Appendix E
Water Resources Supporting Information

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This appendix provides supporting detail for water quality and groundwater discussions in Section 3, Water Resources, and presents it in the same sequence as that discussion. Tables are provided first, and figures follow the tables. All references for the sources cited in this appendix are provided at the end of Section 3, Water Resources.

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Table E-1
Delta Water Quality

	Rivers at Mallard Island				Banks Pumping Plant*			
Analyte	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**
Inorganics								
Arsenic (µg/L)	29/29 (T)	0.80	2.50	1.77	103/104	1.0	4.0	2.0
Boron (µg/L)	—	—	—	—	—	—	—	—
Cadmium (µg/L)	27/29 (T)	0.01	0.04	0.02	0/100	—	—	—
Chromium (µg/L)	6/6 (T)	2.72	80.37	10.66	68/104	1.0	8.0	2.3
Copper (µg/L)	29/29 (T)	2.39	4.81	3.15	103/104	1.0	7.0	2.0
Lead (µg/L)	29/29 (T)	0.23	1.13	0.55	1/104	7.0	7.0	7.0
Mercury (µg/L)	27/29 (T)	0.002	0.01	0.01	1/104	0.2	0.2	0.2
Methylmercury (ng/L)	22/29 (T)	0.04	0.33	0.08	—	—	—	—
Nickel (µg/L)	29/29 (T)	2.03	6.73	3.57	82/91	1.0	2.0	1.2
Selenium (µg/L)	27/29 (T)	0.06	0.45	0.11	54/104	1.0	2.0	1.1
Zinc (µg/L)	29/29 (T)	0.63	7.06	3.40	1/104	6.0	6.0	6.0
Water Quality Parameters								
Ammonia (mg/L)	29/29	0.02	0.21	0.06	103/104	0.01	0.15	0.05
NO3+NO2 (mg/L)	—	—	—	—	104/104	0.05	1.74	0.46
Total Nitrogen (mg/L)	—	—	—	—	78/78	0.26	2.44	0.90
Nitrate, D (mg/L)	29/29	0.11	0.53	0.26	—	—	—	—
Total Phosphorus (mg/L)	—	—	—	—	78/78	0.06	0.28	0.11
Phosphate, D (mg/L)	29/29	0.01	0.18	0.06	—	—	—	—
Total Alkalinity (mg/L)	—	—	—	—	104/104	28	102	67
Salinity, D (psu)	2/25	2	2	2	—	—	—	—
Conductivity (µS/cm)	26/29	124	3820	751	100/100	125	730	383
TDS (mg/L)	—	—	—	—	100/100	74	428	218
TSS (mg/L)	16/16	11	46	25	33/33	2	35	11
Turbidity (NTU)	—	—	—	—	104/104	2	71	9

* MWQI 2011, data collected 1999–2001, 2003–2009
Note: Analyte concentrations are in dissolved fraction unless otherwise indicated.
—: No data available
µS/cm: microSiemens per centimeter
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean
mg/L: milligram per liter
Min: minimum
ng/L: nanogram per liter
NTU: nephelometric turbidity unit

Table E-2
Selenium Concentrations in Largemouth Bass Fillets and Whole Bodies at Representative Locations in the Delta Watershed, 1999–2007

	Fillet (wet weight)[b]				Whole Body (dry weight)[b,c]			
Location[a]	**1999**	**2000**	**2005**	**2007**	**1999**	**2000**	**2005**	**2007**
Sacramento R., Veterans Bridge (1)			0.58±0.52				2.27±1.57	
Sacramento R., River Mile 44 (2)		0.70±0.05	0.32±0.17	0.45±0.09		2.64±0.38	1.47±0.65	1.85±0.35
Sacramento R. near Rio Vista (3)		0.38±0.23	0.38±0.11	0.62±0.40		1.50±0.54	1.74±0.43	2.58±1.39
San Joaquin R., Fremont Ford (4)			0.48±0.31				1.94±1.12	
San Joaquin R., Crows Landing (5)	0.66	0.75±0.10	0.72±0.66		2.54	2.69±0.40	2.86±1.37	
San Joaquin R., Vernalis (6)	0.61	0.28±0.28	0.47±0.17	0.61±0.25	2.37	1.29±1.15	1.95±0.47	2.44±0.13
Old R. near Tracy (7)	0.58±0.47		0.56±0.30		2.31±1.83		2.41±1.11	
San Joaquin R., Potato Slough (8)	0.38	0.34±0.14	0.29±0.17	0.61±0.62	1.59	1.36±0.38	1.32±0.53	2.57±2.12
Middle R., Bullfrog (9)	0.49		0.44±0.16	0.51±0.16	1.76		1.93±0.77	2.14±0.37
Franks Tract (10)		0.38±0.21	0.27±0.33	0.68±0.25		1.66±0.70	1.20±1.11	2.37±0.29
Big Break (11)		0.39±0.22	0.21±0.13	0.71±0.37		1.57±0.67	1.03±0.48	2.86±1.02
Discovery Bay (12)			0.37±0.12				1.63±0.35	
Whiskey Slough (13)			0.41±0.76				1.74±2.39	

Source: Central Valley RWQCB 2010c, p. 24

[a] The number in parentheses indicates the station locations identified in Figure E-1.

[b] Mean ± 95% confidence limits; values without confidence limits are the average of a composite of five largemouth bass analyzed by the State Toxic Monitoring Program in 1999.

[c] Whole-body dry weights were calculated from wet weights using the formula in Saiki et al. 1991, p. 380

Table E-3
Mercury Concentrations in Largemouth Bass Fillets at Representative Locations in the Delta Watershed, 1999–2000

Location	Fillet Concentrations* of Mercury mg/kg Wet Weight	Number of Samples
Feather R. above Yuba R.	0.629	10
Feather R. at Nicolaus	0.683	10
Sacramento R., River Mile 44	0.869	10
Sacramento R. at Iselton	0.628	10
Putah Creek	0.401	16
Cache Slough	0.559	15
Cosumnes R.	0.859	19
Mokelumne R.	1.091	17
White Slough	0.226	10
Sherman Island	0.323	10
Mildred Island	0.226	10
San Joaquin R., Naval Station	0.352	10
Stanislaus R.	0.661	10
San Joaquin R., Crows Landing	0.635	20
San Joaquin R., Vernalis	0.739	18
San Joaquin R., Potato Slough	0.365	8
San Joaquin R., Landers	0.565	17
Franks Tract	0.226	10
Big Break	0.226	15

Source: SFEI 2009, Mercury
* Fillets normalized to 350 mm standard length fish

Table E-4
Suisun Water Quality

Analyte	Suisun Marsh				Suisun Bay			
	FOD	Min	Max	Mean	FOD	Min	Max	Mean
Inorganics								
Arsenic (µg/L)	34/34	1.19	4.03	2.40	5/5	1.51	3.49	2.38
Boron (µg/L)	—	—	—	—	—	—	—	—
Cadmium (µg/L)	30/34	0.02	0.09	0.05	5/5	0.04	0.09	0.07
Chromium (µg/L)	6/6	4.22	198.23	34.69	—	—	—	—
Copper (µg/L)	34/34	2.99	8.43	4.89	5/5	2.76	4.28	3.46
Lead (µg/L)	34/34	0.28	3.44	1.15	5/5	0.15	0.92	0.49
Mercury (µg/L)	32/34	0.00	0.04	0.01	5/5	0.003	0.02	0.01
Methylmercury (ng/L)	27/34	0.02	0.20	0.07	2/5	0.03	0.04	0.04
Nickel (µg/L)	34/34	2.35	12.52	5.65	5/5	1.91	5.14	3.12
Selenium (µg/L)	32/34	0.04	0.19	0.11	5/5	0.10	0.21	0.14
Zinc (µg/L)	34/34	2.57	16.06	6.55	5/5	2.30	5.25	3.43
Water Quality Parameters								
Ammonia, D (mg/L)	34/34	0.03	0.20	0.07	5/5	0.08	0.13	0.10
Nitrate, D (mg/L)	33/34	0.17	0.61	0.32	5/5	0.12	0.51	0.31
Phosphate, D (mg/L)	34/34	0.02	0.24	0.08	5/5	0.08	0.12	0.10
Salinity, D (psu)	20/29	2.21	9.66	5.39	4/4	8.53	13.95	11.19
Conductivity (µS/cm)	34/34	170	21,260	4,877	5/5	14,160	22,900	18,164
TSS (mg/L)	17/17	22	127	59	—	—	—	—

Source: SFEI 2011b, data collected 1999–2008
Note: Analyte concentrations are in total fraction unless otherwise indicated.
—: No data available
µg/L: microgram per liter
µS/cm: microSiemens per centimeter
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean
mg/L: milligram per liter
Min: minimum
ng/L: nanogram per liter
psu: practical salinity unit

