

11. AMADOR WATER AGENCY

Amador Water Agency (AWA) provides raw and treated water, and wastewater collection, treatment and disposal services.

AGENCY OVERVIEW

Formation

Amador Water Agency was formed by the State legislature on July 20, 1959²³⁰ through the Amador Water Agency Act.²³¹ AWA was formed as an independent district for the conservation, development, control and use of water for the public good in Amador County.

The Legislature drafted the Amador Water Agency Act with the understanding that Amador County's water problems required countywide water conservation, flood control and development of water resources, and that special legislation was needed due to "peculiar" circumstances in the County. Such circumstances included the existence of various water-related districts and municipalities with established property, works and indebtedness, which had proven unable to individually develop an economical adequate water supply and control floods.²³²

Accordingly, AWA has several related powers, including but not limited to the following:

- ❖ To appropriate and acquire water and water rights, to store water in surface or underground reservoirs, to conserve and reclaim water, and to import water (95-4.3);
- ❖ To take any legal action to ensure that sufficient water is available for use in the County, including irrigation, domestic, fire protection, municipal, commercial, industrial, recreational, and all other beneficial uses and purposes (95-4);
- ❖ To plan, finance, acquire, construct, operate and maintain facilities for the collection, transmission, treatment, and disposal of sewage, waste, and storm water (95-4.14);
- ❖ To control the flood and storm waters of the agency, including waters of streams with sources outside the County (95-4.2); and
- ❖ To form improvement districts (95-14.2).

A limitation of AWA's powers as stated in its principal act is that the Agency shall not "affect, restrict nor supersede the existence, property, right or power" of another public agency.²³³

²³⁰ Formation date from Board of Equalization records.

²³¹ Chapter 2137 of the Statutes of 1959.

²³² Ibid.

²³³ Statutes of 1959, Chapter 2137 §95-23.

AWA is not presently engaged in flood control or stormwater service. Districts must apply and obtain LAFCO approval to exercise services authorized by the principal act but not already provided (i.e., latent powers) by the district at the end of 2000.²³⁴

Boundary and SOI

The AWA boundary encompasses the entire County per the Amador Water Agency Act.²³⁵ The AWA water and wastewater service areas are smaller than the boundary area, and are described in the water and wastewater profiles elsewhere in this chapter.

LAFCO has not yet adopted a SOI for the Agency. After adoption of the MSR, Amador LAFCO will adopt a SOI for the Agency. LAFCO is required to adopt and update an SOI for each local agency within the County.²³⁶ A local agency is defined as a city, county or district.²³⁷ A water agency is considered a district, as it is not included on the list of districts excluded from the definition.²³⁸ LAFCO may take a formal action to exclude various districts from the definition of district;²³⁹ however, Amador LAFCO has never taken any action to exclude AWA from its definition of a district. Thus, AWA is subject to Amador LAFCO jurisdiction and to the SOI update requirement.

Local Accountability and Governance

AWA is governed by a five-member board of directors. Board members are to be elected by district; these districts align with County supervisorial districts. For more information on individual members and meeting information, see Figure 11-1.

AWA provides customers with District information through several means. AWA maintains and regularly updates an extensive website informing the public of meetings, minutes, public documents, rates, contact information, and other items. All meeting information is available through the website, plus the Agency maintains an email list serve for meeting agendas. The District also sends out quarterly newsletters, including items for community education regarding water conservation. AWA meets with major customers annually and also conducts annual customer surveys. The Agency reported that it had no Brown Act violations in recent history.

²³⁴ Government Code §56824.10.

²³⁵ Ibid.

²³⁶ Government Code §56425 (a) and (g).

²³⁷ Government Code §56054.

²³⁸ Government Code §56036(a).

²³⁹ Government Code §56036(c).

Figure 11-1: AWA Governing Body

Amador Water Agency			
Governing Body			
	Name	Position	Term Ends
<i>Members</i>	Paul Molinelli Sr	President	Dec. 2014
	Art Toy	Vice Pres.	Dec. 2016
	Gary Thomas	District 2	Dec. 2016
	Rich Farrington	District 3	Dec. 2014
	Robert Manassero	District 4	Dec. 2014
<i>Manner of Selection</i>	Elections by district		
<i>Length of Term</i>	Four years, staggered		
<i>Meetings</i>	Date: second and first Thursdays 9 a.m.	Location: AWA Office	
<i>Agenda Distribution</i>	Online, email subscription, posted		
<i>Minutes Distribution</i>	Online		
Contact			
<i>Contact</i>	General Manager		
<i>Mailing Address</i>	1200 Ridge Road, Sutter Creek, CA 95685		
<i>Phone</i>	209-257-5245		
<i>Email/Website</i>	http:// www.amadorwater.org		

With regard to customer service, the Agency reported that complaints may be submitted by email to those contacts listed on the Agency’s website, enclosing a written complaint in the bill or addressing a written complaint to the general manager or board of directors. The Agency has a computerized work order program, which tracks the progress and outcome of each complaint. In 2012, AWA received 51 complaints regarding water issues—15 at Tanner Water Treatment Plant, one complaint in the La Mel water system, three in the Lake Camanche water system, 10 in the Lone water system, and 22 in the Buckhorn water system. Complaints most often related to pressure, taste, odor, and color.

The District demonstrated accountability in its disclosure of information and cooperation with LAFCO. The agency responded to LAFCO’s written questionnaires and cooperated with document requests.

Management

Since 2007, AWA has reduced its staff by 25 positions. The Agency now employs a total of 40 staff, including a general manager, a field services manager, an HR/Office Manager, and a controller. In July 2011, the Board of Directors implemented an Agency-wide reorganization which resulted in the current structure. The Agency eliminated three department head positions, one IT position, one supervising engineer position, one electrical position, eliminated 13 vacant positions, combined three positions to take on eliminated department head or supervisor responsibilities, implemented a hiring freeze and has not filled two positions that have been vacated since the reorganization and has not filled one approved position due to budget constraints.

AWA's daily operations are overseen by the general manager, who supervises management in four departments: financial services, construction, operations, and engineering and planning.²⁴⁰ The general manager reports directly to the board.

The Agency conducts annual employee evaluations. The Agency reported that these reviews are completed on schedule approximately 90 to 100 percent of the time. A computerized maintenance management system was initiated in late 2007 with the intent of allowing workload tracking.

AWA's strategic plan identifies several areas in which the Agency monitors its performance. The Agency tracks public notifications and violations from the State, violations from the Central Valley RWRCB, lost-time injuries, accident reports, avoidable auto accidents, number of public agency and water purveyor training sessions conducted, and wastewater spills and overflows. The Agency plans to do annual customer surveys with a goal of 90 percent satisfaction; however, due to constrained staffing levels, surveys have not been sent out on a regular basis. AWA also benchmarks staffing levels with other utilities.

AWA's planning documents include a detailed five-year strategic plan, a development impact fee nexus study, and urban water management plan, and a mission statement. The Agency has also actively participated in multiple regional planning documents: a watershed management plan and an integrated regional water master plan. It is Agency policy to actively participate in regional planning efforts.

Agency financial planning efforts include annual preparation of budgets and annually audited financial statements. The most recent audit was completed in FY 12-13. AWA compiles an annual capital improvement plan, which is included in the Agency's annual budget. The Agency's strategic plan sets out infrastructure improvement goals through 2013.

Management practices include risk management. The Agency's insurance includes general liability and machinery insurance.

With regard to recent accomplishments, the Agency has secured in excess of \$3 million in grants for construction projects since 2000. The funds were used for the Buckhorn Water Treatment Plant expansion, the Amador Transmission Pipeline, service line replacements in Lake Camanche Village, and a tank and main replacement in La Mel. The Agency also reports several improvements to operational efficiency in recent history, including the outsourcing of billing and billing process tasks, the computerization of the agency's maintenance management system, the computerization of the agency's document management and retrieval system, and the acquisition of an updated mapping/GIS program.²⁴¹

Service Demand and Growth

Existing land use in Amador County consists primarily of forest land, agriculture, and single-family residential. The five Amador County cities as well as unincorporated

²⁴⁰ Amador Water Agency, *Organizational Chart*.

²⁴¹ Agency response to LAFCO Request for Information, 2008.

communities have residential, commercial and some industrial land uses. Timber Preserve Zones are concentrated east of Buckhorn. Approximately 48 percent of the land throughout the County is vacant.

The most profitable industries in the County include forest products, hydroelectric generation, legalized casino gambling, and tourism.²⁴² Significant employers include the Jackson Rancheria Hotel and Casino and various governmental services, including Amador County, school district offices, Caltrans, the Department of Motor Vehicles and CHP. Approximately 25 percent of employment in the County is dependent upon tourism.²⁴³ Although agriculture (particularly wineries) have increased employment in recent years, overall farmland in the County declined by 5,707 acres from 1984 to 2004.²⁴⁴

The Agency considers the water and wastewater connections served to be its customers. The Agency served 7,172 retail water connections and 931 wastewater connections for a total of 8,103 customers as of the close of FY 12-13.²⁴⁵ In addition, the Agency also provides wholesale water to five distributors totaling approximately 3,038 connections: 2,400 connections in the City of Jackson, 62 in Drytown, 406 in Mace Meadows, 107 in Rabb Park, and 364 in Pine Grove. The population within Amador County is 38,091,²⁴⁶ and within AWA's water service area there were approximately 20,020 residents in 2013.²⁴⁷ The population density in the AWA boundary area is 64 per square mile.

In recent years, demand for water and wastewater services has generally declined due to economic conditions, recent droughts and resulting conservation efforts. Demand for water declined by 14 percent between 2005 and 2010. While both the water and wastewater systems experienced growth associated with new development and new utility connections prior to 2007; in recent years, there have been few new connections.

In the 2008 MSR, there were 24 planned and proposed developments in unincorporated Amador County at the time this report was drafted.²⁴⁸ Of the 24 projects, 23 were residential developments with plans calling for a total of 2,246 dwelling units at build-out on 18,143 acres (approximately 28 square miles). Non-residential developments approved by the County included the Sierra West Business Park (Phases I and II) and the Martell Business Park. As of January 2013, there are 13 planned and proposed residential developments in unincorporated Amador County that have received tentative approval.²⁴⁹ There are proposals and plans for 531 residential units on 661 acres (approximately one

²⁴² Amador County, History Center, URL accessed 3/11/08, <http://www.co.amador.ca.us/depts/archives/history.htm>

²⁴³ Amador County, *General Plan Update: Local Economy Background Working Paper*, May 2007, p. LE-35.

²⁴⁴ Amador County, *General Plan Update: Agriculture Background Working Paper*, December 2006, p. AG-7.

