact the ability to divert water supplies from the Delta, including water quality, fishery protection and levee system integrity. Water quality in the Delta can be adversely affected by both SWP and CVP diversions, which primarily affect salinity, as well as by urban discharge and agricultural runoff that flows into the Delta, which can increase concentrations of constituents such as mercury, organic carbon, selenium, pesticides, and toxic pollutants, and reduce dissolved oxygen. The Delta also provides a unique estuarine habitat for many resident and migratory fish species, some of which are listed as threatened or endangered. The decline in some fish populations is likely the result of a number of factors, including water diversions, habitat destruction, degraded water quality and the introduction of non-native species. Delta islands are protected from flooding by an extensive levee system.

Levee failure and subsequent island flooding can lead to increased salinity requiring the temporary shutdown of SWP pumps.

In order to address some of these issues, SWP and CVP operations in the Delta are limited by a number of regulatory and operational constraints. These constraints are primarily incorporated into the SWRCB Water Rights Decision 1641 (D-1641), which establishes Delta water quality standards and outflow requirements that the SWP and CVP must comply with. In addition, SWP and CVP operations are further constrained by requirements included in Biological Opinions (BOs) for the protection of threatened and endangered fish species in the Delta, issued by the United States Fish and Wildlife Service (FWS) in December 2008 and the National Marine Fishery Service (NMFS) in June 2009. The requirements in the BOs are based on real-time physical and biological phenomena (such as turbidity, water temperature and location of fish), which results in uncertainty in estimating potential impacts on supply of the additional constraints imposed by the BOs.

Demand for SWP Water

The reliability of SWP supplies is affected by the total amount of water requested and used by SWP contractors, since an increase in total requests increases the competition for limited SWP supplies. As previously mentioned, contractor Table A Amounts in the SWP Contracts ramped up over time, based on projected increases in population and water demand at the time the contracts were signed. Urban SWP contractors' requests for SWP water were low in the early years of the SWP, but have increased steadily over time, although more slowly than the ramp-up in their Table A Amounts, which reached a maximum for most contractors in the early to mid-1990s. Since that time, urban contractors' requests for SWP water have continued to increase until recent years when nearly all SWP contractors are requesting their maximum Table A Amounts.

Consistent with other urban SWP contractors, SWP deliveries to SGPWA have increased as its requests for SWP water have increased. Historical total SWP deliveries to SGPWA are shown in Table 3-2.

3.2.3.1 SWP Table A Supply Assessment

DWR prepares a biennial report to assist SWP contractors and local planners in assessing the near and long-term availability of supplies from the SWP. DWR issued its most recent update, the 2015 DWR SWP Delivery Capability Report (2015 DCR), in July 2015. In the 2015 DCR, DWR provides SWP supply estimates for SWP contractors to use in their planning efforts, including for use in their 2015 UWMPs.

3.2.3.1.1 Analysis Assumptions

DWR's estimates of SWP deliveries are based on a computer model that simulates monthly operations of the SWP and CVP systems. Key assumptions and inputs to the model include the facilities included in the system, hydrologic inflows to the system, regulatory and operational constraints on system operations, and projected contractor demands for SWP water.

In the 2015 DCR, DWR uses the following assumptions to model current conditions: existing facilities; hydrologic inflows to the model based on 82 years of historical inflows (1922 through 2003), adjusted to reflect current levels of development in the supply source areas; current regulatory and operational constraints, including D-1641, the 2008 FWS BO, and the 2009 NMFS BO; and contractor demands for SWP water at maximum Table A Amounts.

To evaluate SWP supply availability under future conditions, the 2015 DCR included four model studies. The first of the future-conditions studies, the Early Long Term (ELT) scenario, used all of the same model assumptions for current conditions, but reflected changes expected to occur from climate change, specifically, a 2025 emission level and a 15 cm sea level rise. The other three future-conditions studies also include varying model assumptions related to the Bay Delta Conservation Plan (BDCP)/California Water Fix (Cal WaterFix), such as changes to facilities and/or regulatory and operational constraints.

BDCP/Cal WaterFix plans are currently in flux, environmental review is ongoing, and several regulatory and legal requirements must be met prior to any construction.

This UWMP uses the ELT scenario to estimate future SWP supply availability because it is based on existing facilities and regulatory constraints, with hydrology adjusted for the expected effects of climate change. This scenario is consistent with the studies DWR has used in its previous SWP Delivery Reliability Reports for supply availability under future conditions. Therefore, in this UWMP, future SWP supply availability is based on the ELT study included in the 2015 DCR.

3.2.3.1.2 Analysis Results

In the 2015 DCR, DWR estimates that for all contractors combined, the SWP can deliver on a long-term average basis a total Table A supply of 62 percent of total maximum Table A Amounts. In the worst-case single critically dry year, DWR estimates the SWP can deliver a total Table A supply of 11 percent of total maximum Table A Amounts. DWR estimates the SWP can deliver a total Table A supply during a four-year dry period averaging 33 percent of total maximum Table A Amounts.

DWR's analysis of current (2015) conditions is used in this Plan to estimate 2015 SWP supplies and its analysis of future (2035) conditions is used to estimate 2035-2050 SWP supplies. As has been suggested by DWR, SWP supplies for the five-year increments between 2015 and 2035 are interpolated between these values. SWP supplies for years beyond 2035 are assumed to be the same as for 2035.

The extremely dry sequence from the beginning of January 2013 through the end of 2015 was one of the driest two-year periods in the historical record. Water year 2013 was a year with two hydrologic extremes.[3] October through December 2012 was one of the wettest fall periods on record, but was followed by the driest consecutive 12 months on record. Accordingly, the 2013 SWP supply allocation was a low 35 percent of SWP Table A Amounts. The 2013 hydrology ended up being even drier than DWR's conservative hydrologic forecast, so the SWP began 2014 with reservoir storage lower than targeted levels and less stored water available for 2014

[3] A water year begins in October and runs through September. For example, water year 2013 is October 2012 through September 2013.

supplies. Compounding this low storage situation, 2014 also was an extremely dry year, with runoff for water year 2014 the fourth driest on record. Due to extraordinarily dry conditions in 2013 and 2014, the 2014 SWP water supply allocation was a historically low 5 percent of Table A Amounts. The dry hydrologic conditions that led to the low 2014 SWP water supply allocation were extremely unusual, and to date this hydrology has not been included in the SWP delivery estimates presented in DWR's 2015 DCR. It is anticipated that the hydrologic record used in the DWR model will be extended to include the period through 2014 during the next update of the model, which is expected to be completed prior to issuance of the next update to the biennial DCR. For purposes of this UWMP, the historical single dry year of 1977 is used to estimate single dry year supplies.

Table 3-3 shows SWP supplies projected to be available to SGPWA in average/normal years, a single dry year, and over a multiple dry year period, based on the supply reliability analyses provided in the 2015 DCR.

TABLE 3-3

SWP TABLE A AMOUNT SUPPLY RELIABILITY (AF)[a]

SWP Supply	2020	2025	2030	2035	2040
Average Water Year[b]					
Table A Supply	10,700	10,700	10,700	10,700	10,700
% of Table A Amount[c]	62%	62%	62%	62%	62%
Single Dry Year[d]					
Table A Supply	1,900	1,900	1,900	1,900	1,900
% of Table A Amount[c]	11%	11%	11%	11%	11%
Multi-Dry Year[e]					
Table A Supply	5,700	5,700	5,700	5,700	5,700
% of Table A Amount[c]	33%	33%	33%	33%	33%

Notes: Values rounded to nearest hundred.

(a) Projected SWP supplies to SGPWA based on analyses presented in DWR's "2015 Delivery Capability Report (DCR)."
(b) Based on average deliveries over the DCR's historic hydrologic period of 1921 through 2003.
(c) Supply as a percentage of SGPWA's Table A Amount of 17,300 AF.
(d) Based on a repeat of the worst case historic single dry year of 1977 (from DWR 2015 DCR).
(e) Supplies are annual averages over four consecutive dry years, based on the historic four-year dry period of 1931-1934.

3.2.3.1.1 Potential Future SWP Supplies

An ongoing planning effort to increase long-term supply reliability for both the SWP and CVP is taking place through the California Water Fix and EcoRestore (Cal Water Fix) process. The co-equal goals of the Cal Water Fix are to improve water supply reliability and restore the Delta ecosystem. The Cal Water Fix is being prepared through a collaboration of state, federal and local water agencies, state and federal fish agencies, environmental organizations and other interested parties. Several "isolated conveyance system" alternatives are being considered in the plan that would divert water from the north Delta to the south Delta where water is pumped into the south-of-Delta stretches of the SWP and CVP. The new conveyance facilities would allow for greater flexibility in balancing the needs of the estuary with the reliability of water supplies. The plan could also provide other benefits, such as reducing the risk of long outages from Delta levee failures.

Cal Water Fix has been in development since 2006, initially as the BDCP and is currently undergoing extensive environmental review. The Draft BDCP and its associated Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) were released for public review in December 2013. In response to public comments, the Cal Water Fix was reevaluated, and in April 2015 the lead agencies announced a modified alternative which effectively split the project into two parts: the conveyance portion (known as Cal WaterFix), and the restoration portion (known as EcoRestore). The Cal WaterFix alternative is evaluated in a partially recirculated draft environmental document (Recirculated Draft EIR/Supplemental Draft EIR) that was released for public review in July 2015. That environmental document is not anticipated to be final until at least 2016.

While there is support for the BDCP/Cal WaterFix project, plans are currently in flux and environmental review is ongoing. Additionally, several regulatory and legal requirements must be met prior to any construction. Because of this uncertainty, any improvements in SWP supply reliability or other benefits that could result from this proposed project are not included in this Plan.

3.2.4 Other Imported Supplies

3.2.4.1 Yuba Accord Water

SGPWA entered into the Yuba Accord Agreement (Appendix F), which allows for the purchase of water from the Yuba County Water Agency through DWR to 21 SWP contractors (including SGPWA) and the San Luis and Delta- Mendota Water Authority. Yuba Accord water comes from north of the Delta, and the water purchased under this agreement is subject to losses associated with transporting it through the Delta. While the amount of this water varies each year depending on hydrologic conditions, the average amount that the Agency has received has been approximately 300 AFY. The Agency recently signed an extension to this agreement allowing it to purchase this water well into the future.

3.2.4.2 Multi-Year Pool Demonstration Project

In 2013, DWR and the State Water Contractors developed a multi-year pool in which Contractors could purchase unused Table A water from a pool formed by several Contractors. The price of this water varied on a sliding scale depending on hydrologic conditions. The Agency, through this program, purchased 1,000 AF of water and delivered it to retail water agencies in its service area. This is not a long-term reliable supply and is only available in some years.

3.2.5 SGPWA SWP Supply Facilities

3.2.5.1 Conveyance

SGPWA receives SWP supplies via the East Branch Extension of the SWP. The East Branch Extension begins at Devil Canyon Power Plant in San Bernardino and ends in Cherry Valley. Efforts to increase the conveyance capacity of the East Branch extension to 48 cubic feet per second (CFS) are currently ongoing, with construction scheduled to be complete by the end of 2016 and startup testing to be concluded in the first half of 2017. This East Branch Extension,

Phase 2 project will provide the additional capacity necessary to convey the full allocation of SWP supplies, as available.

SGPWA plans to purchase an additional 16 CFS of capacity from the East Branch Extension Phase 2 expansion from SBVMWD, bringing the conveyance capacity to 64 CFS or approximately 35,000 AFY at a 75 percent frequency of operation, sufficient to meet regional demand through 2035, assuming SGPWA obtains supplemental sources of imported water.

3.2.5.2 Treatment

SWP supplies delivered to the SGPWA service area are treated at the Yucaipa Valley Regional Water Filtration Facility (YVRWFF), with a capacity of 12 million gallons per day (MGD). Treated water from the YVRWFF is used to meet demands in both the SBVMWD and SGPWA service areas.

3.3 Transfers, Exchanges, and Groundwater Banking Programs

In addition to existing SWP water supplies, SGPWA is currently exploring opportunities to purchase water supplies from other water agencies and sources. Transfers, exchanges, and groundwater banking programs, such as those described below, are important elements to enhancing the long-term reliability of the total mix of supplies currently available to meet water demand.

3.3.1.1 Exchanges

Since 2010, the Agency has been involved in three exchanges with the Crestline-Lake Arrowhead Water Agency (CLAWA). In 2010, the Agency received 1,000 AF of CLAWA's Table A amount in exchange for a like amount to be returned by 2020. In 2013, the Agency received 2,000 AF of CLAWA's Table A amount in exchange for 1,300 AF to be returned by 2023. In 2016 the Agency is receiving 1,200 AF of CLAWA's Table A amount in exchange for 600 AF to be returned by 2026. The latter two exchanges are unbalanced exchanges approved by DWR.

3.3.1.2 Purchases

The Agency has a number of plans to procure additional water supplies. The Agency is currently in final negotiations with the SBVMWD to purchase up to 5,000 AF of its Table A water in years in which SBVMWD's Board declares a surplus. Based on past hydrologic conditions, that is likely to occur approximately two years out of every five. Thus, on the average, this will amount to approximately 2,000 AFY. The SBVMWD Board of Directors has approved the concept; both Boards still need to approve the final terms, which should be finalized in calendar year 2017. This supply is reflected in Table 3-1. The term of this agreement is expected to be at least 20 years.

The Agency's Board has committed to keeping ahead of the regional water demand curve and implementation of the capacity fee will enable it to do so financially. The Agency has updated a study identifying additional supplemental supplies that are for sale around the state, particularly

south of the Delta, and will move quickly to negotiate a deal for one or more of these sales in 2016 or early 2017.

3.3.1.3 Other Supplies

The Agency's Board has voted to participate as an owner of capacity in the proposed Sites Reservoir project, and submitted a proposal to the Sites Joint Powers Association to that effect in July 2016. The proposal was for 14,000 acre-feet of yield from the reservoir. It is anticipated that this will be a long-term investment whose returns will not become tangible for at least 10 years, if at all.

In addition to these efforts, the Agency has completed the design of a conjunctive use storage facility in its service area that will enable it to take advantage of additional supplies, including Article 21 water from the SWP when available. The Agency has the funds on hand to construct this facility and will do so within the next few years. This will ensure that there is ample space to store all new water supplies procured by the Agency to meet the projected demands within its service area.

A summary of planned supplies is provided in Table 3-4.

TABLE 3-4

SUMMARY OF POTENTIAL WATER TRANSFER AND EXCHANGE OPPORTUNITIES FOR SGPWA

Supplemental Water Source	Description	Type and Reliability	Potential Partners
Table A Transfers	Purchase of Table A allocations from agencies with allocations in excess of demand	Permanent, 60%	Kern County Water Agency (KCWA); Tulare Lake Basin Water District; Dudley Ridge Water District; Empire West Side Irrigation District; MWDSC; San Bernardino Valley Municipal Water District
Kern River Exchanges	Water agencies obtain diversion rights from the Kern River, making available Table A SWP supplies for exchange	Permanent, 100%	Nickel Family Farms via KCWA exchange; Buena Vista Water Storage District (WSD) via Buena Vista WSD or Rosedale-Rio Bravo WSD exchange
Banked Groundwater Exchanges	Purchases of banked groundwater delivered in-lieu from unused Table A deliveries	Short-term, 100%	Rosedale-Rio Bravo WSD; Water agencies participating in the Semitropic WSD Groundwater Storage Program; Water agencies south of Edmonston Pumping Plant
Banked Groundwater Pumpback	Purchase of banked groundwater delivered via "pumpback" to the California aqueduct	Short-term, 100%	Rosedale-Rio Bravo WSD; Kern Delta Water District; Semitropic WSD Stored Water Recovery Unit
Excess SWP Purchases	Purchase excess SWP supply from SWP or water agencies with a surplus	Short-term, 100%	SWP Article 21; SWP Turnback Pool (Table A); San Bernardino Valley Municipal Water District; Crestline-Lake Arrowhead Water Agency; West Side San Joaquin Valley Districts
Dry Year Water Purchases or Transfer Programs	Purchase or transfer of unused water from water agencies with a surplus to water agencies requesting supplemental dry year supply	Short-term in dry years, 100%	SWP Contractors (buyers and sellers are treated as singular entities); SWP Turnback Pool (Table A); Western Canal Water District; Yuba County Water Agency Dry Year Water Transfer Program

Source: Provost & Pritchard, 2016.

3.3.2 Plans to Acquire Additional Supplies

As discussed in Section 3.3, the Agency is planning to develop a diverse portfolio of water supplies that include a mix of dry year supplies, SWP Table A allocation purchased from or exchanged with other SWP Contractors, purchase of surplus water from a neighboring State Water Contractor, and other supplemental water as available. The Agency has put a financial plan in place to purchase additional supplemental water supplies from various sources, including Table A water, riparian water rights, or other various sources. This financial plan includes four sources of revenue: withdrawal from reserves, dedication of a portion of general fund and *ad valorem* tax revenues as needed and appropriate, a component of the wholesale water rate, and a recently adopted capacity fee on new growth in the region. The Agency currently has $5.7 million in reserves to purchase new water rights.

In order to collect the capacity fee, the Agency would have to sign cooperative agreements with retail water agencies or land use planning agencies. In areas where the Agency can collect the fee, it is assuring its retail customers that it will have the financial resources to procure the needed additional water supplies. As this report is being written, the Agency is in final negotiations with the YVWD and the City of Calimesa to sign a cooperative agreement to enable it to collect the fee and thus assure future water supplies for the YVWD service area. Meeting future water demands within the service area of the City of Banning and the BCVWD will be more difficult until cooperative agreements are signed with these entities. In the meantime, the Agency still has some financial resources to use to procure additional water for these areas, including the sources listed above (with the exception of the capacity fee).

3.4 Groundwater

Local groundwater does not provide a source of water to SGPWA, however the predominant means of providing SWP supply to retail agencies is to recharge the Beaumont groundwater Basin. The storage capacity of the Beaumont Basin (adjudicated at 200,000 AF, practically estimated to be 100,000 AF) exceeds the total annual demand for water at build-out. Storage capacity is not likely to be a limiting factor for importing SWP supplies and any additional supplemental imported water. The capacity to store imported water in the Beaumont Basin by spreading water in recharge basins is a key component of SGPWA's role as a wholesaler of SWP supply.

It is noted that local runoff of surface water accounts for a small portion of local water resources utilized by the retail agencies. Most of this runoff is typically recharged into local groundwater basins where it becomes part of the groundwater supply. Storm water capture represents a potential new source of water within the service area, however it is not currently considered a large supply source. Capturing storm water would present a water quality benefit to the groundwater if recharged.

3.4.1 Groundwater Recharge Facilities

BCVWD's Noble Creek facility is used to recharge SWP deliveries. The facility consists of recharge basins (eight cells) with a long-term recharge capacity of approximately 20,000 AFY. SWP deliveries to this facility will consist of BCVWD's imported water supply requirements, plus any water purchased for long-term banking prior to completion of additional basins. BCVWD has recently completed Phase 2, increasing the capacity.

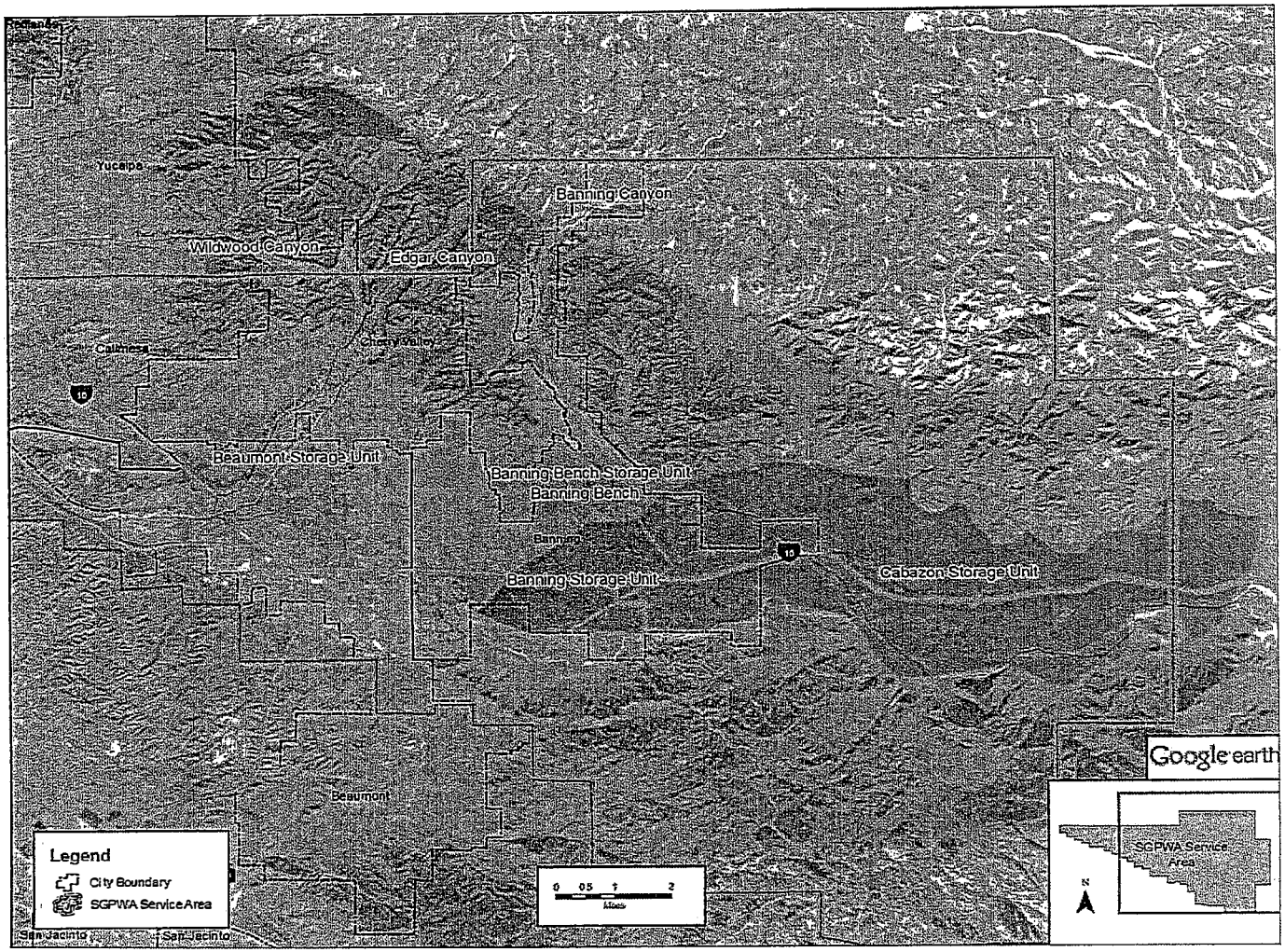
The Beaumont Avenue Recharge Facility, expected to be completed in 2017, enables SGPWA to import more water in wet years when available and to store it in the local groundwater basin. The facility consists of five large ponds, a pipeline connecting the ponds to the East Branch Extension and a new connection to the East Branch Extension.

