

23 July 2014

Mr. Jeff Davis
General Manager
San Gorgonio Pass Water Agency
1210 Beaumont Avenue
Beaumont, CA 92223

Subject: San Gorgonio Pass Water Agency
Update of Demand Section of 2010 Urban Water Management Plan (UWMP)
and Amendment of 2010 UWMP
K/J 1389031*00

Dear Mr. Davis:

The text of this letter report represents updates to the demand section of the San Gorgonio Pass Water Agency's (SGPWA, Agency) 2010 UWMP and also provides responses to the Department of Water Resources (DWR) request for additional information regarding the 2010 UWMP.

Section 1: Update Demand Projections

SGPWA wished to update the demand tables as shown in its 2010 UWMP due to changed conditions and additional data becoming available. This consisted of various of the retail water suppliers in the SGPWA service area updating their demand data through the interim period, as well as additional data becoming available when certain retailers completed their 2010 UWMPs, after the Agency had adopted its 2010 UWMP. It is expected that this information will be updated again when the Agency prepares its 2015 UWMP.

Table 1 shows the demand projections provided to SGPWA and the Agency's 2010 UWMP projections. BCVWD was the only agency to provide its projections in time to be incorporated into the Agency's UWMP, although BCVWD has since revised their total demand projections downwards (Table 2). The City of Banning and YVWD provided their projections after the Agency had completed its UWMP.

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Table 1: Water Demand Projections (AF)

	2010	2015	2020	2025	2030	2035	Source/Notes
BCVWD	15,658	19,239	19,494	23,043	26,817	28,194	Provided to SGPWA for its 2010 UWMP. BCVWD has since revised its estimate for its UWMP (see Table 2).
City of Banning	1,200	2,595	2,595	2,595	2,595	2,595	Provided to SGPWA after its 2010 UWMP was filed. Projection is based on Banning receiving 25% of the Agency's SWP allocation at 60% reliability: 25%* (17,300*60%) = 2,595
YVWD	123	826	1,080	1,396	1,779	2,260	Provided to SGPWA after the 2010 UWMP was filed
Total	16,981	22,660	23,169	27,034	31,191	33,049	Sum of projections provided
SGPWA projections in 2010 UWMP		6,970	7,760	15,015	22,468	26,920	Table 2.3, SGPWA 2010 UWMP

Table 2 updates the Agency's 2010 UWMP demand projections to reflect more recent estimates provided by the retailers, and/or actual demands. The five other Agency retailers were contacted and were unable to provide demand projections. The following adjustments were made:

BCVWD: replaced the demands provided to the Agency in 2010 with the revised demands in BCVWD's UWMP (Table 3-11), filed in 2013.

City of Banning: revised the projection to more closely reflect demand rather than allocation. The revised estimates reflect the growth in the demand projections found in Table 3-8 of Banning's UWMP. The estimates in Table 2 mimic the growth in demand projected by Banning, starting in 2010 through 2035.

YVWD: adjusted the 2015 demands downward to more closely reflect actual use in 2014 and projected linear growth through to projected build out at 2035.

Table 2: Average Hydrologic Year Demand on SGPWA (AFY)

	2010	2015	2020	2025	2030	2035
BCVWD		7,406	7,726	9,166	10,890	12,820
City of Banning	1,200	1,594	1,611	1,778	1,963	2,168

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YVWD	123	150	677	1,204	1,731	2,260
Total Demand on SGPWA (Revised)	9,150	10,014	12,148	14,584	17,247	

The adjusted demands indicate higher demands through 2020 but then a flatter demand curve from 2020 through 2035. The revised demand for 2035 is about 35% lower than projected in the 2010 UWMP. These projections include only the three retailers that are currently purchasing water from the Agency and do not take into consideration potential future demands from the other five retailers.

It is not clear if and how BCVWD and YVWD incorporated reduction requirements from SBX7-7. It is expected that this will also be clarified during preparation of the 2015 UWMPs.