²⁴⁵ Amador Water Agency, *Financial Statements, June 30, 2007 and 2006*, 2007, p. 7.

²⁴⁶ U.S. Census 2010.

²⁴⁷ AWA, *Public Water System Statistics*, 2013.

²⁴⁸ Amador County, Planning Department. URL accessed 5/30/08, <http://www.co.amador.ca.us/depts/planning/index.cfm?id=8>

²⁴⁹ <http://amadorgov.org/Modules/ShowDocument.aspx?documentid=3492>

square mile), among the projects with available data. Developments with tentative approved proposals would house approximately 1,221 residents at build-out.²⁵⁰

AWA is tracking 194 planned and previously proposed developments within its boundaries which could theoretically add 15,600 new water connections and 6,000 new wastewater connections if built to completion. Figure 11-2 shows planned and proposed developments of which AWA is aware of and has issued a will serve or letter of availability, or anticipates doing so at some point in the future. Several of these developments may not come to fruition, depending on litigation, economic conditions, and the status of the County General Plan. The certainty and status of land use or other entitlements varies among the projects listed

A potential development project discussed in the 2008 MSR but not listed in Figure 8-2 is Rancho Arroyo Seco. Located to the north, west and south of the City of Ione, the Rancho Arroyo Seco property consists of 16,100 acres of land (15,860 acres in unincorporated territory outside of the City of Ione SOI). According to the Amador County Planning Department, there has been no development and no plans for development on the Rancho Arroyo Seco property, and the land continues to be used for grazing and mining.²⁵¹

Also reported in the 2008 MSR were three proposals that had been approved for a total of 168 units across 261 acres (Fairway Pines PD, Silver Pointe and The Pines at Mace Meadows) in the Buckhorn area. As of January 2013, in the Buckhorn area, only Silver Pointe and The Pines at Mace Meadows have tentative approval from the County, expiring in 2018 and 2015, respectively.

The District is not a land use authority, and does not hold primary responsibility for implementing growth strategies.

The Agency indicates interest in countywide regionalization of wastewater and water recycling services to maximize the benefit of economies of scale.

²⁵⁰ Population estimates are calculated by multiplying the total number of residential units by the average household size in Amador County (2.3) according to the Department of Finance, 2010.

²⁵¹ Conversation with Susan Grijalva, Planning Director, Amador County on October 11, 2013.

Figure 11-2: Planned and Proposed Developments within AWA Service Areas

Project Name	# of EDUs	Location	AWA Service	Status
Dominic Renda	1	Amador City	Water	CFD No. 1
Last Chance Alley	8	Amador City	Water	Will Serve
Anderson/Lemaux	3	Camanche	Water	Letter of Water Availability
Anderson/Lemaux	3	Camanche	Wastewater	Letter of Water Availability
Bill Lyons	20	Camanche	Water	Future
Bill Lyons	20	Camanche	Wastewater	Future
Camanche 3-B, Phase 1	50	Camanche	Water	Letter of Water Availability
Camanche 3-B, Phase 1	50	Camanche	Wastewater	Letter of Water Availability
Camanche 3-B, Phase 2	278	Camanche	Water	Future
Camanche 3-B, Phase 2	231	Camanche	Wastewater	Future
Camanche Greens	600	Camanche	Water	Letter of Water Availability
Camanche Greens	600	Camanche	Wastewater	Future
Lakeview Estates	160	Camanche	Water	Letter of Water Availability
Lakeview Estates	160	Camanche	Wastewater	Letter of Water Availability
Lone Oaks Estates	43	Camanche	Water	Letter of Water Availability
Lone Oaks Estates	43	Camanche	Wastewater	Letter of Water Availability
North Shore Stockade	81	Camanche	Water	Letter of Water Availability
North Shore Stockade	81	Camanche	Wastewater	Letter of Water Availability
Thortenson	4	Camanche	Water	Letter of Water Availability
Thortenson	4	Camanche	Wastewater	Letter of Water Availability
Drytown expansion	12	Drytown	Water	Future
Thomas Estates (Drytown)	17	Drytown	Water	Letter of Water Availability
Broussard	7	Ione	Water	Letter of Water Availability
Carbondale Industrial Park	20	Ione	Water	Future
Castle Oaks - Villages 4-10	520	Ione	Water	Letter of Water Availability
Castle Oaks Partners	500	Ione	Water	CFD No. 1
Castle Oaks Village 3	31	Ione	Water	Will Serve
Castle Park MHP (Golden Gate Est)	8	Ione	Water	Will Serve
Castle Ridge	66	Ione	Water	Letter of Water Availability
CDF expansion	16	Ione	Water	CWS
Claypit Road, remainder lots	9	Ione	Water	Letter of Water Availability
Dominic Renda	4	Ione	Water	Letter of Water Availability
Eagles Nest Pipeline	21	Ione	Water	Will Serve
Edgebrook	6	Ione	Water	Will Serve
Finch	2	Ione	Water	Will Serve
Gold Village Phase 1&2 (residential)	163	Ione	Water	Letter of Water Availability
Gold Village Phase 2 (commercial)	50	Ione	Water	Future
Hansen, Christopher (Claypit)	1	Ione	Water	Letter of Water Availability
Hess, Ron (Claypit)	1	Ione	Water	Letter of Water Availability
Howard Business Park	748	Ione	Water	Letter of Water Availability
Howard Properties	120	Ione	Water	CFD No. 1
Ione 101	156	Ione	Water	Letter of Water Availability
Ione Oaks	17	Ione	Water	Will Serve
Ione-20	4	Ione	Water	Letter of Water Availability
Jones, Peter (Claypit)	1	Ione	Water	Letter of Water Availability
Mule Creek Addl.*	44	Ione	Water	Will Serve
Newman Ridge	1	Ione	Water	Letter of Water Availability
Preskar (Eagles Nest)	1	Ione	Water	Letter of Water Availability

Project Name	# of EDUs	Location	AWA Service	Status
Q Ranch	822	Ione	Water	Future
Quail Oaks	4	Ione	Water	Will Serve
Ringer Ranch	400	Ione	Water	Future
Ringer Ranch LLC et al.	700	Ione	Water	CFD No. 1
Saint Andrews Lane	25	Ione	Water	Letter of Water Availability
Scully Property	221	Ione	Water	Future
Silva Properties	400	Ione	Water	Future
Single, Michael (Claypit)	1	Ione	Water	Letter of Water Availability
Small, Brian (Claypit)	1	Ione	Water	Letter of Water Availability
Wildflower	201	Ione	Water	CWS
Wildflower Remainder	75	Ione	Water	CWS
ACLIC Inc.	100	Jackson	Water	Future
Argonaught II (Jackson)	6	Jackson	Water	Will Serve
Guirlani-Teresa's Place (Jackson)	2	Jackson	Water	Letter of Water Availability
Jackson Gate Plaza Additional	10	Jackson	Wastewater	Future
Jackson Hills (Jackson)	550	Jackson	Water	Future
Jackson View	102	Jackson	Water	CFD No. 1
Jackson View (Jackson)	102	Jackson	Water	Will Serve
Mondani (Jackson?)	275	Jackson	Water	Future
Mondani (Jackson?)	275	Jackson	Wastewater	Future
Pine Meadows (Jackson)	12	Jackson	Water	Will Serve
Shealor (Jackson)	32	Jackson	Water	Letter of Water Availability
SPI-Jackson Gate	100	Jackson	Water	Future
St. Patrick Green (Jackson)	240	Jackson	Water	Letter of Water Availability
Stone Creek (Jackson)	8	Jackson	Water	Will Serve
Westbend-Fuller Family (Jackson)	100	Jackson	Water	Future
Amador Central Phase 1	40	Martell	Water	Will Serve
Amador Central Phase 1	42	Martell	Wastewater	Will Serve
Amador Central Phase 2	40	Martell	Water	Letter of Water Availability
Amador Central Phase 2	60	Martell	Wastewater	Letter of Water Availability
Amador County Jail (Amador Central)	55	Martell	Water	Letter of Water Availability
Amador County Jail (Amador Central)	97	Martell	Wastewater	Letter of Water Availability
Amador Hills	150	Martell	Water	Future
Amador Ridge	103	Martell	Water	CFD No. 1
Amador Ridge Business Park	40	Martell	Water	Will Serve
Amador Ridge Shopping Center	43	Martell	Wastewater	Will Serve
Amador Ridge Shopping Center Additi	25	Martell	Wastewater	Future
Amador Ridge South	46	Martell	Water	Letter of Water Availability
Amador Ridge South	84	Martell	Wastewater	Letter of Water Availability
Catholic Center	12	Martell	Wastewater	Will Serve
Chopra Developers (by Kmart)	50	Martell	Wastewater	Future
Golden Vale	472	Martell	Water	Letter of Water Availability
Golden Vale	472	Martell	Wastewater	Letter of Water Availability
Martell Plaza Phase 2	6	Martell	Wastewater	Letter of Water Availability
Prospect Plaza Additional	9	Martell	Wastewater	Letter of Water Availability
RTR Investments	4	Martell	Wastewater	Letter of Water Availability
RTR Investments	8	Martell	Wastewater	Letter of Water Availability
RTR Investments	5	Martell	Wastewater	Letter of Water Availability
Sierra West BP Lots 21,23,24,25&26	5	Martell	Wastewater	Letter of Water Availability
Sierra West Business Park	45	Martell	Water	Will Serve