3.4.2 Groundwater Basins

SGPWA is underlain by portions of two large groundwater basins, the Upper Santa Ana Valley Basin and Coachella Valley Basin, both of which are divided into subbasins. Of the many subbasins, three fall within the SGPWA boundaries, including the Yucaipa, San Timoteo, and San Gorgonio Pass Subbasins. The latter two subbasins are in turn divided into water storage

units, (also colloquially termed "basins"). The principal storage units and basins that are used by the water purveyors are the Beaumont, Banning, Yucaipa, and Cabazon groundwater basins. A summary of these local groundwater basins is provided below and shown on Figure 3-1. Details on basin characteristics, groundwater pumping, and basin management are provided in individual purveyor UWMPs.

FIGURE 3-1
GROUNDWATER BASINS WITH PUMPING BY SGPWA RETAIL AGENCIES



Source: SGPWA 2010 Urban Water Management Plan, prepared by CDM.

3.4.2.1 Beaumont Basin

The Beaumont Basin (storage unit) encompasses approximately 28 square miles and underlies the Cities of Calimesa, Beaumont, and Banning. Generally, hydro-geologic studies have identified major inflows to the Beaumont storage unit as runoff from Edgar Canyon (Little San Gorgonio and Noble Creeks) and from infiltration of rainfall within the groundwater basin boundary. The Beaumont Basin is the only adjudicated groundwater basin within the SGPWA service area. The Judgment for the adjudication (provided in Appendix G) allocates pumping rights to both overliers and appropriators, and provides guidelines for conversion of pumping rights from overliers to appropriators. Overliers are parties that own land overlying the Beaumont Basin and have exercised pumping rights. Appropriators are the water purveyors who serve water to serve demands within the Beaumont Basin, including the City of Banning, BCVWD, SMWC, and YVWD. Appropriators can obtain additional pumping rights from an overlier by providing water service, either potable or recycled. The Beaumont Basin Water Master develops annual projections of pumping rights conversion from overliers to appropriators.

According to the stipulated judgment, the long-term safe yield of the Basin is 8,650 AFY, recently (2013) updated to 6,700 AFY. Since 2003, SGPWA has purchased a portion of its Table A allocation to sell to retailers within its service area, including BCVWD, and the City of Banning.

3.4.2.2 Banning Groundwater Basin

The Banning Basin consists of the East Banning and West Banning storage units. The East Banning and Banning Bench storage units are separated from the West Banning storage unit by the McMullen fault (Bloyd 1971). The East Banning storage units encompass approximately 7 square miles and the West Banning storage unit encompasses approximately 4 square miles. The City of Banning is the only water purveyor that extracts water from the East Banning and West Banning storage units. The average of the estimated maximum perennial yield from the East Banning storage units is 1,050 AFY, and 350 AFY from the West Banning storage unit (Geoscience, 2003). Historical trends in water level have declined in the Banning groundwater basin, especially in the West Banning storage unit, where most well pumping occurs. The Banning groundwater basin is not adjudicated.

3.4.2.3 Yucaipa Basin

The Yucaipa Basin encompasses approximately 40 square miles and underlies the southeast part of San Bernardino Valley. The Basin is not adjudicated; sustainable yield is estimated to be approximately 9.600 AFY with a storage capacity of more than 800,000 AF (DWR Bulletin 118). Extractions from the basin are approximately 14,000 AFY (DWR Bulletin 118, California's Groundwater, 2004). DWR identifies the basin in overdraft in its Bulletin-118, however water levels have been historically rising. Moreover, the amount of groundwater pumping from the basin has significantly decreased being attributable to the supplemental supply of SWP and the use of recycled water.

The Basin is conjunctively managed by the Agency, SBVMWD, YVWD, SMWC, Western Heights Water Company, and the City of Yucaipa.

3.4.2.4 Cabazon Basin

The Cabazon Basin (storage unit) is located on the eastern boundary of SGPWA's service area. City of Banning, CWD, Mission Springs Water District, and the Morongo tribes rely on pumping from this basin to serve a portion of their respective water demands. The safe yield estimate of the Cabazon storage unit is estimated to be 1,770 AFY (Geoscience 2010).

3.4.2.5 Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), passed in 2014, requires all groundwater basins in California to be managed sustainably by 2022. The legislation requires that a Groundwater Sustainability Plan (GSP) be prepared by 2022 in those basins the DWR has identified as medium to high priority. The San Gorgonio Pass, San Timoteo and Yucaipa Subbasins are listed as medium priority basins (per DWR's Final CASGEM Basin Prioritization Reports, June 2014). SGMA does not apply to basins that are managed through adjudication.

SGPWA is currently working with other water agencies that overly the San Gorgonio Pass Subbasin to develop a cooperative agreement to manage the subbasin in accordance with the legislation. The other agencies involved include Desert Water Agency, MSWD, HVWD, Morongo Band of Mission Indians, City of Banning, and BHMWC.

3.4.3 Recycled Water

The Agency does not provide supplemental treatment to recycled water and does not distribute recycled water, nor does the Agency have plans to provide recycled water as a part of its deliveries. As a result, UWMP Act Guideline Tables 6-3, 6-4 and 6-5 will not be completed.

The Cities of Beaumont and Banning, YVWD, and the Morongo Band of Mission Indians discharge treated wastewater within the SGPWA service area. The use of recycled water to offset potable water demands and for groundwater replenishment is a major component in the supply plans for most of the retail agencies and therefore is discussed briefly below.

BCVWD has an extensive non-potable water system, which provides non-potable water for landscape irrigation throughout the City of Beaumont. In the BCVWD 2015 UWMP, recycled water demands are estimated to range from 1,154 FY to 3,363 AFY between 2020 and 2040 (BCVWD 2015 UWMP Table 6-19).

YVWD operates an 8 MGD Wochholz Water Recycling Facility that provides advanced tertiary treatment of wastewater from its sewer system. Recycled water is used to meet approximately 10-15 percent of YVWD's overall water demands. YVWD plans to implement aggressive recycled water use for new development in the City of Calimesa, requiring dual plumbing for front yard irrigation on Single-family residential properties. Ultimately their facility will be capable of treating up to 11 MGD of wastewater. YVWD currently operates a 2.5 MGD reverse osmosis treatment system to purify the recycled water produced at their facility and a brineline to dispose of the salts removed by the treatment system. A 4.0 million gallon (MG) recycled water storage reservoir and pump station is used to store the recycled water. YVWD will be constructing a Regional Recycled Water Conveyance System which will allow it to provide surplus recycled water to BCVWD and the City of Banning.

The City of Banning currently spreads treated wastewater effluent in ponds overlying the Cabazon storage unit which has limited storage capacity to allow for indirect potable reuse of

this effluent. Banning has plans to upgrade its wastewater treatment plant to meet Title 22 requirements and increase capacity by 2025. Once on-line, this upgrade would make approximately 1,680 AFY of recycled water available to the City for irrigation use[4].

3.5 Development of Desalination

The California UWMP Act requires a discussion of potential opportunities for use of desalinated water (Water Code Section 10631[i]). SGPWA has explored such opportunities, and they are described in the following section, including opportunities for desalination of brackish water, groundwater and seawater. However, at this time, none of these opportunities are practical or economically feasible for SGPWA and SGPWA has no current plans to pursue them. Therefore, desalinated supplies are not included in the supply summaries in this Plan.

3.5.1 Opportunities for Brackish Water and/or Groundwater Desalination

As discussed in Section 4, groundwater supplies within the SGPWA service area impacted by total dissolved solids, and desalination could be implemented by the individual retail agencies to address this issue. YVWD for example is close to obtaining a permit to serve desalted recycled wastewater for non-potable uses.

It is noted that SGPWA could team with other SWP contractors and provide financial assistance in construction of other regional groundwater desalination facilities in exchange for SWP supplies. The desalinated water would be supplied to users in communities near the desalination plant, and a similar amount of SWP supplies would be exchanged and allocated to SGPWA from the SWP contractor. A list summarizing the groundwater desalination plans of other SWP contractors is not available; however, SGPWA would begin this planning effort should the need arise.

In addition, should an opportunity emerge with a local agency other than a SWP contractor, an exchange of SWP deliveries would most likely involve a third party, such as Metropolitan. Most local groundwater desalination facilities would be projects implemented by retail purveyors of SWP contractors and, if an exchange program was implemented, would involve coordination and wheeling of water through the contractor's facilities to SGPWA.

3.5.2 Opportunities for Seawater Desalination

Because the SGPWA service area is not in a coastal area, it is neither practical nor economically feasible for SGPWA to implement a seawater desalination program. However, similar to the brackish water and groundwater desalination opportunities described above, SGPWA and the purveyors could provide financial assistance to other SWP contractors in the construction of their seawater desalination facilities in exchange for SWP supplies.

SGPWA has been following the existing and proposed seawater desalination projects along California's coast. Table 3-5 provides a summary of the status of several of California's

[4] City of Banning 2015 UWMP

municipal/domestic seawater desalination facilities. As of December 2015, there was an estimated 10 active proposals for seawater desalination plants along the California Coast, as well as two additional proposed plants in Baja California, Mexico that would provide water to southern California communities (Pacific Institute, 2015). This is down from an estimated 21 proposals in 2006 and 19 in 2012 (Pacific Institute, 2015).

As shown Table 3-5, most of the existing and proposed seawater desalination facilities are/would be operated by agencies that are not SWP contractors. However, in these cases as described above, an exchange for SWP deliveries would most likely involve a third party (SWP contractor), the local water agency and SGPWA.

TABLE 3-5
EXISTING AND PROPOSED SEAWATER DESALINATION FACILITIES IN CALIFORNIA

Project	Member Agency Service Area or Project Developer	MGD	Status
Carlsbad Seawater Desalination Project	San Diego County Water Authority/Poseidon Water	50	Operational
Marina Desalination Plant	Marina Coast Water District	0.27	Idle
Sand City Coastal Desalination Facility	City of Sand City	0.3	Operational
Monterey Bay Aquarium	Monterey Bay Aquarium	0.008	Operational
Morro Bay Desalination Facility	City of Morro Bay	0.6	Idle
Diablo Canyon Power Plant	Pacific Gas and Electric	0.58	Operational
Gaviota Oil Heating Facility	Chevron Corporation	0.41	Operational
Santa Catalina Island	City of Avalon/Southern California Edison	0.325	Operational
San Nicholas Island	U.S. Navy	0.024	Operational
West Basin Seawater Desalination Project	West Basin Municipal Water District	20-60	Proposed
Huntington Beach Seawater Desalination Project	Orange County Water District	50	Proposed
DeepWater Desalination Project	DeepWater Desal, LLC	25	Proposed
Charles Meyer Desalination Plant	City of Santa Barbara	2.8	Idle
Expanding Diablo Canyon Nuclear Power's Desalination Plant	PG&E and San Luis Obispo County	1.5	Proposed
Monterey Peninsula Water Supply Project	Cal Am, Monterey County, Monterey Peninsula Regional Water Authority, Monterey Peninsula Water Management District	6.4 to 9.6	Proposed
The People's Moss Landing Water Desalination Project	Nader Agha	12	Proposed
Doheny Ocean Desalination Project	South Coast Water District and Laguna Beach County Water District	15 to 20	Proposed
City of Oceanside	City of Oceanside	5 to 10	Proposed
Rosarito Beach Seawater Desalination Plant	San Diego County Water Authority	25 to 75	Proposed
Binational Rosarito Desalination Project	NSC Agua and Otay Water District	100	Proposed
	Total MGD	**315 – 418 MGD**	

Source: Pacific Institute, December 2015, Available at: http://pacinst.org/publication/key-issues-in-seawater-desalination-proposed-facilities

Section 4: Water Quality

4.1 Overview

The quality of any natural water is dynamic in nature. This is true for the SWP water brought into the SGPWA service area. During periods of intense rainfall or snowmelt, routes of surface water movement are changed; new constituents are mobilized and enter the water while other constituents are diluted or eliminated. The quality of water changes over time. These same basic principles apply to groundwater. Depending on water depth, groundwater will pass through different layers of rock and sediment and leach different materials from those strata. Water quality is not a static feature of water, and these dynamic variables must be recognized.

Water quality regulations also change. This is the result of the discovery of new contaminants, changing understanding of the health effects of previously known as well as new contaminants, development of new analytical technology, and the introduction of new treatment technology. All retail water purveyors are subject to drinking water standards set by the Federal EPA and the California Department of Public Health. SGPWA imports SWP water primarily for groundwater basin recharge. Retail purveyors extract groundwater from these groundwater basins for delivery, with the exception of YVWD, who treats the imported water and delivers it directly to its customers.

This Section provides a general description of the water quality of both imported water and groundwater supplies. A discussion of potential water quality impacts on the reliability of these supplies is also provided.

The Agency prepares an annual Report on Water Conditions that generally describes the water quality of imported SWP water and local groundwater. Several state, regional and county agencies have jurisdiction and responsibility for monitoring water quality and contaminant sites. Programs administered by these agencies include basin management, waste regulation, contaminant cleanup, public outreach, and emergency spill response.

4.2 Imported Water Quality

SGPWA provides imported SWP water to its service area. The source of SWP water is rain and snow from the Sierra Nevada, and Coastal mountain ranges. This water travels to the Sacramento-San Joaquin Delta, which is a network of natural and artificial channels and reclaimed islands at the confluence of the Sacramento and San Joaquin rivers. The Delta forms the eastern portion of the San Francisco estuary, receiving runoff from more than 40 percent of the state's land area. It is a low-lying region interlaced with hundreds of miles of waterways. From the Delta, the water is pumped into a series of canals and reservoirs, which provides water to urban and agricultural users throughout the San Francisco Bay Area and Central and Southern California. SGPWA samples its water quality at the Devil Canyon sampling station in San Bernardino. This is the closest sampling station to the Agency and is representative of the water that the Agency receives from the SWP.

One important property of SWP water is the mineral content. SWP water is generally low in dissolved minerals, such as calcium, magnesium, sodium, potassium, iron, manganese, nitrate,

and sulfate. Most of these minerals do not cause health concerns. Nitrate is the main exception, as it has significant health effects for infants in high concentrations; however, the nitrate content of SWP water is very low. Also of significance is the chloride content. Although not a human health risk, chloride can have a negative impact on agricultural activities and regulatory compliance for local sanitation agencies. The chloride content of SWP water varies widely from well over 100 milligrams per liter (mg/L) to below 40 mg/L, depending on Delta conditions.

Salinity is becoming more heavily regulated by Regional Water Quality Control Boards (RWQCBs) throughout the State, especially as water agencies construct recycled water systems. In order to maintain reasonable total dissolved solids (TDS) (also known as salinity or salts) levels in the lower reaches of the Santa Ana watershed, the Santa Ana RWQCB must set standards for TDS at relatively low concentrations in the upper reaches of the watershed, where the western portion of the Agency's service area is located. This watershed already has among the highest levels of TDS in the State. Sewage treatment plant effluent from Beaumont, Yucaipa, and Calimesa is discharged into tributaries to the Santa Ana River and is regulated by the Santa Ana RWQCB; effluent from Banning is currently regulated by the Colorado River RWQCB, though it is likely that the Santa Ana RWQCB may at some time regulate this discharge or portions thereof. This is due to the fact that the City of Banning has plans for a recycled water system, parts of which will overlie a portion of the Santa Ana watershed.

Since SWP water imports to the underlying groundwater basins will be persistent, long term, and increasing, these imports are deemed to be a significant factor in the long term salt balance in the region. Data regarding the quantity and quality of SWP water delivered to the SGPWA service area are available from Santa Ana Regional Board, and are also reported in the Agency's annual Report on Water Conditions. As discussed for groundwater quality, TDS is the most significant constituent in the SWP water. The concentration of TDS is very dependent on hydrologic conditions, and during dry years, the concentration of TDS increases. In January of 2011, which was a relatively wet hydrologic year in California, TDS concentrations were found to greatly decrease. This is significant because the ambient salinity concentration of the Beaumont Basin is benefited by the recharge of SWP water.

4.2.1 Municipal Water Quality Investigations Program

SGPWA participates in the DWR Municipal Water Quality Investigations (MWQI) Program. The MWQI Program is funded by the sixteen SWP Contractors that provide water to their customers for municipal and industrial uses. The mission of the MWQI Program is to: a) support the effective and efficient use of the Sacramento-San Joaquin Delta (Delta) and the SWP as a source water supply for municipal purposes through monitoring, forecasting, and reporting water quality; b) provide early warning of changing conditions in source water quality used for municipal purposes; c) provide data and knowledge based support for operational decision-making on the SWP; d) conduct scientific studies of drinking water importance; and e) provide scientific support to DWR, the State Water Project Contractors Authority MWQI-Specific Project Committee, and other governmental entities.

The MWQI Program conducts extensive monitoring in the Delta and the outlet to San Luis Reservoir. The data from this program, combined with data collected throughout the SWP by the DWR Division of Operations and Maintenance, are used to understand how water quality changes from the Delta to the turn outs of the SWP Municipal and Industrial (M&I) Contractors.

The MWQI Program has also developed a forecasting model to forecast organic carbon concentrations and salinity levels throughout the SWP. A daily report is sent out via email to the M&I Contractors with recent water quality data at key locations and information on Delta conditions and pumping at the Banks and Jones pumping plants.

Ongoing work includes refinement of the forecasting model to more accurately predict water quality conditions and to better model the impacts of groundwater and surface water pump-ins. The MWQI Program is also conducting studies to better understand the dynamics of algal and aquatic plant growth in the SWP. Algae and aquatic plants create a number of problems, including taste and odor issues, wide swings in pH, filter clogging, and clogging of conveyance structures. The MWQI Program also conducts the sanitary survey of the SWP, which must be submitted to the State Water Resources Control Board, Division of Drinking Water every five years.

4.3 Groundwater Quality

Groundwater quality in the region is very high. There is no known historical industrial or mining activity in the region that has generated harmful plumes of pollutants. The Santa Ana RWQCB has a "maximum benefit" goal of 330 parts per million (ppm) for TDS (or salinity) for the Beaumont Basin. The current ambient TDS concentration in the Beaumont Basin is approximately 280 ppm (Report on Water Conditions, 2013). The Basin Plan requires local entities to begin planning desalters when the ambient TDS increases to 320 ppm. YVWD has constructed a desalination plant and brine disposal pipeline to address the TDS issue.

In addition to salinity or TDS, nitrate is also monitored closely. This too is regulated by the RWQCB, but nitrate concentrations are currently well within the maximum benefit standards. Over the past few years there have been isolated incidents of high nitrates at individual wells for short periods of time, typically after a large rainstorm that causes flushing of the system. These have not proven to be a health hazard.

Total chromium has been regulated by the SWRCB at an MCL of 50 microgram per liter (µg/L), which includes both chromium-3 and chromium-6. In 2011, California EPA Office of Environmental Health Hazard Assessment set a Public Health Goal (PHG) of 0.02 µg/L for chromium-6. California Department of Public Health then reviewed the PHG and recommended an MCL for chromium-6 at the level of 10 µg/L, which went into effect July 1st, 2014. In 2015, SB385 was passed and signed by Governor Jerry Brown that effectively pushed the enforcement of the new chromium-6 MCL out to 2020, if the water purveyor submitted a compliance plan to their local Division of Drinking Water (DDW).

Within the SGPWA service area, chromium-6 concentrations have been measured at levels above the MCL in several wells owned by the City of Banning and BCVWD, forcing some wells to be taken out of production temporarily, pending implementation of a fix to the problem.

More detail on groundwater quality management actions are identified in the retail water agencies' UWMPs.

4.4 Groundwater Protection

The general goal of groundwater protection activities is to maintain the groundwater and the aquifer to ensure a reliable high quality supply. Activities to meet this goal include continued and increased monitoring, data sharing, education and coordination with other agencies that have local or regional authority or programs. To increase its groundwater protection activities, SGPWA, YVWD, and BCVWD have been taking the actions to manage salinity in the Yucaipa, Beaumont, and San Timoteo Basins. The City of Banning is also planning to reduce TDS in recycled water for irrigation use.

4.5 Water Quality Impacts on Reliability

The quality of water dictates numerous management strategies a water purveyor will implement, including, but not limited to, the selection of raw water sources, treatment alternatives, blending options, and modifications to existing treatment facilities. Maintaining and utilizing high quality sources of water simplifies management strategies by increasing water supply alternatives, water supply reliability, and decreasing the cost of treatment. Maintaining high quality source water allows for efficient management of water resources by minimizing costs.

Maintaining the quality of water supplies increases the reliability of each source by ensuring that deliveries are not interrupted due to water quality concerns. A direct result from the degradation of a water supply source is increased treatment cost before consumption. The poorer the quality of the source water, the greater the treatment cost. Groundwater may degrade in quality to the point that is not economically feasible for treatment. In this scenario the degraded source water is taken off-line. This in turn can decrease water supply reliability by potentially decreasing the total supply and increasing demands on alternative water supplies.

Overall, the quality of imported water is not anticipated to affect water reliability. Water quality issues are constantly evolving, the Agency will continue to take action to protect supplies when needed, however it is recognized water quality treatment can have significant costs.

Section 5: Reliability Planning

5.1 Overview

The Act requires urban water suppliers to assess water supply reliability that compares total projected water use with the expected water supply over the next twenty years in five year increments. The Act also requires an assessment for a single-dry year and multiple-dry years. This chapter presents the reliability assessment for SGPWA's service area through 2040.

As stated in SGPWA's mission statement, the goal of SGPWA is to "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 Gorgonio Pass Water Agency." This Plan helps SGPWA to achieve this goal even during dry periods based on a conservative water supply and demand assumptions over the next 25 years, as discussed in the following sections.