Section 2: Responses to Request by DWR for More Information

1. San Geronio should include demand for SWP water out to 2035

Updated demands are provided in Table 2

2. San Geronio should include projections of planned supplies from through the year 2030. Water Code Section 10631 (e) (1)

SGPWA average year supplies through 2035 are shown in Table 3.

Table 3: Planned Supplies (average year)

		2010	2015	2020	2025	2030	2035
SGPWA	Table A Supply	8,650	10,445	10,445	10,445	10,445	10,445
SGPWA	Supplemental - Permanent	-	-	-	5,049	12,023	16,476
Yuba Water		300	300	300	300	300	300
TOTAL		8,950	10,745	10,745	15,794	22,768	27,221

3. The updated UWMP should include a discussion of revenue and expenditure impacts to the agency in the case of water shortage. Water Code 10632 (a) (7)

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During periods of reduced consumption, revenue from water sales will decline. Reductions in the cost of energy for pumping groundwater are realized, but are not expected to make-up the difference in revenue. 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.

4. The updated UWMP should also include a description of the wastewater collection system in the service area and opportunities for the use of recycled water, either by San Gorgonio WA or the retailers within the service area. Water Code section 10633

The wastewater collection systems are owned and operated by various local agencies. Local retailers are Yucaipa Valley Water District (YVWD), Beaumont Cherry Valley Water District (BVCWD), the City of Banning and Mission Springs Water District.

The retailers are actively pursuing recycled water resources, as shown in Table 4 and described below. (Information cited from the 2010 UWMPs of the individual retailers.)

Table 4: Recycled Water in the Service Area

	2010	2015	2020	2025	2030	2035
YVWD	0	1,584	2,176	2,823	3,544	4,334
BVCWD ^(a)	971	1,194	1,494	1,892	2,336	2,835
Banning	0	1,680	1,680	1,680	1,680	1,680
Mission Springs		0	2,000	3,500	4,000	4,500

Note: (a) estimated amount which can be recycled.

YVWD recently expanded the Wochholz Regional Water Recycling Facility to a 6.7 MGD wastewater treatment facility. The ultimate facility is expected to be capable of treating up to 10 million gallons per day of wastewater. Recycled water used in the YVWD service area is currently produced at the YVWD Filtration Facility. YVWD will be constructing a pipeline, reservoir and booster station to complete the recycled water system to the Wochholz Regional Water Recycling Facility. In its 2010 UWMP, YVWD projected that the facility would be completed in January 2014 allowing YVWD to use recycled water to meet the irrigation demands within the service area. It also projected that by 2013, YVWD would add another supply of recycled water to the Regional Conveyance System from the Wochholz Regional Water Recycling Facility (WRWRF). This source was expected to contribute an additional 3.5 million gallons per day, or approximately 1,300 million gallons per year. As the Henry N. Wochholz Regional Water

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Recycling Facility expands, the amount of recycled water generated from this facility will increase. (YVWD, 2010 UWMP)

BCVWD was awarded a facilities planning grant from the State Water Resources Control Board (SWRCB) to study the technical and economical feasibility of a connection to the YVWD recycled water system that was projected in its 2013 UWMP to deliver 2,000 AFY of recycled water to BCVWD (3000 AFY after 2030). Discussions also continue with the City of Beaumont (City) to take recycled water from the City's plant when it is available. This would require a balancing tank and booster pumping station at the treatment plant site as well as validation of the treatment plant to meet full Title 22 as required in a letter from CDPH in 2007. In its 2013 UWMP, BCVWD expected recycled water would be available as soon as late 2014/early 2015. (BCVWD 2013 UWMP Update, 2013)