Project Name	# of EDUs	Location	AWA Service	Status
Sierra West Business Park	93	Martell	Wastewater	Will Serve
Sierra West Business Park Additional	25	Martell	Wastewater	Future
SierraPine Composite Solutions	22	Martell	Wastewater	Letter of Water Availability
Sunset West	10	Martell	Water	Future
SWBP Lot 1C-1 additional	2	Martell	Wastewater	Will Serve
SWBP Lot 3	1	Martell	Water	Will Serve
SWBP Lot 3	4	Martell	Wastewater	CWS
SWBP Lot 3 additional	1	Martell	Water	CWS
SWBP Lot 5A	1	Martell	Water	Will Serve
SWBP Lot 5A	1	Martell	Wastewater	Will Serve
SWBP Lot 5B	4	Martell	Water	Will Serve
SWBP Lot 5B	3	Martell	Wastewater	Will Serve
Target	5	Martell	Water	CWS
Target	24	Martell	Wastewater	Letter of Water Availability
Target Additional	6	Martell	Wastewater	CWS
Wicklow Way Pase 1&2	200	Martell	Wastewater	Letter of Water Availability
Wicklow Way Phase 3,4&5	1162	Martell	Wastewater	Letter of Water Availability
Wicklow Way Phases 1&2	200	Martell	Water	Letter of Water Availability
Wicklow Way Phases 3,4&5	1315	Martell	Water	Letter of Water Availability
Aparicio Subdivision		Pine Grove	Neither (Wells)	Final Map
Black Oak Ridge	7	Pine Grove	Water	Letter of Water Availability
Dale Newberry	10	Pine Grove	Water	Future
Frank A's Pizza	10	Pine Grove	Wastewater	Future
Hilary Heijmen (PGCSD)	5	Pine Grove	Water	Letter of Water Availability
Mike Mlenek	100	Pine Grove	Water	Future
Mokelumne Bluffs	98	Pine Grove	Water	Future
Peters	5	Pine Grove	Water	Will Serve
Pine Acres Camp	140	Pine Grove	Water	Future
Pine Acres MHP Phase 1	137	Pine Grove	Water	Future
Pine Acres MHP Phase 1	137	Pine Grove	Wastewater	Future
Pine Acres MHP Phase 2	28	Pine Grove	Water	Future
Pine Acres MHP Phase 2	28	Pine Grove	Wastewater	Future
Pine Acres North	98	Pine Grove	Water	Letter of Water Availability
Pine Acres North	98	Pine Grove	Wastewater	Letter of Water Availability
Pine Grove Bluffs	28	Pine Grove	Wastewater	Letter of Water Availability
Pine Grove Bluffs (PCCSD)	38	Pine Grove	Water	Letter of Water Availability
Tabeau Mobile Home Park (PGCSD)	16	Pine Grove	Water	CWS
Branstetter	1	Pioneer	Water	Letter of Water Availability
Cedar Ridge View MH Park	90	Pioneer	Water	Letter of Water Availability
Dan & Barry Morris	4	Pioneer	Water	Letter of Water Availability
Fairway Vista 1 / Fairway Pines	92	Pioneer	Water	Letter of Water Availability
Golden Eagle Resources	3	Pioneer	Water	Letter of Water Availability
Nicholas & Patricia Seidler	1	Pioneer	Water	Letter of Water Availability
Pines at Mace Meadows (FMMCSD)	13	Pioneer	Water	Letter of Water Availability
Quail Ridge	84	Pioneer	Water	Letter of Water Availability
Red Tail Ridge (Brammel)	9	Pioneer	Water	Future
Robert Morgan	2	Pioneer	Water	Letter of Water Availability
Wolfgang/Matthey	4	Pioneer	Water	CWS
Annie Mason PT LLC	1	Plymouth	Water	CFD No. 1
Arroyo Woods (Plymouth)	137	Plymouth	Water	Letter of Water Availability

Project Name	# of EDUs	Location	AWA Service	Status
Blue Oak Arbor (Plymouth)	138	Plymouth	Water	Letter of Water Availability
Cottage Knoll (Plymouth)	304	Plymouth	Water	Letter of Water Availability
Oak Glen (Plymouth)	47	Plymouth	Water	Letter of Water Availability
Plymouth Port LLC	4	Plymouth	Water	CFD No. 1
Shenandoah Ridge (Plymouth)	136	Plymouth	Water	Letter of Water Availability
Shenandoah Springs (Plymouth)	64	Plymouth	Water	Letter of Water Availability
Shenandoah Valley Center (Plymouth)	142	Plymouth	Water	Letter of Water Availability
Shenandoah Ridge LLC	1	Plymouth	Water	CFD No. 1
Zinfandel (Plymouth)	350	Plymouth	Water	Letter of Water Availability
Zinfandel Development	165	Plymouth	Water	CFD No. 1
Aaron Brusatori	2	Sutter Creek	Water	CFD No. 1
Aaron Brusatori	10	Sutter Creek	Water	CFD No. 1
Armstrong-Foothill Dr	3	Sutter Creek	Water	Will Serve
Brusatori	4	Sutter Creek	Water	Letter of Water Availability
Brusatori Family	4	Sutter Creek	Water	CFD No. 1
Bryson Drive Cottages	13	Sutter Creek	Water	Will Serve
Colewell	8	Sutter Creek	Water	Future
Cramer Hill	30	Sutter Creek	Water	Letter of Water Availability
Crestview 1-2	6	Sutter Creek	Water	Will Serve
Crestview 3&4	49	Sutter Creek	Water	Future
Gerlach	3	Sutter Creek	Water	Will Serve
Gold Courts Terrace	2	Sutter Creek	Water	Will Serve
Gold Rush	1775	Sutter Creek	Wastewater	Future
Gold Rush Ranch	1785	Sutter Creek	Water	Letter of Water Availability
Golden Hills 1&2	21	Sutter Creek	Water	Will Serve
Golden Hills 3	44	Sutter Creek	Water	Future
Golden Hills 4	10	Sutter Creek	Water	Letter of Water Availability
Grimshaw-Bill Payne	3	Sutter Creek	Water	Will Serve
Herzig & Aparicio	5	Sutter Creek	Water	Future
Hillside	5	Sutter Creek	Water	Will Serve
Les Brusatori	4	Sutter Creek	Water	CFD No. 1
Manor Court	2	Sutter Creek	Water	Will Serve
Mesa De Oro	13	Sutter Creek	Water	Will Serve
Newman Ridge Project	10	Sutter Creek	Water	Future
Peters, Ed	5	Sutter Creek	Water	Future
Pinotti	2	Sutter Creek	Water	Letter of Water Availability
Powder House	108	Sutter Creek	Water	Letter of Water Availability
Ridge	19	Sutter Creek	Water	Will Serve
Ridge Business Park	23	Sutter Creek	Water	Will Serve
Smith, Patrick	1	Sutter Creek	Water	Will Serve
Sutter Creek Crossroads Phase 1	5	Sutter Creek	Water	Will Serve
Sutter Creek Crossroads Phase 2	41	Sutter Creek	Water	Will Serve
Sutter Crest	1	Sutter Creek	Water	Will Serve
Sutter Hill Transit Center	5	Sutter Creek	Water	Letter of Water Availability
TPDDG Jackson Associates	32	Sutter Creek	Water	Will Serve
Valley View Vistas	60	Sutter Creek	Water	Letter of Water Availability

Disadvantaged Unincorporated Communities

LAFCO is required to evaluate disadvantaged unincorporated communities as part of this service review, including the location and characteristics of any such communities. A disadvantaged unincorporated community is defined as any area with 12 or more registered voters, or as determined by commission policy, where the median household income is less than 80 percent of the statewide annual median.²⁵²

The California Department of Water Resources (DWR) has developed a mapping tool to assist in determining which communities meet the disadvantaged communities median household income definition.²⁵³ DWR identified nine disadvantaged communities within Amador County—three of which are cities and are therefore not considered unincorporated.²⁵⁴ All six of the identified disadvantaged unincorporated communities are within AWA. The six disadvantaged communities include Camanche North Shore (population 777), River Pines (population 574), Buena Vista (population 518), Drytown (population 210), Martell (population 153), and Kirkwood (population 110).

However, DWR is not bound by the same law as LAFCO to define communities with a minimum threshold of 12 or more registered voters. Because income information is not available for this level of analysis, disadvantaged unincorporated communities that meet LAFCO's definition cannot be identified at this time.

Financing

AWA finances its water and wastewater operations primarily with rates and secondarily with service charges, assessments and interest income. Capital projects are financed with bonded debt, grants and connection fees paid by new development.

The Agency reported that financing was inadequate to provide water services to the AWS, CAWP, Lake Camanche, and La Mel water systems. In recent years, the Agency has faced significant financing constraints forcing substantial staffing cutbacks, an agency-wide reorganization, reduction of board member compensation and benefits, foregone salary increases on the part of staff, and furlough days. As a result, the Agency conducted an agency-wide rate study and overhaul of its water system rates in 2012. Water service and use charges were standardized regardless of system to cut overhead costs by simplifying the current multiple rate-setting and budgeting process. The Agency plans to increase rates annually for the next three years by not more than three percent in each year. It is anticipated that as a result of the water rate restructuring, financing levels will become sufficient to cover water service costs.

The District tracks its financial activities separately through various funds. Separate funds include a general fund and funds for the Amador Water System (AWS), Central Amador Water Project (CAWP), two water improvement districts (Lake Camanche and La

²⁵² Government Code §56033.5.

²⁵³ Based on census data, the median household income in the State of California in 2010 was \$57,708, 80 percent of which is \$46,166.

²⁵⁴ DWR maps and GIS files are derived from the US Census Bureau's American Community Survey (ACS) and are compiled for the five-year period 2006-2010.

Mel Heights), three wastewater improvement districts (Lake Camanche, Martell and ID 1) and debt finance.

The Agency's total revenues increased from \$10.2 million for FY 12, to \$11.2 million in FY 13. The increase in current services and grant revenues accounts for the majority of the increase. Revenue sources included water and wastewater service charges (75 percent), other operating charges (seven percent), participation fees (six percent), property taxes and assessments (six percent), grants (four percent), and other nonoperating revenues (two percent)

The Agency's total expenses increased from \$12.4 million for FY 12, to \$12.6 million in FY 13. Increased general and administration expenses net of decreases in other nonoperating expenses as well as decreased other operating expenses account for the increase. Expenditure categories include administration and general (32 percent), capital depreciation (30 percent), maintenance and operating costs (26 percent), interest on debt (12 percent), and other nonoperating costs (less than one percent).

The District's significant capital costs in recent years have consisted of the following: Amador Transmission Line (\$1.2 million), water treatment plant improvements (\$1.2 million), small diameter pipeline (\$1.1 million), improvements to the Camanche water system (\$530,000), improvements to the Camanche wastewater system (\$466,000). New development pays connection fees per dwelling unit for water to finance capacity expansion needed to serve the new growth.

The District had \$32.8 million in long-term debt outstanding at the end of FY 12-13. The debt was composed of two certificates of participation and 11 loans. Most of the debt (\$21 million) was associated with a bond issued in 2006, composing 64 percent of outstanding debt. Loans financing Buckhorn Water Treatment Plant made up 15 percent of outstanding debt. The principal act governing the district states that the agency shall not incur debt or liability exceeding the revenue for any year, excluding bonded indebtedness, the levying of special assessments, or the execution of contracts with the United States, California, Amador County, or member units (95-13).

The Agency has a goal of maintaining two months of operational and management expenses or 16.7 percent of annual expenses.²⁵⁵ At the close of FY 12-13, the Agency had a total of \$1.4 million in cash and cash equivalents, which is equivalent to just over one month of expenses. Certain funds had greater reserve ratios and others had negative reserve ratios at the close of FY 12-13. Funds with positive reserves included the general fund, AWS, La Mel Heights, Lake Camanche wastewater improvement district, and the Martell wastewater improvement district. Funds with negative reserves included the CAWP water system, Lake Camanche water system, and Wastewater Improvement District #1 fund.