Table E-5
Sacramento River Water Quality

	Yuba River at Marysville[a]				Downstream of Feather River Wildlife Area[b]				American River at WTP[c]				Sacramento River at Freeport[d]			
Analyte	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**
Inorganics																
Arsenic (µg/L)	8/8	0.44	1.03	0.54	14/14	0.52	0.76	0.60	—	—	—	—	32/32	1.06	2.25	1.61
Boron (µg/L)	0/8 (D)	—	—	—	0/31 (D)	—	—	—	0/139 (D)	—	—	—	—	—	—	—
Cadmium (µg/L)	0/8	—	—	—	1/14	0.05	0.05	0.05	—	—	—	—	—	—	—	—
Chromium (µg/L)	8/8	0.19	2.26	0.50	13/14	0.17	1.34	0.52	—	—	—	—	—	—	—	—
Copper (µg/L)	8/8	0.33	2.94	0.73	14/14	0.61	2.12	1.04	—	—	—	—	—	—	—	—
Lead (µg/L)	3/8	0.06	0.50	0.19	14/14	0.02	0.43	0.06	—	—	—	—	—	—	—	—
Mercury (ng/L)	—	—	—	—	—	—	—	—	—	—	—	—	45/45	1.2	30.6	4.1
Methylmercury (ng/L)	—	—	—	—	—	—	—	—	—	—	—	—	36/36	0.05	0.24	0.10
Nickel (µg/L)	8/8	0.57	3.18	1.05	14/14	0.82	3.29	1.32	—	—	—	—	—	—	—	—
Selenium (µg/L)	0/8	—	—	—	2/14	0.13	0.25	0.18	—	—	—	—	31/32	0.04	0.23	0.10
Zinc (µg/L)	8/8	1.27	4.16	1.92	14/14	0.14	1.55	0.35	—	—	—	—	—	—	—	—
Water Quality Parameters																
Ammonia, D (mg/L)	1/8	0.01	0.01	0.01	17/30	0.01	0.07	0.02	25/92	0.01	0.1	0.02	34/135	0.01	0.55	0.02
NO3+NO2, D (mg/L)	5/8	0.01	0.07	0.03	25/31	0.01	0.20	0.04	75/93	0.01	0.4	0.04	105/135	0.03	0.44	0.12
Nitrogen (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—	71/71	0.1	1.0	0.3
Total Kjeldahl Nitrogen (mg/L)	0/1	—	—	—	—	—	—	—	65/91	0.10	0.30	0.14	—	—	—	—
Total Alkalinity (mg/L)	8/8	26	42	35	21/21	39	51	42	192/192	16	36	25	—	—	—	—
Total Phosphorus (mg/L)	6/8	0.01	0.03	0.01	29/31	0.01	0.11	0.02	70/91	0.01	0.10	0.01	134/135	0.03	0.29	0.07
Conductivity (µS/cm)	8/8	66	100	85	—	—	—	—	194/194	40	190	64	—	—	—	—
TDS (mg/L)	8/8	47	61	57	30/30	48	65	55	136/136	28	109	39	—	—	—	—
TSS (mg/L)	9/10	1	27	3	32/34	1	21	4	—	—	—	—	—	—	—	—
Turbidity (NTU)	—	—	—	—	—	—	—	—	175/198	1	99	2	—	—	—	—

Note: Analyte concentrations are in total fraction unless otherwise indicated.
[a] Source: USEPA 2011, data collected 2008–2010
[b] Source: USEPA 2011, data collected 2002–2004
[c] Source: Central Valley RWQCB 2011e, data collected 1999–2010
[d] Source: USGS 2011, data collected 1999–2010 except for mercury (Central Valley RWQCB 2008, data collected 1999–2002) and methyl mercury (Central Valley RWQCB 2008, data collected 2000–2003)
—: No data available
µg/L: microgram per liter
µS/cm: microSiemens per centimeter
D: Dissolved
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean; average if cell is highlighted.
mg/L: milligram per liter
Min: minimum
ng/L: nanogram per liter
NTU: nephelometric turbidity unit
WTP: Water Treatment Plant

Table E-6
San Joaquin River Tributaries Water Quality

	Orestimba Creek[a]				Merced River near Newman[b]				Tuolumne River near Grayson[c,d]				Stanislaus River near Ripon[e,f]			
Analyte	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**
Inorganics																
Arsenic (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Boron (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cadmium (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chromium (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Copper (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Lead (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mercury (µg/L)	—	—	—	—	1/1	0.6	0.6	0.6	1/1	1.2	1.2	1.2	1/1	0.6	0.6	0.6
Nickel (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Selenium (µg/L)	6/18	1.2	2.0	1.6	—	—	—	—	—	—	—	—	—	—	—	—
Zinc (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Water Quality Parameters																
Ammonia (mg/L)	51/103	0.01	9.75	0.08	53/118	0.01	0.75	0.04	5/5	0.08	0.54	0.22	3/3	0.04	0.30	0.10
NO3+NO2 (mg/L)	103/103	0.03	7.59	1.63	117/118	0.04	4.98	1.16	5/5	0.6	1.2	0.8	3/3	0.4	0.6	0.5
Total Nitrogen (mg/L)	36/36	0.3	6.7	1.8	46/46	0.2	5.3	1.3	—	—	—	—	—	—	—	—
Total Kjeldahl Nitrogen (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Phosphorus (mg/L)	103/103	0.02	1.71	0.22	116/118	0.01	1.23	0.06	5/5	0.1	0.8	0.3	3/3	0.08	0.58	0.20
Total Alkalinity (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Conductivity (µS/cm)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TDS (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TSS (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Turbidity (NTU)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: Analyte concentrations are in dissolved fraction unless otherwise indicated.,
[a] USGS 2011, data collected 1999–2001
[b] USGS 2011, data collected 1999–2006, 2008–2009
[c] USGS 2011, mercury data collected 2002 near Waterford
[d] USGS 2011, data (except mercury) collected 2000–2001 near Grayson
[e] USGS 2011, mercury data collected 2002 at Riverbank
[f] USGS 2011, data (except mercury) collected 2000–2001 near Ripon
—: No data available
µg/L: microgram per liter
µS/cm: microSiemens per centimeter
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean; average if cell is highlighted.
mg/L: milligram per liter
Min: minimum
NTU: nephelometric turbidity unit

Table E-7
San Joaquin River Water Quality

Analyte	San Joaquin River at Hills Ferry[a]				San Joaquin River at Airport Way (Vernalis)[b]				San Joaquin River near Vernalis[c]			
	FOD	Min	Max	Mean	FOD	Min	Max	Mean	FOD	Min	Max	Mean
Inorganics												
Arsenic (µg/L)	9/16 (T)	4.2	9.4	5.5	2/22 (T)	2.1	3.0	2.5	36/36	1.1	2.7	1.6
Boron (µg/L)	117/117	190	2600	1273	548/555	50	920	298	—	—	—	—
Cadmium (µg/L)	0/16 (T)	—	—	—	0/22 (T)	—	—	—	—	—	—	—
Chromium (µg/L)	10/28 (T)	2.1	10.4	4.4	23/53 (T)	1.0	3.7	1.8	—	—	—	—
Copper (µg/L)	21/28 (T)	1.1	7.5	2.5	38/52 (T)	1.0	5.5	2.5	—	—	—	—
Lead (µg/L)	0/29 (T)	—	—	—	0/53 (T)	—	—	—	—	—	—	—
Mercury (ng/L)	—	—	—	—	0/21 (T)	—	—	—	31/31	3.1	21.7	7.7
Methylmercury (ng/L)	—	—	—	—	—	—	—	—	31/31	0.1	0.3	0.2
Nickel (µg/L)	7/29 (T)	5.1	13.0	8.4	5/53 (T)	5.2	12.0	6.6	—	—	—	—
Selenium (µg/L)	99/99	0.5	11.1	3.9	492/552	0.4	2.8	0.9	42/54	0.3	2.2	0.8
Zinc (µg/L)	11/28 (T)	2.3	16.0	7.7	28/51 (T)	2.1	21.0	4.7	—	—	—	—
Water Quality Parameters												
Ammonia (mg/L)	5/23	0.06	0.22	0.10	4/40	0.06	0.42	0.13	89/228	0.01	0.41	0.06
NO3+NO2 (mg/L)	—	—	—	—	—	—	—	—	228/228	0.07	2.87	1.38
Total Nitrate (mg/L)	11/11	3	19	8	27/27	3	12	8	—	—	—	—
Total Nitrogen (mg/L)	Cal	4	22	9	Cal	3	14	8	108/108	0.4	3.7	1.8
Total Kjeldahl Nitrogen (mg/L)	10/20	0.7	2.6	1.3	8/34	0.2	1.9	0.7	—	—	—	—
Total Phosphorus (mg/L)	—	—	—	—	—	—	—	—	89/228	0.1	0.9	0.2
Ortho-phosphate-P (mg/L)	8/22	0.04	0.15	0.09	8/37	0.07	0.16	0.11	—	—	—	—
Total Alkalinity (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Conductivity (µS/cm)	—	—	—	—	—	—	—	—	—	—	—	—
TDS (mg/L)	19/19	150	1700	1016	34/34	140	630	355	—	—	—	—
TSS (mg/L)	44/44	30	170	94	286/287	7	190	42	—	—	—	—
Turbidity (NTU)	19/20	28	194	79	57/57	-0.6	86.6	33.8	—	—	—	—

Note: Analyte concentrations are in dissolved fraction unless otherwise indicated.
[a] SWAMP 2011, data collected 1999–2009
[b] SWAMP 2011, data collected 1999–2009
[c] USGS 2011, data collected 1999–2010 (except mercury and methylmercury). Mercury data collected 2000–2004 (CVRWQCB 2008). Methyl mercury data collected 2000–2001 and 2003-2004 (CVRWQCB 2008)—: No data available
µg/L: microgram per liter
µS/cm: microSiemens per centimeter
Cal: Calculated from Total Nitrogen and Total Kjeldahl Nitrogen values provided in table.
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean; average if cell is highlighted.
mg/L: milligram per liter
Min: minimum
NTU: nephelometric turbidity unit