Banning is developing a program to substitute recycled water for existing potable water demand used for irrigation. Currently the wastewater treatment plant (WWTP) is unable to use the recycled water for irrigation purposes because it does not meet the State of California Department of Health Services (CDHS) Title 22 water quality requirements. Banning proposes to expand its 3.6 mgd WWTP and construct facilities to support its planned recycled water storage and distribution capability in accordance with the Banning Recycled Water Master Plan. Phase I consists of increasing the capacity of the existing WWTP from 3.6 mgd to 5.1 mgd. The additional capacity would include an advanced treatment process using a Membrane Bioreactor (MBR) to produce recycled water. The MBR treatment process would satisfy DHS Title 22 water quality requirements without filtration. Recycled water would be used for irrigation of parks, golf courses, street medians and greenbelts in the Phase I service area. Water not used to offset potable demand will be applied to percolation basins for ground water recharge in the Cabazon Storage Unit. In its 2010 UWMP Banning anticipated increasing supply by an additional 1.5 mgd/1,680 AFY every ten years. There is considerable potential for the use of recycled water in the City of Banning. (City of Banning 2010 UWMP, 2011)

MSWD is currently evaluating the potential for establishing a new wastewater treatment plant as well as upgrading the existing treatment plants to use the generated recycled water for other uses including landscape irrigation for golf courses and parks. MSWD is also preparing a preliminary sewer collection system design to be completed in the next fiscal year. MSWD has prepared an Appraisal Report evaluating the potential to develop a recycled water system within MSWD through the United States Bureau of Reclamation's (USBR) Title XVI of Public Law 102-575 process. Once this planning process is complete, it is envisioned that MSWD will move forward to recycle most, if not all, of its wastewater to help provide additional water supplies to its customers. MSWD anticipates that the plan will be initially operable by 2020 and by 2025 will reclaim and reuse all of the wastewater generated within the service area for irrigation of golf courses and other suitable landscaping purposes. MSWD currently percolates treated effluent into the groundwater basin. Though this does not reduce the demand for pumped groundwater, it does provide recharge that benefits basin as a whole and lessens the impact of pumping. If a recycled water system is delayed past the 2020 projection or proves to be infeasible, effluent will continue to be percolated into the groundwater basin

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for future reuse. In this case, groundwater return flow will provide the volume needed to meet irrigation demands that were projected to be supplied through recycled water. (MSWD 2010 UWMP, 2011)

5. DWR requires wholesale urban water suppliers to address the following DMMs in their UWMPs, see page 6-1 of the 2010 UWMP Guidebook. This could be a description of active implementation or, if not implemented, a description of planned implementation, or a simple cost/benefit analysis and explanation of why it is not implemented.

- **DMM C - Leak detection and repair,**
- **DMM D - Metering with commodity rates,**
- **DMM J - Wholesale agency programs,**
- **DMM K - Conservation pricing, and**
- **DMM L - Water conservation coordinator**

DMM C: Leak detection and repair

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

DMM D: Metering with commodity rates

All connections are metered.

DMM J: Wholesale agency programs

SGPWA has begun implementation of a school education program in February 2014 and will continue to explore potential support options. Where possible, SGPWA will also identify partnerships to support implementation. For example, SGPWA plans to contract with the local Resource Conservation District to implement its education programs.

DMM K: Conservation pricing

SGPWA charges a volumetric rate of \$317/AF.

DMM L: Water conservation coordinator

The General Manager acts as the conservation coordinator.

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A discussion was held with DWR staff on 22 April 2014 regarding their request for additional information and these responses. At that time DWR staff indicated that all responses were satisfactory.

Findings

SGPWA may now utilize the updated demand data and these responses to DWR, to serve as an amendment to its 2010 Urban Water Management Plan per Water Code Section 10621 and 10640 et seq. (Article 3). SGPWA General Manager and General Counsel may set up a public hearing on the amendment at a time to be determined by SGPWA. Requirements for distribution of the amendment, once adopted by the SGPWA Board of Directors, are as required by WC Section 10644.

Very truly yours,

KENNEDY/JENKS CONSULTANTS



Mary Lou Cotton
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