



**Legend**

- SSWD Well
- Booster Pump Stations (BPS)
- Elevated Storage Tank
- Ground Storage Tank
- Pipes
- Street
- Highways
- PCWA Water Rights of Use
- Area D Boundary
- Capehart
- McClellan
- NSA-1
- NSA-2
- NSA-3
- NSA-4
- SSA-1
- SSA-2
- SSA-3
- SSA-4

	PROJECT	135849	SITE	Water System Master Plan Sacramento Suburban Water District	Figure 2-4
	DATE	6-11-09	TITLE	Water System Facilities	

Tables 2-1 and 2-2 summarize the capacity and characteristics of the active and inactive wells in the District. The term “active” is used to refer to wells that are fully operational and used for water supply within the District.

Wells throughout the District are generally between 200 and 1,300 feet deep and draw water primarily from the Mehrten formation. The older, shallower wells typically produce up to 1,000 gpm. Some of the newer wells produce over 2,500 gpm.

Table 2-1. North Service Area Wells

Well no.	Well name	Capacity <sup>a</sup> , gpm	Well characteristics <sup>b</sup>	SCADA sites	Status
15	San Martin / Bolivar	NA	Hydropneumatic tank		Abandoned
16	Georgia / Canary	NA	Hydropneumatic tank		Abandoned
27	Melrose / Channing	680	Hydropneumatic tank		Active
31A	Watt / Elkhorn	1,600	Stationary generator		Active
34	La Cienega / Melrose	410	Hydropneumatic tank		Active
39	Thomas / Elkhorn	600	Stationary generator		Active
44	Gilman / SMUD Station	NA	–		Abandoned
56A	Fairbairn / Karl	2,400	Hydropneumatic tank, VFD, stationary generator	x	Active
57	Larchmont / Watt	NA	Hydropneumatic tank		Abandoned
58	Thirty Second / Elkhorn	650	Hydropneumatic tank	x	Active
59	Bainbridge/Holmes School	NA	–		Abandoned
59A	Bainbridge / Holmes School	2,950	VFD, stationary generator	x	Active
64	Galbrath / Antelope Woods	675	Hydropneumatic tank	x	Active
MC10	McClellan Business Park	675	In vault	x	Active
MC-C1	Capehart	450	Hydropneumatic tank, stationary generator		Active
MC-C2	Capehart	400	Hydropneumatic tank, stationary generator		Active
MC-C3	Capehart	650	–		Active
N1	Evergreen	880	Hydropneumatic tank		Active
N3	Engle	925	Hydropneumatic tank, portable generator	x	Active
N5	Hillsdale	850	VFD, portable generator	x	Active
N6	Palm	1,040	–		Active
N7	Rosebud	1,300	–	x	Active
N8	Field	1,200	–		Active
N9	Cameron	1,300	Hydropneumatic tank	x	Active
N10	Walnut	1,300	VFD, stationary generator	x	Active
N11	Diablo	NA	Hydropneumatic tank		Abandoned
N12	St Johns	1,350	–	x	Active
N13	Madison	NA	–		Abandoned
N14	Orange Grove	1,200	Portable generator		Active
N15	Cabana	1,000	Hydropneumatic tank, portable generator	x	Active
N17	Oakdale	1,100	Hydropneumatic tank		Active
N18	McCloud	NA	Hydropneumatic tank		Abandoned

Table 2-1. North Service Area Wells

Well no.	Well name	Capacity <sup>a</sup> , gpm	Well characteristics <sup>b</sup>	SCADA sites	Status
N19	Larchmont	NA	Hydropneumatic tank		Abandoned
N20	Cypress	1,300	Right angle drive, 6 hours standby		Active
N21	Yucca	NA	--		Abandoned
N22	River College	1,000	Hydropneumatic tank	x	Active
N23	Freeway	1,030	Hydropneumatic tank	x	Active
N24	Don Julio	1,190	Hydropneumatic tank		Active
N25	Sutter	1,900	Boosted	x	Active
N26	Monument	600	--		Active
N27	Jamestown	1,225	Portable generator		Active
N28	Oakbrook	NA	--		Abandoned
N29	Merrihill	1,285	Boosted	x	Active
N30	Park Oaks	1,125	--	x	Active
N31	Barrett Meadows	750	Hydropneumatic tank, portable generator	x	Active
N32A	Poker 1	2,000	VFD, stationary generator	x	Active
N32B	Poker 2	1,800	VFD, stationary generator	x	Active
N32C	Poker 3	790	Sationary generator	x	Active
N33	Walerga	1,275	--	x	Active
N34	Cottage	2,000	VFD, portable generator	x	Active
N35	Antelope	2,000	VFD	x	Active
N36	Vemer	1,500	VFD, portable generator	x	New well
<b>Total North Service Area well capacity</b>		<b>49,195</b>	--	--	--

<sup>a</sup> Pumping capacity with current equipment under average operating pressure. The capacities are higher under lower pressures.