Table E-8
Eastside Streams Water Quality

	Cosumnes River at Michigan Bar[a]				Mokelumne River at I-5[b]				Calaveras River upstream of West Lane[c]			
Analyte	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**	**FOD**	**Min**	**Max**	**Mean**
Inorganics												
Arsenic (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Boron (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Cadmium (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Chromium (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Copper (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Lead (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Mercury (ng/L)	1/1	1.4	1.4	1.4	21/21	0.3	12.3	4.5	4/4	13.2	26.2	19.9
Methylmercury (ng/L)	—	—	—	—	20/23	0.07	0.32	0.16	4/4	0.11	0.19	0.14
Nickel (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Selenium (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Zinc (µg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Water Quality Parameters												
Ammonia, D (mg/L)	1/45	0.01	0.01	0.01	—	—	—	—	—	—	—	—
NO3+NO2 (mg/L)	12/45 (D)	0.03	0.27	0.09	—	—	—	—	—	—	—	—
Nitrogen (mg/L)	21/21	0.04	0.32	0.12	—	—	—	—	—	—	—	—
Total Alkalinity (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Total Phosphorus (mg/L)	45/45	0.004	0.058	0.009	—	—	—	—	—	—	—	—
Conductivity (µS/cm)	—	—	—	—	—	—	—	—	—	—	—	—
TDS (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—
TSS (mg/L)	—	—	—	—	—	—	—	—	—	—	—	—
Turbidity (NTU)	—	—	—	—	—	—	—	—	—	—	—	—

Note: Analyte concentrations are in total fraction unless otherwise indicated.
[a] USGS 2011, data collected 2001–2006
[b] Central Valley RWQCB 2008, data collected 2000, 2001, 2003
[c] Central Valley RWQCB 2008, data collected 2003–2004
—: No data available
D: Dissolved
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean
mg/L: milligram per liter
Min: minimum
ng/L: nanogram per liter
NTU: nephelometric turbidity unit
µS/cm: microSiemens per centimeter

Table E-9
Tulare Water Quality

Analyte	California Aqueduct at Kern River Intertie[a]				USEPA Tulare Area Results[b]			
	FOD	Min	Max	Mean	FOD	Min	Max	Mean
Inorganics								
Arsenic, D (µg/L)	2/2	3.0	5.0	3.9	—	—	—	—
Boron, D (µg/L)	0/2	—	—	—	—	—	—	—
Cadmium, D (µg/L)	0/2	—	—	—	—	—	—	—
Chromium, D (µg/L)	1/2	1.0	1.0	1.0	—	—	—	—
Copper, D (µg/L)	2/2	1.0	1.0	1.0	—	—	—	—
Lead, D (µg/L)	0/2	—	—	—	—	—	—	—
Mercury, D (µg/L)	0/2	—	—	—	—	—	—	—
Nickel, D (µg/L)	0/2	—	—	—	—	—	—	—
Selenium (µg/L)	0/2 (D)	—	—	—	2/2	0.2	0.2	0.2
Zinc (µg/L)	1/2 (D)	6.0	6.0	6.0	3/7	0.2	21.0	2.0
Water Quality Parameters								
Ammonia, D (mg/L)	0/2	—	—	—	—	—	—	—
NO3+NO2, D (mg/L)	2/2	0.02	0.03	0.02	—	—	—	—
Nitrogen (mg/L)	—	—	—	—	2/2	0.06	0.31	0.13
Total Kjeldahl Nitrogen (mg/L)	1/2	0.3	0.3	0.3	—	—	—	—
Total Alkalinity (mg/L)	2/2	36	49	42	—	—	—	—
Total Phosphorus (mg/L)	2/2	0.06	0.13	0.09	2/2	10	86	29
Conductivity (µS/cm)	2/2	86	112	98	20/20	20	246	92
TDS (mg/L)	2/2	54	74	63	—	—	—	—
TSS (mg/L)	3/3	26	42	36	7/7	0.60	2.24	1.38
Turbidity (NTU)	3/3	17	21	20	7/7	0.21	1.62	0.53

Source: USEPA 2011
[a] Data collected in 2006
[b] Data collected 2000–2010
Note: Analyte concentrations are in total fraction unless otherwise indicated.
—: No data available
µg/L: microgram per liter
µS/cm: microSiemens per centimeter
D: Dissolved
FOD: frequency of detection (number of samples with detected analyte/total number of samples)
Max: maximum
Mean: geometric mean
mg/L: milligram per liter
Min: minimum
NTU: nephelometric turbidity unit

Figure E-1
Sampling Sites for Analysis of Selenium in Largemouth Bass
Source: Central Valley RWQCB 2011e

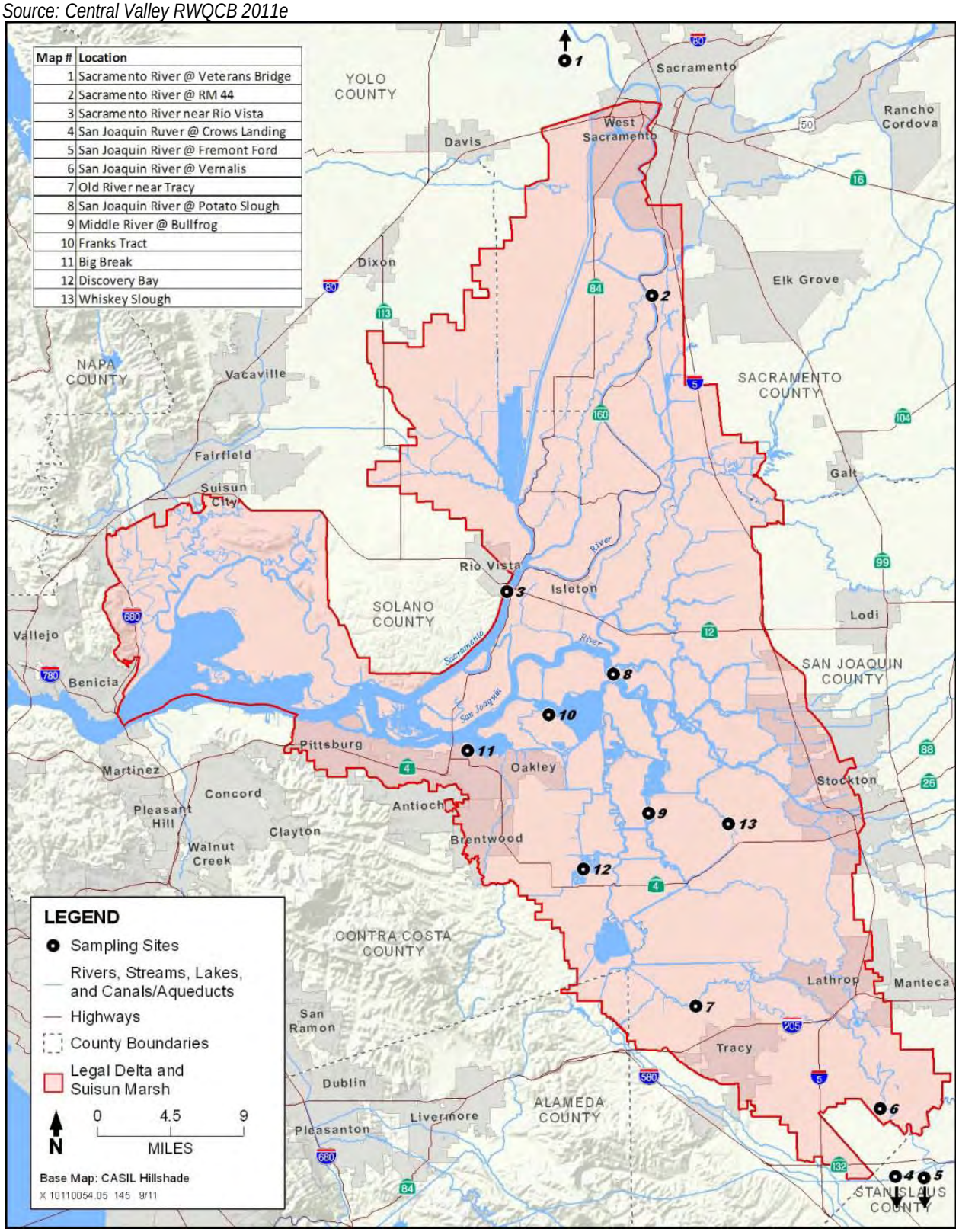


Figure E-2
Sampling Sites for Analysis of Mercury in Largemouth Bass
Source: SFEI 2009