AWA is a member of two joint powers authorities, Calaveras-Amador-Mokelumne River Association and the Upper Mokelumne River Watershed Authority. AWA provides contractual services to several local government agencies in Amador County, including water service to Pine Grove CSD, water services to Plymouth, water and wastewater services to River Pines PUD, and water and wastewater services to Drytown CSD. Services

²⁵⁵ Correspondence with John Griffin, Supervising Engineer, Amador Water Agency, February, 29, 2008.

provided by contract also include water service to PG&E, and AWA also has a mutual aid agreement with EBMUD.

WATER SERVICES

This section describes the nature, extent and location of the water services provided as well as key infrastructure and water sources. The tables provide further information and indicators of the agency's water service supplies, demand, financing, service adequacy, and facilities.

Nature and Extent

AWA provides treated water directly to four distinct service areas—Amador Water System (AWS), Central Amador Water Project (CAWP), Lake Camanche Village Area, and La Mel Heights. AWA also provides wholesale water to Pine Grove CSD, Rabb Park CSD, and Mace Meadows in the CAWP system, and Drytown CWD, the City of Plymouth, and the City of Jackson in the AWS system, as well as contract maintenance services to Drytown CWD and River Pines PUD. Over the last five years, AWA has started providing wholesale water to the City of Plymouth and ceased providing contract maintenance services to the City of Plymouth, Volcano CSD, and Pine Grove CSD.

Figure 11-3: Communities with AWA Water Service

While the Agency does not produce recycled water at its wastewater treatment plants; recycled water is used in the Agency’s service area. Recycled water use within the Agency’s boundaries consists of irrigation of the Castle Oaks golf course and the Bowers and Hoskins ranches. Recycled water is provided from the City of Ione’s Castle Oaks Reclamation Water Plant and Sutter Creek Wastewater Treatment Plant. Backwash water is used for irrigation on the Mace Meadows Golf Course. Recycled water via spray irrigation is provided in the Lake Camanche area, although it does not meet Title 22 criteria. The Agency has added a section on recycled water to its Water Code that requires users in the Agency’s service areas to use recycled water wherever feasible for future non-potable uses, if available.²⁵⁶

Location

AWA provides water related services only within its bounds. The Agency’s service area does not extend beyond the county lines, which is the Agency’s bounds. There are multiple areas within the County that are not served directly by AWA, which are either served by privately owned wells or other City and special district water purveyors. The Agency indicated that a majority of the unserved areas would require significant line extensions in order to begin service. The needed infrastructure is generally costly compared to the number of units that would bear the burden of the expenses. The Agency reported that it attempts to find grants and low interest loans for these areas.

	Treatment	Distribution	Wholesale	Maintenance
Amador Water System (AWS)				
City of Ione	✓	✓		
City of Sutter Creek	✓	✓		
City of Amador	✓	✓		
Eagles Nest and Eagles Ranch	✓	✓		
Ridge Road	✓	✓		
Sutter Hill	✓	✓		
New York Ranch	✓	✓		
Running Gold	✓	✓		
Martell (northeastern portion)	✓	✓		
City of Jackson			✓	
City of Plymouth			✓	
Drytown County Water District			✓	✓
Central Amador Water Project (CAWP)				
Pioneer	✓	✓		
Buckhorn	✓	✓		
Red Coral	✓	✓		
River View	✓	✓		
Ridgeway Pines	✓	✓		
Ranch House Estates	✓	✓		
Pine Park East	✓	✓		
Gayla Manor	✓	✓		
Pine Grove Youth Camp	✓	✓		
Toma Lane	✓	✓		
Jackson Pines	✓	✓		
Pine Acres	✓	✓		
Silver Lake Pines	✓	✓		
Sierra Highlands	✓	✓		
Mace Meadows Unit #1	✓	✓		
Sunset Heights	✓	✓		
Mace Meadows Water Association			✓	✓
Pine Grove CSD			✓	
Rabb Park CSD			✓	✓
Other AWA Water Systems				
ID #3 (La Mel Heights)	✓	✓		
ID #7 (Lake Camanche)	✓	✓		
Non-AWA Treated Water Systems				
River Pines PUD				✓

²⁵⁶ AWA, Urban Water Management Plan, 2005, p. 8-4.

The Agency generally provides services to upcountry communities along SR 88 and Ridge Road from the community of Jackson Pines to Ridgeway Pines, and in the lower foothills from Lake Tabeaud west to Ione along SRs 88 and 104 and north to the community of Drytown along SR 49. Connections from Lake Tabeaud to Ridge Road along the Amador Canal and along SRs 88 and 104 between Jackson and Ione are served untreated water for irrigation purposes. In addition, AWA serves the two non-contiguous communities of La Mel Heights and Lake Camanche Village.

The cities and communities where AWA provides water treatment, distribution, wholesale, or maintenance services are shown in Figure 8-3.

Infrastructure

Key infrastructure for water service includes the Agency's water supplies, four treatment plants, 178 miles of distribution mains, 24 miles of canals, six wells, 36 storage tanks and three reservoirs.

Water Supplies

A majority of the Agency's water comes from the Mokelumne River watershed, which supplies both the AWS and CAWP systems. The Agency relies on groundwater for the La Mel Heights and Lake Camanche service areas.

Surface water constitutes approximately 98 percent of the Agency's water production.²⁵⁷ AWA has rights to a total of 16,150 af of surface water—1,150 af of water from the Mokelumne watershed, in addition to 15,000 af, also from the Mokelumne watershed, through a contractual agreement with PG&E for its pre-1914 water rights. The Agency has post-1914 appropriative water rights for the 1,150 af from three tributaries to the Mokelumne River, including the Bear River, North Fork River and Antelope Creek. The water is diverted from the Tiger Creek Afterbay and used to serve the CAWP system. As the Agency is reaching the diversion limits of this water right and is anticipating further growth and an increase in demand, it is searching for additional surface water sources. The Agency has applied for an increase in its water rights to a total of 2,200 af from this source. The application has been pending since 2008. If transferred, the rights would be used by AWA to permit storage at Lower Bear Reservoir, a PG&E facility. In addition, AWA is considering substitution of recycled water for a portion of JVID's Mokelumne River water right. AWA proposes to discharge tertiary treated effluent in Jackson Creek during winter months.

In 1985, AWA acquired the AWS system from PG&E and the rights to 15,000 af, or a maximum diversion rate of 30 cfs, of water stored at Lake Tabeaud from the Mokelumne River. The water is transferred into the AWS system via the recently completed Amador Transmission Pipeline. The Mokelumne River generally has a high water quality through most of the year, as identified by the Agency. During storm events, the water quality can become turbid.²⁵⁸

²⁵⁷ AWA, *Urban Water Management Plan*, 2005, p. 3-1.

²⁵⁸ *Ibid*, p. 7-1.

Groundwater accounts for approximately two percent of AWA's water supply.²⁵⁹ The Lake Camanche wells pump groundwater from the Cosumnes sub-basin. The water quality of the sub-basin is generally of excellent quality for irrigation and domestic use.²⁶⁰ However, the Agency has closed two wells as a result of water quality concerns, specifically iron and manganese at one well and bacteria at another. Based on Department of Water Resources groundwater recharge and outflow analysis, the sub-basin is losing on average approximately 4,300 af annually.²⁶¹ During times of extreme drought, the water levels in the wells have dropped and then recovered in subsequent years. However, due to concerns of growth, basin overdraft, reliability, and water quality, the Agency is seeking surface water use to augment existing groundwater supply.

Water in La Mel Heights is from an unclassified groundwater aquifer. Due to constraints on the build-out size of the community, the Agency did not indicate concerns regarding the capacity of the future groundwater supply.²⁶²

Treatment Systems

The Agency owns, operates and maintains four treatment plants for surface water—two in the AWS, one in the CAWP system, and a small membrane plant located at the PG&E facility at Tiger Creek. The Tanner and Ione treatment plants serve the AWS area and have treatment capacities of 6.1 mgd and 3.3 mgd respectively. Both treatment plants were identified by the Agency as being in fair condition. The Tanner plant is nearing capacity during periods of maximum day demand. AWA plans to add an additional one mgd of capacity and improve its backwash system. The Ione treatment plant must use stored water to meet maximum day demands.²⁶³ In addition, planned and proposed growth will exceed the capacity of the treatment plant. The Ione treatment plant is scheduled to be expanded by 0.8 mgd. The Buckhorn treatment plant serves the CAWP system and has a treatment capacity of 3.4 mgd. Construction of the plant was completed in 2005, and the plant is in excellent condition according to the Agency. Plans are in place to include the use of aluminum chlorohydrate for disinfection by-product purposes and to also install a backwash recycling system.

A study was recently completed to study the feasibility of a Camanche regional water supply, which would utilize a joint surface water treatment plant. Participating agencies include EBMUD, AWA, and Calaveras County Water District to supply surface water to the Lake Camanche Village and other service areas in the Lake Camanche region. AWA is participating in applications to fund this potential project.

The Agency operates six wells—four in Lake Camanche Village and two in La Mel Heights. Lake Camanche Village wells have a reliable pumping capacity of 600 gpm, and the wells in La Mel Heights have a pumping capacity of 76 gpm. The groundwater is treated with well-head treatment systems. Four of the wells were reported as being in fair

²⁵⁹ AWA, *Urban Water Management Plan*, 2005, p. 3-1.

²⁶⁰ Department of Water Resources, *California's Groundwater Bulletin 118*, 2006, p. 3.

²⁶¹ *Ibid*, p. 2.

²⁶² AWA, *Urban Water Management Plan*, 2005, p. 3-3.

²⁶³ DPH, *2007 Annual Inspection Report – Ione*, 2007, p. 6.

condition and two of the wells, which were constructed in 2007, were identified as being in excellent condition. The Agency plans to seek out funding to augment groundwater with surface water in the Lake Camanche Village with no certain date identified at this time.

Water Storage

The Agency owns and maintains 36 storage facilities and three raw water reservoirs. The storage tanks have a combined storage of 8.8 mg of water—4.5 mg in AWS, 3.4 mg in the CAWP, 0.7 mg in Lake Camanche, and 0.1 mg in La Mel. According to the Department of Public Health (DPH), the AWS tanks are in good condition. The La Mel tank was replaced in FY 07-08, due to insufficient storage for peak and fire flows. The Agency plans to complete a storage consolidation study for the CAWP system to increase water storage and eliminate small aged tanks.