5.2 Supply And Demand Comparisons

The available supplies and water demands for SGPWA's service area were analyzed to assess the region's ability to satisfy demands during three scenarios: an average water year, single-dry year, and multiple-dry years. Table 5-1 presents the base years for the development of water year data. Tables 5-2, 5-3, and 5-4 summarize, respectively, Average Water Year, Single-Dry Water Year, and Multiple-Dry Year supplies.

TABLE 5-1
BASIS OF WATER YEAR DATA

Water Year Type	Base Years	Historical Sequence
Average Water Year	Average	1921-2003
Single-Dry Water Year	1977	--
Multiple-Dry Water Years	1931-1934	--

5.2.1 Normal Water Year

Table 5-2 summarizes SGPWA's water supplies available to meet demands over the 25-year planning period during an average/normal year. For SWP supplies it is assumed 62 percent of Table A will be available as the long-term average supply. As presented in the table, SGPWA's water supply is broken down into existing and planned water supply sources.

TABLE 5-2
PROJECTED AVERAGE/NORMAL YEAR SUPPLIES AND DEMANDS (AFY)

Water Supply Source	2020	2025	2030	2035	2040
Existing Supplies					
Imported SWP[a]	10,700	10,700	10,700	10,700	10,700
Yuba Accord[b]	300	300	300	300	300
Total Existing Supplies	**11,000**	**11,000**	**11,000**	**11,000**	**11,000**
Planned Supplies[c]					
SBVMWD Purchased Supply	2,000	2,000	2,000	2,000	2,000
Available Purchases of Supply [d]	1,500	3,800	7,700	11,700	15,000
Total Planned Supplies	**3,500**	**5,800**	**9,700**	**13,700**	**17,000**
Total Existing and Planned Supplies	**14,500**	**16,800**	**20,700**	**24,700**	**28,000**
Total Demands[e]	**13,200**	**16,500**	**20,400**	**24,400**	**27,700**
Total Maximum Demands[f]	**18,700**	**22,000**	**25,800**	**29,700**	**31,600**

Notes: Values are rounded to the nearest hundred.

(a) Assumes 62% of Table A amount (17,300 AFY) based on the California Department of Water Resources Final Delivery Capability Report 2015 (DWR 2015 DCR).
(b) See Section 1.2.3.
(c) See Section 1, Table 3-1.
(d) The Agency is expected to purchase additional supplies by 2020 to meet projected demands during average years.
(e) SWP is the assumed source of planned supplies. Volumes shown assume 62% reliability of planned supplies based on the DWR 2015 DCR. Refer to Table 3-1.
(f) Demands from Table 2-4.
(g) Demands from Table 2-5.

5.2.2 Single-Dry Year

The water supplies and demands for SGPWA's service area over the 25-year planning period were analyzed in the event that a single-dry year occurs, similar to the drought that occurred in California in 1977. During a single-dry year, SWP supply availability is anticipated to be reduced to 11 percent. Table 5-3 summarizes the existing and planned supplies available to meet demands during a single-dry year. Demand during single-dry years are presented in section 2.6 and shown below. Dry year demand is lower than average year demand, as shown in Table 5-3.

TABLE 5-3
PROJECTED SINGLE-DRY YEAR SUPPLIES AND DEMANDS (AFY)

Water Supply Source	2020	2025	2030	2035	2040
Existing Supplies					
Imported SWP[a]	1,900	1,900	1,900	1,900	1,900
Yuba Accord[b]	300	300	300	300	300
Total Existing Supplies	**2,200**	**2,200**	**2,200**	**2,200**	**2,200**
Planned Supplies					
Future Dry Year Supplies[c]	400	600	1,100	1,500	1,900
Total Planned Supplies	**400**	**600**	**1,100**	**1,500**	**1,900**
Total Existing and Planned Supplies [d]	**2,600**	**2,800**	**3,300**	**3,700**	**4,100**
Total Demands[e]	**1,600**	**3,300**	**5,500**	**7,500**	**9,200**
Total Maximum Demands[f]	**4,300**	**5,500**	**6,800**	**8,000**	**9,200**

Notes: Values are rounded to the nearest hundred.

(a) Assumes 11% of Table A amount (17,300 AFY) based on the California Department of Water Resources Final Delivery Capability Report 2015 (DWR 2015 DCR).

(b) See Section 1.2.3.

(c) As described for average year supplies, the Agency is expected to purchase additional supplies by 2020 to meet projected demands during average years. SWP is the assumed source of planned supplies. Future dry year supplies shown here assume 11% availability of those planned supplies based on the DWR 2015 DCR.

(d) The Agency is negotiating a cooperative agreement with YVWD and the City of Calimesa to provide as-needed supplies as discussed in Section 3.3.2. Therefore, supplies shown are projected to meet those demands at a minimum. Procurement of additional dry year supplies will be ongoing to meet additional dry year demands, as discussed in Section 3.3.

(e) Demands from Table 2-6.

(f) Demands from Table 2-7.

5.2.3 Multiple-Dry Year

The water supplies and demands for SGPWA's service area over the 25-year planning period were analyzed in the event that a four-year multiple-dry year event occurs, similar to the drought that occurred during the years 1931 to 1934. During multiple-dry years, SWP availability is anticipated to be reduced to 33 percent. Table 5-4 summarizes the existing and planned supplies available to meet demands during multiple-dry years.

TABLE 5-4
PROJECTED MULTIPLE-DRY YEAR SUPPLIES AND DEMANDS (AFY)

Water Supply Source	2020	2025	2030	2035	2040
Existing Supplies					
Imported SWP[a]	5,700	5,700	5,700	5,700	5,700
Yuba Accord[b]	300	300	300	300	300
Total Existing Supplies	**6,000**	**6,000**	**6,000**	**6,000**	**6,000**
Planned Supplies					
Future Dry Year Supplies [c][d]	1,200	1,900	3,200	4,500	5,600
Total Planned Supplies	**1,200**	**1,900**	**3,200**	**4,500**	**5,600**
Total Existing and Planned Supplies	**7,200**	**7,900**	**9,200**	**10,500**	**11,600**
Total Demands[e]	**3,200**	**5,000**	**7,300**	**9,600**	**11,500**
Total Maximum Demands[f]	**5,900**	**7,200**	**8,700**	**10,100**	**11,500**

Notes: Values are rounded to the nearest hundred.

(a) Assumes 33% of Table A amount (17,300 AFY) based on the DWR 2015 DCR.

(b) See Section 1.2.3.

(c) As described for average year supplies, the Agency is expected to purchase additional supplies by 2020 to meet projected demands during average years. SWP is the assumed source of planned supplies. Future dry year supplies shown here assume 33% availability of those planned supplies based on the DWR 2015 DCR.

(d) The Agency is negotiating a cooperative agreement with YVWD and the City of Calimesa to provide dry year supplies as discussed in Section 3.3.2. Therefore, supplies shown are projected to meet those demands at a minimum; other retail agencies are assumed to meet dry year demands with local supplies. Procurement of additional dry year supplies will be ongoing.

(e) Demands from Table 2-8.

(f) Demands from Table 2-9.

5.2.4 Summary of Comparisons

As shown in the analyses above, SGPWA has planned adequate supplies to meet demands during average and multiple-dry years throughout the 25-year planning period. However, the Agency will need to procure additional water supplies to meet projected future needs in single-dry year conditions. As discussed in Section 3.3, these additional supplies will represent a diverse portfolio of water, including dry year supplies, SWP Table A water purchased from or exchanged with other SWP Contractors, purchase of surplus water from a neighboring SWP Contractor, and other supplemental water as available. Refer to Section 3.4 for the Agency's plans to procure these additional supplies.

Section 6: Water Demand Management Measures

6.1 Demand Management

The purpose of the Demand Management Measures (DMM) section of this UWMP is to (a) provide a description of the past wholesaler water conservation programs that the Agency has implemented since 2010 and (b) describe the activities and actions the Agency plans to use in the future to assist its retailers in meeting their urban water use reduction targets. For the purposes of this UWMP the DMMs are categorized as "Foundational" and "Other". Foundational DMMs, listed below, are those DMMs that the UWMP Act and Water Code specifically mention that apply to a wholesaler such as SGPWA:

a) Metering
b) Public education and outreach
c) Water conservation program coordination and staffing support
d) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.
e) A narrative description of the wholesale supplier's distribution system asset management program
f) Wholesale supplier assistance programs

SGPWA does not have an internal distribution system. The Agency currently has three retail customers: the YVWD, the BCVWD, and the City of Banning. The YVWD is the only entity that purchases water for direct deliveries.

6.1.1 Metering

The Agency does not provide water directly to water users, hence it does not have a traditional metering system. The Agency does replenish the groundwater basin by recharging imported SWP water at several locations throughout the service area, as described in Section 3. The SWP water is metered at the turnouts where the Agency receives the water into its service area. All connections to the retailers listed above are metered.

6.1.2 Public Education and Outreach

The Agency recognizes the importance of public education and outreach for water resource conservation, and works towards providing materials to its customers informing them on ways to conserve water. A number of different resources including "Save our Water", "EPA Water Sense", "Be Water Wise", "Conservation Garden Brochure", and other activities related to conservation for children are made available on the Agency website (http://www.sgpwa.com/conservation) free of charge for the benefit of its customers and the public.

The Agency is involved in a number of outreach and education programs geared towards both children and adults.

Each year, the Agency sponsors a local high school in a regional solar boat race. During this weekend event, each high school team is required to write a paper and make a presentation on water conservation, and the Agency Board brings the high school to a Board meeting to hear from the students what they learned. Board members are judges for the event, which has raised the profile of water conservation considerably among high school students in the region. Approximately eight high schools compete each year.

The Agency has partnered with the Inland Empire Resource Conservation District to provide water conservation themed presentations in local schools for the three school districts within the Agency's service area. The programs focus on groundwater using a physical tabletop groundwater model purchased by the Agency. The program also describes the local retail water supplier that serves the school, where its water comes from, where the Agency's water comes from, how much water is used for everyday activities and to grow food, and other conservation-themed subjects. 2015 is the second year that the Agency began implementing this program. During the first year, 62 presentations were made to 48 different classes at eight different schools. These programs reached approximately 1,700 students. We anticipate similar numbers for 2015 and in subsequent years as the program continues.

The Agency has also contracted with a local small business, Drought Solutions, to provide workshops to gardening clubs, homeowners' associations, service organizations, and other adult groups. These typically focus on outdoor water use, though there are six separate topics that are offered. In 2015, approximately eight programs were given. Several hundred adults have attended these programs. The Agency will continue to build on this outreach program.

Finally, the Agency, its staff, and its Board of Directors participate in numerous speaking engagements in the communities of the service area whereby the importance of water conservation and investments in infrastructure and water supplies for the future are consistent themes that are emphasized.

6.1.3 Water Conservation Program Coordination and Staffing Support

The General Manager acts as the conservation coordinator. In addition to the above programs, he has direction from the Board to examine other conservation programs that meet the needs of the region and the retailers.

The Agency has set an example for other public agencies by re-landscaping its administration building with low water use vegetation and other hardscape. It has created a demonstration "back yard" that is a true conservation garden. Garden clubs and schools students have visited this garden. Flyers are available with the names of each of the plants so that the public is aware of what to purchase. The garden includes artificial turf, a winding pathway, and seats. This was done well before the recent drought, thus setting an example for other local public agencies, which have since begun to take similar actions.

6.1.4 Conservation pricing

SGPWA Ordinance No. 8 mandates that the Agency, at a minimum, shall establish and charge rates for the delivery of water sufficient to cover SGPWA's variable costs for delivery of imported water, internal SGPWA costs and other amounts as determined by the Board of Directors. 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.

Currently, SGPWA charges a volumetric rate of $317/AF to its retailers. The wholesale water rate was established via Resolution No. 2009-3. The rate structure is supported by the 2009 Water Rate Study prepared for SGPWA (David Taussig Associates, Inc., 2009).

6.1.5 Wholesale Supplier Assistance Programs

SGPWA regularly explores potential support options for its retailers to assist them in meeting their SBX7-7 demand reduction targets. Where possible, SGPWA identifies partnerships to support DMM implementation. For example, SGPWA has contracted with the local Inland Empire Resource Conservation District to implement some of the Agency's education programs, and makes this program available to the retailers.

6.2 Asset Management Program

The Agency does not at this time have an internal distribution system or any other physical facilities. It anticipates constructing a distribution system in the future. Since it does not have an internal distribution system but rather sells water directly from the SWP to local retail water agency systems, no asset management program is required. At such time as the Agency constructs an internal distribution system, it will implement an asset management program.

6.3 Planned Wholesale Supplier Assistance Programs

Over the next five years, the Agency will continue to implement the Foundational DMMs as described in Section 6.1 and will offer to provide help to its retail agencies in meeting their water use targets. The Agency staff will continue to provide residents (adults and children) with educational information and outreach and other DMMs as feasible and appropriate.

The Agency General Manager is Chair of the Conservation Committee of the San Gorgonio Pass Regional Water Alliance, a consortium of water agencies and cities in the region, including the retail agencies with demands on SGPWA. Through this committee, the Agency is providing technical support and information to the smaller retail agencies that do not have staff to implement conservation programs or even to understand the implications of the State Board's recently-enacted emergency conservation regulations. It is also ensuring that local retail agencies are aware of the regulations and all public hearings associated with them so that the water agencies in the region can provide input on the emergency regulations as well as understand them. This is a valuable resource, especially for the smaller retail water agencies.

Monthly meetings include presentations on local, regional and state water issues, committee reports and individual agency presentations and updates. Topics have included California Water Plan Update, Integrated Regional Water Management Plans, Urban Water Management Plans,

water conservation programs, 2014 water bond, storm water resources, salinity management, State Water Project, and drought conditions presented by a representative of the California Department of Water Resources.

The Committee's website can be accessed at http://www.passwateralliance.com/conservation/.

6.3.1 Planned Implementation of DMMs to Achieve Water Use Targets

SGPWA will continue to implement the DMMs described in this section, and will continue to collaborate with the other retail purveyors to implement the measures outlined in this UWMP. These programs, taken together, will assist SGPWA in helping its retail agencies achieve their SBX7-7 2020 targets as described in their respective UWMPs.

Section 7: Water Shortage Contingency Planning

7.1 Overview

Water supplies may be interrupted or reduced significantly in a number of ways, such as a drought which limits supplies, an earthquake which damages water delivery or storage facilities, a regional power outage, or a toxic spill that affects water quality. This chapter of the Plan describes how SGPWA plans to respond to various stages of shortage.

Cities and water agencies within SGPWA rely on large groundwater reserves to meet potable water supply needs. During previous drought periods, municipal water suppliers continued to draft from these reserves to meet customer needs without imposing restrictions on water use, but at rates exceeding natural replenishment in most areas. Large groundwater basins in the region serve as reservoirs and buffer the impacts of seasonal and year-to-year variations in precipitation and imported and natural surface water deliveries. This has been demonstrated during the recent drought, as groundwater supply was available to meet demands; in addition, the retailers have complied with the Governor's emergency and executive orders requiring mandatory conservation actions statewide. The area aquifers are either currently in balance or expected to be in balance in the near future due to the combination of water imports, State-mandated conservation requirements, and/or court ordered production "ramp-down." During multiple-year droughts or State Water Project outages, adequate groundwater supplies will be available to meet demands through the use of conjunctively banked pre-stored imported water.

The SGPWA adopted Ordinance No. 10 establishing a water shortage contingency plan in July 2014. The ordinance established procedures for allocating reduces deliveries of water to Purchasers in the event of single and multiple dry years and a shortage of water available to meet the demands of the Purchasers. SGPWA produced a draft update to Ordinance No. 10 in August 2016 to further guide its actions in the event of a water shortage emergency. This new draft Ordinance (provided in Appendix H) includes stages of action to be undertaken by the Agency in response to shortages in wholesale water supplies available for purchase by the Agency, including up to a 50 percent reduction in those supplies and to provide an outline of the specific water supply conditions that are applicable to each stage of action by reference to the allocation scenarios established in Agency Ordinance No. 10. It is also noted that the SGPWA's role is limited to the use of imported water to replenish local groundwater basins for subsequent pumping by its retail agencies. As such, direct delivery of water provided by SGPWA is minimal.

Therefore, the majority of the water shortage contingency planning in the SGPWA service area is undertaken by retail agencies, Riverside County, and the cities throughout the County. This section summarizes water shortage contingency plans developed by SGPWA retail agencies.

Actions of the SGPWA to address water shortages are summarized below.

7.2 SGPWA Stages of Action to Respond to Water Shortages

SGPWA's Board of Directors determines when to declare a level 0, 1, 2, or 3 water supply shortage in response to drought, regulatory requirements, or other water supply conditions, and what reduction in water use is necessary to make the most efficient use of water, protect public health and safety, and respond to existing water supply and/or regulatory conditions.

Table 7-1 presents the three-stage water supply shortage action plan for the Agency.

These stages are outlined in SGPWA Draft Resolution No. XX, and described in further detail below. See Appendix H for the complete Draft Resolution.

As a wholesale agency, SGPWA does not have the authority to impose mandatory restrictions on retail customers due to water shortages. Therefore, this level of contingency planning is conducted by the retail water agencies.

TABLE 7-1

RATIONING AND REDUCTION GOALS

Stage	Percent Supply Reduction[a]	Water Supply Condition	Stages of Action
0	0%	Year when at least 62% of contractual SWP Table A Imported supplies are available to the Agency	• Coordination. Meet and coordinate with retail water agencies and other entities in the San Gorgonio Pass area regarding current and projected water supplies and demands. • Public Messaging. Encourage the public to avoid water waste and increase water use efficiency. • Manage Water Supplies in Excess of Demands. Pursue programs and projects to manage water supplies in excess of demands, including, but not limited to, placing such water in storage or water banking or exchange programs.
1	25%	47%	• Water Shortage Plan. The Agency will determine whether a Water Shortage Year exists in accordance with Ordinance 10 and the extent to which imported water supplies available for purchase by the Agency will need to be allocated in accordance with Ordinance No. 10. • Coordination. Meet and coordinate with retail water agencies and other entities in the San Gorgonio Pass area regarding current and projected water supplies and demands, and the extent to which other agencies may implement the appropriate stages and actions under their respective water shortage contingency plans. • Continue to undertake other applicable actions identified above under a Stage 0 Water Supply Condition.

Stage	Percent Supply Reduction[a]	Water Supply Condition	Stages of Action
2	26-45%	46-34%	• Water Shortage Plan. The Agency will determine whether a Water Shortage Year exists in accordance with Ordinance 10 and the extent to which imported water supplies available for purchase by the Agency will need to be allocated in accordance with Ordinance No. 10. • Shift and Increase in Public Messaging. The Agency will utilize its own website and other local media and communication efforts to educate the public on the shortage and to encourage greater conservation on the part of individuals, businesses, and institutions. • Dry Year Supplies. Determine from its customers if they desire additional dry-year supplies at an additional cost and, if so, to make reasonable and practicable attempts to obtain and deliver such supplies to customers who request and ensure payment for them. • Continue to undertake other applicable actions identified above under Stage 0 and Stage 1 Water Supply Conditions.
3	Greater than 45%	Greater than 34%	• Water Shortage Plan. The Agency will determine whether a Water Shortage Year exists in accordance with Ordinance 10 and the extent to which imported water supplies available for purchase by the Agency will need to be allocated in accordance with Ordinance No. 10. • Shift and Increase in Public Messaging. The Agency will utilize its own website and other local media and communication efforts to educate the public on the shortage and to encourage greater conservation on the part of individuals, businesses, and institutions. • Dry-Year Supplies. Determine from its customers if they desire additional dry-year supplies at an additional cost and, if so, to make reasonable and practicable attempts to obtain and deliver such supplies to customers who request and ensure payment for them. • Transfers. Evaluate and solicit input from its customers whether the Agency should pursue any transfers to augment supplies during the Stage 3 Condition, including related considerations of potential impacts to future water supplies. • Continue to undertake other applicable actions identified above under Stage 0, Stage 1, and Stage 2 Water Supply Conditions.

Source: SGPWA Ordinance No. XX, Ordinance Adopting a Wholesale Water Shortage Contingency Plan for Purposes of the Urban Water Management Planning Act (in Appendix H).

7.3 Minimum Water Supply Available During Next Three Years

The minimum water supply available during the next three years would occur during a three-year multiple-dry year event between the years 2016 and 2018. As shown in Table 7-3, the minimum regional water supply for agencies in the SGPWA service area for the next three years is about 6,000 AF. The water supply and demand are based on dry-year assumptions for the SWP and annual supply available for groundwater.

When comparing these supplies to the demand projections provided in Chapters 2 and 5 of this Plan, SGPWA does not have adequate supplies available to meet projected demands should a multiple-dry year period occur during the next three years, assuming SWP imported supply deliveries would be reduced to 33 percent, and based on realization of retail agency demand projections on SGPWA, as shown below. SGPWA will actively pursue transfers and exchanges in order to help meet demands.

TABLE 7-3
ESTIMATE OF MINIMUM SUPPLY FOR THE NEXT THREE YEARS

Water Supply Source	2016	2017	2018
Existing Supplies			
Imported SWP[a]	5,700	5,700	5,700
Yuba Accord[b]	300	300	300
Total Existing Supplies	**6,000**	**6,000**	**6,000**

Notes: Values rounded to the nearest hundred.

(a) SWP supplies are calculated by multiplying SGPWA's Table A amount of 17,300 AF by 33 % of total deliveries projected to be available based on the worst-case historic four-year drought of 1931-1934 (DWR 2015 DCR).

(b) See Section 3, Table 3-1. Assumes Yuba Accord supply available to meet demands.

7.4 Actions to Prepare For Catastrophic Interruption

7.4.1 General

The SGPWA service area is bounded on the east by a major portion of the San Andreas Fault. A major earthquake along the southern portion of the San Andreas Fault would affect the SGPWA service area.

The California Division of Mines and Geology has stated two of the aqueduct systems that import water to southern California (including the portion of the California Aqueduct that traverses the San Joaquin Valley) could be ruptured by displacement on the San Andreas Fault, and supply may not be restored for a three to six-week period. The situation would be further complicated by physical damage to pumping equipment and local loss of electrical power. DWR has a contingency aqueduct outage plan for restoring the California Aqueduct to service should a major break occur, which it estimates would take approximately four months to repair.