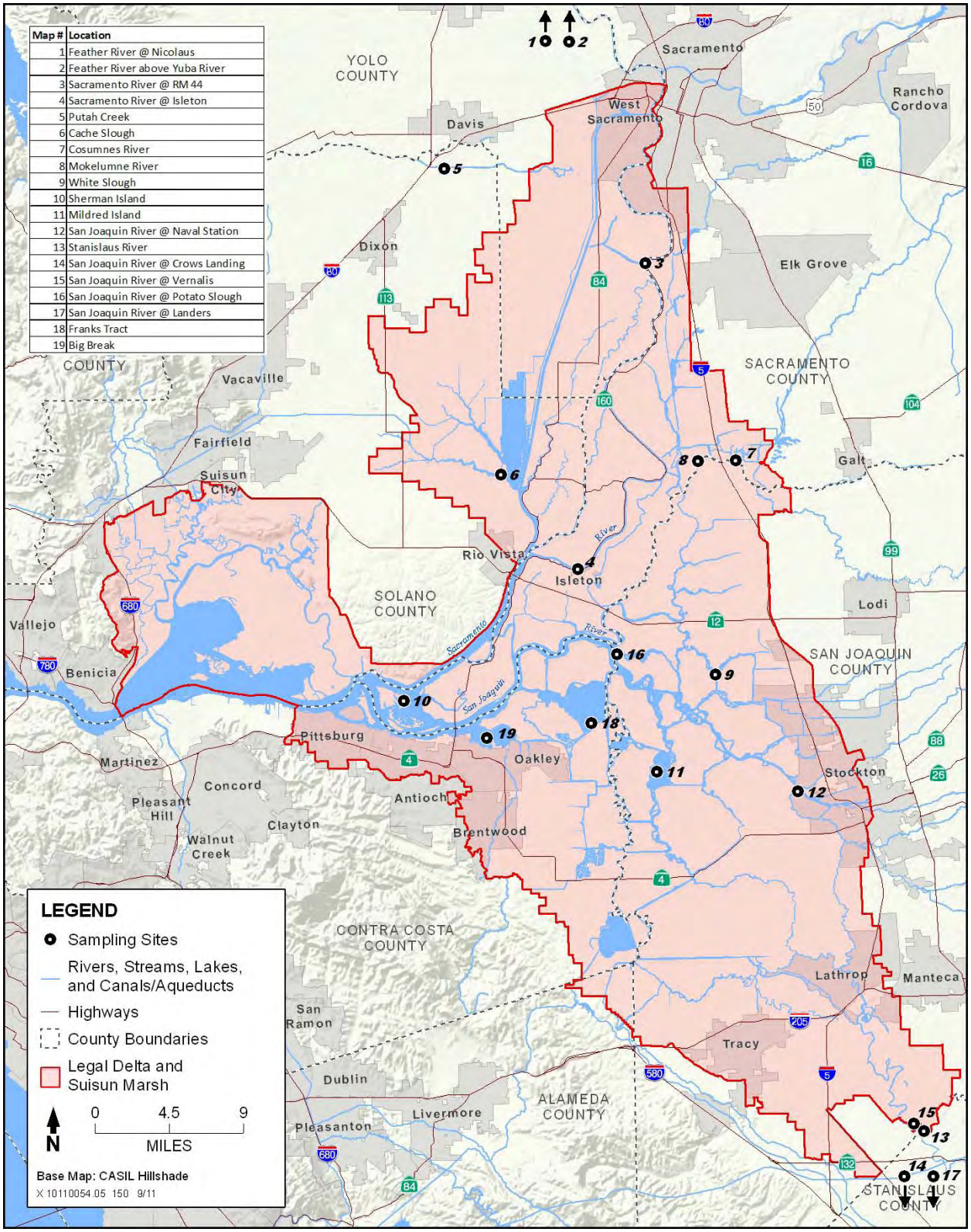


Figure E-3
Delta Mendota Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

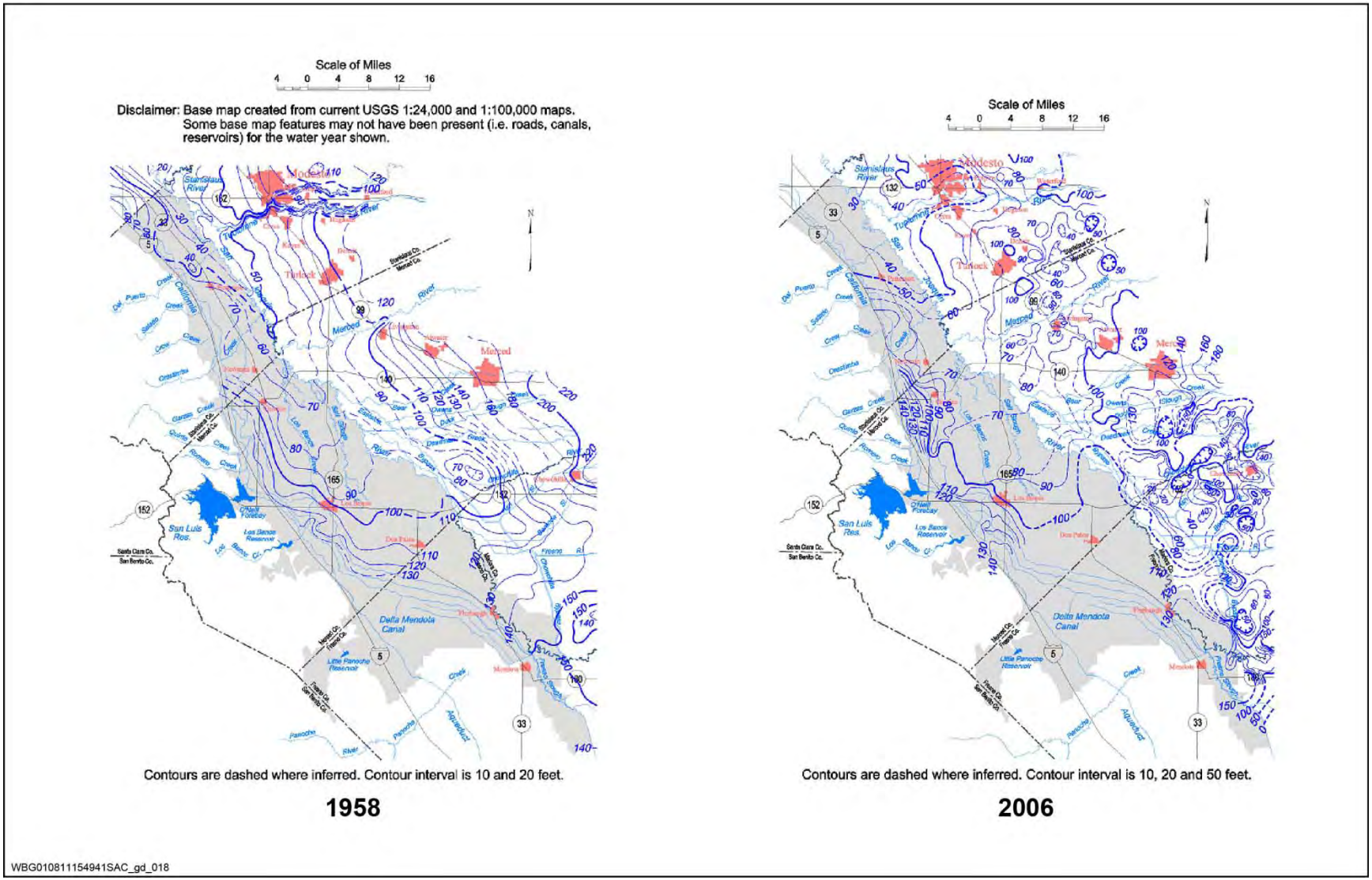


Figure E-4
Modesto Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