Distribution and Transmission

The distribution system consists of 177 miles in the four service areas—65 in the AWS, 93 in CAWP, 19 in Lake Camanche, and 1.4 in La Mel Heights. The system consists of a variety of materials, including cast iron, cement lined steel, galvanized steel, PVC, asbestos cement, and HDPE. The AWS distribution system was reported as being in fair to good condition by DPH during an annual inspection in 2013.²⁶⁴ The Agency identified the CAWP distribution system as being aged and undersized in portions and in need of replacement. In addition, the system requires improvements to increase pressure. There are no plans to replace these pipelines in the near future.

The Agency previously used the 24-mile Amador Canal to transfer raw water from Lake Tabeaud to the Tanner treatment plant. The canal was replaced with the Amador Transmission pipeline in 2007 to eliminate significant transmission loss and vulnerabilities to contamination from livestock and wild animals, and septic tanks along its course.²⁶⁵ The canal is still in use to supply water to 100 raw water connections. EBMUD, PG&E, and AWA agreed to jointly contribute to the replacement of the Amador Canal with the pipeline that is anticipated to eliminate 3,000-6,000 afa in seepage losses from the prior earthen ditch canal. Until AWA needs its full 15,000 af of entitlement, which is currently estimated to be approximately 2030, the conserved water will be available to PG&E and EBMUD for additional hydropower generation and as additional inflow to Pardee Reservoir.²⁶⁶ The water conserved by this project will be available to EBMUD in most years for diversion into the Mokelumne Aqueduct or through the Pardee and Camanche power plants.

AWA has extended a pipeline from its Tanner treatment plant near Sutter Creek to the City of Plymouth. The City of Plymouth now receives treated water from AWA through the pipeline extension.²⁶⁷ The pipeline is 12 inches in diameter, entirely gravity fed, and approximately 11 miles in length from the Tanner treatment plant. The total estimated

²⁶⁴ DPH, *2007 Annual Inspection Report*, 2013, p. 19.

²⁶⁵ DPH, *2007 Annual Inspection Report*, 2013, p. 6.

²⁶⁶ EBMUD, *Summary Financial Information Statement*, FY 2007, p. 14.

²⁶⁷ DPH, *Plymouth Annual Inspection Report*, 2005, p. 28.

cost of the pipeline construction was \$8.3 million, of which AWA's share was approximately \$3.18 million.²⁶⁸

Future Services

AWA has discussed with the County the possibility of it providing water services to the Carbondale Industrial Park. The industrial park would be served by the pipeline, which runs from the Lone treatment plant to the community of Eagles Nest in Amador County. To add a storage tank and extend services to the area would cost an estimated \$2 million. AWA has not yet issued a letter of water availability for the park.

²⁶⁸ Plymouth, *Wate System Financial Plan and Water Rate Study*, 2006, p. 12.

Figure 11-4: AWA Water Profile

Water Service Configuration & Infrastructure				
Water Service	Provider(s)	Water Service	Provider(s)	
Retail Water	AWA	Groundwater Recharge	None	
Wholesale Water	AWA	Groundwater Extraction	AWA	
Water Treatment	AWA	Recycled Water	Ione/Sutter Creek	
Service Area Description				
Retail Water	Retail water service is provided to the cities of Ione, Sutter Creek, Amador City, and upcountry communities of PG&E @Tiger Creek, La Mel Heights, other communities along SR 88 and Ridge Road from Jackson Pines to Ridgeway Pines, and in the lower foothills from Lake Tabeaud west to Ione along SRs 88 and 104 and north to the communities of Drytown along SR 49. Connections from Lake Tabeaud to Ridge Road along the Amador Canal and along SRs 88 and 104 between Jackson and Ione are served untreated water for irrigation purposes.			
Wholesale Water	City of Jackson, Drytown County Water District, Mace Meadows Water Association, Rabb Park CSD, Pine Grove CSD, and City of Plymouth.			
Recycled Water	80 % Seasonally at Buckhorn Water Treatment Plant			
Boundary Area ²	594 sq. miles	Population (2012) ³	20,020	
System Overview		Average Day Demand (2012)	Peak Day Demand (2012)	
AWS System (Tanner WTP)		2.20 mgd	4.4 mgd	
AWS System (Ione WTP)		1.30 mgd	2.6 mgd	
CAWP System		0.83 mgd	1.66 mgd	
Lake Camanche		0.26 mgd	0.51 mgd	
La Mel		0.0154 mgd	0.03 mgd	
PG&E at Tiger Creek		0.00137 mgd	0.003 mgd	
Major Facilities				
Facility Name	Type	Capacity	Condition	Yr Built
Buckhorn Treatment Plant	Treatment	3.4 mgd	Excellent	2003
Tanner Treatment Plant	Treatment	6.1 mgd	Fair	1990
Ione Treatment Plant	Treatment	3.3 mgd	Fair	1986
Other Infrastructure				
Reservoirs	3	Storage Capacity (mg)	8.7	
Pump Stations	18	Pressure Zones	42	
Production Wells	6	Pipe Miles	230	
Infrastructure Needs and Deficiencies				
<ol style="list-style-type: none"> 1) An aged and undersized water distribution system within the CAWP system 2) Lack of future treatment capacity for anticipated growth in the Ione and Tanner treatment plants 3) Additional water sources needed for the Lake Camanche to address concerns of basin overdraft 4) Rehabilitation of the deteriorating Lake Camanche system 				
Facility-Sharing and Regional Collaboration				
<p>Current Practices: The Agency practices facility sharing of its treatment plants by providing wholesale water to independent water purveyors. In addition, the Agency reported that it has on occasion shared equipment and materials with other purveyors.</p>				
<p>Opportunities: The Agency identified two opportunities for future facility sharing 1) a shared regional water treatment plant with EBMUD and CCWD in the Lake Camanche area and 2) an intertie with the EBMUD system in the Lake Camanche area for emergency backup.</p>				
Notes:				
(1) NA means Not Applicable, NP means Not Provided, mg means millions of gallons, af means acre-feet.				
(2) The Agency's boundary area includes the entire County, the size of the service area is unknown.				
(3) Population of the service area as estimated in the 2012 Public Water System Statistics.				

Water Demand and Supply							
Service Connections	Total		Inside Bounds		Outside Bounds		
Total	7,000		7,000		0		
Irrigation/Landscape	190		190		0		
Domestic	6,481		6,481		0		
Commercial/Industrial/Institutional	323		323		0		
Recycled	0		0		0		
Other	6		6		0		
Average Annual Demand Information (Acre-Feet per Year)							
	1995	2000	2005	2010	2015	2020	2025
Total	NP	NP	9,778	8,407	9,051	10,498	11,407
Residential	NP	NP	2,168	1,951	2,181	2,746	3,106
Commercial/Ind./Inst.	NP	NP	1,144	1,178	1,408	1,828	2,112
Irrigation/Landscape ¹	NP	NP	1,179	1,023	1,023	1,023	1,023
Other ²	NP	NP	3,604	2,878	2,957	3,114	3,225
Wholesale	NP	NP	1,683	1,377	1,482	1,787	1,941
Water Sources				Supply (Acre-Feet/Year)			
Source	Type		Average		Maximum		Safe/Firm
Mokelumne River/Lake Tabeaud	Surface Water		4,238		15,000		Unknown
Mokelumne River/Tiger Creek Afterbay	Surface Water		1,053		1,150		Unknown
Cosumnes Subbasin	Groundwater		241		1,347		Unknown
Unclassified Groundwater Aquifer	Groundwater		23		123		Unknown
Supply Information (Acre-feet per Year)							
	1995	2000	2005	2010	2015	2020	2025
Total	NP	NP	16,431	16,519	17,569	17,642	17,711
Imported	NP	NP	0	0	0	0	0
Groundwater	NP	NP	281	369	369	442	511
Surface	NP	NP	16,150	16,150	17,200	17,200	17,200
Recycled	NP	NP	0	0	0	0	0
Drought Supply and Plans							
Drought Supply (af) ³	Year 1: 16,419		Year 2: 16,419		Year 3: 16,419		
Significant Droughts	1976, 1977, 1988-94, 2008-09, 2014						
Storage Practices	The Agency maintains storage facilities for short-term water needs. In addition, water is stored by PG&E in Lake Tabeaud and Tiger Creek Afterbay for use by the						
Drought Plan	Historically, drought conditions have not resulted in a cut back in the amount of surface water available to the Agency, and AWA has never had to require rationing of its customers. However, the Agency has a Water Shortage Contingency Plan, which includes both voluntary and mandatory water rationing. Mandatory rationing requirements are also outlined in the Agency's water code. There are no flow requirements or storage levels that trigger mandatory water rationing. Recommendations for rationing are determined on a case-by-case basis by Agency staff.						
Water Conservation Practices							
CUWCC Signatory	No						
Metering	Yes						
Conservation Pricing	Yes						
Other Practices	1) Water survey programs for residential customers 2) Free residential plumbing retrofit kits 3) System water audits, leak detection, and repair 4) Large landscape conservation programs and incentives 5) Public information programs 6) School education programs 7) Review of plans and water use audits for commercial, industrial and institutional customers 8) Water waste mitigation in the AWA water code						
Notes:							
(1) Irrigation is the Agency's raw water sales.							
(2) Other includes backwash water, raw water losses, recycled water, and system losses.							
(3) As drought conditions have never resulted in a cut back in the water available to the Agency, the Agency assumes drought supply would be equal to the current supply available.							