In the case of the southern portion of the fault, experts agree it may be at least three days after the earthquake before outside help could get to the area. Extended supply shortages of both groundwater and imported water, due to power outages and/or equipment damage, would have to be managed although local effects of these types of outages would not materially affect the region based on local native groundwater and banked imported water supplies.

Power outages currently do not affect SGPWA because it does not own or operate any wells or distribution systems. However, for the retailer water agencies, all of the water systems have some form of storage as both regulating reservoirs and emergency supply. It is assumed that in an emergency the public would be asked to reduce consumption to minimum health and safety levels, extending the supply. This would provide sufficient time to restore a significant amount of groundwater production. After the groundwater supply is restored, the pumping capacity of the retail purveyors could meet the reduced demand until such time that the imported water supply was reestablished. Updates on the water situation would be made as often as necessary. In addition, the County of San Bernardino has an Emergency Response Plan (2005) which further defines functions, assigns responsibilities, specifies policies and general procedures for coordination of planning efforts of various department and staff to assist in an emergency situation.

The area's water sources are generally of good quality, and no insurmountable problems resulting from industrial or agricultural contamination are foreseen. If contamination did result from a toxic spill or similar accident, the contamination would be isolated and should not significantly impact the total water supply. In addition, such an event would be addressed in the retailers' emergency response plan.

7.4.2 SWP Emergency Outage Scenarios

In addition to earthquakes, the SWP could experience other emergency outage scenarios. Past examples include slippage of aqueduct side panels into the California Aqueduct near Patterson in the mid-1990s, the Arroyo Pasajero flood event in 1995 (which also destroyed part of Interstate 5 near Los Banos), flood damage to the East Branch of the Aqueduct in 2015, and various subsidence and leakage repairs needed along the Main Branch and East Branch of the Aqueduct since the 1980s. All these outages were short-term in nature (on the order of weeks to several months), and DWR's Operations and Maintenance Division worked diligently to devise methods to keep the Aqueduct in operation and continue SWP deliveries while repairs were made. Thus, the SWP contractors generally experienced no interruption in total annual deliveries.

One of the SWP's important design engineering features is the ability to isolate parts of the system. The Aqueduct is divided into "pools." Thus, if one reservoir or portion of the California Aqueduct is damaged in some way, other portions of the system can still remain in operation. The primary SWP facilities are shown on Figure 7-1.

Other events could result in significant outages and potential interruption of service. Examples of possible nature-caused events include a levee breach in the Delta near the Harvey O. Banks Pumping Plant, a flood or earthquake event that severely damages the Aqueduct along its San Joaquin Valley traverse, or an earthquake event along either the West or East Branches. Such events could impact some or all SWP contractors south of the Delta.

The response of DWR, SGPWA, and other SWP contractors to such events would be highly dependent on the type and location of any such event. In typical SWP operations, water flowing through the Delta is diverted at the SWP's main pumping facility, located in the southern Delta, and is pumped into the California Aqueduct. During the relatively heavier runoff period in the winter and early spring, Delta diversions generally exceed SWP contractor demands, and the excess is stored in San Luis Reservoir. SWP aqueduct terminal reservoirs, such as Pyramid and Castaic Lakes, are also replenished during these periods. During the summer and fall, when diversions from the Delta are generally more limited and less than contractor demands, releases from San Luis Reservoir are used to make up the difference in deliveries to contractors. The SWP share of maximum storage capacity at San Luis Reservoir is 1,062,000 AF.

SGPWA receives its SWP deliveries through the East Branch of the California Aqueduct. The other contractors receiving deliveries from the East Branch are Metropolitan Water District of Southern California, Antelope Valley-East Kern Water Agency, Palmdale Water District, Crestline-Lake Arrowhead Water Agency, Desert Water Agency, San Gabriel Valley Municipal Water District, San Bernardino Valley Municipal Water District, and Mojave Water Agency The East Branch has two terminal reservoirs, Silverwood Lake and Lake Perris, which were designed to provide emergency storage and regulatory storage (i.e., storage to help meet peak summer deliveries) for several of the East Branch contractors. However, SGPWA does not have contract rights to storage capacity in those reservoirs.

In addition to SWP storage south of the Delta in San Luis and the terminal reservoirs, a number of contractors have stored water in groundwater banking programs in the San Joaquin Valley and more recently along the East Branch, and many also have surface and groundwater storage within their own service areas.

Three scenarios that could impact the delivery to SGPWA of its SWP supply or other supplies delivered to it through the California Aqueduct are described below. For each of these scenarios, it was assumed that an outage of six months could occur. SGPWA's ability to meet demands during the worst of these scenarios is presented following the scenario descriptions.

FIGURE 7-1
PRIMARY SWP FACILITIES

7.4.2.1 Scenario 1: Emergency Freshwater Pathway

DWR has estimated that in the event of a major earthquake in or near the Delta, regular water supply deliveries from the SWP could be interrupted for up to three years, posing a substantial risk to the California business economy. Accordingly, a post-event strategy has been developed which would provide necessary water supply protections. The plan has been coordinated through DWR, the Army Corps of Engineers (Corps), Bureau of Reclamation, California Office of Emergency Services (Cal OES), the Metropolitan Water District of Southern California, and the State Water Contractors. Full implementation of the plan would enable resumption of at least partial deliveries from the SWP in less than six months.

DWR Delta Flood Emergency Management Plan. DWR has developed the Delta Flood Emergency Management Plan to provide strategies for a response to Delta levee failures, which addresses a range of failures up to and including earthquake-induced multiple island failures during dry conditions when the volume of flooded islands and salt water intrusion are large. Under such severe conditions, the plan includes a strategy to establish an emergency freshwater pathway from the central Delta along Middle River and Victoria Canal to the export pumps in the south Delta. The plan includes the pre-positioning of emergency construction materials at existing and new stockpiles and warehouse sites in the Delta, and development of tactical modeling tools (DWR Emergency Response Tool) to predict levee repair logistics, water quality conditions, and timelines of levee repair and suitable water quality to restore exports. The Delta Flood Emergency Management Plan has been extensively coordinated with state, federal and local emergency response agencies. DWR, in conjunction with local agencies, the Corps and Cal OES, regularly conduct simulated and field exercises to test and revise the plan under real time conditions.

DWR and the Corps provide vital Delta region response to flood and earthquake emergencies, complementary to an overall Cal OES structure. Cal OES is preparing its Northern California Catastrophic Flood Response Plan that incorporates the DWR Delta Flood Emergency Management Plan. These agencies utilize a unified command structure and response and recovery framework. DWR and the Corps, through a Draft Delta Emergency Operations Integration Plan (April 2014), would integrate personnel and resources during emergency operations.

Levee Improvements and Prioritization. The DWR Delta Levees Subvention Program has prioritized, funded, and implemented levee improvements along the emergency freshwater pathway and other water supply corridors in the central and south Delta region. These efforts have been complementary to the DWR Delta Flood Emergency Management Plan, which along with use of pre-positioned emergency flood fight materials in the Delta, relies on pathway and other levees providing reasonable seismic performance to facilitate restoration of the freshwater pathway after a severe earthquake. Together, these two DWR programs have been successful in implementing a coordinated strategy of emergency preparedness for the benefit of SWP and CVP export systems.

Significant improvements to the central and south Delta levee systems along Old and Middle Rivers began in 2010 and are continuing to the present time at Holland Island, Bacon Island, Upper and Lower Jones Tracts, Palm Tract and Orwood Tract. This complements substantially improved levees at Mandeville and McDonald Islands and portions of Victoria

and Union Islands. Together, levee improvements along the pathway and Old River levees consisting of crest raising, crest widening, landside slope fill and toe berms, meet the needs of local reclamation districts and substantially improve seismic stability to reduce levee slumping and create a more robust flood-fighting platform. Many urban water supply agencies have participated or are currently participating in levee improvement projects along the Old and Middle River corridors.

Assuming that the Banks Pumping Plant would be out of service for six months, DWR could continue making at least some SWP deliveries to all southern California contractors from water stored in San Luis Reservoir. The water available for such deliveries would be dependent on the storage in San Luis Reservoir at the time the outage occurred and could be minimal if it occurred in the late summer or early fall when San Luis Reservoir storage is typically low. In addition to supplies from San Luis Reservoir, water from the East Branch terminal reservoirs would also be available to the East Branch contractors, including SGPWA. SGPWA water stored in groundwater banking programs in the San Joaquin Valley may also be available for withdrawal and delivery to SGPWA.

7.4.2.2 Scenario 2: Complete Disruption of the California Aqueduct in the San Joaquin Valley

The 1995 flood event at Arroyo Pasajero demonstrated vulnerabilities of the California Aqueduct (the portion that traverses the San Joaquin Valley from San Luis Reservoir to Edmonston Pumping Plant). Should a similar flood event or an earthquake damage this portion of the aqueduct, deliveries from San Luis Reservoir could be interrupted for a period of time. DWR has informed the SWP contractors that a four-month outage could be expected in such an event. SGPWA's assumption for this Plan is a more conservative six-month outage.

Arroyo Pasajero is located downstream of San Luis Reservoir and upstream of the primary groundwater banking programs in the San Joaquin Valley. Assuming an outage at a location near Arroyo Pasajero that takes the California Aqueduct out of service for six months, supplies from San Luis Reservoir would not be available to those SWP contractors located downstream of that point. It is likely that in such an emergency, water from the East Branch terminal reservoirs would be made available to the East Branch contractors, including SGPWA.

7.4.2.3 Scenario 3: Complete Disruption of the East Branch of the California Aqueduct

The East Branch of the California Aqueduct begins at a bifurcation of the Aqueduct south of Edmonston Pumping Plant, which pumps SWP water through and across the Tehachapi Mountains. From the point of bifurcation, the East Branch is an open canal passing through Alamo Power Plant, Pearblossom Pumping Plant, and on to Silverwood Lake and Lake Perris.

If a major earthquake (an event similar to or greater than the 1994 Northridge earthquake) were to damage a portion of the East Branch, deliveries could be interrupted. The exact location of such damage along the East Branch would be key to determining emergency operations by DWR and the East Branch SWP contractors. For this scenario, it was assumed that the East Branch would suffer a single-location break and deliveries of SWP water from north of the Tehachapi Mountains would not be available. It was also assumed that Lake Perris and Silverwood Lake reservoirs would not be damaged by the event and that water in Lake Perris and Silverwood Lakes would be available to the East Branch SWP contractors, including SGPWA.

In any of these three SWP emergency outage scenarios, DWR and the SWP contractors would coordinate operations to minimize supply disruptions. Depending on the particular outage scenario or outage location, some or all of the SWP contractors south of the Delta might be affected. But even among those contractors, potential impacts would differ given each contractor's specific mix of other supplies and available storage. During past SWP outages, the SWP contractors have worked cooperatively to minimize supply impacts among all contractors. Past examples of such cooperation have included certain SWP contractors agreeing to rely more heavily on alternate supplies, allowing more of the outage-limited SWP supply to be delivered to other contractors, and exchanges among SWP contractors, allowing delivery of one contractor's SWP or other water to another contractor, with that water being returned after the outage was over.

Of these three SWP outage scenarios, the East Branch outage scenario presents the worst-case scenario for the SGPWA service area. In this scenario, the retail water suppliers would rely on local supplies and water available to SGPWA from Lake Perris and Silverwood Lakes. See Section 7.4.2 regarding recommendations for emergency outage storage using cooperative agreements with other East Branch SWP contractors and individual groundwater banking programs.

During such an outage, the local supplies available would consist of native and banked groundwater. It was assumed that local well production would be unimpaired by the outage and that the outage would occur during a year when average/normal supplies would be available. Note that adequate well and aquifer capacity exists to pump at levels higher than those assumed in this assessment, particularly during a temporary period such as an outage.

7.4.3 Regional Power Outage Scenarios

For a major emergency such as an earthquake, Southern California Edison (Edison) has declared that in the event of an outage, power would be restored within a 24 hour period. For example, following the 1994 Northridge earthquake, Edison was able to restore power within 19 hours. Edison experienced extensive damage to several key power stations, yet was still able to recover within a 24-hour timeframe.

SGPWA is committed to providing regular service and meeting the needs of the community during any emergency situation. SGPWA is obligated to respond to emergencies by using all available resources in the most effective way possible. Additionally, the East Branch Phase II Extension includes emergency and operational storage for the region.

7.5 Mandatory Prohibitions During Shortages

SGPWA is not a direct purveyor of retail water supplies and does not have any emergency powers or the authority to implement water shortage plans within its boundaries. It relies instead on efforts of the individual cities and water agencies. However, SGPWA does have an Ordinance No. 10 establishing a water shortage plan that allows the Agency to sell and deliver SWP water to these entities. SGPWA's Ordinance 10 requires customers taking direct delivery of SWP water from SGPWA to maintain a backup supply in the event of outages or shortages in supply from the SWP. SGPWA informs customers under Ordinance 10 that supplies are variable and interruptible, with no guarantee of a specified delivery quantity. Ordinance 10 is SGPWA's only authority to reduce water supplies to its customers during shortages. However, customers under Ordinance 10 represent only a small portion of the overall water

use within the SGPWA service area, with a majority of water users receiving water supply from groundwater production.

7.6 Consumption Reduction Methods During Restrictions

As explained in the previous section, SGPWA does not have the power to implement mandatory prohibitions during water supply shortages, with the exception of customers receiving direct SWP supplies under SGPWA Ordinance No. 10.

SGPWA will however manage water supplies to minimize the social and economic impact of water shortages. The Water Shortage Plan is designed to establish procedures for allocating reduced deliveries of water to Purchasers in the event of single or multiple-dry year and a shortage of water available to meet demands of Purchasers.

7.7 Penalties for Excessive Use

The penalties for excessive water use are stated in the text of the resolutions and ordinances outlined in Table 7-1 for the SGPWA and the regional retail agencies.

7.8 Financial Impacts of Actions During Shortages

During periods of reduced consumption, revenue from water sales will decline. Also, a natural disaster may entail unpredicted expenditures for repairs. Therefore, each retail water agency has plans to address financial challenges of water shortages that include a mix of temporary base rate adjustment, use of reserves, fines for violation of mandatory water use restrictions, and deferring of non-critical maintenance items and filling of some personnel vacancies.

SGPWA has sufficient operating funds to supplement any deficiencies in revenue caused from a water shortage.

7.9 Water Shortage Contingency Resolution

SGPWA has prepared a draft Water Shortage Contingency Plan, which is included in Appendix H.

7.10 Mechanism to Determine Reductions in Water Use

As explained in Section 7.5, SGPWA does not have the power to implement mandatory prohibitions during water supply shortages, with the exception of customers receiving direct SWP supplies under SGPWA Ordinance No. 10.

MEMORANDUM

TO: Board of Directors

FROM: General Manager

RE: Status Report on Capacity Fee

DATE: March 6, 2017

Summary:
The purpose of this agenda item is to summarize the history of the Agency's capacity fee and to review with the Board two potential formats for cooperative agreements that would be required in order for the Agency to collect the fee. Staff is seeking direction from the Board as to which format it would prefer so that staff can move forward to develop such agreements with retail water agencies and/or land use planning agencies.

Included in the agenda package are the resolution adopting the fee, findings of the Board, the nexus study produced to adopt the fee, and two separate potential cooperative agreements. Staff will discuss these with the Board at the meeting.

RESOLUTION NO. 2015-05

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN GORGONIO PASS WATER AGENCY TO ADOPT FACILITY CAPACITY FEES FOR FACILITIES AND WATER

WHEREAS, the San Gorgonio Pass Water Agency (SGPWA) is a public agency formed and existing pursuant to Article 101 of the California Water Code Appendix (SGPWA Act) in 1961; and

WHEREAS, SGPWA entered into a contract with the California Department of Water Resources (DWR) in 1962 for a Table A amount of water capacity in the California State Water Project (SWP) which is currently 17,300 acre feet per year (AFY) to bring supplemental water to the SGPWA service area; and

WHEREAS, there is a need to meet future increasing demands for SGPWA supplemental water to the SGPWA service area which will require additional water facilities to be constructed to distribute water and to acquire additional water rights to meet future increasing demands; and

WHEREAS, the Board of Directors finds and determines that the present existing water importation, production, transportation, delivery facilities and water supplies are inadequate to meet anticipated demand; and

WHEREAS, Section 101 – 27.1(a) of the SGPWA Act authorizes SGPWA to impose a facility capacity fee, which is in the nature of a connection fee, for the right to make a new retail connection to the water distribution system of any retail water distributor that is located within the boundaries of the SGPWA and that obtains all or any portion of its water supplies from SGPWA; and

WHEREAS, Section 101- 27.1(c) also provides the facility capacity fee referred to in subdivision (a) shall be adopted, established, and imposed only following a public hearing and in accordance with the requirements set forth in Chapter 5 (commencing with Section 66000 of Division 1 of Title 7 of the Government Code as it now exists or may hereafter be amended; and

WHEREAS, the Facility Capacity Fee as set forth in the SGPWA Act, Sections 101 – 27.1 (a) through (i) will assist SGPWA to fund (1) the purchase of capacity in existing pipeline systems owned by other public agencies; (2) and additional basin recharge project for underground water storage in the Beaumont groundwater basin, including land purchases associated with such basin activity; and (3) the purchase of new water and/or water rights and entitlements to meet future water demand; and

WHEREAS, pursuant to Section 101 – 27.1 of the SGPWA Act, SGPWA has prepared a Capacity Fee Study (Study) to support the need for additional water facilities and new water and/or water rights in that the existing facilities are not adequate to meet the future increasing water needs in the SGPWA service area; and

WHEREAS, the Study meets the requirements of Section 101 – 27.1 and Government Code Section 66013 to ensure that the Facility Capacity Fee does not exceed the estimated reasonable cost of providing the service for which the fee is imposed and provides a clear and concise document that will serve as the basis for the proposed fee levels; and

WHEREAS, SGPWA has provided all of the notices prior to and conducted a public hearing on July 27, 2015 required by Section 101 – 27.1 (c) of the Agency Act; and

WHEREAS, SGPWA after close of the hearing considered the Study, and proposed Findings.

NOW THEREFORE BE IT HEREBY RESOLVED

1. The matters set forth in the recitals to this Resolution are true and correct statements and are made findings and determinations of the Board of Directors.

2. That the Findings as set forth on Attachment 1 concerning the Study are hereby adopted.

3. The Board of Directors finds that the Facility Capacity Fees as defined in the Study and the Findings are for the purpose of obtaining funds for capital projects necessary to maintain service within SGPWA as set forth in this Resolution and, therefore, the establishment of such fees is not subject to the California Environmental Quality Act.

4. That the Study is hereby approved.

5. That the Facility Capacity Fees as set forth in the Study and on Attachment 2 hereof are hereby adopted and shall take effect immediately.

6. The General Manager is authorized to contract with the counties in which it is located and with the cities within the SGPWA for the collection of the Facility Capacity Fee along with building permit fees or other fees related to the improvement of property, or may contract for collection of the Facility Capacity Fees by the water retail distributors (SGPWA Act 101 – 27.1 (f)).

7. The Facility Capacity Fee component shall be automatically adjusted without further action of the Board effective on July 1st of each year, beginning July 1, 2016, by a percentage equal to the change in Construction Cost Index for Los Angeles as published by Engineering New Record for the preceding twelve months as set forth in the Study.

8. The Facility Fee component of the facility capacity fee shall be reviewed periodically as determined by the General Manager to determine if changes are needed and reasonable in unit prices, facility requirements, and water demands and demographics in order to ensure that Facility Fee cost allocations are reasonable and that collections over time will fund the required facilities.

9. The Water Capacity Fee component shall be reviewed annually in the month of July, commencing July 1, 2016 to adjust the Water Capacity Fee by a reasonable percentage based on the cost of actual water purchases, an updated water rights appraisal or comparisons of

recent purchases of additional water rights by statewide municipalities and special districts over the preceding twelve months.

10. The General Manager is further authorized to take any and all other actions to implement and carry out this resolution.

11. All resolutions or administrative actions by the Board of Directors, or parts thereof that are inconsistent with any provision of this Resolution are hereby superseded only by this Resolution to the extent of such inconsistency.

12. If any section, subsection, clause, sentence, or phrase in this Resolution is for any reason held invalid, the validity of the remainder of this Resolution shall not be affected thereby. The Board hereby declares it would have passed this Resolution and each section, sentence, clause or phrase thereof, irrespective of the fact that all or more sections, subsections, clauses, sentences, or phrase are held invalid.

13. The Resolution shall take effect immediately.

AYES: Stephenson, Melleby, Duncan, Dickson, Jeter

NOES: Ball

DATE: July 27, 2015

SAN GORGONIO PASS WATER AGENCY

By _____
Secretary of the Board of Directors

ATTACHMENT "1"
FINDINGS
SUPPORTING THE ADOPTION OF FACILITY CAPACITY FEES

I. INTRODUCTORY FINDINGS

a. The San Gorgonio Pass Water Agency ("Agency" or "SGPWA") 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 Gorgonio Pass Water Agency Law, Water. 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 unincorporated Riverside County areas from Cherry Valley to Cabazon.

b. The Agency has a mandatory duty 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. The Agency is authorized to establish and impose a facility capacity fee ("FCF"), which is "in the nature of a connection fee, for the right to make a new retail connection to the water distribution system of any retail water distributor with the agency" that obtains any portion of its water supply from the Agency. (Cal. Wat. Code-App. § 101-27.1(a).)

d. The California Environmental Quality Act ("CEQA") requires public agencies to analyze the water supply impacts of projects, including estimations of project water demand and evidence of adequate long-term water supplies. Failure to do so can result in a court-ordered revocation of project approvals and permits. For example, in *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, the Court of Appeal determined that a water district water supply assessment failed to provide firm assurance of adequate water supplies for a residential project. This was based in part on uncertainties and a failure to discuss the contingent nature of identified supplies. As a result, the project's environmental impact report failed to meet CEQA's requirements. Similarly, in *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, the Court of Appeal determined that a biological waste composting facility was required to have completed a water supply assessment and failure to do so resulted in an environmental impact report that

failed to adequately address the issue of water supply for the facility. This was due to the environmental impact report's identified water supplies being purely speculative.

e. The Agency Board of Directors ("Agency Board") has determined that "existing water importation, production, treatment, transportation, or delivery facilities or other related works are inadequate to meet anticipated demand." Therefore the Agency must develop facilities to meet the needs of retail water agencies within its service area as part of its "mandatory duty of furnishing water to [existing] inhabitants within the [Agency service area]" and its "continuing obligation to exert every reasonable effort to augment its available water supply in order to meet increasing demands." The proposed Facility Capacity Fees are necessary to fund such facilities (Cal. Wat. Code-App. § 101-27.1(b); *Glenbrook Development Co. v. City of Brea* 253 Cal.App.2d at p. 277; *Swanson v. Marin Municipal Water Dist.* 56 Cal.App.3d at p. 524.)

