

SAN GORGONIO PASS WATER AGENCY
1210 Beaumont Avenue, Beaumont, CA
Capacity Fee Workshop
Agenda
March 30, 2015 at 1:30 p.m.

1. Call to Order, Flag Salute and Roll Call

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 assure your comment on specific agenda items will be timely considered, please complete a speaker's request form and hand it to the Board secretary.

4. Presentation of Draft Capacity Fee Study for Potential Facility Capacity Fee*(Page 2)

5. Announcements

- A. Regular Board Meeting, April 6, 2015 at 1:30 p.m.
- B. Engineering Workshop, April 13, 2015 at 1:30 p.m.
- C. Regular Board Meeting, April 20, 2015 at 1:30 p.m.

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 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.

DAVID
TAUSSIG
& Associates, Inc.

DRAFT
UPDATE
CAPACITY FEE STUDY
FOR
SAN GORGONIO PASS WATER
AGENCY

MARCH 20, 2015

Public Finance
Facilities Planning
Urban Economics

Newport Beach
Riverside
San Francisco
Chicago

**UPDATE
CAPACITY FEE STUDY
FOR
SAN GORGONIO PASS WATER
AGENCY**

MARCH 20, 2015

**Prepared for
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Appendix A – Demographic Background

Appendix B – Facility Costs – Letter to Jeff Davis from Webb Associates, December 30, 2014

Appendix C – Updated Water Rights Appraisal – Memo from Water Consultancy, July 20, 2014

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 supplies in order to replenish local groundwater basins, sell imported water to local water districts within the SGPWA service area, and enhance the reliability of continuing to provide current levels of service to existing and future local customers. The SGPWA provides wholesale water to 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, and Yucaipa Valley Water District.

In order to provide 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 over \$49,000,000 in infrastructure during this period. This infrastructure will include basin recharge facilities, pipelines necessary to convey imported water to these recharge basins, 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. In order to insure that new development pays its fair share of these costs, SGPWA will implement a facility capacity fee consistent with California Government Code Section 66013, which requires that the “...capacity fee does not exceed the estimated reasonable cost of providing the service for which the fee 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 serves as an update to the 2011 study, reflecting updated demographics, updated facility lists and updated facility costs.

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

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 and future development are allocated to both existing and future development proportionally according to appropriate factors.

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 Facility Fee			
Land Use	Facility Element (\$ unit)	Admin Element (\$ per Unit)	Total Facility Fee per DU
Single Family	\$ 925.64	\$ 4.63	\$ 930.27
Multi-Family	\$ 450.71	\$ 2.25	\$ 452.97

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 tenant operations, meter size is a better indicator of water demand and a better means of allocation. Therefore, the allocations to non-residential uses by building size is then converted to allocations by meter size, using a 5/8 inch meter (typical of a single family residence) as the baseline "equivalent demand unit". 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 Facility Fee			
Meter Size	Facility Element	Admin Element	Total Facility Fee
5/8"	\$ 925.64	\$ 4.63	\$ 930.27
3/4"	\$ 1,018.20	\$ 5.09	\$ 1,023.29
1"	\$ 1,295.89	\$ 6.48	\$ 1,302.38
1-1/2"	\$ 1,666.15	\$ 8.33	\$ 1,674.48
2"	\$ 2,684.35	\$ 13.43	\$ 2,697.78
3"	\$ 10,182.02	\$ 50.93	\$ 10,232.95
4"	\$ 12,958.93	\$ 64.82	\$ 13,023.75
6"	\$ 19,438.40	\$ 97.23	\$ 19,535.63
8"	\$ 26,843.51	\$ 134.27	\$ 26,977.78

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

Water Capacity Fee

Item	units	Fee
Fee for New Water Rights	\$ 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. 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.

I. Definitions

The following key defined terms are used throughout this report:

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.

Backbone Water System – the interconnected system of pipelines, basins, pumps and other storage and conveyance facilities required in order to deliver water to retail water purveyors within the SGPWA service area on a reliable basis, as discussed in more detail in Section V. The revenue from facility capacity fees recommended in this study will partially finance the following Backbone Water System components: Banning Pipeline Extension; Cabazon Pipeline Extension; Beaumont Basin; Cabazon Basin; additional capacity in the SBVMWD water conveyance system; and land acquisition costs for the Beaumont Basin and the Cabazon Basin.

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 potable 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 potable water deliveries on a reliable basis.

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

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 Update 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.

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 Update 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 Update and hereafter referred to as the “**Facility Fee**”, 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.