Water Rates and Financing			
Residential Water Rates-Ongoing Charges FY 13-14¹			
Rate Description		Avg. Monthly Charges	Consumption²
AWS	Monthly Service Charge: \$12.70 Monthly Debt Service: \$13.02 Usage rates: 1-10 ccf: \$1.92 per ccf 11-40 ccf: \$2.40 per ccf >40 ccf: \$3.00	\$ 45.31	250 gal/day
CAWP	Monthly Service Charge: \$12.70 Monthly Debt Service: \$15.19 Usage rates: 1-10 ccf: \$1.92 per ccf 11-40 ccf: \$2.40 per ccf >40 ccf: \$3.00	\$ 47.48	250 gal/day
Camanche	Monthly Service Charge: \$12.70 Monthly Debt Service: \$5.88 Usage rates: 1-10 ccf: \$1.92 per ccf 11-40 ccf: \$2.40 per ccf >40 ccf: \$3.00	\$ 38.17	250 gal/day
La Mel	Monthly Service Charge: \$12.70 Monthly Debt Service: \$31.13 Usage rates: 1-10 ccf: \$1.92 per ccf 11-40 ccf: \$2.40 per ccf >40 ccf: \$3.00	\$ 63.42	250 gal/day
Special Rates			
Rates are different for each of the four water systems. There are no other special rate zones.			
Wholesale/Other Water Rates			
City of Jackson: \$1.21 per ccf plus monthly charge of \$26,716 City of Plymouth: \$1.21 per ccf plus monthly charge of \$6,931 Drytown CWD: \$1.21 per ccf plus monthly charge of \$1,682 Mule Creek: \$1.61 per ccf plus monthly charge of \$21,843			
Rate-Setting Procedures			
Policy Description	The AWA Board has adopted a single Agency-wide water rate schedule to cut overhead costs by simplifying the current multiple rate-setting and budgeting process. All AWA water customers in the four water systems will pay the same service charge and the same water usage rate. The SERVICE CHARGE pays for the fixed portion of the operation, maintenance and administrative costs. The WATER USAGE CHARGE covers the costs that vary with the amount of water used, such as electricity, chemicals, etc.		
Most Recent Rate Change (AWS)	7/1/2013	Most Recent Rate Change (CAWP)	7/1/2013
Most Recent Rate Change (Camanche)	7/1/2013	Most Recent Rate Change (La Mel)	7/1/2013
Frequency of Rate Changes	The District recently conducted a systemwide rate study and plans to increase rates annually for the next three years by not more than 3% in each year.		

Water Rates and Financing				
Water Development Fees and Requirements				
Connection Fee Approach	The Agency charges a fee for connecting the meter and an additional participation fee for facility expansion needs.			
Connection Fee Timing	Upon sale of the lot or receipt of the building permit.			
Connection Fee Amount (per single-family unit)	AWS: \$17,410 Camanche: \$12,840		CAWP: \$5,880 La Mel: \$4,025	
Land Dedication Requirements	Developers are required to build necessary infrastructure and transfer it to the Agency.			
Development Impact Fee	None			
Water Enterprise Operating Revenues, FY 11-12			Operating Expenditures, FY 11-12	
Source	Amount	%	Amount	
Total	\$8,200,727	100%	Total	\$7,557,954
Rates & charges	\$6,585,085	80%	Administration ⁴	\$995,682
Property tax ³	\$236,858	3%	O & M ⁴	\$4,324,361
Fees ⁵	\$552,311	7%	Capital Depreciation	NP
Assessments & Standl	\$132,850	2%	Purchased Water	\$0
Connection Fees ⁶	\$60,339	1%	Capital Assets	\$312,282
Interest	\$22,949	0%	Debt	\$1,542,946
Loans	\$0	0%	Reserves	\$382,683
Other	\$610,335	7%	Other	\$0
Notes:				
(1) Rates include water-related service charges and usage charges.				
(2) Water use assumptions used to calculate average monthly bills are consistent countywide for comparison purposes.				
(3) Property taxes and other revenues for the AWA "agency general" and "outside services" budget units were allocated to water (88%) and wastewater (12%) based on each respective enterprise's share of direct revenues.				
(4) The AWA budget category for salaries and wages was allocated to O&M. Costs associated with the agency's general account and outside services were allocated to water (89%) and wastewater (11%).				
(5) Fees includes engineering and inspection fees as well as participation fees.				
(6) Connection fees include meter setting fees.				

Water Service Adequacy, Efficiency & Planning Indicators			
Water Planning		Description	Planning Horizon
Water Master Plan		None	
UWMP		2011	2015
Capital Improvement Plan		2007	2012
Vulnerability Assessment and Emergency Plan ¹		2005	
Service Challenges			
<p>The Agency identified the following challenges to the provision of water service:</p> <ol style="list-style-type: none"> 1) Finalizing the water rights application submitted to DWR for expansion of the CAWP system. 2) Inadequate treatment capacity based on projected growth, particularly in AWS. 3) Inadequate water supply for the Camanche system by 2018. 4) Need for recycling at Tanner, Ione and Buckhorn 5) CAWP fire flow capacity 6) Disinfection By-Products in the CAWP system 			
Service Adequacy Indicators			
Connections/FTE	400	O&M Cost Ratio ²	\$920,583
MGD Delivered/FTE	0.33	Distribution Loss Rate	14%
Distribution Breaks & Leaks	19	Distribution Break Rate ³	12.7
Response Time Policy	2 hours	Response Time Actual	Depends on severity
Water Pressure	40+ psi	Total Employees (FTEs)	17
Water Operator Certification			
AWA personnel hold up to a T4 classification for treatment systems and a D4 classification for distribution systems. AWA meets the minimum classification requirements for each of its systems.			
Drinking Water Quality Regulatory Information⁴			
	#	Description	
Health Violations	1	Exceedance of Haloacetic Acid MCL in 2005	
Monitoring Violations	4	Lead and Copper 2008, Tank deficiencies 2008, Missed TC Sample 2010, Sampled wrong location 2010	
DW Compliance Rate ⁵	>99%		
Notes:			
(1) Vulnerability Assessment plan prepared for each service area.			
(2) Operations and maintenance costs (exc. purchased water, debt, depreciation) per volume (mgd) delivered.			
(3) Distribution break rate is the number of leaks and pipeline breaks per 100 miles of distribution piping.			
(4) Violations since 2005, as reported by the U.S. EPA Safe Drinking Water Information System.			
(5) Drinking water compliance is percent of time in compliance with National Primary Drinking Water Regulations in 2012.			

WASTEWATER SERVICES

Nature and Extent

AWA provides wastewater collection, treatment and disposal services to unincorporated communities located within its wastewater improvement districts.

In addition, AWA provides wastewater collection service to the unincorporated Martell community. The City of Sutter Creek provides wastewater treatment and the Amador Regional Sanitation Authority (ARSA) provides wastewater disposal services to the Martell area.

Location

Figure 11-5: Communities with AWA Wastewater Service

AWA provides wastewater collection, treatment and disposal services to 10 unincorporated communities, as shown in Figure 11-5.

The largest of the AWA wastewater systems are the Martell and Lake Camanche Village systems. Two county service areas formerly operated by Amador County were transferred in 2003 from the County to AWA. The Martell system (formerly operated by County Service Area 4) is operated by AWA and organized internally as AWA Wastewater Improvement District #12. The Lake Camanche Village system (formerly operated by County Service Area 3) is organized as AWA Wastewater Improvement District #11. Neither of the two CSAs has been formally dissolved.

By contract, AWA provides wastewater operations, maintenance and emergency services to other wastewater service providers, presently the City of Plymouth and River Pines PUD. AWA has provided contract services in the past to Kirkwood PUD, Amador County and the Oaks Mobile Home Park.

Community	Collection	Treatment	Disposal	Maintenance
Eagle's Nest	✓	✓	✓	✓
Surrey Junction	✓	✓	✓	✓
Wildwood Estates	✓	✓	✓	✓
Gayla Manor	✓	✓	✓	✓
Jackson Pines	✓	✓	✓	✓
Fairway Pines	✓	✓	✓	✓
Pine Grove	✓	✓	✓	✓
Viewpoint Estates	✓	✓	✓	✓
Tiger Creek Estates	✓	✓	✓	✓
Lake Camanche	✓	✓	✓	✓
Martell	✓			✓
City of Plymouth				✓
River Pines PUD				✓

Infrastructure

Key AWA infrastructure includes two wastewater treatment plants, leach fields, 33 miles of sewer pipes and 15 lift stations.

Lake Camanche Village

The WWTP provides secondary treatment with disinfection and spray irrigation. Treatment is conducted with a pond system, including a chlorine contact ditch and an outfall to an unlined storage reservoir. The facility has a design flow capacity of 0.28 mgd, although the storage pond and sprayfield were not designed to meet build-out demand. By

comparison, average flow was 0.052 mgd in 2013. The plant was built in the 1970s and was described as in fair condition. The WWTP lacks capacity to handle peak flows during rain events. The regulatory agency imposed a cease and desist order in 2003 requiring long-term improvements to the WWTP. There were three documented spills between 2003 and 2006, one of which is believed to have drained into Camanche Lake. More recently, there were no reported spills in this system in 2012 and 2013. In addition, there is a moratorium on wastewater service in the area, and property owners are on a waiting list for additional capacity.

AWA and EBMUD are considering a joint project to build a regional wastewater system to accommodate their respective infrastructure needs in the area. The planned first phase is expansion of storage and spray field disposal system to avoid spills and serve approved development in the area. The second phase would upgrade the WWTP to membrane bio-reactor WWTP with disposal to land during dry months and surface water during wet months. AWA is contemplating disposal of recycled water to the Jackson Valley Irrigation District service area, and requires conveyance facilities to transport recycled water the three-mile distance.

The total cost of the project is projected to be \$23 million. Potential funding sources include the SWRCB small community wastewater grant program, the State Revolving Fund (loans), and wastewater rates and connection fees. AWA plans to implement \$0.6 million in capital projects at the WWTP in the short-term. There is no anticipated construction date pending completion of environmental review.

The facility has a conventional gravity collection system with four lift stations and 6.3 miles of sewer pipe. The collection system was described as in good condition by AWA.

Martell

Wastewater originating in the Martell area is treated at the City of Sutter Creek WWTP and disposed by ARSA.

AWA identified a short-term need for 50,000 gpd capacity, and plans to continue to rely on Sutter Creek for treatment and ARSA for disposal in the short-term. The flow originating in Martell was .062 mgd in 2013. At build-out, the Martell flow has been estimated at 1.19 mgd and 3.0 mgd by the City of Sutter Creek and AWA, respectively.²⁶⁹

To address growth and capacity needs in the Martell area, AWA is interested in constructing a new WWTP in the Martell area in the long-term; it would then no longer rely on Sutter Creek or ARSA. AWA was awarded \$3 million toward the cost through the Water Resources Development Act to partly fund the project. AWA has conducted outreach aimed at attracting the cities of Amador, Jackson and Sutter Creek to rely on a future regional WWTP in Martell; however, consensus could not be reached to do the regional project. AWA reported that it continues its outreach effort with the nearby cities. The cost of a regional facility would be approximately \$42 million; the cost of a facility designed solely to meet the needs of Martell would be approximately \$20 million. The project was still in the preliminary planning stages, and cost estimates were not available when this report was

²⁶⁹ HDR Engineering, *Sutter Creek Wastewater Master Plan*, August 2007, p. 3-4.

prepared. Assuming the AWA board decides to move forward with the project, it would take approximately three years to complete .

There are small developments along SR 88 between Fairway Pines and Jackson Pines that rely on community leach fields and recirculating gravel filters with spray fields for wastewater, but the systems are strained due to increased loads. AWA hopes to construct a sewer trunk line to collect wastewater from those existing developments and convey it either to the expanded Sutter Creek WWTP or to the planned AWA WWTP located in Martell. The estimated cost is approximately \$8 million, and a funding source has not yet been identified.