II. STATEMENT OF NEED

a. The Agency was formed in 1961with the knowledge that at some time in the future, water demand in its service area would exceed available local water supply. That is at hand and the Agency must plan ahead to have sufficient water supply available to support existing and new development.

b. In *San Timeteo Watershed Management Authority v. City of Banning* (RCSC Case No. RIC 389197) [the "Beaumont Basin Adjudication"], the court determined that pumping from the Beaumont Groundwater Basin ("BSU") to supply groundwater to local users exceeded the natural recharge of the basin. The court allowed the parties to continue to exceed the natural recharge of the BSU temporarily to create dewatered storage—essentially an underground reservoir—and to have time to find other ways to balance supply and demand. Once the "temporary surplus" called for in that adjudication is fully-withdrawn, however, water demand in dry years will outstrip currently available supply for existing and future development. A watermaster was appointed to manage the BSU through controlled overdraft (temporary surplus) through 2013. The BSU is now required to operate in a balanced condition, replacing an amount of water equal to the amount removed from the basin to meet local demands, over time. The Beaumont Basin Adjudication is an official document of the State of California, on file with the Riverside County Superior Court and on file with SGPWA.

c. The 2010 Urban Water Management Plan for the San Gorgonio Pass Water Agency ("2010 SGPWA UWMP"), adopted and published by the Agency Board in December 2010, is the main water planning document for the Agency in its service area, pursuant to law. The 2010 SGPWA UWMP projects estimates of water supply and demand for the Agency service area to the year 2035.

d. The Agency is mandated by the UWMP Act to provide reasonable, conservative estimates of water use based on demand projections provided by retail agencies

within its service area. The Agency is required by the UWMP Act to rely on these retail agency-provided numbers in its projections. Thus the 2010 SGPWA UWMP notes on page 2-2 that the demand numbers on which the plan relies "are derived entirely from data provided by each retail water agency in recent coordination activities...".

e. The 2010 SGPWA UWMP charts the discrepancy between future demand and supply in its "Section 5 Water Reliability." In all dry year types, beginning in 2015, significant amounts of supplemental short-term water will be needed from the Agency to meet demands in the Agency service area. Any Agency water withdrawn from groundwater storage in dry years to meet these short-term needs must have been stored previously in wet years.

f. In order to facilitate storage and conjunctive use to benefit existing development in dry years or during periods of significant water supply interruption, the Agency must have additional storage, transmission, and groundwater percolation capacity to take advantage of peak water availability on short notice in wet months and/or years.

    i. For example, "Article 21" water is a classification under the Agency's contract for SWP water with the Department of Water Resources. This water is outside of various agencies percentages of "Table A" water that they are allocated every year. DWR declares when this type of "bonus" water is available on short notice. So if an agency desires to take advantage of Article 21 water when it becomes available, that agency must have sufficient pipeline capacity to move the water to its area and must have sufficient capacity to store it to use later. If an agency relies primarily on groundwater storage and not surface water in a reservoir, then the agency must have sufficient percolation capacity to recharge a substantial amount of water on short notice.

g. New development will need additional facilities for the same reliability purposes as existing development—that is, increased capacity to take more water on short notice when it is available to store it for when it is not available. New development, however, adds to total water demand. It thus adds to the capacity or size of the facilities needed by existing development. It also creates the need for some facilities solely on its own. Some, but not all, new development will also need new permanent water rights (see Section IV.d.ii, below). Section **5** of the **2010** SGPWA UWMP projects that new development will require additional permanent water rights prior to **2035** to meet long-term average annual demand.

h. The 2010 SGPWA UWMP notes that existing "facilities do not provide sufficient capacity to recharge all imported water supply that may be available in a given year. Conditions in the SWP may require that SGPWA use its Table A allocation over a shorter period of time (e.g. a six month window as opposed to spread evenly over the course of the year). This would require SGPWA to plan for surplus capacity. Moreover, SGPWA plans to obtain supplemental sources of

imported water and to use SWP Article 21 water whenever possible. The timing of supplemental sources of imported water are *[sic]* not known, but could also require deliveries to occur over a shorter time-period. Article 21 water is declared on a weekly basis, thus its use is highly limited by the capacity of conveyance and recharge facilities."

i. The Agency Board finds that a need exists for new facilities to convey and store water when it is available to increase water supply reliability for existing and future development. The Agency Board finds substantial evidence in the record to support this conclusion.

III. REGIONAL, INTEGRATED SYSTEM

a. SGPWA owns and maintains the Regional, Integrated System ("SGPWA System") consisting of water storage and conveyance facilities that provide benefit to all lands within SGPWA boundaries by providing access to an imported water supply through the SWP. Each facility within the system provides delivery of water for groundwater basin replenishment, storage for local use when imported water is in short supply, or direct delivery to retail agencies. SGPWA will need to construct new facilities within this system to augment current storage capacity and delivery capabilities in order to meet the demands of current and future development. Thus, imported water stored in the Beaumont Basin, or any other groundwater basin, by SGPWA can be locally used as part of a conjunctive use program in time of shortage, allowing SGPWA imported water supplies to be beneficially used by water users within the SGPWA service area. The integrated system will provide the central core access to a water supply for lands that would not otherwise have such access during prolonged periods of limited imported water deliveries and during years of surplus. For example, the Beaumont Basin Recharge Facility, more fully described in Section V.1 of the Study, provides an interconnected system of water delivery to local water agencies that overlie the Beaumont and Banning groundwater basins. The Beaumont Basin Recharge Facility adds recharge capacity and storage to an overdrafted basin in order to provide reliable water supplies to both new and existing development within the entire SGPWA service area.

b. The SGPWA System will increase reliability for all development, both existing and future, throughout the Agency service area in wet, average, and dry years through conjunctive use. The SGPWA System will provide additional capacity, conveyance, recharge, and storage facilities for SWP water that may be filled in wet months and/or years, and drawn down in dry months and/or years.

    i. In wet years the Agency will be able to take all of its available Table A allotment, any future acquired short- or long-term water transfers, and even "bonus" Article 21 water because the SGPWA System provides the capacity to move, recharge, and store that water. This capability is currently nonexistent.

ii. Conjunctive use of the abundant groundwater storage in the Agency service area provides the flexibility needed for the Agency to manage its supply and protect users in its service area from significant supply shortfalls.

1. The Beaumont Basin Recharge Facility will benefit future development by increasing the BSU's recharge capacity to take advantage of dewatered storage to store supplemental water when future water demand reaches the point where it becomes necessary. Through conjunctive use the Agency will be able to store water when it is available during wet months or years and then withdraw that water as needed during dry months and/or years.

iii. The SGPWA System will benefit both existing and future development by providing increased reliability and supply in wet, average, and dry years through conjunctive use. Through conjunctive use the Beaumont Avenue Recharge Facility will act as an additional storage facility for SWP water that may be filled in wet months and/or years, and drawn down in dry months and/or years.

iv. The 16 cubic foot per second ("CFS") Capacity from San Bernardino Valley Municipal Water District will benefit future development by providing the needed capacity to bring in supplemental water when future water demand reaches the point where it becomes necessary.

c. As Appendix B of the July 21, 2015 Capacity Fee Study for San Gorgonio Pass Water Agency ("Study") notes, "in order to meet average delivery of SWP water to the Agency's service area, the Agency must have the ability to convey and store SWP water during the multiple-wet years to utilize this water during multiple-dry years. The implementation of recharge facilities in the Beaumont groundwater basin will provide the Agency the terminal storage to implement the required conjunctive use program to fully utilize the Agency's Table A amount and be able to provide water to its retail customers during protracted drought periods."

d. The Agency Board finds that the SGPWA System is necessary to fulfill the Agency's legislative mandate to import supplemental water and to protect and enhance local water supplies to serve the needs of present and future water users. The Agency Board finds substantial evidence in the record to support this conclusion.

IV. THE STUDY REPRESENTS A FAIR ALLOCATION OF THE COSTS OF THE SGPWA SYSTEM AND FUTURE PERMANENT WATER PURCHASES

a. The purpose of the Study is to ensure that the FCF does not exceed the estimated reasonable cost of providing the service for which the fee is imposed and to

provide a clear and concise document that will serve as the basis for the proposed fee level.

b. The Study calculates the need for new water facilities through the year 2035. It does so for two reasons: 1) the Agency Board determined that projecting demand for facilities through that year (vs. ultimate buildout) is reasonable because it is consistent with local agency UWMPs and water demand estimates, and; 2) that year allowed the Study to draw from and be consistent with the 2010 SGPWA UWMP, the main water planning document for the Agency service area.

c. The City of Calimesa notified the Agency it had updated its land use plan on July 20, 2015 ("Calimesa Update") which increased its industrial square footage from 412,000 square feet to18,700,000 square feet in 2035. Upon verifying the impact of the Calimesa Update on the Study, the Agency modified the Study to include such information on July 21, 2015. It is fair and reasonable to proceed with the hearing on the Study and adoption of the findings and the Resolution adopting the Study and implementing the FCF on July 27, 2015 for the following reasons:

1. All notices, publication and availability of the study as required by law have been complied with by the Agency.

2. Only Riverside BIA requested a special notice of the hearing which was provided by the Agency on July 13, 2015

3. A copy of the Study was sent to the Riverside BIA on July13, 2015.

4. As soon as the Calimesa Update impact on the Study was verified on July 21, 2015, the Agency notified Riverside BIA by e-mail on July 22, 2015.

5. A copy of the Updated Study was sent by e-mail to riverside BIA on July 22, 2015.

6. The result of the Calimesa Update on the Study was to reduce the FCF component from $178 per EDU to $171 per EDU.

7. The calculation of the effect of the Calimesa Update reducing the fee to $171 per EDU was completed using the same methodology applied in a consistent manner as the calculation to derive the cost of $178 per EDU.

8. The reduction in the FCF does not harm the users to which the fee is charged because it reduces their costs.

9. It is reasonable for the public to expect that hearings on Facility Capacity Fees will result in changes to the fee based on comments and concerns of the Agency Directors, Agency staff, other public agencies and members of the public.

10. The reduction of the fee from $178 per EDU to $171 per EDU is only a 4% change in the fee which is not a material change and does not deprive any affected

party or member of public of it rights to provide meaningful information at the hearing.

11. Other than Riverside BIA, there has been no requests of the Agency for a copy of the Study.

12. The Board finds substantial evidence in the record to support the conclusion to proceed with the adoption of the Facility Capacity fee on July 27, 2015.

d. To accurately allocate costs in accordance with the law, the Study allocates the cost of the SGPWA System between existing development and new development, and allocates the costs by type of development by using a single metric: equivalent dwelling units ("EDUs") for new construction.

e. The Study also breaks up the FCF into two components: the facility capacity fee component and the water capacity fee component.

i. The facility capacity fee component will be required of all new development, regardless of the water capacity fee component. Regardless of the amount of water required, all new development will benefit from the increased reliability provided by the SGPWA System.

ii. The water capacity fee component will only be required of new development if the retail agency tasked with supplying water to that development determines that additional supplemental water is needed. Whether sufficient supply will be able meet a specific project's demand will be determined on a project-by-project basis in coordination with retail water distributors.

f. The Study divides the cost of some of the SGPWA System Facilities between existing development and new development, given the water supply reliability needs of both groups. The facility capacity fee component is only required of new development. Existing development will pay for its share of the cost of the facilities through water rates and other sources of SGPWA revenues and assets.

iii. As detailed in Section V of the Study, to determine the benefit to new development of the Agency portion of the SGPWA System, the Study divided the total projected water demand in the year 2035 by the amount of that total demand attributable to new development. This new development is responsible for a portion of the costs of the facilities listed above as follows: new development is responsible for 80% of the costs of the Beaumont Basin Recharge Facility and 100% of the 16 CFS capacity from San Bernardino Valley Municipal Water District ("SBVMWD") because the 16 CFS capacity from SBVMWD will only benefit new development.

g. When the estimated total SGPWA System cost allocated to new development ($10,983,000) is divided by the estimated demand for facilities created by that

new development by 2035, the result is a FCF component of $170.04 per equivalent dwelling unit ("EDU").

h. The Agency received appraisal information from Lynn Takaichi of Kennedy/Jenks Consultants. Mr. Takaichi is one of the leading experts on the subject of water transfers and water pricing in the State of California. Mr. Takaichi estimated that the cost of additional water rights (the water capacity fee component) to be $6200.00 per acre-foot. This information is included in the study as Appendix D entitled "Water Rights Appraisal."

i. The Agency Board finds that the allocation of the cost of the SGPWA System between existing development and new development, and the allocation by type of development does not exceed the estimated reasonable cost of providing the service for which the fee is imposed. The Agency Board finds substantial evidence in the record to support this conclusion.

V. AGENCY ADMINISTRATIVE OVERHEAD

a. The Agency is entitled by law to recover the reasonable costs associated with administrating the facility capacity fee program as part of the "estimated reasonable cost of providing the service for which the fee or charge is imposed...". (Cal. Gov. Code § 66013(a); Cal. Wat. Code-App. § 101-27.1(d).) The Agency Board determined that the reasonable cost of administering the FCF program is .50%.

b. As detailed in Tables 9 and 12 of the Study, the administrative overhead for the facility capacity fee component is $.86 per EDU and the administrative fee for the water capacity fee component is $31.00 per acre-foot respectively. As described more fully in the Study, these represent reasonable administrative overhead costs for the maintenance of these funds and for administrative costs associated with the procurement of a new water source.

c. The total facility capacity fee component, including administrative overhead, is $170.89 per EDU.

d. The total water capacity fee component, including administrative overhead, is $6,231.00 per acre-foot.

e. The Agency Board finds that the administrative overhead does not exceed the estimated reasonable cost of providing the service for which the fee is imposed. The Agency Board finds substantial evidence in the record to support this conclusion.

VI. PERIODIC FEE REVIEW

a. To continue to collect sufficient funds to cover the costs of new facilities, the facility capacity fee component will be automatically increased without further Board action in the month of July of each year, beginning in July, 2016, by a

percentage equal to the change in Construction Cost Index for Los Angeles as published by Engineering News Record for the preceding twelve months.

b. The Agency Board recognizes in accordance with California law that some level of uncertainty is a permanent, inherent feature of modern water management, and as such, long-term water planning involves expectations and not certainties. The Agency Board thus will periodically review the FCF structure and adjust the fee to reflect the estimated reasonable cost of providing the service for which the fee is charged.

i. The Facility ity Fee component shall be reviewed periodically as determined by the General Manager to determine if changes are needed and reasonable in unit prices, facility requirements, water demands and demographics in order to ensure that Facility Fee cost allocations are reasonable and that collections over time will fund the required facilities.

ii.The Water Capacity Fee component shall be reviewed annually in the month of July, commencing 2016 to adjust the Water Capacity Fee by a reasonable percentage based on the cost of actual water purchases, an updated water rights appraisal or comparisons of recent purchases of additional water rights by statewide municipalities and special districts over the preceding twelve months.

iii.The General Manager is further authorized to take any and all actions to implement and carry out the FCF program and its implementing resolution. The Agency Board finds that its review process will prevent the FCF from exceeding the estimated reasonable cost of providing the service for which the fee is charged. The Agency Board finds substantial evidence in the record to support this conclusion.

VII. FACILITY CAPACITY FEE ACCOUNT

a. As required by law, the Agency Board will deposit all funds from the FCF program except agency overhead in a separate FCF account. (Cal. Gov. Code. § 66013(c).)

b. The Agency Board will account for the FCF funds in a manner to avoid any commingling with other funds of the Agency, except for investments, and shall expend facility capacity fee funds solely for the purposes for which they were collected. (Cal. Gov. Code. § 66013(c).)

c. Any interest income earned from the investment of funds in the FCF account should be deposited in that account. (Cal. Gov. Code. § 66013(c).)

d. The Agency Board will include the following information in its annual financial report (Cal. Gov. Code. § 66013(e).):

i. A description of the funds deposited in the FCF account. (Cal. Gov. Code. § 66013(d)(1).)

ii. The beginning and ending balance of the account and the interest earned from investment of funds in the account. (Cal. Gov. Code. § 66013(d)(2).)

iii. The amount of FCF revenue collected in that fiscal year. (Cal. Gov. Code. § 66013(d)(3).)

iv. An identification of each of the following:

1. Each water facility or water right on which funds were expended and the amount of the expenditure for each facility or water right, including the percentage of the total cost of the facility or water right that was funded with FCF funds if more than one source of funding was used. (Cal. Gov. Code. § 66013(d)(4)(A).)

2. Each water facility or water right on which funds were expended that was completed during that fiscal year. (Cal. Gov. Code. § 66013(d)(4)(B).)

3. Each water facility or water right purchase that is anticipated to be undertaken in the following fiscal year. (Cal. Gov. Code. § 66013(d)(4)(C).)

v. A description of each interfund transfer or loan made from the FCF account. The information provided in the case of an interfund transfer shall identify the water facilities or water rights on which the transferred funds are, or will be, expended. The information shall include the date on which the loan will be repaid and the rate of interest that the fund will receive on the loan. (Cal. Gov. Code. § 66013(d)(5).)

VIII. REASONABLENESS OF FACILITY CAPACITY FEE

a. There is a reasonable relationship between the FCF and the benefit to new and existing development within the Agency service area. Those benefits include, but are not limited to, the need to ensure water reliability for both existing and new development and the need to supply water to new development.

b. The FCF set forth in Resolution does not exceed the estimated reasonable cost to the Agency of providing the service for which the fee is charged.

c. The allocation of costs to existing development to pay for a percentage of the costs of new water facilities is proportional to the benefits received from those facilities by existing development.

d. The Agency Board finds that the FCF will not exceed the estimated reasonable cost of providing the service for which the fee is charged. The Agency Board finds substantial evidence in the record to support this conclusion.

IX. PROPOSITION 218 DOES NOT APPLY TO FACILITY CAPACITY FEES UNDER GOVERNMENT CODE § 66013

a. In *Richmond v. Shasta Community Services District* (2004) 32 Ca1.4th 409, the California Supreme Court held that facility capacity fees are not property-related fees under Article XIII D of the California Constitution (Proposition 218) because they are only charged to development that elects to connect to the local agency's water infrastructure. Therefore the FCF only goes into effect at the election of the development.

b. The Agency Board finds that the FCF is not a property-related fee and is thus not subject to the requirements of Proposition 218. The Agency Board finds substantial evidence in the record to support this conclusion.

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CAPACITY FEE STUDY FOR SAN GORGONIO PASS WATER AGENCY

JULY 17, 2015

Newport Beach
Riverside
San Francisco
Chicago

CAPACITY FEE STUDY
FOR
SAN GORGONIO PASS WATER AGENCY

JULY 17, 2015

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Executive Summary

The San Gorgonio Pass Water Agency ("SGPWA" or "Agency") is a State Water Project ("SWP") contractor located in the northwest portion of Riverside County east of San Bernardino, California. The mission of SGPWA "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 retail water distributors within the service areas of the SGPWA service area."[1] The SGPWA provides, or can potentially provide, wholesale water service within its boundaries to and including the City of Banning, the Beaumont-Cherry Valley Water District, Cabazon Water District, South Mesa Water Company, Banning Heights Mutual Water Company, High Valleys Water District, Mission Springs Water District, and Yucaipa Valley Water District.

To provide capacity in SGPWA's system, sufficient water supply and levels of service to existing and future development over the next twenty years consistent with the mission of the Agency, SGPWA will need to invest at least $12.6M in infrastructure during this period. This infrastructure will include a basin recharge facility and the purchase of additional capacity in existing pipelines that convey SWP water along the route from the SWP turnout at Devil Canyon to the SGPWA service area. Also, due to uncertainties related to the quantity of SWP allotments year to year, SGPWA will need to purchase additional water rights outside of the SWP contract. The current price of additional water rights is estimated at $6,200 per acre-ft and will be purchased on an as-needed basis. To ensure that new development pays its fair share of these costs, SGPWA will implement a facility capacity fee as authorized by SGPWA Law (Water Code App. §101-27.1) and consistent with California Government Code Section §66013, which requires that the "...capacity fee shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed."

In 2011 a nexus study was prepared that proposed the implementation of a Facility Capacity Fee to be imposed on new development. The SGPWA board approved the nexus study, however the fee was not adopted at that time. This nexus study is a new and independent evaluation of (1) current demographics; (2) reconciliation of various local demographic estimates; (3) assessment of facilities and water supplies needed to serve new and expanded development; (4) and the allocation of costs reflecting current demographics and current cost estimates of facilities; and (5) calculation of new fee schedules.

The proposed capacity fee has two components: the Facility Fee, and the Water Capacity Fee. The Facility Fee will fund a portion of the new infrastructure and the Water Capacity Fee will fund a portion of the purchase of new water rights and/or entitlements.

The future capital projects are evaluated on a project-by-project basis to determine the costs that should be allocated to future development. Based on this approach, projects that are required to only meet the needs of future development are allocated 100% to such development. Projects that benefit both existing demands and future development are allocated to both existing demands and future development proportionally according to appropriate factors.

[1] The SGPWA Mission Statement as indicated in the Agency's website

The Table below shows the proposed fee per residential dwelling unit that represents the reasonable fair share contribution of new ***residential*** development to the cost of the required infrastructure.

Residential Facilty Fee			
Land Use	Facility Element ($ unit)	Admin Element ($ per Unit)	Total Facility Fee per DU
Single Family	$ 176.75	$ 0.89	$ 177.64
Multi-Family	$ 86.28	$ 0.43	$ 86.72

The fees for the ***non-residential*** uses (commercial/retail and industrial) are determined in a similar manner. Because water demand from commercial/retail and industrial uses varies widely with building uses, meter size is a reasonable indicator of water demand and basis for allocation. The allocations to non-residential uses in the 2011 Study used building size and water use factors to allocate costs based on equivalent dwelling units ("EDUs"). This Study converts the non-residential allocations to meter size, using a 5/8 inch meter (typical of a single family residence) as the baseline, whose demand is equivalent to a single family dwelling unit, or one (1) EDU. The Table below shows the proposed fee structure that represents the reasonable fair share contribution of new non-residential development to the cost of the required infrastructure.