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

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 – 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 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 Update and hereafter referred to as the “**Water Capacity Fee**”, 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 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).

II. Introduction

In 2011 The San Geronio Pass Water Agency (“SGPWA” or “Agency”), a State Water Project (“SWP”) Contractor, authorized David Taussig & Associates, Inc. (“DTA”) to prepare a nexus study (“2011 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 to provide a source of revenue needed to mitigate the regional water related impacts of such new development. In 2011 the 2011 Study was adopted by the SGPWA Board of Directors, however the recommended fee was not implemented. This updated study (“Update”) revises the 2011 Study to include current existing and projected demographics, a revised capital improvement needs list, and the resulting methodology that supports an updated facility capacity fee structure. The 2011 Study is made a part of and is referenced by this Update. This Update 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.

A facility capacity fee is a charge imposed by a local agency on new development or redevelopment to recover the estimated reasonable cost of providing water to the person or property being charged for new or acquired capital facilities, land, water rights or entitlements and capacity contracts with other purveyors. SGPWA is authorized, pursuant to Section 27.1 of the San Geronio Pass Water Agency Law (“Section 27.1”), to establish and impose a facility capacity fee. Further discussion of the legal parameters imposed on facility capacity fees can be found in Appendix A of the 2011 Study.

Pursuant to Section 27.1, SGPWA may 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. The Board of Directors of the SGPWA may contract with the counties in which SGPWA is located, or with cities located within the boundaries of 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 the collection of the facility capacity fee by the retail water distributors. 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 this SGPWA water to new water users.

This Update and the resulting fee structure will focus on the use of the SGPWA facility capacity fee to fund (1) pipelines to provide additional water conveyance capacity, (2) purchase of capacity in existing pipeline systems owned by others, (3) additional basin recharge projects for underground water storage in both the Beaumont and Cabazon groundwater basins, including land purchases associated with such basin facilities, and (4) purchase of new water and/or water rights to meet future water demand. The underlying principle that supports the identification and allocation of costs to new development for these facilities is that they are components of a Backbone Water

System that distributes the benefit of access to imported water supplies through an integrated system of conveyance, basin storage and basin recharge, acting in conjunction with local water supplies. This is more fully discussed in Section V, “Facility Capacity Fee Component”.

The 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), (2), and (3) 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, as identified in item (4) above.

The Facility Fee component 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 meet the anticipated needs of such new development through the year 2035. The steps followed in calculating the facility capacity fee 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:** Identify the public facilities required to support the new development through 2035 and the costs of such facilities. The needs list and estimate of costs are presented in Section V.1, “Facility Costs.”
- **Cost Allocation:** Allocate costs: (i) per equivalent dwelling unit (“EDU”) where benefits shared between new and existing development are based on expected water usage. A discussion of existing and future EDUs is included in Section V.2, “Methodology”; (ii) per a percentage utilization factor based on estimated utilization rates of conjunctive use facilities to meet the demands of existing and new development. A discussion of these utilization assumptions 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 structure is presented in Section V.3, “Fee Structure.”

The Water Fee will be charged to new development based upon the amount of new water capacity needed to serve such development. The calculation of the Water 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 regardless of the amount of the Water Capacity Fee paid. This revenue is necessary for SGPWA to build the Backbone Water System that is needed to provide reliable water deliveries to water retailers.

It is expected that the SGPWA will review both the facility capacity fee component and water capacity fee component at reasonable intervals to incorporate changes in prices, facility

requirements, water demands and demographics in order to ensure that the capacity fees are allocated fairly and continue to generate sufficient revenues.

The 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 needed to enhance the reliability of water deliveries for existing development. Thus the commodity rates will work in conjunction with capacity fee revenues to fund the purchase of new water rights over time that are needed to provide an ongoing reliable water source for both new and existing development.

III. 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 California 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 Supplemental Water Supply Planning Study (“Water Supply Study”) by Albert A. Webb Associates (“Webb Associates”)¹ describes in detail the existing and proposed conveyance systems from Devil Canyon into the SGPWA service area.

The primary source of local water supply to the SGPWA service area at the present time is natural surface runoff and groundwater basins. The major groundwater basin is the Beaumont Storage Unit (“BSU”), which serves the City of Beaumont through the Beaumont-Cherry Valley Water District (“BCVWD”), the City of Calimesa and the community of Yucaipa 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 replenishment water equal to the amount removed from the basin to meet local demands, on an annual basis. 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.