<sup>b</sup> Well characteristics state if a well has a VFD, hydropneumatic tank, generator, and/or is fluoridated.

Table 2-2. South Service Area Wells

Well no.	Well name	Capacity <sup>a</sup> , gpm	Well characteristics <sup>b</sup>	SCADA site	Status
2A	El Prado / Park Estates	995	Fluoridated	x	Active
3A	Kubel / Armstrong	370	Hydropneumatic tank		Active
4B	Bell / Marconi	2,675	VFD, stationary generator, fluoridated	x	Active
5	Bell / El Camino	330	Hydropneumatic tank		Active
7	Rubicon / Seely Park	180	Hydropneumatic tank		Active
8	South Park / Wrendale	NA	Hydropneumatic tank		Abandoned
9	Ravenwood / Eastern	625	Hydropneumatic tank, fluoridated	x	Active
10	Potter / East Country Club <sup>c</sup>	NA	--		Abandoned
12	Hemando / Santa Anita Park	540	Hydropneumatic tank		Active
13	Calderwood / Marconi	820	--		Active
14	Marconi South / Fulton	570	Hydropneumatic tank		Active
18	Riding Club / Ladino	840	Hydropneumatic tank, fluoridated	x	Active

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Table 2-2. South Service Area Wells

Well no.	Well name	Capacity <sup>a</sup> , gpm	Well characteristics <sup>b</sup>	SCADA site	Status
19	Balmoral / Yorktown	950	Hydropneumatic tank, fluoridated	x	Active
20A	Watt / Arden	1,100	Hydropneumatic tank, fluoridated	x	Active
22	West / Becerra	650	Hydropneumatic tank, fluoridated	x	Active
23	Marconi North / Fulton	550	Hydropneumatic tank		Active
24	Becerra / Woodcrest	590	Hydropneumatic tank, fluoridated	x	Active
25	Thor / Mercury	750	Hydropneumatic tank, fluoridated	x	Active
26	Greenwood / Marconi	650	Hydropneumatic tank, fluoridated	x	Active
28	Red Robin / Darwin	585	Hydropneumatic tank, fluoridated	x	Active
30	Rockbridge / Keith	650	Hydropneumatic tank, fluoridated	x	Active
32A	Eden / Root	1,905	Portable generator, fluoridated	x	Active
33A	Auburn / Norris	2,675	VFD, stationary generator, fluoridated	x	Active
35	Ulysses / Mercury	1,000	Hydropneumatic tank, fluoridated	x	Active
37	Morse / Cottage Park	700	Stationary generator		Active
38	Watt / Auburn	500	Stationary generator		Active
40	Auburn / Yard	675	Stationary generator		Active
40A	Auburn/Yard	2,525	Hydropneumatic tank, stationary generator, fluoridated	x	Active
41	Albatross / Iris	600	Stationary generator, fluoridated	x	Active
42	Becerra / Marconi	NA	Stationary generator		Abandoned
43	Edison / Traux	850	Stationary generator		Active
45	Jamestown / Middleberry	750	Stationary generator		Active
46	Jonas / Sierra Mills	800	Stationary generator		Active
47	Copenhagen / Arden	885	Stationary generator, fluoridated	x	Active
50	Columbia / Fair Oaks	500	Hydropneumatic tank		Active
51	Sudbury / Elsdon	285	Hydropneumatic tank		Active
54	North / Root	NA	Hydropneumatic tank		Abandoned
55A	Stewart / Lynndale	2,000	Hydropneumatic tank, portable generator, fluoridated	x	Active
60	Whitney / Conchetta	600	Fluoridated	x	Active
63A	American River Well Field	NA	--		Abandoned
63B	American River Well Field	NA	--		Abandoned
63C	American River Well Field	NA	--		Abandoned
63D	American River Well Field	NA	--		Abandoned
63K	American River Well Field	NA	--		Abandoned
63L	American River Well Field	NA	--		Abandoned

REGULATORY COMPLIANCE

Table 2-2. South Service Area Wells

Well no.	Well name	Capacity <sup>a</sup> , gpm	Well characteristics <sup>b</sup>	SCADA site	Status
65	Merrily / Annadale	1,250	Hydropneumatic tank, fluoridated	x	Active
66	Eastern / Woodside Church	1,350	Hydropneumatic tank, portable generator, fluoridated	x	Active
67	El Camino / Eastern	NA	Hydropneumatic tank		Abandoned
68	Northrop / Dornajo	1,600	–		Active
69	Hillsdale / Cooper	450	Hydropneumatic tank		Active
70	Sierra / Blackmer	350	Hydropneumatic tank		Active
71	River Drive/Jacob	2,675	VFD, portable generator, fluoridated	x	Active
72	River Walk / NETP	1,850	Hydropneumatic tank, portable generator, fluoridated	x	Active
73	River Walk / NETP East	3,500	Fluoridated, equipped for portable generator	x	Active
74	River Walk / NETP South	2,700	Fluoridated, equipped for portable generator	x	Active
75	Enterprise / Northrop	1,150	Stationary generator, fluoridated	x	Active
76	Fulton / Fair Oaks	250	Hydropneumatic tank		Active
77	Larch / Northrop	400	Hydropneumatic tank		Active
<b>Total South Service Area well capacity</b>		<b>49,195</b>	–		–