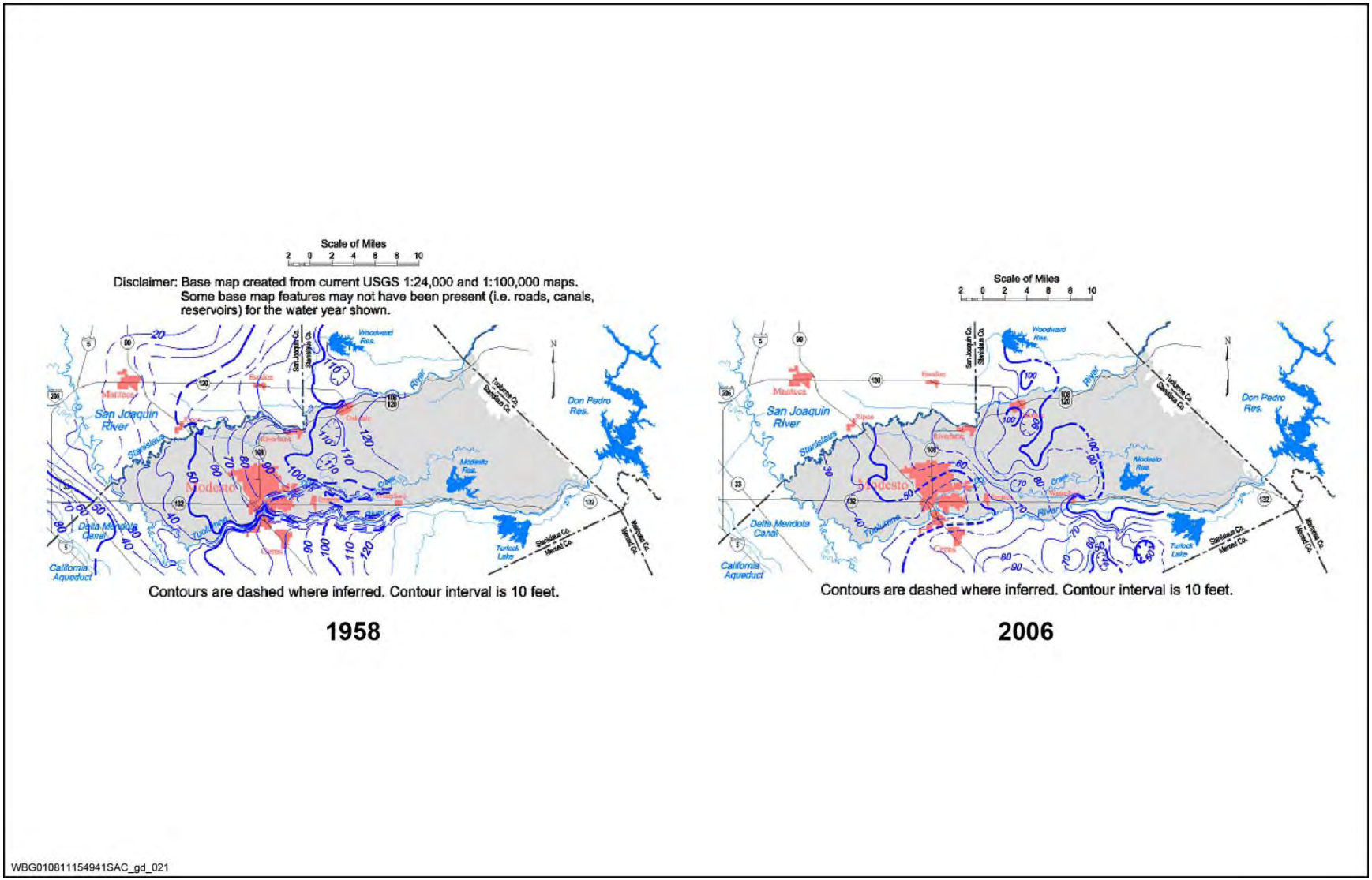


Figure E-5
Turlock Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

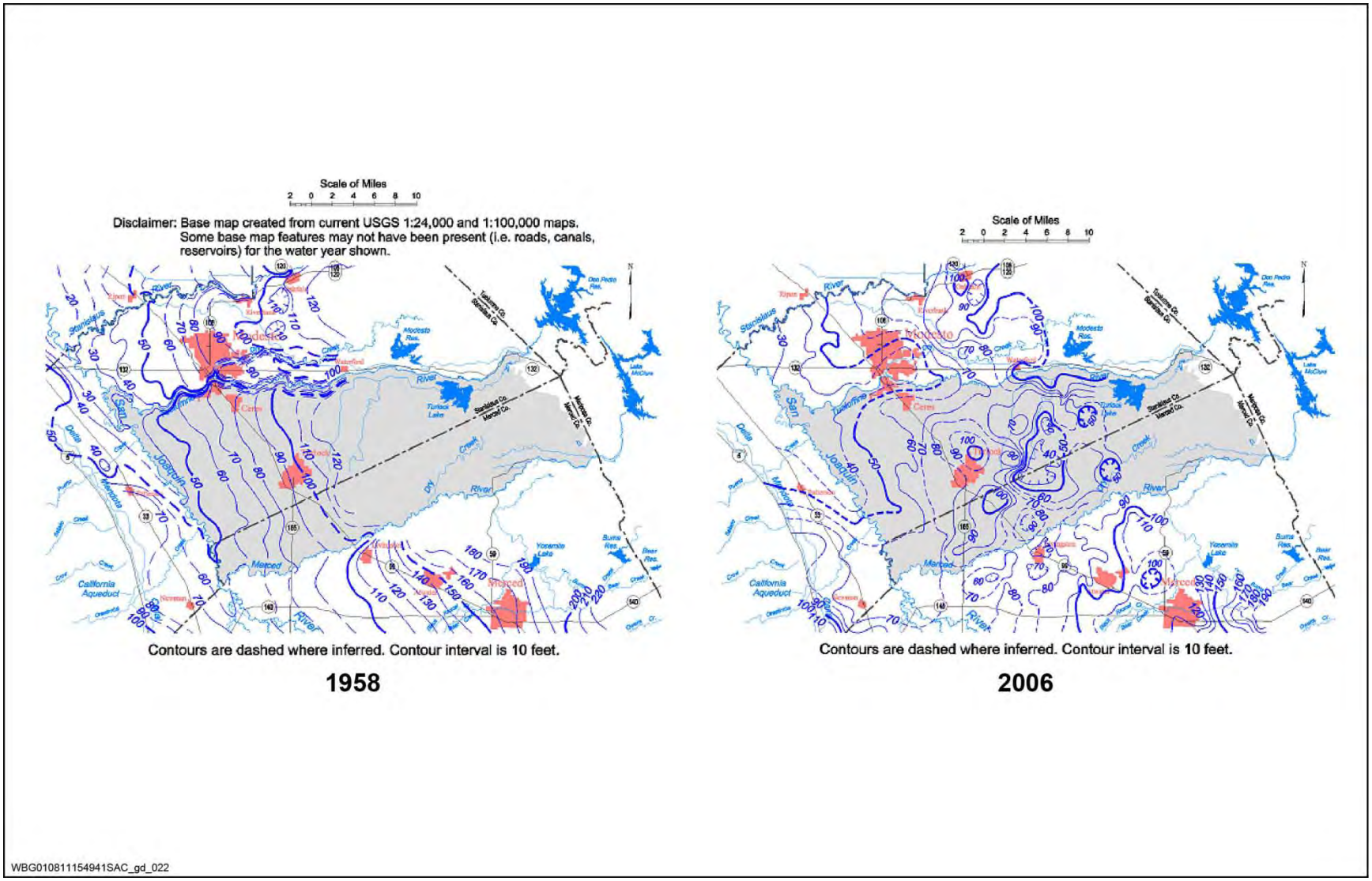


Figure E-6
Merced Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