Non-Residential Facilty Fee			
Meter Size	Facility Element	Admin Element	Total Facility Fee
5/8"	$ 176.75	$ 0.89	$ 177.64
3/4"	$ 194.42	$ 0.98	$ 195.40
1"	$ 247.45	$ 1.25	$ 248.69
1-1/2"	$ 318.15	$ 1.60	$ 319.75
2"	$ 512.57	$ 2.58	$ 515.15
3"	$ 1,944.23	$ 9.79	$ 1,954.02
4"	$ 2,474.48	$ 12.45	$ 2,486.93
6"	$ 3,711.72	$ 18.68	$ 3,730.40
8"	$ 5,125.70	$ 25.80	$ 5,151.50

Finally, to maintain reliability for the benefit of future development, SGPWA will need to purchase additional water rights and entitlements outside of its SWP contract. The Table below shows the recommended fee charged to new development to fund the purchase of ***new water rights and entitlements*** over the twenty-year period.

Water Capacity Fee			
Item	Units	Fee	
Fee for New Water Rights and Entitlements	$ per ac-ft	$	6,200.00
Administrative Overhead	$ per ac-ft	$	31.00
Total		$	6,231.00

Please note that the above tables represent the maximum fee that the board can adopt and impose on new development, based on the cost of facilities and water rights or entitlements planned to be constructed or acquired prior to 2035 and identified in this Study. Also, it is recommended that SGPWA review these fee structures periodically to adjust for changes in demographics, water demands, and facility requirements, as well as adjustments for inflation. Based on the above fee structures, a typical single family house would pay a Facility Fee of $177.64, and using an average water use factor of 0.548 acre-feet per year, that same single family house would be subject to a water capacity fee of $3,414.59 ($6,231.00 per acre-feet per year x 0.548), for a total of $3,592.23.

I. Background

In 1961 SGPWA was formed pursuant to Chapter 101 of the California Water Code Appendix as a result of the approval by the voters of the Burns-Porter Act, which authorized the financing and construction of the SWP. SGPWA entered into a contract with the Department of Water Resources ("DWR") in 1962 for Table A Water capacity in the SWP, which is currently 17,300 acre-ft per year ("AFY"), to bring supplemental water to the SGPWA service area. 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 and the community of Cherry Valley through the Beaumont-Cherry Valley Water District ("BCVWD"), the City of Calimesa through the Yucaipa Valley Water District ("YVWD"), the City of Banning and the South Mesa Water Company ("SMWC"). 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.[2] The BSU is now required to operate in a balanced condition, replacing an amount of water equal to the amount removed from the basin to meet local demands, over time. The Beaumont Basin Adjudication is an official document of the State of California, on file with the Riverside County Superior Court as Case No. RIC 389197, and on file with SGPWA.

Increased demand from new development and decreasing reliability of imported water supplies will continue to exert pressure on the ability of SGPWA to deliver supplemental water on a reliable basis. Adjudication of the BSU, requiring a balanced operating condition, will also exert pressure on the SGPWA to find additional reliable sources of water to meet increasing demands. Revenue from the proposed Facility Capacity Fee program is necessary to provide reliable water service to new development by helping fund new capacity in delivery pipelines, new recharge basins, related land acquisitions and the purchase of new water rights and entitlements. These investments are necessary to continue to provide an adequate level of service and reliability to retail agencies over time. No revenues from this Facility Capacity Fee program will be used to fund the correction of existing deficiencies in the system.

[2] See also, San Gorgonio Pass Water Agency Report on Water Conditions (Reporting Period 2013), dated December 2014.

II. Introduction to Analysis

The San Gorgonio Pass Water Agency ("SGPWA" or "Agency"), a State Water Project ("SWP") Contractor, authorized David Taussig & Associates, Inc. ("DTA") to prepare a nexus study ("Study") for proposed Facility Capacity Fees that the appropriate retail water agencies and/or land use planning agencies would collect from new development on behalf of SGPWA. These fees will provide a source of revenue for SGPWA needed to mitigate the regional water related impacts of such new development.

California Government Code §66000 et seq ("Mitigation Fee Act") governs the imposition by a local agency of a fee or charge to a development project for "...the purpose of defraying all or a portion of the cost of public facilities related to the development project...". California Government Code §66013(b)(3) further defines a *Capacity Charge* as "... charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged." New public facilities are further defined in Section 66002 as "facilities for the storage, treatment and distribution of non-agricultural water."

California Water Code §101-27.1 authorizes SGPWA to impose a Facility Capacity Fee, which is in the nature of a connection fee, for the right to make a new retail connection to the water distribution system of any retail water distributor that is located within the boundaries of the SGPWA and that obtains all or any portion of its water supplies from SGPWA.

For the purposes of this Study, the term "Facility Capacity Fee" shall mean *Capacity Charge* as defined in the Mitigation Fee Act. The Facility Capacity Fee is imposed and authorized in California Water Code §101-27.1 and will meet the requirements of California Government Code Section §66013, and will achieve the following goals related to said Section:

- Ensure that the Facility Capacity Fee does not exceed the estimated reasonable cost of providing the service for which the fee is imposed; and

- Provide a clear and concise document that will serve as the basis for the proposed fee levels.

The Board of Directors of SGPWA may contract with the counties in which SGPWA is located, and cities and retail water distributors located within the boundaries of SGPWA, for the collection of the Facility Capacity Fees subject to certain conditions. SGPWA water made available through facilities built, and/or water rights acquired, with capacity fee revenue will be sold to retail water distributors who in turn serve SGPWA water to new and expanded water users.

This Study and the resulting fee structure will focus on the use of the SGPWA Facility Capacity Fee to fund (1) the purchase of capacity in existing pipeline systems owned by other public agencies; (2) an additional basin recharge project for underground water storage in the Beaumont groundwater basin, including land purchases associated with such basin facility; and (3) the purchase of new water and/or water rights and entitlements to meet future water demand. The underlying principle that supports the identification and allocation of costs to new development for these facilities and new water rights or entitlements is that new development throughout the SGPWA service will have access to additional water delivery capacity, additional storage capacity

and additional water rights and entitlements necessary to meet the demands of future development. This is more fully discussed in Section V, "Facility Component of the Facility Capacity Fee."

The Facility Capacity Fee will consist of two components:

- the **Facility Component of the Facility Capacity Fee** ("Facility Fee"). This component will fund the facilities identified in items (1) and (2) above; and

- the **Water Component of the Facility Capacity Fee** ("Water Capacity Fee"). This component will fund the purchase of new water and/or water rights or entitlements, as identified in item (3) above.

The Facility Fee will be charged to all new development within the SGPWA service area (except the Morongo Tribal Land as discussed in Section IV, "Demographics") and is designed to fund the cost of facilities needed to mitigate the cost of facilities needed to meet the additional demands of such new development through the year 2035. The steps followed in calculating the Facility Fee component include:

- **Demographic Assumptions**: Identify future development through 2035 that represents the increased demand for facilities. The demographic assumptions are discussed in Section IV, "Demographics."

- **Facility Needs and Costs**: List the public facilities that can be clearly identified and have a reasonably accurate estimate of costs, that best mitigate the demands of new development through 2035. The needs list and estimate of costs are presented in Section V.1, "Facility Costs."

- **Cost Allocation**: Allocate costs between new and existing residential and non-residential development based on estimated percentage utilization factors related to a proposed conjunctive use facility and additional capacity in the East Branch Extension ("EBX" pipeline system owned by other public agencies). Further allocate costs between single family and multi-family land use by equivalent dwelling unit ("EDU") methodology, and between non-residential buildings by meter sizes. A detailed discussion of the cost allocation methodology is included in Section V.2, "Methodology."

- **Fee Schedule**: Calculate the fee per residential unit or per non-residential meter size based on weighted average water usage factors, providing a uniform fee structure for the SGPWA service area. The resulting Facility Fee component structure is presented in Section V.3 "Fee Structure."

The Water Capacity Fee will be charged to new development based upon the amount of new water capacity needed to serve such development. The steps to calculate the Water Capacity Fee is discussed in Section VI, "Water Component of the Facility Capacity Fee."

It is important to note that all new development will be required to pay the Facility Fee and the Water Capacity Fee. While the Facility Fee is a fixed amount, depending upon land use, the Water Capacity Fee will be calculated based on expected water demands on a project by project basis. This revenue is required for SGPWA to build the proposed facilities and purchase the necessary

water rights and entitlements discussed herein that are needed to provide reliable water deliveries to water retailers.

It is expected that the SGPWA will review both the Facility Fee and the Water Capacity Fee at reasonable intervals to incorporate changes in prices, facility requirements, water demands and demographics in order to ensure that the Facility Capacity Fees are allocated fairly and continue to generate sufficient revenues.

The Facility Capacity Fee program will work in conjunction with SGPWA's other sources of revenue to play a part in a coordinated financing plan that provides a balance of rates and charges needed to fund current and future costs of service. For instance, the current commodity rate structure – the amount charged for actual water deliveries – includes an allocation to partially fund the purchase of new water rights and entitlements needed to enhance the reliability of water deliveries for existing development. Thus the commodity rates will work in conjunction with Water Capacity Fee revenues and other general fund revenue to fund the purchase of new water rights and entitlements over time that are needed to provide an ongoing reliable water source for both new and existing development.

III. Definitions

The following key defined terms are used throughout this Study:

Acre-foot ("AF") – a volumetric unit of measurement commonly used for water supply purposes. It is the amount of water required to cover one acre of land one foot deep, one acre being equal to 43,560 square feet. For illustrative purposes, it is the amount of water required to cover a football playing field, including end zones, 9 inches deep.

AFY – Acre-feet per year. A unit of measurement commonly used for large scale water supply purposes to represent flow, or volume of water over a period of time.

BSU - the Beaumont Storage Unit, an adjudicated groundwater basin underlying a portion of the SGPWA service area.

Build Out or Build Out Condition – The state of development within the SGPWA service area in which there are no longer any undeveloped parcels or lots identified as residential or non residential uses on approved local land use plans from which capacity fees can be collected.

Conjunctive Use – is the interactive use of SWP supplemental water and local groundwater for water deliveries. The recharge of groundwater basins with SWP and local surface water during years of surplus and the pumping of stored groundwater to augment SWP allocations during years of deficit assist SGPWA in providing water deliveries on a reliable basis.

cfs - cubic feet per second, a measure of volumetric rate of water conveyance

DTA – David Taussig & Associates, Inc., the public finance consulting firm that prepared the 2011 Capacity Fee Study and this current Capacity Fee Study.

DWR - State of California ("State") Department of Water Resources, the agency that contracts on behalf of the State with SGPWA to deliver water through the SWP under the terms of "Contract Between the State of California Department of Water Resources and San Gorgonio Pass Water Agency, For Water Supply."

EDU Factor – the ratio of the water demand for a unit of a given land use to the baseline water demand for a single family residential unit.

Equivalent Dwelling Unit ("EDU") – for given land uses, a method of comparison of that land use to a baseline land use, using a common demand variable. A demand variable is a measurable factor that is directly related to the required size or extent of a public facility. For the purposes of this Study the demand variable used is water demand, in gallons per day or acre-feet per year ("AFY"), and the baseline demand is that of a single family residential unit, which is the assumed baseline land use. For non-residential uses costs are allocated by meter size. A 5/8" meter is assumed as the baseline, equivalent in demand to a single family unit.

Existing Development - residential and non-residential land use improvements that exist as of June, 2014, within the SGPWA service area. The sources of data used to quantify the extent of such improvement includes local agency permit activity and studies, local UWMPs and County of Riverside demographic data.

Facility Capacity Fee – a charge imposed by a local water agency on new development, or increased usage (such as remodels or expansions), to fund or to recover the estimated reasonable cost of providing water, water conveyance or water storage facilities to the person or property being charged. For purposes of this Study the Facility Capacity Fee consists of two components: the facility component ("Facility Component of the Facility Capacity Fee" or "Facility Fee") and the water component ("Water Component of the Facility Capacity Fee" or "Water Capacity Fee").

Facility Component of the Facility Capacity Fee – for the purposes of this Study and hereafter referred to as the "**Facility Fee**", is a facility capacity fee imposed on new development to pay that development's fair share of the costs to construct water storage and conveyance facilities that benefit such development.

Floor Area Ratio ("FAR") – is the ratio of useable non-residential building square feet to the area, in square feet, of the property within whose boundaries the building is located. For the purposes of this Study a FAR of 0.40 for commercial/retail uses and an FAR of 0.20 for industrial uses was assumed, these ratios being common industry norms and generally accepted where site specific local investigations related to non-residential densities do not exist.

Future Development - projected residential and non-residential land use improvements within the SGPWA service area anticipated to occur by the year 2035. The sources of data used to quantify the extent of such improvement includes local agency demographic projections, local UWMPs and County of Riverside demographic studies.

KSF – the unit of measurement used for non–residential building size equal to one thousand square feet.

SBVMWD - San Bernardino Valley Municipal Water District

State Water Project ("SWP") – the system of dams, reservoirs, channels, pipelines, pumping stations, delivery structures and all other conveyance systems whose purpose is to convey and deliver water from the Sacramento-San Joaquin Delta to the various water contractors, including SGPWA. Specific to SGPWA such deliveries are in accordance with the terms of "Contract Between the State of California Department of Water Resources and San Gorgonio Pass Water Agency, For Water Supply."

Table A Water - The total annual amount of SWP water, entitled by DWR to SGPWA under the terms of "Contract Between the State of California Department of Water Resources and San Gorgonio Pass Water Agency, For Water Supply", Amendment No. 18 dated December 26, 2007. Table A of that contract, as amended by Amendment No. 18, indicates that the current maximum annual entitlement to SGPWA is 17,300 Acre-feet.

UWMP – is an Urban Water Management Plan. California Water Code §10610 et. seq. directs certain water agencies to carry out long term planning to ensure that adequate water supplies are

available to both existing demand and new development. Agencies that are required by this code to produce this plan must document its long-term planning effort in an Urban Water Management Plan. This planning document is required to be updated every five years.

Water Component of the Facility Capacity Fee - for the purposes of this Study and hereafter referred to as the "**Water Capacity Fee**", is a facility capacity fee imposed on new development to pay that development's fair share of the costs to purchase new water or new water rights or entitlements necessary to meet future water demands and ensure acceptable levels of reliability with regard to the ability of the servicing agency or special district to deliver water in the future.

Water Use Factor ("WUF") – a measure of average water demand for a given land use within a given area, expressed as Acre-feet per year per acre (AFY/acre).

2011 Study – a capacity fee nexus study prepared by David Taüssig & Associates, Inc. for SGPWA in 2011. This study was adopted by SGPWA but not implemented. The demographic analysis for existing residential units and non-residential building square feet in the 2011 Study is used in this Study as the baseline demographics for Existing Development through 2009.

IV. Demographics

The SGPWA boundary includes the areas within the Cities of Banning, Beaumont, and Calimesa, the communities of Cabazon, Cherry Valley, Poppet Flat, the Morongo Indian Reservation, and other portions of the unincorporated area of Riverside County ("County"). A small area of undeveloped land within the service area at the headwaters of the San Gorgonio River extends into San Bernardino County. At the eastern edge of the SGPWA the Mission Springs Water District straddles the boundary line, serving a portion of the community of Verbania. Water is provided or is planned to be provided to retail customers by various retail water agencies, including the City of Banning, Beaumont Cherry Valley Water District, Cabazon Water District, South Mesa Water Company, Banning Heights Mutual Water Company, High Valleys Water District, Mission Springs Water District, and Yucaipa Valley Water District. As noted in this Study, certain of these agencies will require additional water deliveries and the facilities to convey that water sooner while other agencies may not require additional water and facilities until after the planning period used in this Study. Note that, for purposes of this Study, any property designated as Morongo Tribal Land has been excluded from our analysis because the Morongo Band of Mission Indians is a sovereign nation. Property within the Morongo Tribal lands will not be subject to either component of the Facility Capacity Fee. Therefore, the demographic analysis as described below reflects the property located within the three cities mentioned above and the unincorporated area of Riverside County excluding the Morongo Tribal Land.

For purposes of this Study David Taussig & Associates, Inc. ("DTA") categorized developed residential land uses as Single Family Residential and Multi-Family Residential units. Single Family Residential units include detached and attached residential units, while Multi-Family Residential units include those units with two or more living units on one Assessor's parcel as well as mobile homes. Non-residential land uses are categorized as Commercial/Retail or Industrial.

Because it is difficult to assign a specific year in the distant future in which the Build Out state (as identified by the various local agencies) is realized, the year 2035 was determined to present a reasonable horizon to achieve funding and construction goals. This planning horizon is also consistent with 2035 horizons identified in county and local city studies and local water district UWMPs.

1. Existing Number of Residential Units and Non-Residential Square Footage

The estimate of the number of current residential units and non residential square feet in the Cities of Beaumont, Banning, Calimesa and the unincorporated areas emanate from the 2011 Study and are used as a baseline level of development (see Appendix A). The numbers for residential units and non-residential square footage in the 2011 Study represented existing development through 2009. DTA then added to the 2009 baseline numbers the number of residential units and non-residential square footage indicated by building permits issued, not necessarily constructed, within the three cities and the unincorporated area for the years 2010 to mid 2014 to establish the present baseline. The permit data was provided by the respective planning departments.

A detailed discussion of the demographic assumptions and methods used to determine the increase in development from 2009 to mid 2014 can be found in Appendix A of this Study.

The estimated existing residential units by jurisdiction and by single family and multi-family land uses are shown in Table 1 below:

TABLE 1

Existing Residential Units Through June 2014[1]

Residential Land use	City of Banning	City of Beaumont	City of Calimesa	Unincorporated Area	Total Existing Residential Units
Single Family	9,900	12,700	2,200	6,200	31,000
Multi-Family	2,300	1,500	1,500	1,400	6,600
Totals	12,200	14,200	3,700	7,600	37,600

1. Rounded to the nearest 100 units

The estimated existing non-residential building square feet, rounded to the nearest 1,000, by jurisdiction and by Commercial/Retail and Industrial land uses is shown in Table 2 below:

TABLE 2

Existing Non-Residential Square Feet Through June 2014[1]

Non-Residential Land use	City of Banning	City of Beaumont	City of Calimesa	Unincorporated Area	Total Existing Non Residential Square Feet
Comercial/Retail	4,536,000	3,639,000	1,482,000	3,780,000	13,437,000
Industrial	4,231,000	1,982,000	412,000	60,000	6,685,000
Totals	8,767,000	5,621,000	1,894,000	3,840,000	20,122,000

1. Rounded to the nearest 1,000 square feet

2. Future Residential and Non-Residential Development

Although projections for Build-Out conditions can be found in studies by various other sources, it was felt that the year 2035 is consistent with local studies and provides a period from which a reasonable prediction of new development growth may be estimated. This quantified estimate of growth may then be used to allocate the cost of facilities that SGPWA staff has determined are needed at this time to mitigate the impacts of current and future demands.

There are several sources that project future residential and non-residential demographics for various horizons within SGPWA boundaries, including housing elements from City General Plans, Urban Water Management Plans ("UWMP") and development projections from interested agencies such as the Southern California Association of Governments ("SCAG"). Differing development trends unique to jurisdictional areas within the Agency boundary suggest that the local retail water agencies' UWMP projections or projections from independent studies might be the most in tune with actual development trends within their purview. Specifically, the growth projections for the Cities of Beaumont and Banning

were taken from the Beaumont Cherry Valley Water District UWMP and the City of Banning UWMP, respectively; however the City of Calimesa provided current growth projections based on its own independent study.

Development projections for unincorporated areas within the Agency are more difficult to determine using local UWMP's as a source. Some retail water districts include unincorporated areas within their boundaries. Those areas may or may not be within the Agency. Also, there are unincorporated areas within the SGPWA that are not covered by a local UWMP. For this reason the County of Riverside was contracted to provide a special study, or addendum, to their 2013 Progress Report that compiles data from only unincorporated areas within census tracts that lie within the SGPWA boundary. In this special study the County estimated the housing units in such census tracts in the year 2035. The results of this study are shown graphically in Figure 1, Appendix A, "Demographic Background."

Furthermore, the Yucaipa Valley Water District UWMP does not segregate water demands from the parts of its service area that lie within the City of Calimesa and the County of Riverside. In addition, the South Mesa Water Company services portions of the City of Calimesa but does not have a UWMP. For these reasons, development projections for the City of Calimesa were provided by the City of Calimesa staff and are based on City General Plan projections and current development trends considering active development projects at various stages of planning.

The following sources were used to project total new housing units to 2035:

- City of Banning UWMP (2010)
- Beaumont Cherry Valley Water District UWMP (2010)
- City of Calimesa planning data provided by City staff
- Riverside County 2013 Progress Report, with a special study that includes unincorporated areas within SGPWA boundaries (2014). See Figure 1 in Appendix A

For the City of Banning, their 2010 UWMP provides a total housing projection of 17,988 units in 2035. However, a breakdown of single family and multi family units was not provided. Using projected water usage and water usage factors provided in the UWMP, the 17,988 total units was broken down into single family and multi family units in proportion to each category's water usage.

In similar fashion, the Beaumont Cherry Valley Water District UWMP (2010) projects total residential units in 2035 at 21,958 units, however it does not break that figure down to single family and multi-family units. Again, projected water usage for multi-family units in 2035 and water usage factors were used to calculate the percentage split between single family housing units and multi-family housing units in 2035. The resulting number of housing units were then rounded to the nearest 500 housing units and entered into Table 3 below (see Appendix A, Section A-5).

The City of Calimesa staff provided the number of existing and projected single family and multi-family housing units within the City limits. The City projects 12,100 new residential

dwelling units between 2014 and 2035. The number of new non-residential building square feet added between 2009 and 2014 is negligible, however the City projects over 23,000,000 new commercial building square feet by 2035.