A detailed discussion of various issues relating to imported water deliveries, basin storage, and water reliability is set forth in Appendix B “Detailed Background” of the 2011 Study.

Increased demand from new growth and decreasing reliability will continue to exert pressure on the ability of SGPWA to deliver wholesale 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 supplement local sources in dry years and to replenish groundwater basins in wet years. Revenue from the proposed SGPWA 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. These investments are necessary to continue to provide an adequate level of service and reliability to wholesale agencies over time. No revenues from this capacity fee program will be used to fund the correction of existing deficiencies in the system.

¹ Supplemental Water Supply Planning Study, Albert A. Webb Associates, October 2009, prepared for SGPWA.

² See also, San Geronio Pass Water Agency Report on Water Conditions (Reporting Period 2006-2007), dated December 2008.

IV. Demographics

The SGPWA boundary includes the area within the Cities of Banning, Beaumont, and Calimesa, the communities of Cabazon, Cherry Valley, and 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, and Yucaipa Valley Water District. Note that, for purposes of this Update, 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 Update and as found in the 2011 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.

In order to match up capacity of facilities and demographics for a specific year in the future, the year 2035 was determined to present a reasonable horizon to achieve funding and construction goals. It was felt that the planning horizon should be extended from the 2030 horizon used in the 2011 Study to a 2035 horizon for several reasons, not the least of which includes accounting for the slower than anticipated growth rate from 2010 through 2014, precipitated by slower local and regional economic conditions. In addition, the 2035 horizon now provides projection data over a 20 year period rather than 15 years with the 2030 horizon, which is now more consistent with local UWMPs.

1. Existing Residential Units and Non-Residential Square Feet

In order to estimate the number of current residential units and non residential square feet in the Cities of Beaumont, Banning, Calimesa and the unincorporated areas, DTA started with the numbers in the 2011 Study as a baseline level of development. The numbers for residential units and non-residential square feet 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 feet indicated by building permits issued, not necessarily constructed, within the three cities and the unincorporated area for the years 2010 to mid 2014. The permit data was provided by the respective planning departments.

A detailed discussion of how the baseline demographic numbers were determined can be found in Section IV and Appendix C of the 2011 Study. A detailed discussion of the demographic

assumptions and methods used to determine the increase in development from 2009 to the present can be found in Appendix A of this Update.

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

TABLE 1
Existing Residential Units Through June 2014¹

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 jurisdictional agency and by Commercial/Retail and Industrial land uses is shown in Table 2 below:

TABLE 2
Existing Non-Residential Square Feet Through June 2014¹

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 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 estimate the size and cost of facilities required to mitigate the impacts of this growth.

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 Southern California Association of Governments (“SCAG”). Although the 2011 Study used the 2010 SGPWA UWMP as the data source for development projections to 2030, differing development trends unique to jurisdictional areas within the Agency boundary suggest that the local retail water agencies’ UWMP projections might be the most in tune with actual development trends within their purview.

However, 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 following sources were used to project new housing units to 2035:

- City of Banning UWMP (2010)
- Beaumont Cherry Valley Water District UWMP (2010)
- Yucaipa Valley Water District UWMP (2010)
- Riverside County 2013 Progress Report, with a special study that includes unincorporated areas within SGPWA boundaries (2014). See 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. Projected water usage for multi-family units in 2035 and water usage factors were used to calculate the expected number of multi-family housing units in 2035. The difference between total housing units and multi-family units in 2035 is assumed to be for all the single family housing.

For the City of Calimesa, the Yucaipa Valley Water District UWMP (2010) projected water usage in 2035 for the areas within its district that overlapped the SGPWA service area. This water demand was then converted to residential units by using appropriate water use factors. The growth in residential units was broken down into single family and multi-family units in proportion to water usages given in the UWMP.

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 Update. Table 3 below summarizes the expected residential units within the study area at year 2035

TABLE 3
Projected Residential Units in 2035¹

Residential Land Use	City of Banning ²	City of Beaumont	City of Calimesa	Unincorporated Area	Total Residential Units
Single Family	15,707	20,500	3,100	8,700	48,000
Multi-Family	2,281	1,500	2,100	1,400	7,300
Total	17,988	22,000	5,200	10,100	55,300

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 three cities did 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. 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 2035¹

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	2,126,000	5,112,000	19,177,000
Industrial	6,546,000	2,493,000	590,000	75,000	9,704,000
Total	13,564,000	7,414,000	2,716,000	5,187,000	28,881,000

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 Update. The numbers found in Table 3 and 4 above represent total numbers through 2035. In order 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.