<sup>a</sup> Pumping capacity with current equipment under average operating pressure. The capacities are higher under lower pressures.

<sup>b</sup> Well characteristics state if a well has a VFD, hydropneumatic tank, generator, and/or is fluoridated.

<sup>c</sup> Well 10 is currently being used as a single zone monitoring well according to Jim Arenz on 12/22/08.

## 2.2.2 Surface Water Facilities

The District imports surface water from three supply sources. The District's current surface water agreements are with PCWA, City of Sacramento, and the United States Bureau of Reclamation (USBR) (Section 215 Central Valley Project (CVP) water).

Surface water from PCWA and the USBR is diverted from Folsom Lake and treatment is provided by the Sydney N. Peterson WTP. The Peterson WTP is owned and operated by SJWD. SJWD also supplies treated surface water from Folsom Reservoir for a family of water entities (SJWD Retail Service Area, Orange Vale Water Company, Citrus Heights Water District, City of Folsom-Ashland Area, and Fair Oaks Water District [FOWD]).

The Peterson WTP has a nominal capacity of 120 million gallons per day (MGD). Treated water is pumped to the Hinkle Reservoir, which has 62 million gallons (MG) of storage capacity. From the Hinkle Reservoir, the potable surface water supply for the District is delivered by gravity flow through the San Juan Cooperative Transmission Pipeline (CTP) followed by the Antelope Conveyance Pipeline (ACP) (formerly referred to as the Northridge Conveyance Pipeline).

The 48-inch diameter, gravity flow ACP is constructed from the terminus of the San Juan Cooperative Transmission Pipeline at C-Bar-C Park, which is located on Oak Avenue, east of Sunrise Boulevard within the Citrus Heights Water District service area. The District owns the total pipeline capacity of 59.2 MGD in the ACP and that same quantity of flow in the larger capacity CTP. The surface water facilities are illustrated on Figure 2-4.

The District has a surface water supply from the American River through a contract with the City of Sacramento, dating to 1964. Historically, only a portion of this amount has been diverted through the American River Well Field located in the SSA. The American River Well Field is not currently being used because it does not meet the requirements of the Surface Water Treatment Rule. In 2006, the District began receiving surface water from the City of Sacramento. This water is treated at the City's Fairbairn WTP and delivered to the District via the City's Howe Avenue transmission main to an existing interconnection located near Enterprise Drive and Northrop Avenue in the SSA.

## 2.3 Distribution System

This section discusses the District's distribution system, including storage, pump stations, and interconnections.

The District has four service areas: NSA, SSA, McClellan Business Park, and Arbors at Antelope. Frequently in this plan the McClellan Business Park and Arbors at Antelope service areas are included as part of the larger NSA. Within the larger NSA there are two pressure zones: larger NSA (includes McClellan Business Park and Arbors at Antelope) and the North Highlands subzone. The North Highlands subzone is hydraulically separated from the rest of the NSA by a pressure reducing valve (PRV) located at Bainbridge Drive and Walerga Road. While McClellan Business Park and Arbors at Antelope are separate service areas, they are not hydraulically separated pressure zones. There is no PRV between Arbors at Antelope and the NSA. Water from the NSA to McClellan Business Park flows directly into the McClellan Business Park service area (boosters from the NSA to McClellan Business Park are rarely used). Water is served to McClellan Business Park but prevented from flowing back into the NSA. Because of fluoridation and surface water place of use restrictions in the SSA, the SSA is hydraulically separated from the NSA (by closing main line valves) and is its own pressure zone.

A hydraulic schematic of the distribution system is shown on Figure 2-6.

### 2.3.1 Pipelines

The distribution system ranges in size from 48-inch mains down to 4-inch laterals. Table 2-3 provides a breakdown of the linear feet of each pipe diameter in the system. Pipeline material consists predominantly of asbestos cement, polyvinyl chloride (PVC), ductile iron, mortar lined coated steel, and cast iron pipe. Table 2-4 provides a breakdown in linear feet of the pipe materials in the system. The District's standards include the requirement for gridding cross connecting mains at intervals of approximately 1,300 feet with a minimum size of 12-inch. Exceptions have been made where 10-inch mains and larger exist in the grid pattern.