For the unincorporated areas the special study by the County of Riverside, mentioned above, projected a total of 10,068 residential units in 2035. It is assumed that most of the growth between 2015 and 2035 will be single family units. DTA assumed a 2% cumulative growth in multi-family units during this period, with the balance being single family units.

A detailed discussion of the analysis used to estimate the number of future residential units can be found in Appendix A of this Study. Table 3 below summarizes the expected residential units within the study area at year 2035

TABLE 3

Projected Residential Units in 2035[1]

Residential Land Use	City of Banning[2]	City of Beaumont	City of Calimesa	Unincorporated Area	Total Residential
Single Family	15,707	20,500	11,500	8,700	56,400
Multi-Family	2,281	1,500	4,300	1,400	9,500
Total	17,988	22,000	15,800	10,100	65,900

1. Rounded off to the nearest 100 units

2. Total units are not rounded. The 17,988 is taken directly from the City of Banning UWMP, Table 3-1.

The UWMP's that cover the Cities of Banning and Beaumont do not provide projections for non-residential building square feet. Their projections consisted of growth in water demand, as it should for water planning purposes. The percentage growth in water demand for the land use categories within the city limits was applied to the data for existing development to project building square feet in 2035. The City of Calimesa staff provided projections for non-residential building square feet in 2035. Table 4 below summarizes the total expected non-residential square feet within the study area in 2035.

TABLE 4

Projected Non-Residential Building Square Feet in 2035[1]

Non-Residential Land Use	City of Banning	City of Beaumont	City of Calimesa	Unincorporated Area	Total Non-Residential SF
Commercial/Retail	7,018,000	4,921,000	24,895,000	5,112,000	41,946,000
Industrial	6,546,000	2,493,000	412,000	75,000	9,526,000
Total	13,564,000	7,414,000	25,307,000	5,187,000	51,472,000

1. Rounded off to the nearest 1,000 square feet

A detailed discussion of projected residential units and non-residential building square feet can be found in Appendix A of this Study. The numbers found in Table 3 and 4 above represent total numbers through 2035. To determine the amount of growth between 2014 and 2035 the data in Tables 1 and 2 (existing development) must be subtracted from the

corresponding data in Tables 3 and 4 (total projected at 2035). This difference is shown in column (5), Table 7, Section V below.

V. Facility Component of the Facility Capacity Fee

The estimated reasonable cost to SGPWA of providing water supplies to new development is divided into two components: the Facility Component of the Facility Capacity Fee ("Facility Fee") and the Water Component of the Facility Capacity Fee (Water Capacity Fee"). This section will address the identification, the cost, the method of cost allocation, and the fee structure for new water facilities.

SGPWA owns and maintains an integrated system of water storage and conveyance that provides benefit to all lands within SGPWA boundaries by providing access to an imported water supply through the SWP. Each facility within the system provides delivery of water for groundwater basin replenishment, storage for local use when imported water is in short supply, or direct delivery to retail agencies. SGPWA will need to construct new facilities within this system to augment current storage capacity and delivery capabilities in order to meet the demands of current and future development. Thus, imported water stored in the Beaumont Basin, or any other groundwater basin, by SGPWA can be locally used as part of a conjunctive use program in times of shortage, allowing SGPWA imported water supplies to be beneficially used by water users within the SGPWA service area. The integrated system will provide the central core access to a water supply for lands that would not otherwise have such access during prolonged periods of limited imported water deliveries and during years of surplus. For example, the Beaumont Basin Recharge Facility, more fully described in Section V.1 herein, provides an interconnected system of water delivery to local water agencies that overlie the Beaumont and Banning groundwater basins. The Beaumont Basin Recharge Facility adds recharge capacity and storage to an overdrafted basin in order to provide reliable water supplies to both new and existing development within the entire SGPWA service area.

In July, 2015 Webb Associates submitted a letter report to SGPWA included herein as Appendix B, ("Implementation Update"). This document included detailed cost estimates, list of facilities, and detailed graphics that describe the location of recharge basins and alignments of interconnecting pipelines.

The fair share allocation of the cost of facilities anticipated to be needed during this planning horizon is discussed in detail in Section V.2, "Methodology" herein.

1. Facility Costs

For purposes of the Facility Fee calculation, SGPWA decided at this time to include only the facilities related to conjunctive use of the Beaumont Basin and the purchase of additional capacity from San Bernardino Valley Municipal Water District ("SBVMWD") because these facilities will be needed prior to the year 2035 based on projected water demands for that year. The facilities to be financed consist of (1) the purchase of additional capacity in existing pipeline systems owned by others, and (2) an additional basin recharge project for underground water storage in the Beaumont basin, including land purchases associated with that basin facility. Itemized facility costs totaling $12.66M were provided

by Webb Associates in its Implementation Update document prepared for SGPWA. See Appendix B herein.

The East Branch Extension Phase II project by DWR will include pipelines, pump station additions and expansions, and a reservoir that will convey SWP water from Highland to the SGPWA service area. SGPWA is negotiating with SBVMWDfor the purchase of an additional 32 cubic feet per second ("cfs") capacity in the SBVMWD pipeline between Highland and Devil Canyon. This purchase will provide additional capacity for SGPWA, increasing its capacity from 32 cfs to 64 cfs for the entire East Branch Extension. It has been determined by SGPWA that the full additional 32 cfs capacity will be needed to meet the demands of expected development through 2035. The estimated cost of this capacity, as indicated in the Implementation Update (see Appendix B) is $4M.

Beaumont Basin Recharge Facility – SGPWA proposes to construct a 54 acre recharge basin (also known as the Beaumont Avenue Recharge Facility) at the intersection of Beaumont Avenue and Brookside Avenue for the purpose of storing SWP water conveyed through a 6,000 lineal feet pipeline. Water will be used to recharge the Beaumont Basin, thereby replenishing water used to meet the demands of expected development. The estimated cost to improve the site, not including land purchase costs, as indicated in the Implementation Update, is $5.46M. This facility will provide additional storage that can be filled in wet years and drawn down in dry years. The land cost for Beaumont Basin Recharge Facility is $3.2M .

Table 5 below provides a summary of the list of facilities and the respective estimated costs that will be financed, or partially financed, by the revenue from the Facility Fee recommended in this Study. Maps showing the location of each facility can be found in the Implementation Update, found in Appendix B of this Study. Part of the additional capacity provided by the Beaumont basin recharge facility is needed for new development. This additional capacity will also provide a benefit to existing development. The total additional capacity from SBVMWD is required to meet the demands of new development. Therefore, only a portion of the cost of the basin recharge facility is allocated to new development and the full cost of the additional capacity from SBVMWD is allocated to new development. The allocations are more fully described in Section V.2, "Methodology."

TABLE 5

Needs List and Estimate of Costs[1]

Facility Name	Cost Estimate	% Allocated To New Development	Cost to New Development
Beaumont Basin Recharge Facility	$ 5,460,000	80.00%	$ 4,368,000
Land Costs for Beaumont Basin Recharge Facility	$ 3,200,000	80.00%	$ 2,560,000
32 cfs capacity from SBVMWD	$ 4,000,000	100.00%	$ 4,000,000
Total Facility and Land Cost	$ 12,660,000		$ 10,928,000
Administrative fee @ 0.50%			$ 55,000
Grand Total			$ 10,983,000

1. Rounded to nearest $1,000

An Administrative Cost Component is included in the total cost to be financed in order to cover the costs incurred by SGPWA associated with the administration of the Facility

Capacity Fee program. Administrative costs include staff time associated with fee collection, maintenance of trust funds into which the fees are deposited, preparation of annual reports, and negotiation and implementation of agreements between SGPWA and the retail agencies or land use planning agencies. A budget of 0.50% of the total facility cost is a reasonable number to spread over the next twenty years of development, amounting to $55,000. This represents approximately one man-hour per month over the next twenty years. The revenue to fund these activities will be a component of the Facility Fees collected.

2. Methodology

The Beaumont Basin Recharge Facility discussed above will benefit both existing and new development within the SGPWA boundaries while the additional capacity in the SBVMWD pipeline is needed solely to meet the demands of new development. Because the reliability of SWP deliveries is partially dependent upon weather trends, regulations and court cases, uncertainty becomes a major factor in the management of wholesale water deliveries. Also, the Beaumont Basin is now in balance and the adjudicated requirement that the basin cannot be in overdraft on a continual basis substantiates the need for SGPWA to find additional water rights and entitlements to improve reliability. The Beaumont Basin Recharge Facility will rely on imported water to operate as planned.

The Beaumont Avenue Recharge Facility is a conjunctive use facility designed to take advantage of greater water supplies in wet years. With the reliability of the State Water Project decreasing, a regional conjunctive use project has value to current residents, enabling SGPWA as the regional water agency to import more water in those wet years and store it for future dry years. However, this value will increase substantially as the area grows, as more water supplies will be required and hence the value of being able to import and store more water in wet years increases greatly.

With current water demands the conjunctive use facility might be used once in five years, providing a 20% utilization rate. That rate will increase in future years as additional supplies are obtained for the growing region. As the region grows and the Agency obtains additional water supplies, the facility will likely be used every year, increasing the utilization rate to 100%. Since in the near term it might only be used an average of 20% of the time, it makes sense to have 20% of the cost of the facility funded by current residents. With additional growth causing the facility to eventually be used continuously at 100% capacity, the remaining 80% should be funded by that growth. Thus the funding of the cost of the Beaumont Avenue Recharge Basin Facility and its land cost are components of the Facility Fee. The allocated costs are shown in Table 5 above.

Based on current water demands and projections of future development to 2035, an additional 32 cfs capacity from SBVMWD is required solely to meet the demands of future development. Therefore the cost to purchase this additional capacity is allocated 100% to new development. Negotiations between SBVMWD and SGPWA are ongoing. The Implementation Update (see Appendix B) indicates that a $4M purchase price for this additional capacity is a reasonable estimate. Refer to Section V.1 above.

To fairly distribute the cost of new facilities allocated to the various land use designations for new development, a distribution based on an Equivalent Dwelling Unit ("EDU") methodology will be used whereby water demand will serve as the unit of comparison. The water demand for a residential dwelling or one thousand square feet ("KSF") of building floor area is compared as a ratio of that value to the demand for a single family residential unit. This ratio is defined as the EDU factor and is used to calculate the total existing EDUs, as shown in Table 6 below, and the increase in EDUs through 2035, as shown in Table 7 below.

Data for projected residential and non residential development to 2035 is subtracted from the corresponding existing data as of 2014 to identify the growth in development from 2014 to 2035, as shown in Table 7. Converting this growth into EDUs, the allocated costs can then be distributed to the various land uses. Table 7 shows that the total growth in EDUs from 2014 to 2035 is 61,828 EDUs.

Table 6 below shows the calculation for total existing EDUs, while Table 7 below shows similar calculations for future EDUs through 2035. Water use factors ("WUF"), in acre-ft of water demand per year ("AFY") per acre, are shown in column (1) of both tables and the values are taken from Table 1-7 of the Webb Implementation Plan (see Appendix C) that was made a part of the 2011 Study, where the value entered for "Unincorporated Areas and Others" is the average of the values shown for "Riverside County" and "Cabazon Area". In column (2) of both tables, "Density (DU per acre or FAR)", the residential densities are assumed to be the higher end of the range given for "Residential Low" and "Residential High" given in Table 1-7 of the Webb Implementation Plan for Single Family and Multi-Family land use designations, respectively. This is a reasonable and more conservative method to calculate the estimated densities in that it generates higher EDU counts, resulting in lower calculated residential fees. The densities for Commercial/Retail and Industrial categories use floor area ratios ("FARs") of 0.20 and 0.40 respectively, which are also conservative for the same reasons discussed above for residential uses. In column (3) of both tables the unit water use, in AFY per DU for residential uses or AFY per KSF for non-residential uses, for each land use category was then calculated from the values in the columns (1) and (2).

For example, for the City of Banning, single family land use for existing development, as shown in Table 6, the WUF shown in column (1) is divided by the density shown in column (2). Thus 2.73 AFY/acre divided by 5 DU per acre equals 0.546 AFY per DU. In a similar manner, for City of Banning, Commercial/Retail land use in Table 6, the WUF shown in column (1) is divided by the density in column (2), the result then divided by the 43.560 KSF per acre conversion factor[3]. Thus 5.76 AFY per acre divided by 0.20, the result then divided by 43.560 KSF per acre equals 0.662 AFY per KSF, as shown in column (3). The EDU factor in column (4) was determined by dividing each unit water use in column (3) by the unit water use for a single family dwelling unit in the City of Banning, Beaumont or Calimesa (0.546). For example, the unit water use calculated above for commercial/retail use, 0.662 in column (3) is divided by 0.546 for single family also shown in column (3) to produce an EDU factor of 1.21, shown in column (4).

[3] 1 acre = 43,560 square feet, or 43.560 KSF

In Table 6 below, the total existing residential dwelling units and the total existing non-residential building area in KSF shown in column (5) was taken from Tables 1 and 2. For instance, for the City of Banning, single family land use, the value of 9,936 DU's corresponds to the same value shown for the City of Banning, single family land use in Table 1. The total EDUs for existing development for the various agencies and land uses shown in column (6) were calculated by multiplying the residential dwelling units and commercial/industrial KSF shown in column (5) by the corresponding EDU factors shown in column (4).

TABLE 6

EDU Calculation - Existing Development

	(1)	(2)	(3)	(4)	(5)	(6)
Land Use	Water Use Factor (AFY/Ac)	Density (DU per acre or FAR)	Water Use (AFY per DU or KSF)	EDU Factor	DU or KSF	EDU[1]
City of Banning:						
Single Family	2.73	5	0.546	1.00	9,936	9,936
Multi-Family	5.34	20	0.267	0.49	2,281	1,115
Commercial/Retail	5.76	0.20	0.662	1.21	4,536	5,497
Industrial	1.27	0.40	0.073	0.13	4,231	565
Total						17,113
City of Beaumont:						
Single Family	2.73	5	0.546	1.00	12,681	12,681
Multi-Family	5.34	20	0.267	0.49	1,463	715
Commercial/Retail	5.76	0.20	0.662	1.21	3,639	4,410
Industrial	1.27	0.40	0.073	0.13	1,982	265
Total						18,071
City of Calimesa:						
Single Family	2.73	5	0.546	1.00	2,200	2,200
Multi-Family	5.34	20	0.267	0.49	1,500	734
Commercial/Retail	5.76	0.20	0.662	1.21	1,482	1,796
Industrial	1.27	0.40	0.073	0.13	412	55
Total						4,785
Unincorporated Areas & others						
Single Family	2.85	5	0.570	1.04	6,208	6,481
Multi-Family	5.44	20	0.272	0.50	1,363	679
Commercial/Retail	5.79	0.20	0.664	1.22	3,780	4,598
Industrial	1.29	0.40	0.074	0.14	60	8
Total						11,766
1. totals are rounded					Total Existing EDUs =	51,735
					% of total	45.56%

The total EDUs for new development shown in Table 7 below are calculated in a similar manner as Table 6 while using future development to 2035. The new development ("growth") value is the difference between 2035 and existing residential DUs or non-residential square feet from Tables 1 through 4.

TABLE 7						
EDU Calculation - Future Development						
	(1)	(2)	(3)	(4)	(5)	(6)
Land Use	Water Use Factor (AFY/Ac)	Density (DU per acre or FAR)	Water Use (AFY per DU or KSF)	EDU Factor	DU or KSF	EDU
City of Banning:						
Single Family	2.73	5	0.546	1.00	5,771	5,771
Multi-Family	5.34	20	0.267	0.49	0	0
Commercial/Retail	5.76	0.20	0.662	1.21	2,482	3,008
Industrial	1.27	0.40	0.073	0.13	2,315	309
Total						9,088
City of Beaumont:						
Single Family	2.73	5	0.546	1.00	7,819	7,819
Multi-Family	5.34	20	0.267	0.49	37	18
Commercial/Retail	5.76	0.20	0.662	1.21	1,282	1,553
Industrial	1.27	0.40	0.073	0.13	511	68
Total						9,458
City of Calimesa:						
Single Family	2.73	5	0.546	1.00	9,300	9,300
Multi-Family	5.34	20	0.267	0.49	2,800	1,369
Commercial/Retail	5.76	0.20	0.662	1.21	23,413	28,371
Industrial	1.27	0.40	0.073	0.13	0	0
Total						39,040
Unincorporated Areas & others						
Single Family	2.85	5	0.570	1.04	2,492	2,602
Multi-Family	5.44	20	0.272	0.50	37	18
Commercial/Retail	5.79	0.20	0.664	1.22	1,332	1,620
Industrial	1.29	0.40	0.074	0.14	15	2
Total						4,242
					Total Future EDUs =	61,828
					% of total	54.44%
					Total EDU's =	113,563

Based on the numbers shown in Table 6 and Table 7, it is anticipated that in the year 2035 there will be 113,563 EDUs within the SGPWA service area (51,735 existing EDUs plus 61,828 future EDUs).

The summary of existing EDUs and growth EDUs at 2035 by land use is shown below in Table 8, "EDU Summary at 2035":

TABLE 8 EDU Summary at 2035			
Land Use	Existing EDUs	New Growth Between 2015 and 2035 EDUs	Total EDUs at 2035
Single Family	31,298	25,492	56,790
Multi-Family	3,243	1,405	4,648
Commercial/ Retail	16,301	34,552	50,853
Industrial	893	379	1,272
Totals	51,735	61,828	**113,563**
% of Total EDU's at 2035	45.56%	54.44%	100.00%

3. Facility Fee Structure

As indicated in Table 5 in this Section, the estimated total facility cost allocated to new development is $10.9M. This amount is divided by the total EDUs assigned to new development through 2035 to arrive at a cost per EDU of $176.69. The administrative cost element is calculated in a similar fashion to be $0.89 per EDU. The total cost per EDU is $177.58. These unit costs are shown in Table 9 below:

TABLE 9 Facilites Cost Per EDU			
Item	Cost	EDUs for New Development	Cost per EDU
New Water Facilities	$ 10,928,000	61,828	$ 176.75
Administrative Overhead	$ 55,000	61,828	$ 0.89
Totals	$ 10,983,000	61,828	$ 177.64

The proposed Facility Fee for the respective land uses is determined by multiplying the cost per EDU by the appropriate EDU factor. Because the EDU factors and the WUFs upon which the EDUs are based do vary between local service areas, as shown in Table 10, it is reasonable that weighted average WUFs are used to calculate uniform SGPWA service area EDU factors. This will result in one uniform fee structure to be used throughout the service area. Table 10 also shows the method for determining weighted average WUF for each land use. The WUF for each agency is weighted by the ratio of future EDUs for such agency to the total future EDUs. For example the City of Banning has 9,088 future EDUs, which represents 14.70% of the total future EDUs (refer to Table 7, "EDU Calculation – Growth at 2035" for EDU totals). Each land use within a given agency has its own specific WUF, which is multiplied by the weighting ratio specific to that agency (14.70% for the City of Banning). The weighted average WUF for each land use within the SGPWA service area is calculated by summing the weighted average WUF for each agency, by land use, and this value is shown in bold in the extreme right column labeled "Total" in Table 10.

Since EDUs are based on water demand, weighting based on EDUs presents a fair and rational means of determining service area wide EDU factors. For any of the four land use designations, the variation between EDU factors calculated by this weighted average method and the EDU factor determined on an individual retail agency basis, as shown in Table 10, is less than 4%, therefore use of the weighted average is reasonable. The calculation of the weighted average WUF for each land use designation is shown in Table 10 below:

TABLE 10

Weighted Average Water Use Factors

WUF by LandUse	City of Banning	City of Beaumont	City of Calimesa	Unincorporated Areas and Other	Total
Weighting Factors:					
subtotal of EDUs	9,088	9,458	39,040	4,242	61,828
% of total EDUs	14.70%	15.30%	63.14%	6.86%	100.00%
Single Family:					
Water Use Factor ("WUF")	2.73	2.73	2.73	2.85	
Weighted WUF	0.40	0.42	1.72	0.20	**2.74**
Multi-Family:					
Water Use Factor ("WUF")	5.34	5.34	5.34	5.44	
Weighted WUF	0.78	0.82	3.37	0.37	**5.35**
Commercial/Retail:					
Water Use Factor ("WUF")	5.76	5.76	5.76	5.79	
Weighted WUF	0.85	0.88	3.64	0.40	**5.77**
Industrial:					
Water Use Factor ("WUF")	1.27	1.27	1.27	1.29	
Weighted WUF	0.19	0.19	0.80	0.09	**1.27**

If future data show that water use within the SGPWA service area is significantly different than the WUFs used in this study, it is recommended that SGPWA update the Facility Fee portion of this Update to reflect such changes.

For residential land uses the Facility Fee is determined based on a per unit water demand, whereby a dwelling unit in a multi-family building would demand less water by volume than that demanded by a single family dwelling unit. In Table 11A below the weighted average WUFs, the densities, the resulting water uses and EDU factors were used to calculate a uniform Facility Fee structure for residential land uses only. In column (1) the weighted average WUFs were taken from Table 10 above. The densities in column (2), the water usages in column (3) and the EDU factors in column (4) are the same as used in Tables 6 and 7. The fee for each of the two land uses was calculated by multiplying the cost per EDU from Table 9 of $177.64 by the service area wide EDU factor. For instance, the Facility Fee for a multi-family dwelling unit is found by multiplying the unit facility cost by 0.49, the EDU factor.

TABLE 11A Residential Facilty Component Fee Structure							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Land Use	Weighted Ave. WUF (AFY/Ac)	Density (DU per acre)	Water Use (AFY per DU)	EDU Factor	Facility Element ($ unit)	Admin Element ($ per Unit)	Total Facility Fee per DU
Single Family	2.74	5	0.548	1.00	$ 176.75	$ 0.89	$ 177.64
Multi-Family	5.35	20	0.267	0.49	$ 86.28	$ 0.43	$ 86.72

Commercial and industrial land uses include any one of many specific building uses, ranging from low water demand uses such as retail, office and warehouse to high demand uses such as commercial laundry and car wash. Consequently, a fee structure based on building meter size is reasonable and prudent. A 5/8" meter size is typical for a single family unit, therefore a 5/8" meter is assigned one EDU. EDU factors for larger meter sizes are determined by the ratio of meter operational capacities, as determined by values given by the American Water Works Association, Manual M-1[4]. Table 11B below lists the various EDU factors, by meter size, and the corresponding Facility Fee. The facility element and the administration fees are calculated by multiplying the EDU factor by the costs per EDU from Table 9.