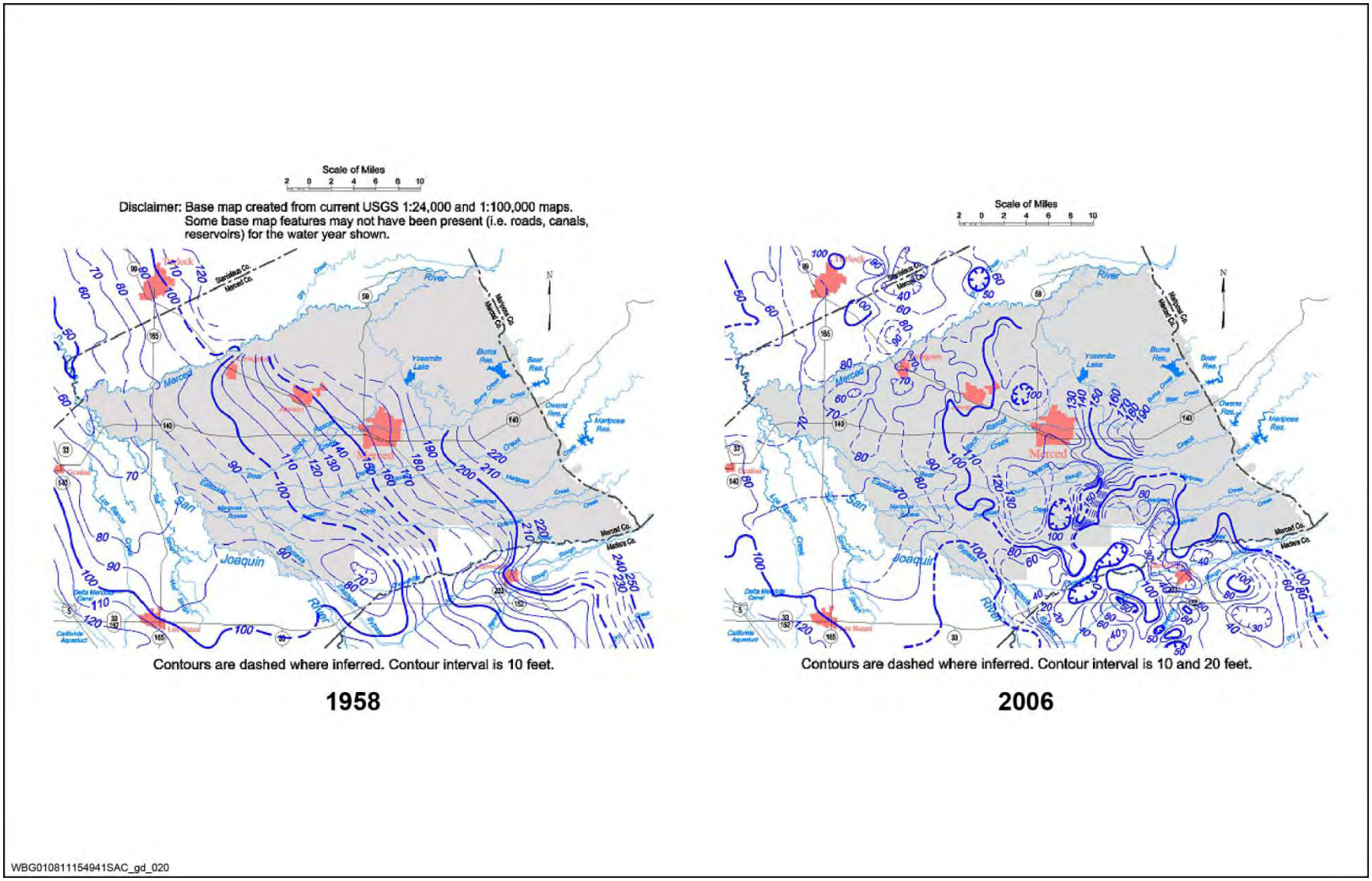


Figure E-7
Chowchilla Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

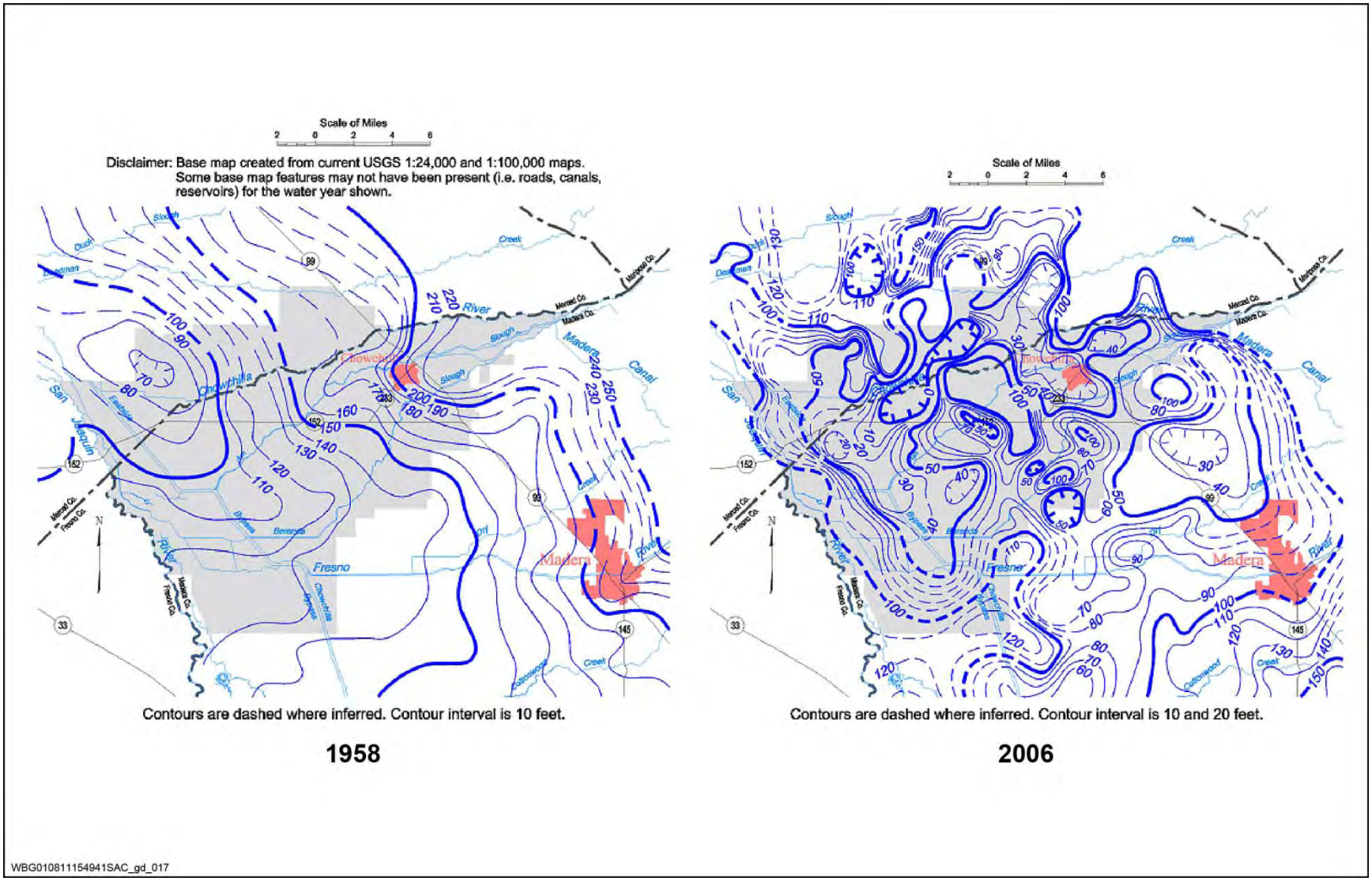


Figure E-8
Madera Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