Gayla Manor

Septic tank effluent from 79 homes flows through gravity or force main sewers to two 10,000-gallon recirculation tanks adjacent to the treatment and disposal site, and a 20-acre supplemental leachfield.

The Gayla Manor WWTP is in fair condition, and provides secondary treatment with disinfection and spray disposal. The treatment facility is designed to handle up to 22,000 gpd. The spray fields become saturated during peak rain events, and have a capacity for only 2,800 gpd. By comparison, the average flow is 5,000 gpd with peak flows of 14,000 gpd. RWQCB issued a cease and desist order in 2004 because the storage level in the ponds encroached on freeboard and there had been spills. To address the RWQCB cease and desist order, AWA constructed a 20-acre leachfield to remove wastewater pathogens through biological processes. AWA has financed \$0.3 million of the expected \$1.1 million cost of capital projects at the WWTP. Financing sources included the SWRCB small community wastewater program grant in the amount of \$211,000.

There is one pump station and 1.44 miles of sewer pipe. The system was built in the early 1990s. The collection system was described as in good condition by AWA. Current plans are to rebuild one filter bed in 2013 and a second in 2015. Infiltration/inflow issues are on-going in the Sunflower Court development.

AWA Satellite Systems

There are eight small communities with separate wastewater systems operated by AWA. Each of these systems involves discharge of septic tank effluent to leachfields. AWA described each of the collection systems as in good condition, having been constructed in the 1990s.

- ❖ Eagle's Nest: Septic tank effluent from eight homes is pumped to a force main and discharged to a community leachfield. There are no pump stations and 1.2 miles of sewer pipe. The system was built in the early 1990s.
- ❖ Surrey Junction: Septic tank effluent from seven homes flows by gravity to a community leachfield. There are no pump stations and 0.6 miles of sewer pipe. The system was built in the early 1990s.
- ❖ Wildwood Estates: Septic tank effluent from 34 homes flows by gravity into a collection system. There are no pump stations and 1.03 miles of sewer pipe. The system was built in 1990. There appears to be an emerging nitrate problem in the

groundwater near the community leachfield. Plans are to hire a consultant to develop an engineered solution.

- ❖ Jackson Pines: Septic tank effluent from 64 homes is collected and pumped to a community leachfield. There are two pump stations and 3.02 miles of sewer pipe. The system was built in the late 1990s.
- ❖ Fairway Pines: Septic tank effluent from 42 homes is conveyed to a lift station, pumped to a force main, and discharged to Fairway Pines leachfield. Once the leachfield capacity is absorbed, there is an additional leachfield available at Mace Meadows. There is one pump station and 4.4 miles of sewer pipe. The system was built in the late 1990s. AWA reported minimal I/I problems; however, the County Department of Environmental Health reported that peak flows indicated a likely I/I problem.
- ❖ Pine Grove: Septic tank effluent from residential and commercial users (83 EDUs) is pumped to a community leachfield. There are 3.4 miles of sewer pipe. The system was built in the late 1990s, and began operating in 2001.
- ❖ Viewpoint Estates: Septic tank effluent from three homes flows by gravity to a community leachfield. There are no pump stations and 0.3 miles of sewer pipe. The system was built in the late 1990s.
- ❖ Tiger Creek Estates: Septic tank effluent from two homes flows by gravity to a community leachfield. There is one pump station and 0.4 miles of sewer pipe. The system was built in the late 1990s.

Water Treatment Plants

To address backwash generated at each of its three water treatment plants, AWA identified a need for re-use projects at each of the water plants. The purpose of the projects is to reduce sewer system loads, meet regulatory requirements, prevent contamination and reduce potable water demands.

Buckhorn WTP will cease delivery of backwash water to the Mace Meadows Golf Course for irrigation use. The long-term plan will be to supply raw water via the planned Gravity Supply Line. AWA is also planning for the use of aluminum chlorohydrate as a water treatment additive to help lower the formulation of disinfection by-products at Buckhorn WTP. Buckhorn WTP will also receive an upgraded backwash recycling process that will help recycle 100 percent of the plant's used backwash water. This is a process being implemented to address certain State water quality requirements.

The Ione WTP backwash presently goes into the City of Ione's secondary WWTP. Plans are to add .8 mgd in potable water production capacity and to install a recycling system for 90 percent of the backwash water.

The Tanner WTP will be receiving one additional flocculator and filter. This will add approximately one mgd in potable water production capacity. The plant will also receive an upgraded backwash water handling process that will be part of a comprehensive recycling system. The IRWMP identified \$0.5 million in costs associated with the Tanner WTP. The improvements are being funded by new customers and water rates.

Figure 11-6: AWA Wastewater Profile

Wastewater Service Configuration and Demand				
Service Configuration				
Service Type	Service Provider(s)			
Wastewater Collection	AWA			
Wastewater Treatment	AWA and City of Sutter Creek (Martell)			
Wastewater Disposal	AWA and ARSA (Martell)			
Recycled Water	None			
Service Area				
Collection:	Eagle's Nest, Surrey Junction, Wildwood Estates, Gayla Manor, Jackson Pines, Fairway Pines, Pine Grove, Viewpoint Estates, Tiger Creek Estates, Lake Camanche, Martell			
Treatment:	Eagle's Nest, Surrey Junction, Wildwood Estates, Gayla Manor, Jackson Pines, Fairway Pines, Pine Grove, Viewpoint Estates, Tiger Creek Estates, Lake Camanche			
Recycled Water	Lake Camanche (spray irrigation)			
Sewer Connection Regulatory/Policies				
When any part of any proposed subdivision lies within 500 feet of a public sewer system, sanitary sewer facilities shall be installed to serve each lot in said subdivision (County Code §17.44.010).				
Onsite Septic Systems in Boundary Area				
There were 7,515 homes in unincorporated areas on septic systems, according to the 1990 Census, which was the most recent to inquire about residential sewage disposal.				
Service Demand				
	Connections 2013		Flow (gpd) 2013	
Type	Active	Standby	Average	Build-Out
Total	845	218	147,841	3,204,887
Eagle's Nest	9	5	1,733	3,327
Surrey Junction	8	0	719	1,902
Wildwood Estates	34	3	3,063	8,795
Gayla Manor	57	0	4,900	19,731
Jackson Pines	74	5	9,815	18,778
Fairway Pines	62	52	4,771	15,909
Pine Grove	46	38	9,601	34,700
Viewpoint Estates	4	1	382	1,188
Tiger Creek Estates	4	4	168	2,377
Lake Camanche	374	0	50,215	98,180
Martell	173	110	62,474	3,000,000
Projected Demand (in millions of gallons per day)				
	2005	2015	2025	Build-Out
Avg. dry weather flow	0.15	NP	0.603	3.20
Peak wet weather flow	NP	NP	NP	NP
Notes:				
(1) NA: Not Applicable; NP: Not Provided.				
(2) Build-out projections are based on standby connections and exclude potential growth outside wastewater improvement district areas, as estimated in the 2005 Regional Wastewater Management Plan.				

Wastewater Infrastructure			
Wastewater Treatment & Disposal Infrastructure			
System Overview			
Treatment level:	Secondary		
Disposal methods:	Sprayfields, leachfields, golf course irrigation		
Facility Name	Capacity	Condition	Yr Built
Lake Camanche Village WWTP	0.281 mgd	Fair	late 1970s
Gayla Manor WWTP	0.022 mgd	Fair	early 1990s
Treatment Plant Daily Flow (mgd)	Average Dry	Peak Day Wet	
Lake Camanche Village WWTP	0.045	0.130	
Gayla Manor WWTP	0.005	0.014	
Infrastructure Needs and Deficiencies			
<p>The Martell area needs 50,000 gpd capacity in the short-term, as much as 1.0 mgd capacity by 2025 and 3.0 mgd for build-out demand. AWA plans to construct a new WWTP to serve Martell. Sutter Creek reported needs for enhanced source control, as elevated loads originating in the Martell area have decreased WWTP capacity.</p> <p>The Lake Camanche Village area needs additional storage and disposal capacity. To reduce wastewater flows and enhance water supplies, AWA needs to make conveyance and disposal improvements at its three water treatment plants.</p>			
Wastewater Collection & Distribution Infrastructure			
Collection & Distribution Infrastructure			
Sewer Pipe Miles	32.9	Sewage Lift Stations	15
Other:			
Infrastructure Needs and Deficiencies			
No collection system infrastructure needs or deficiencies were identified by AWA.			
Infiltration and Inflow			
All collection systems were described as in good condition. The Martell system has some I/I problems. There is minimal I/I in the other collection systems, according to AWA. Regulatory agencies have reported I/I problems in Fairway Pines systems. I/I issues are on-going in the Sunflower Court development in Gayla Manor.			
Wastewater Regional Collaboration and Facility Sharing			
Regional Collaboration			
The Martell area (CSA 4) discharges to Sutter Creek for treatment and ARSA for disposal. ARSA effluent receives tertiary treatment prior to disposal for golf course irrigation in the Ione area. AWA participated in and helped fund a regional wastewater study in 2005. AWA and EBMUD are collaborating on joint solutions to wastewater capacity needs in the Lake Camanche area.			
Facility Sharing Opportunities			
To reap economies of scale and enhance recycled water supplies, AWA has conducted outreach aimed at attracting Jackson and Sutter Creek to relying on its planned Martell facility. The City of Sutter Creek and ARSA plan to construct a new wastewater treatment facility in Sutter Creek with disposal of effluent for irrigation purposes, and have conducted outreach aimed at attracting AWA to rely on its planned facilities.			