TABLE 11B Non-Residential Facilty Component Fee Structure					
Meter Size	AWWA Demand Ratio[1]	EDU Factor	Facility Element	Admin Element	Total Facility Fee
5/8"	1.0	1.0	$ 176.75	$ 0.89	$ 177.64
3/4"	1.1	1.1	$ 194.42	$ 0.98	$ 195.40
1"	1.4	1.4	$ 247.45	$ 1.25	$ 248.69
1-1/2"	1.8	1.8	$ 318.15	$ 1.60	$ 319.75
2"	2.9	2.9	$ 512.57	$ 2.58	$ 515.15
3"	11.0	11.0	$ 1,944.23	$ 9.79	$ 1,954.02
4"	14.0	14.0	$ 2,474.48	$ 12.45	$ 2,486.93
6"	21.0	21.0	$ 3,711.72	$ 18.68	$ 3,730.40
8"	29.0	29.0	$ 5,125.70	$ 25.80	$ 5,151.50
1. American Water Works Association, Manual M-6					

It is recommended that SGPWA include in its fee resolution a provision to automatically increase the Facility Fee on July 1st of each year, beginning July 1, 2016 by a percentage equal to the change in Construction Cost Index for Los Angeles as published by Engineering News Record for the preceding twelve months. It is also recommended that SGPWA review the Facility Fee levels at reasonable intervals to incorporate changes in unit prices, facility requirements, water demands and demographics in order to ensure that Facility Fee cost allocations are reasonable and that collections over time will fund the required facilities. Finally, the Facility Fee is a requirement of all new development or

[4] Principles of Water Rates, Fees and Charges, Manual M-1, and Water Meters- Selection, Installation, Testing and Maintenance, Manual M-6, American Water Works Association.

redevelopment in the SGPWA service area, irrespective of whether a Water Capacity Fee (discussed in Section VI below) is required.

VI. Water Component of the Facility Capacity Fee

The second component of the Facility Capacity Fee is the water component ("Water Capacity Fee"). The task of meeting the demands of new growth with scarce water sources is exacerbated by the significant reduction in reliability of imported water deliveries from the SWP due to periodic drought conditions,regulatory and court case cutbacks in allocations. SGPWA will need to purchase new water rights and entitlements to insure that additional water supplies will be available in the future as the SGPWA service area experiences new development. It has been estimated that total water demand at build-out is expected to be in excess of local supplies and existing imported SWP water, with allowances for reduced reliability. This deficit will need to be balanced by the purchase of new water rights and entitlements. The water rights and entitlements (authorized by SGPWA Act 101 – 27.1(b), (d) and (g)) that are needed to meet the demands of new development shall be purchased with funds provided by new development in the form of a Water Capacity Fee.

In July of 2014 SGPWA instructed Water Consultancy to prepare a memorandum that updates the estimated cost of purchasing additional Table A water (see Appendix D). Water Consultancy, by this July 2014 memorandum, estimates the market value of the cost of additional water rights and entitlements at $6,200 per acre-ft. The amount charged to new development as a Water Capacity Fee will be determined based on water demand, on a project by project basis, by SGPWA in cooperation with the permitting agency that has jurisdiction over the project. Administrative overhead is estimated to be 0.50% of the fee revenue, or $31.00 per acre-ft. This amounts to $31,000 for a purchase of 10,000 acre-ft of water, which is sufficient funding to cover the costs of administrative actions required for such purchase. See Table 12 below:

TABLE 12
Water Capacity Fee

Item	units	Fee
Fee for New Water Rights and Entitlements	$ per ac-ft	$ 6,200.00
Administrative Overhead	$ per ac-ft	$ 31.00
Total		$ 6,231.00

For example, using an annual water use amount of 0.548 AFY as indicated in Table 11A, a hypothetical single family dwelling unit would pay a Water Capacity Fee of $3,414.59 (0.548 AFY x $6,231 per acre-foot).

It is recommended that SGPWA include in its fee resolution a provision to review the Water Capacity Fee on July 1st of each year, beginning July 1, 2016, and adjust the Water Capacity Fee by a reasonable percentage based on the cost of actual water purchases, an updated water rights appraisal, or comparisons of recent purchases of additional water rights by statewide municipalities and special districts over the preceding twelve months.

[TO BE SENT ON AGENCY LETTERHEAD]

Bonnie Johnson, City Manager
City of Calimesa
908 Park Avenue
Calimesa, CA 92320

Re: Inclusion in requirements for development approvals
San Gorgonio Pass Water Agency Facility Capacity Fee

Dear Bonnie:

As you know, the San Gorgonio Pass Water Agency ("Agency") previously adopted a Facility Capacity Fee. The nature of, and substantiation for, the Fee are set forth in Resolution 2015-05 and the Capacity Fee Study, copies of which are enclosed for your reference.

As you also know, there have been a number of agreements and conditions proposed by and between the Yucaipa Valley Water District ("District"), the City and the Agency as to whether or not the Fee would be collected by the water retailer or the land use agency. As a wholesaler, the Agency does not have the legal authority to impose direct development approvals. It was never the intent of the Agency to place the City in the middle of any issues that may exist between the Agency as the wholesaler and the District as the retailer that provides direct service to customers.

The Agency desires to renew its basic request that the City include the payment of the Fee on its list of conditions for the applicable development approval. As between the City and the Agency, any issues pertaining to adoption, imposition and collection of the Fee shall be the sole responsibility of the Agency. The City shall not be responsible for enforcing payment of the Fee. The City's role would end upon including the Fee among the applicable approvals for new development.

In addition, the Agency will defend, indemnify and hold harmless the City from and against any and all costs, claims, liabilities, judgments, or award of damages, including reasonable attorney's fees (collectively "Liabilities"), arising out of or in any way resulting from the adoption and imposition of the Fee.

By way of suggestion only, it would seem that the Fee requirement could be included as one of the requirements referenced in the City's Municipal Code. For example, Section 18.90.040(F)(1) provides that before approval of a major development, the development plan application must be consistent with "local laws and regulations." In addition, Section 18.15.020 addresses "Application Filing" and requires the filing of an application "together with all fees, plans, maps, and other information required by the planning department."

Please provide notice to the Agency as to whether or not the City is willing to provide this assistance to the Agency. In case there are any questions, the impact of the Agency being able to impose and collect the Fee, compared to the impact if the Agency is not able to impose and collect the Fee, will be addressed in the Agency's Urban Water Management Plan which will be adopted in the near future. A draft of the Plan has been posted to the Agency's website.

If you have any questions, please feel free to contact me. The Agency looks forward to working with the City on water resource issues that affect the residents of the City.

WATER RIGHTS, WATER SUPPLY, AND FACILITY CAPACITY FEE COLLECTION AGREEMENT

This WATER RIGHTS, WATER SUPPLY, AND FACILITY CAPACITY FEE COLLECTION AGREEMENT ("Agreement"), dated as of April ____, 2017 (the "Execution Date"), is by and among the CITY OF CALIMESA ("CITY"), a municipal corporation, having its principal address at 908 Park Avenue, Calimesa, California 92320, SAN GORGONIO PASS WATER AGENCY ("AGENCY"), a duly constituted Agency created pursuant to the San Gorgonio Pass Water Agency Act, found at California Water Code Appendix Chapter 101, having its principal address at 1210 Beaumont Avenue, Beaumont, California 92223, and YUCAIPA VALLEY WATER DISTRICT ("DISTRICT") a County Water District organized and operating under the County Water District Law, Sections 30000 and following of the California Water Code, having its principal address at 12770 Second Street, Yucaipa, California 92399.

The CITY, AGENCY, and DISTRICT are also referred to herein individually as a "Party" and collectively as the "Parties".

RECITALS

A. The AGENCY currently has secured water rights in the State Water Project for a quantity up to 17,300 acre feet of water per year ("AFY") by contract with the California Department of Water Resources ("DWR").

B. On July 27, 2015, the AGENCY adopted Resolution No. 2015-05 entitled "A Resolution of the Board of Directors of the San Gorgonio Pass Water Agency to Adopt Facility Capacity Fees for Facilities and Water." As set forth in the AGENCY's Resolution No. 2015-05, the Facility and Water Capacity Fees (referred to collectively as the "AGENCY Fees") consist of two components: (1) a facility fee that will fund a portion of new AGENCY infrastructure; and (2) a water capacity fee that will fund new water rights and entitlements acquired by the AGENCY.

C. The purpose of this Agreement is to enhance existing water supplies provided by the AGENCY to the DISTRICT by creating a mechanism whereby financial contributions from property owners and the DISTRICT are provided to the AGENCY for the purchase of water rights that result in an instantaneous, dedicated, and continuous supply of water to the DISTRICT for development within the DISTRICT and/or the CITY.

TERMS AND CONDITIONS

NOW, THEREFORE, based on the foregoing Recitals and the terms and conditions set forth in this Agreement, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Dedication of Base Secured Water Rights

A. The AGENCY hereby dedicates a firm supply of 800 AFY of water ("Secured Water Rights") as a continuous supply of water to the DISTRICT for existing development and population within the DISTRICT's service territory upon execution of this Agreement by the Parties.

B. The AGENCY shall not contractually obligate, dedicate, deliver, distribute, or provide the Secured Water Rights dedicated to the DISTRICT to any other "AGENCY Customer" defined as any private or public agency or entity, property owner, or other party.

C. Any portion of the Secured Water Rights not delivered by the AGENCY to the DISTRICT during any calendar year shall be delivered to the DISTRICT prior to the delivery of water to any other AGENCY Customer during the following calendar year. The delivery of such deferred Secured Water Rights shall be provided at a mutually agreeable location over a mutually agreeable duration without an increased cost to the DISTRICT and without impacting or reducing regular deliveries in that calendar year.

D. The quantity of water dedicated to the DISTRICT includes the entire amount of 800 acre feet per year of Base Secured Water Rights, plus the additional unreliable portion of water when statewide DWR allocations are greater than the most recently published State Water Project reliability report published by the DWR.

2. Dedication, Accumulation, and Purchase of Additional Secured Water Rights

A. In addition to the Secured Water Rights described in Section 1 above, the AGENCY shall purchase additional secured water rights ("Additional Secured Water Rights") when available, and update the AGENCY Fees to reflect the actual cost per acre foot for such Additional Secured Water Rights with a stated reliability factor applied to the specific purchase of Additional Secured Water Rights.

B. In order to purchase such Additional Secured Water Rights from the AGENCY, the DISTRICT, developers, property owners, and others shall pay the AGENCY Fees for those water rights based on a specific quantity of Additional Secured Water Rights as determined by the DISTRICT. Upon acknowledgement of payment by the AGENCY, the Additional Secured Water Rights shall result in an instantaneous, dedicated, and continuous supply of water from the AGENCY to the DISTRICT. The specific quantity of Additional Secured Water Rights will be determined at the sole discretion of the DISTRICT based on the quantity of water needed to meet the expected water demands of development within the DISTRICT.

C. Upon receipt of payment by the AGENCY of AGENCY Fees, the purchased Additional Secured Water Rights shall be deemed instantaneously transferred from the AGENCY to the DISTRICT resulting in an immediate accumulation in the quantity of the total Secured Water Rights and Additional Secured Water Rights dedicated and available to the DISTRICT by the AGENCY.

D. The quantity of water dedicated to the DISTRICT shall include the entire amount of Secured Water Rights and purchased Additional Secured Water Rights, including reliable and unreliable portions of the water rights as delineated by the AGENCY at the time of purchase.

E. The AGENCY shall provide written evidence to the DISTRICT of the purchased Additional Secured Water Rights including the estimated reliability factor for each

purchase of such Additional Secured Water Rights. Each purchase of Additional Secured Water Rights shall automatically transfer ownership to the DISTRICT upon payment of AGENCY Fees.

F. The DISTRICT may acquire and accumulate Additional Secured Water Rights from the AGENCY at any time, without restriction, based on the adopted AGENCY Fees expressed in units of acre feet per year (AFY) of Additional Secured Water Rights. Purchases of Additional Secured Water Rights by the DISTRICT from the AGENCY may be ultimately used within the AGENCY service territory at the discretion, and for the sole benefit of the DISTRICT.

G. The DISTRICT will provide a drinking water service connection and the CITY will issue a building permit to those parcels for which an AGENCY Customer has:

i. Paid the AGENCY Fees to the AGENCY for the Additional Secured Water Rights as determined by the DISTRICT; and

ii. Received substantial written proof that the AGENCY has purchased, secured, and transferred ownership of Additional Secured Water Rights needed by the DISTRICT resulting in the instantaneous and continuous delivery of water to the DISTRICT.

H. Any portion of the Additional Secured Water Rights not delivered by the AGENCY to the DISTRICT during a calendar year shall be delivered to the DISTRICT prior to the delivery of water to any other AGENCY Customer during the following calendar year. The delivery of such deferred purchased Additional Secured Water Rights shall be provided at a mutually agreeable location over a mutually agreeable duration without an increased cost to the DISTRICT without impacting or reducing regular deliveries in that calendar year

I. The AGENCY shall permanently dedicate and transfer ownership to the DISTRICT, an equal quantity of Additional Secured Water Rights made available on parity, or in a similar manner, to an AGENCY Customer that has not received water from the AGENCY prior to July 27, 2015 as Additional Secured Water Rights, unless such water rights are purchased by a written contract at the published water rights price and made available to all other AGENCY Customers.

J. The DISTRICT retains all rights to Secured Water Rights and purchased Additional Secured Water Rights when the reliability factor exceeds the reliability factor determined at the time the Water Rights are secured and dedicated to the DISTRICT.

K. The AGENCY authorizes the DISTRICT to independently purchase water rights from other sources if such water rights can be delivered consistent with the AGENCY wheeling policy in effect at the time the water rights are secured, or by a wheeling mechanism that does not impact the capacity owned by the AGENCY in State Water Project facilities.

3. General Provisions

A. Dispute Resolution and Remedies. In the event a dispute arises between the Parties relating to this Agreement, the Parties shall first attempt to resolve the dispute through an informal dispute resolution process such as mediation. A Party shall initiate the informal dispute resolution process by transmitting written notice to the other Party, briefly setting forth the nature and extent of the dispute, and requesting that the Parties engage in informal dispute resolution. Within ten (10) working days from the date of receipt of that written notice, the general managers of the AGENCY and the DISTRICT and the city manager of the CITY shall meet and confer in a good faith effort to resolve the dispute by recognizing their mutual interests and attempting to reach a resolution that is just, equitable and satisfactory to both Parties. The Parties may by written agreement postpone or continue the informal dispute resolution process. In the event that the Parties have not reached a mutually satisfactory resolution of the dispute within sixty (60) calendar days following the written notice (unless the Parties have mutually agreed to extend the process beyond the sixty (60) days), either Party may pursue judicial action, including, but not limited to, damages, specific performance and injunctive relief.

B. Law, Venue, Attorney Fees and Costs. This Agreement shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a California State Superior Court in the County of Riverside. In the event of any such litigation between the Parties, the prevailing party shall be entitled to recover all reasonable litigation costs incurred, including without limitation reasonable attorney's fees.

C. Defense and Indemnity. The AGENCY shall defend, indemnify and hold harmless the DISTRICT and the CITY, their elected and appointed officials, officers, employees, and agents from and against any and all costs, claims, liabilities, judgments, or award of damages, including reasonable attorney's fees (collectively "Liabilities"), arising out of or in any way resulting from the adoption, imposition, collection and application of, and accounting for, the AGENCY Fees.

D. Amendment. This Agreement may be amended only by mutual written agreement signed by the Parties.

E. Mutual Cooperation. The Parties agree to provide information and take such further actions as are reasonably necessary to effectuate the purpose and intent of this Agreement. As part of such mutual cooperation, any other cooperative agreement for the collection of the AGENCY Fees between another party and the AGENCY shall be deemed incorporated at the sole discretion of the DISTRICT.

F. Representations and Warranties. On the Execution Date, each Party represents and warrants to the other Parties that:

i. It is a duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and that it has the power and authority to enter into this Agreement and to carry out the transactions contemplated hereby, and to perform and carry out all covenants and obligations on its part to be performed under and pursuant to this Agreement;

ii. The execution, delivery and performance of this Agreement is within its powers, has been duly authorized by all necessary action and does not violate any of the terms and conditions in its governing documents, any contracts to which it is a Party or any legal requirement or the like applicable to it;

iii. All legislative, administrative and other governmental action required to authorize the execution, delivery and performance of this Agreement and the transactions contemplated hereby has been taken except to the extent of actions which by the terms hereof are to be taken at a later time;

iv. This Agreement constitutes a valid, legal and binding obligation enforceable in accordance with the terms hereof except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws;

v. It is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;

vi. There are no actions, suits or proceedings pending or, to such Party's best knowledge, threatened, against or affecting such Party before any court, administrative body or arbitral tribunal that might materially and adversely affect its ability to enter into this Agreement and/or perform its obligations under this Agreement; and

vii. The execution, delivery and performance of this Agreement will not contravene any provision of, or constitute a material default under, any other agreement or instrument to which it is a Party or by which it or its property may be bound.

G. Representatives; Notices.

i. Authorized Representatives. Each Party will designate at least one individual officer or employee who will be its representative and will be authorized to act on behalf of the Party for all purposes in performing the provisions of this Agreement ("Representative"). Each Representative shall be either the General Manager or City Manager of a Party or a Person designated by such Party who shall have at least five (5) years of direct experience and technical expertise in water utility operations. Each Party will also designate an alternate Representative who will serve in the place of (and with the same authority as) the Representative if the latter is unavailable. A Party may also designate more than one Representative. The designation may be changed from time to time. The designation and changes to a designation must be made in a writing delivered to the other Parties.

ii. Notice. All notifications, notices, demands, requests and other communications herein provided for or made pursuant hereto shall be in writing and shall sent by (i) registered or certified mail, return receipt requested, and the giving of such communication shall be deemed

complete on the third (3rd) Business Day after the same is deposited in a United States Post Office with postage charges prepaid, (ii) reputable overnight delivery service, and the giving of such communication shall be deemed complete on the immediately succeeding Business Day after the same is deposited with such delivery service or (iii) so long as a Party has notified the other Parties by means of a method described in clauses (i) or (ii) above of such Party's email address for notification purposes, email transmission of notices to such Party are also permitted provided an original is also sent via one of the other permitted means and the giving of such communication shall be complete when such email is received if such email is received before 5:00 pm PST; otherwise, such communication shall be deemed complete the next Business Day.

H. Other Provisions.

i. Integration. This Agreement, embodies the entire agreement between the AGENCY, CITY and DISTRICT relating to the subject matter hereof and supersedes all prior agreements and understandings, written or oral, relating to such subject matter.

ii. Successor and Assigns. This Agreement shall be binding upon, and shall inure to the benefit of and be enforceable by, the Parties hereto and their respective successors and assigns permitted hereunder.

iii. Relationship of Parties. Each Party is an independent entity and none of the Parties is an agency of another Party.

iv. Construction and Interpretation. The Parties agree and acknowledge that this Agreement has been developed through a negotiated process among the Parties, and that each Party has had a full and fair opportunity to review the terms of this Agreement with the advice of its own legal counsel and to revise the terms of this Agreement, such that each Party constitutes a drafting Party to this Agreement. Consequently, the Parties understand and agree that no rule of construction shall be applied to resolve any ambiguities against any particular Party as the drafting Party in construing or interpreting this Agreement.

v. No Waiver by Failure to Act. No failure, delay, forbearance or indulgence on the part of any Party in insisting upon the strict performance of any provision, or in exercising any option, right, power, privilege or remedy hereunder, shall operate or be construed as a waiver or relinquishment thereof, or as an acquiescence in any breach, nor shall any single or partial exercise of any option, right, power, privilege or remedy hereunder preclude any other or further exercise thereof or the exercise of any other option, right, power, privilege or remedy.

vi. Severability. Any provision of this Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability

in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

vii. Timing and Captions. Any provision of this Agreement referencing a time, number of days, or period for performance shall be measured in calendar days. The captions of the various articles, sections, and paragraphs of this Agreement are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, terms, or intent of this Agreement.

viii. No Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to confer any rights or remedies under or by reason of this Agreement on any persons other than the Parties hereto; nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third person to any party; and this Agreement does not create any duty, liability or standard of care to any person who is not a Party.

ix. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, and such counterparts together shall constitute but one and the same instrument.

CITY OF CALIMESA

By: _____
Mayor, City Council Representative

Attest:

_____
City Clerk

Approved as to form:

_____
Counsel, City of Calimesa

Notices for the City of Calimesa shall be sent as follows:

Attention: City Manager
908 Park Avenue
Calimesa, California 92320

With copies to:

_____
_____
_____
_____

SAN GORGONIO PASS WATER AGENCY

By: _____
President, Board of Directors

Attest:

_____
Secretary, Board of Directors

Approved as to form:

_____
Counsel, San Gorgonio Pass Water Agency

Notices for the San Gorgonio Pass Water Agency shall be sent as follows:

Attention: General Manager
1210 Beaumont Avenue
Beaumont, California 92223

With copies to:

_____
_____
_____
_____

YUCAIPA VALLEY WATER DISTRICT

By: _____
President, Board of Directors

Attest:

_____
Secretary, Board of Directors

Approved as to form:

_____
Counsel, Yucaipa Valley Water District

Notices for the Beaumont Cherry Valley Water District shall be sent as follows:

Attention: General Manager
12770 Second Street
Yucaipa, California 92399

With copies to:

_____
_____
_____
_____

SGPWA Invocation Policy

An invocation shall be permitted at each board meeting immediately following the flag salute

The length of each invocation is limited to three minutes.

Guidelines for Opening Invocation at SGPWA Board Meetings:

Clergy, Staff, Directors, or other persons can open a legislative session of a public entity with a prayer as long as the prayer does not proselytize any one or disparage any other faith or belief. Based on this general principle, prayers offered at the opening of a session of a SGPWA meeting should adhere to the following guidelines:

The prayer should be respectful in tone and invite the Board members & Staff to reflect upon shared ideals and common ends before embarking on their business.

The prayer should not be used as an opportunity to preach or argue on behalf of or against a particular religious faith.

The prayer should not be used as an opportunity to lobby or argue on behalf of or against a particular board related issue.

The prayer can call on God on behalf of those present.