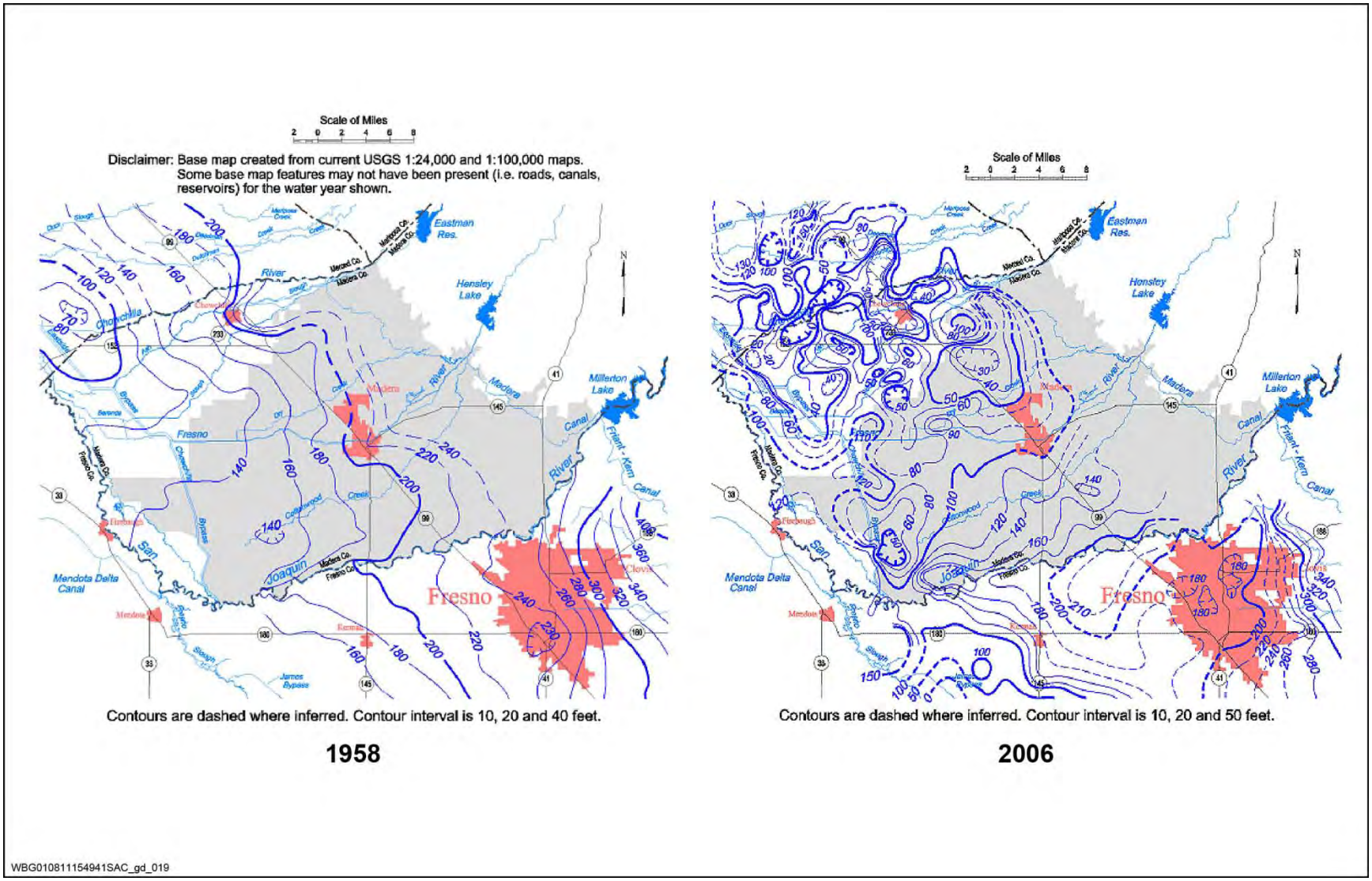


Figure E-9
Kings Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

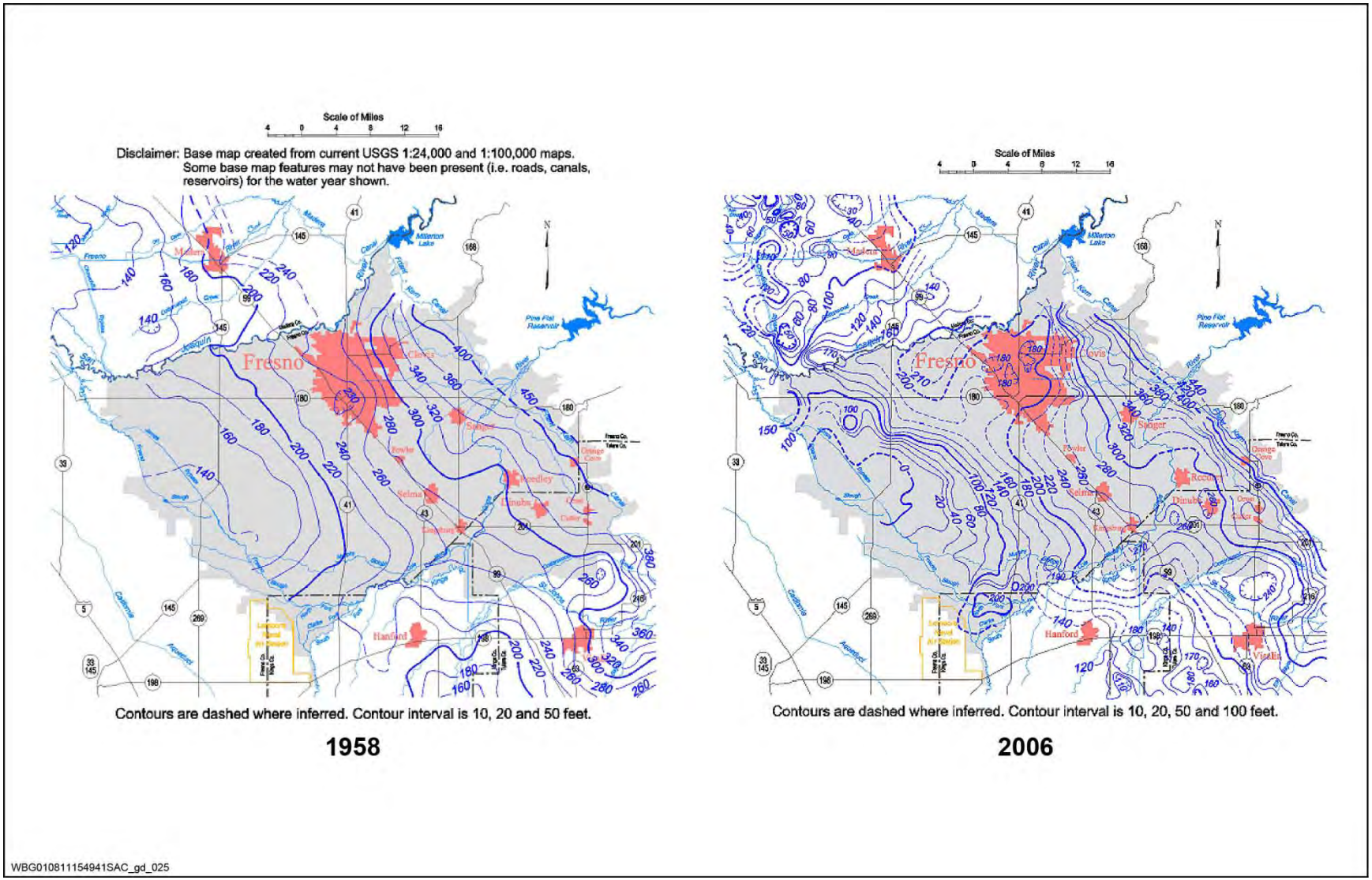
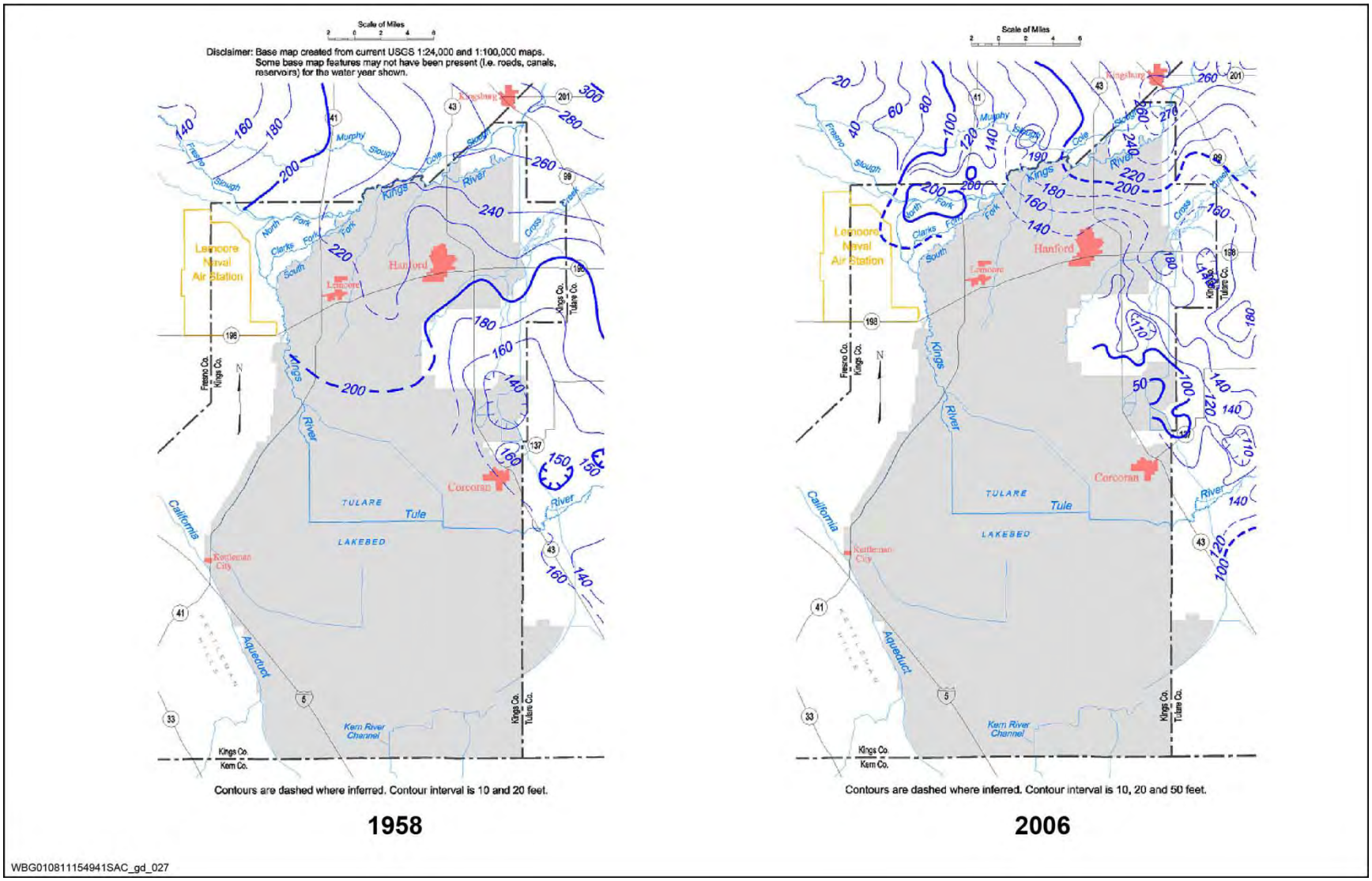