Wastewater Service Adequacy, Efficiency & Planning			
Regulatory Compliance Record, 2008-13			
Formal Enforcement Actions	1	Informal Enforcement Actions	1
Enforcement Action Type	Date	Facility ¹	Description of Violations
Staff Enforcement Letter	1/21/2011	Buckhorn	Order conditions (3)
Notice of Non-Compliance	10/16/2013	Gravity Line	Late Annual Report
Service Adequacy Indicators			
Sewer Overflows 2013 ²	0	Sewer Overflows 2012 ³	1
Treatment Effectiveness Rate (2012) ⁴	95%	Sewer Overflow Rate ⁵	0
Total Employees (FTEs)	4	Response Time Policy ⁶	As quick as possible
Employees Certified?	Yes	Response Time Actual	NP
Source Control and Pollution Prevention Practices			
New projects with potentially harmful discharges must install appropriate waste interceptors. Restaurants must install sand and grease interceptors.			
Collection System Inspection Practices			
New developments are required to videotape all sewer pipelines prior to AWA acceptance. AWA reports that it inspects systems with CCTV equipment on an as-needed basis. AWA conducts preventative maintenance as staffing and funds are available.			
Service Challenges			
Increasingly stringent regulatory requirements, lack of reclamation capacity at Lake Camanche WWTP, environmental issues associated with expansion of Lake Camanche WWTP, emerging nitrate issues at Wildwood Estates, and lack of storage capacity at Gayla Manor WWTP.			
Wastewater Planning			
Wastewater Master Plan	2005 regional plan		2025
Capital Improvement Plan	2013		2014
Strategic Plan	2007		2013
Sanitary Sewer Management Plan	2010		NA
Emergency Plan	Systemwide operation plan		NA
Other: Operations and Maintenance Manuals			
Notes:			
(1) For violation reporting purposes, AWA is separated into four categories: CSA-3 Lake Camanche WWTP, Wildwood Estates Leachfield, Mace Meadows and Fairway Pines Leachfield, and Gayla Manor WWTP.			
(2) Total number of overflows experienced (excluding those caused by customers) in 2013 as reported by the agency.			
(3) Total number of overflows experienced (excluding those caused by customers) in 2012 as reported by the agency.			
(4) Total number of non-compliance days in 2013 per 365 days.			
(5) Sewer overflows (excluding those caused by customers) per 100 miles of collection piping.			
(6) Agency policy, guidelines or goals for response time between service call and clearing the blockage.			

Wastewater Rates and Financing			
Residential Wastewater Rates-Ongoing Charges FY 13-14¹			
Area	Rate Description	Monthly Charge	Standby Charge
Eagle's Nest	Flat monthly charge	\$94.35	\$30.00
Surrey Junction	Flat monthly charge	\$94.35	\$27.00
Wildwood Estates	Flat monthly charge	\$94.35	\$21.00
Gayla Manor	Flat monthly charge	\$94.35	\$34.00
Jackson Pines	Flat monthly charge	\$94.35	\$39.60
Fairway Pines	Flat monthly charge	\$94.35	\$39.60
Pine Grove	Flat monthly charge	\$109.35	\$27.73
Viewpoint Estates	Flat monthly charge	\$94.35	\$39.60
Tiger Creek Estates	Flat monthly charge	\$94.35	\$32.56
Lake Camanche	Flat monthly charge	\$102.65	\$0.00
Martell	Flat monthly charge	\$74.05	\$0.00
Rate-Setting Procedures			
Policy Description: Residential sewer rates are a flat amount per home. Commercial charges are updated annually and based on water use in February and March when non-domestic water use is anticipated to be minimal to none. Wastewater rates are updated every 1-3 years.			
Last Rate Change	7/1/2012	Frequency of Rate Changes	1-3 years
Wastewater Development Fees and Requirements			
Connection Fee Approach	Properties within wastewater improvement districts pay a lower fee in light of standby charges than those outside.		
Connection Fee Timing	Upon building permit issuance.		
Connection Fee Amount ³	Lake Camanche: \$19,915 (facilities expansion charge) Martell: \$ 10,160 Elsewhere: \$ 3,705 (standby) or \$5,000 (outside)		
Land Dedication Req.	Developer must dedicate clear fee and title to lands where any above-ground facilities, such as lift stations, are constructed, and easements for underground facilities, such as pipes.		
Development Impact Fee	None		
Wastewater Operating Revenues, FY 11-12			Operating Expenditures, FY 11-12
Source	Amount	%	Amount
Total	\$1,527,423	100%	Total
Rates & Charges	\$1,353,455	89%	Administration
Property Tax	\$32,299	2%	O & M
Fees (inc. connection fees)	\$52,724	3%	Capital Depreciation
Assessments/Standby	\$56,308	4%	Capital Assets
Loans	\$0	0%	Debt
Interest	\$767	0%	Reserves
Other	\$31,870	2%	Other
Notes:			
(1) Generally, rates include wastewater-related service charges.			
(2) Wastewater use assumptions by customer type were used to calculate average monthly charges. Assumed use levels are 250 gallons per home per day, and are consistent countywide for comparison purposes. By contrast, AWA assumes 200 gallons per home per day in use for an equivalent dwelling unit.			
(3) Connection fee amount is calculated for a single-family home.			

SUMMARY OF DETERMINATIONS

Growth and population projections

- ❖ There has been little or no growth within AWA's bounds over the last five years. There continues to be approximately 20,000 residents within AWA's water service areas.
- ❖ AWA is tracking 194 planned and previously proposed developments within its boundaries which could theoretically add 15,600 new water connections and 6,000 new wastewater connections if built to completion. The entitlement status and probability of these proposed developments varies.
- ❖ Within AWA's wastewater service area, flows are projected to increase by 21 times through build-out, primarily due to anticipated growth in the Martell area.
- ❖ Within its water service area, demand is projected to increase by 35 percent through 2025.
- ❖ While additional development is possible during the time frame of this MSR, litigation, completion of the County General Plan, economic conditions and other service constraints will likely continue to limit potential water and wastewater treatment service demand in the next five years.

The Location and Characteristics of Disadvantaged Unincorporated Communities Within or Contiguous to the Agency's SOI

- ❖ There are six disadvantaged unincorporated communities within the Agency's bounds and SOI based upon mapping information provided by the State of California Department of Water Resources. The identified communities are Camanche North Shore, River Pines, Buena Vista, Drytown, Martell, and Kirkwood.
- ❖ Infrastructure and financing to remediate deficiencies and increase the quality of services in this area, including water and wastewater services, is limited and presents a significant challenge to the County, the district and the communities.

Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs and deficiencies

- ❖ AWA has minimally adequate capacity to provide service to existing water connections. The Lone and Tanner treatment plants lack treatment capacity for anticipated growth. The CAWP and Lake Camanche systems lack adequate source capacity to serve additional development.
- ❖ AWA continues to face challenges due to deteriorating infrastructure and a lack of adequate source capacity in the Camanche water system.

- ❖ Water services in the AWS, CAWP, and La Mel Heights service areas were identified as generally adequate with well operated and maintained systems.
- ❖ Water infrastructure needs include improvements to the aged and undersized distribution system in CAWP system, expansion of the Tanner and Ione treatment plants, significant improvements to the Lake Camanche distribution system, as well as additional water sources for the area.
- ❖ Wastewater services appear to be adequate based on overflow rates, peak flows, response times, compliance with regulatory requirements, and planning efforts. The Agency could improve upon its treatment effectiveness, which is below the industry average.
- ❖ AWA made great improvements in its wastewater regulatory compliance over the last five years, with only one formal and one informal enforcement action during that period.
- ❖ Wastewater infrastructure needs include additional treatment capacity and source control in the Martell area, additional storage and disposal capacity in the Lake Camanche and Gayla Manor areas, and reduction of backwash from the three water treatment plants. No collection system infrastructure needs or deficiencies were identified.
- ❖ Infrastructure and financing to remediate deficiencies and increase the quality of services, including water and wastewater services, is limited and presents a significant challenge to the County, the district and the communities

Financial ability of agencies to provide services

- ❖ The Agency reported that financing was inadequate to provide water services to the AWS, CAWP, Lake Camanche, and La Mel water systems. Consequently, the Agency conducted a rate restructuring to ensure sufficient revenues to cover costs.
- ❖ In recent years, the Agency has faced significant financing constraints forcing substantial staffing cutbacks, an agency-wide reorganization, reduction of board member compensation and benefits, foregone salary increases on the part of staff, and furlough days.
- ❖ Rates are currently being standardized and restructured. Citizen and customer reluctance to pay the short term and long term real costs of service continues to be a significant challenge to elected officials.

Status of, and opportunities for, shared facilities

- ❖ The Agency practices extensive facility sharing of its water treatment plants and major pipelines with other water purveyors. In addition, the Agency shares staff, equipment and materials with other purveyors through contract services. With regard to wastewater services, facility sharing practices and collaboration efforts include discharging to ARSA treatment facilities, financing of a regional wastewater study, and collaboration with EBMUD on joint solutions to wastewater capacity needs in the Lake Camanche area.

- ❖ The Agency identified two opportunities for future facility sharing of water infrastructure—a shared regional water treatment plant with EBMUD and CCWD in the Lake Camanche area and an intertie with the EBMUD system.

Accountability for community service needs, including governmental structure and operational efficiencies

- ❖ AWA demonstrated a high degree of accountability through its constituent outreach efforts and disclosure of information.
- ❖ Local accountability is limited by the large, countywide nature of the District. Constituents within AWA water and wastewater service areas do not perceive that they can exercise as much local control through the election process as in smaller districts. County residents outside AWA water and wastewater service areas participate in elections.
- ❖ Many small districts rely on AWA to some extent for contract maintenance services or wholesale water service. Many of these districts face some challenges in terms of service adequacy as noted elsewhere in this report. A service option for such districts is to transfer services to AWA with subsequent dissolution of the districts by LAFCO.
- ❖ Districts interested in shifting services to AWA districts must take the initiative to approach AWA, however AWA should renew efforts and outreach to ease such transitions. For example, Rabb Park CSD had expressed interest in the past in this governance option, but is no longer considering this option. Citizen and customer reluctance to pay the short term and long term real costs of service continues to be a significant challenge to elected officials at all levels of local government.
- ❖ There are overlapping water service areas in the Martell community. AWA and the City of Jackson provide water retail services within the Martell area. A SOI for AWA's utilities would bring clarity to current and future water service areas and be consistent with the limitation of AWA's powers as stated in its principal act that the Agency shall not "affect, restrict nor supersede the existence, property, right or power" of another public agency.²⁷⁰
- ❖ AWA is authorized by its principal act to distribute water anywhere in the County, except that its principal act prevents it from restricting or superseding rights or powers of cities and special districts. LAFCO's authority to clarify AWA service areas is constrained by the countywide nature of its bounds. A governance structure option is to adopt a service limited SOI for AWA which excludes established water retail service areas of other agencies.
- ❖ AWA provides wastewater collection services to the Martell community, where ARSA provides wastewater treatment and disposal services. The County continues to represent Martell through ARSA membership, and AWA has not formally joined ARSA in spite of its present reliance on ARSA facilities. A governance option to

²⁷⁰ Statutes of 1959, Chapter 2137 §95-23.

address this instability and planning quagmire is to form an independent special district for wastewater services covering the ARSA service area.

- ❖ The 2003 transfer of County Service Areas from the County to AWA does not appear to have been approved by LAFCO, as required. A governance option is to retroactively authorize the transfer and conduct appropriate dissolutions. While CSA 2 has been dissolved, CSA 1 continues to exist.