Figure E-10
Tulare Lake Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e



WBG010811154941SAC_gd_027

Figure E-11
Kaweah Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

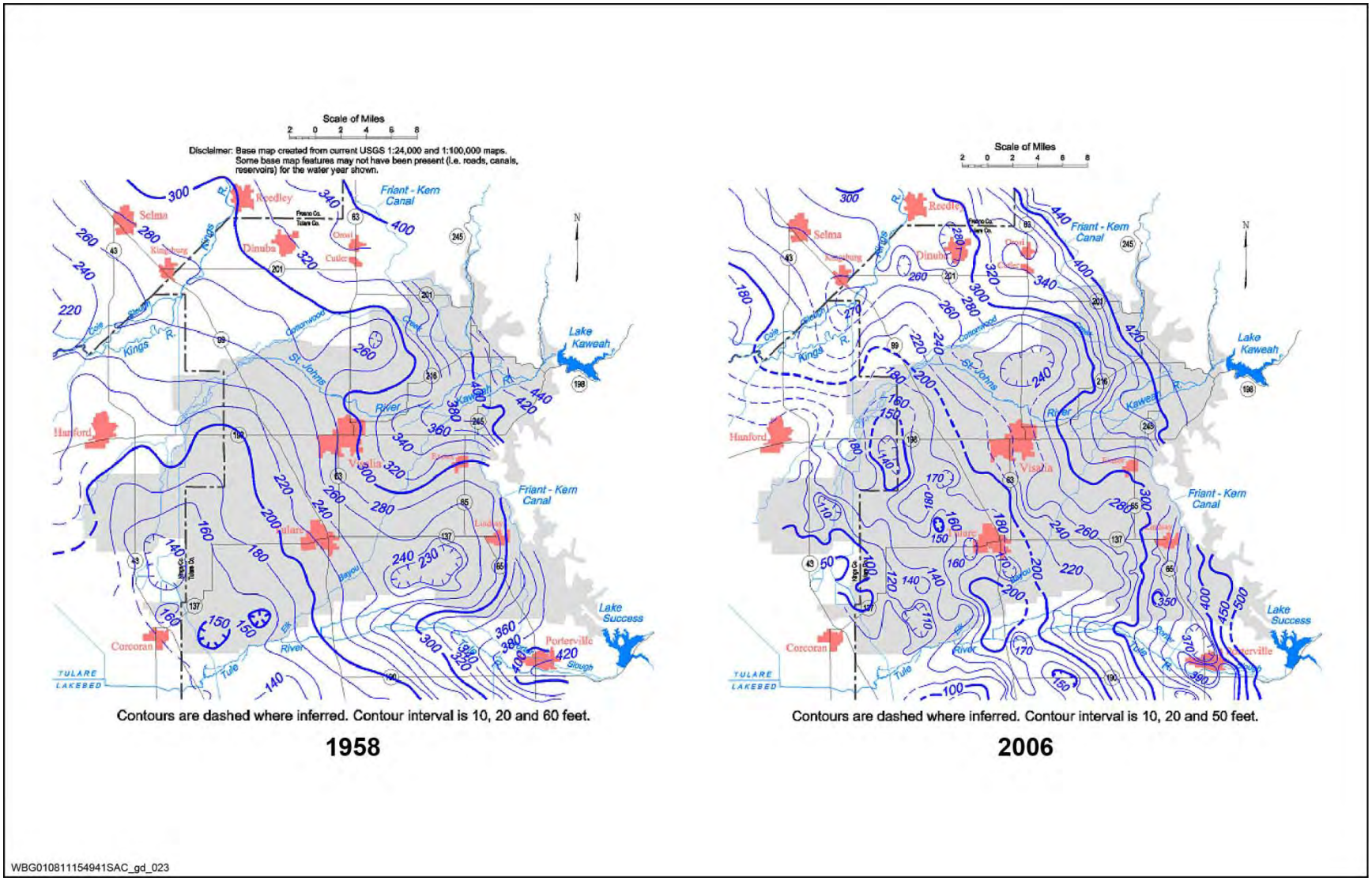


Figure E-12
Tule Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

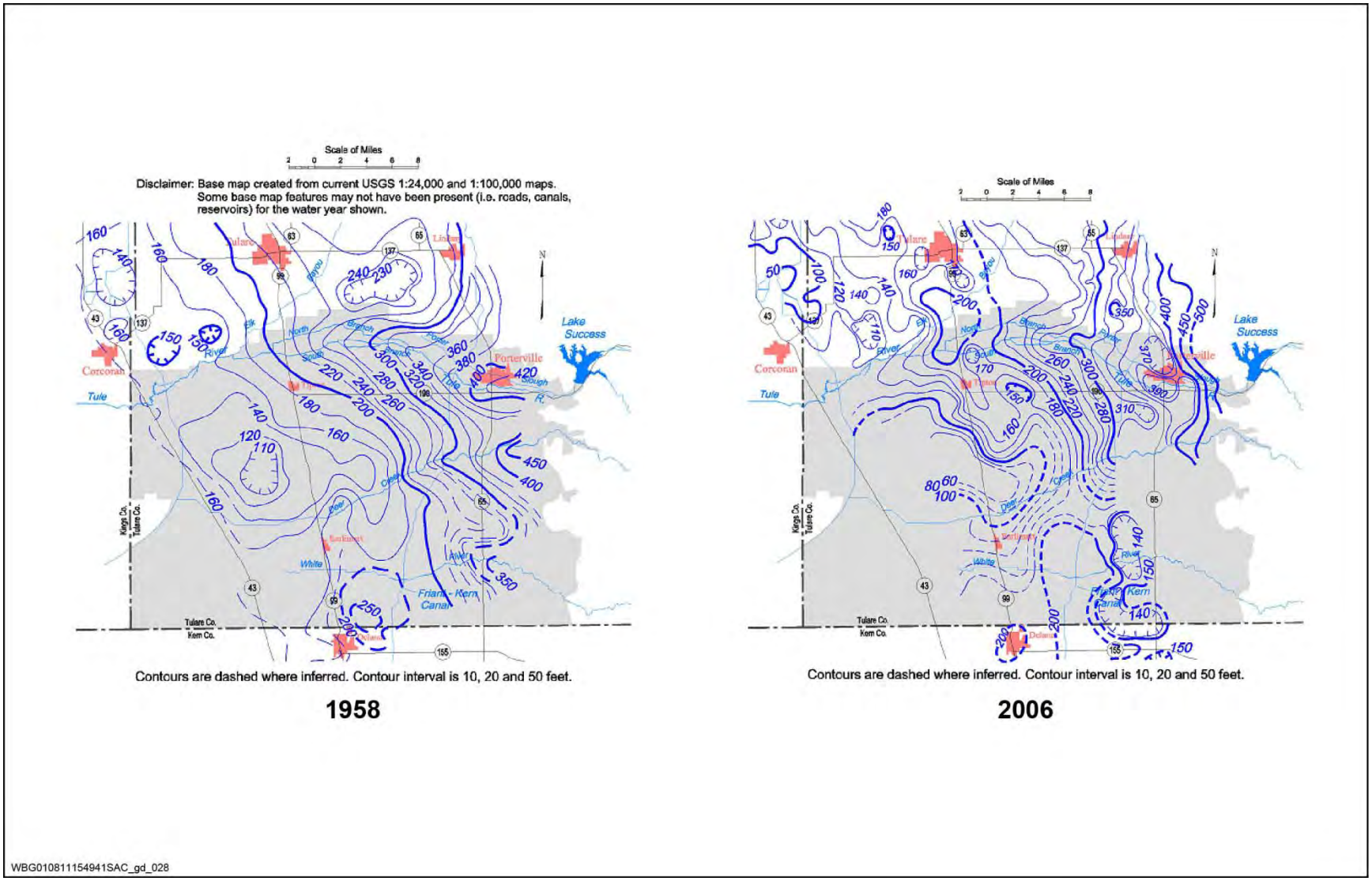


Figure E-13
Pleasant Valley, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e

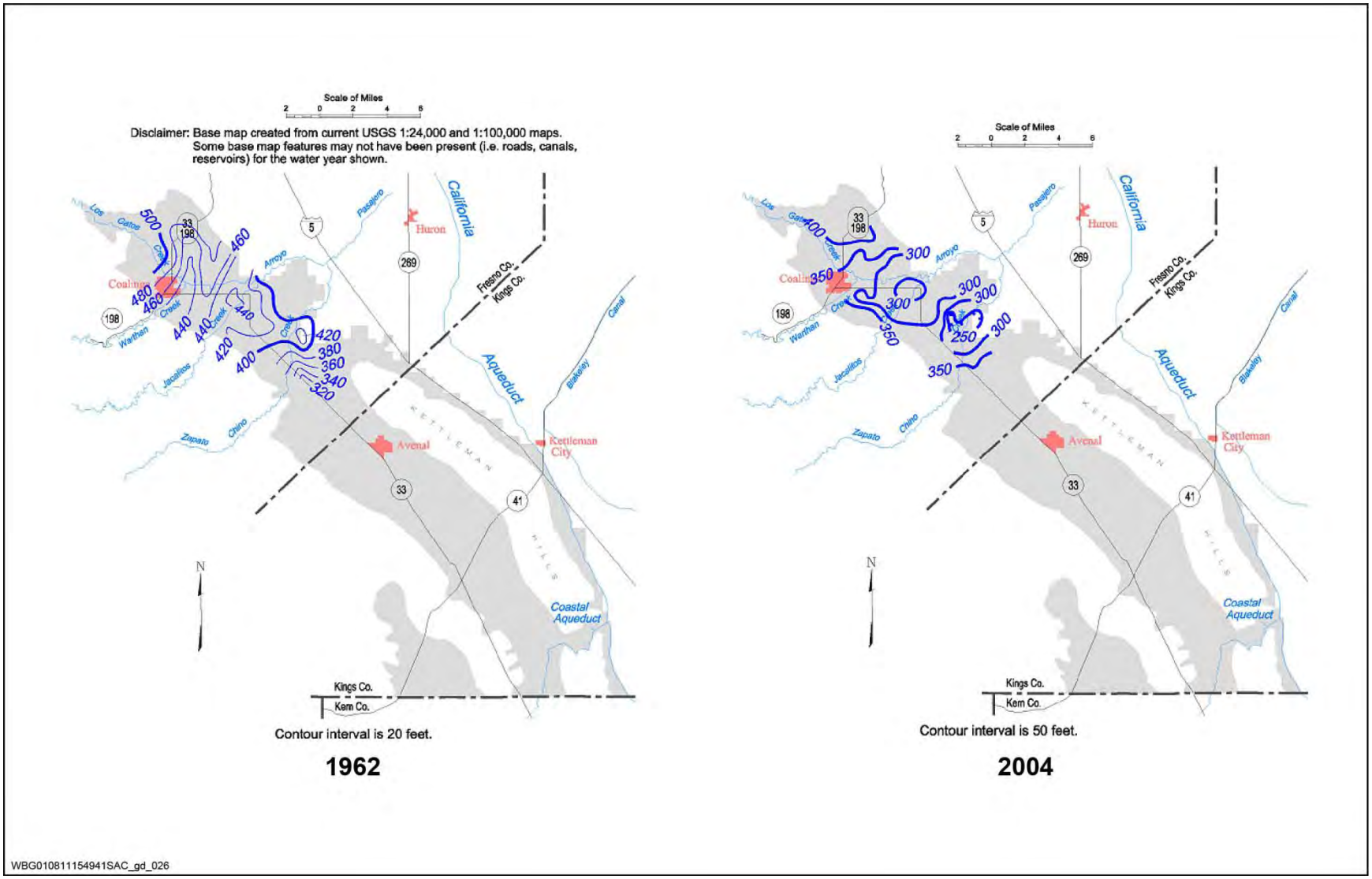
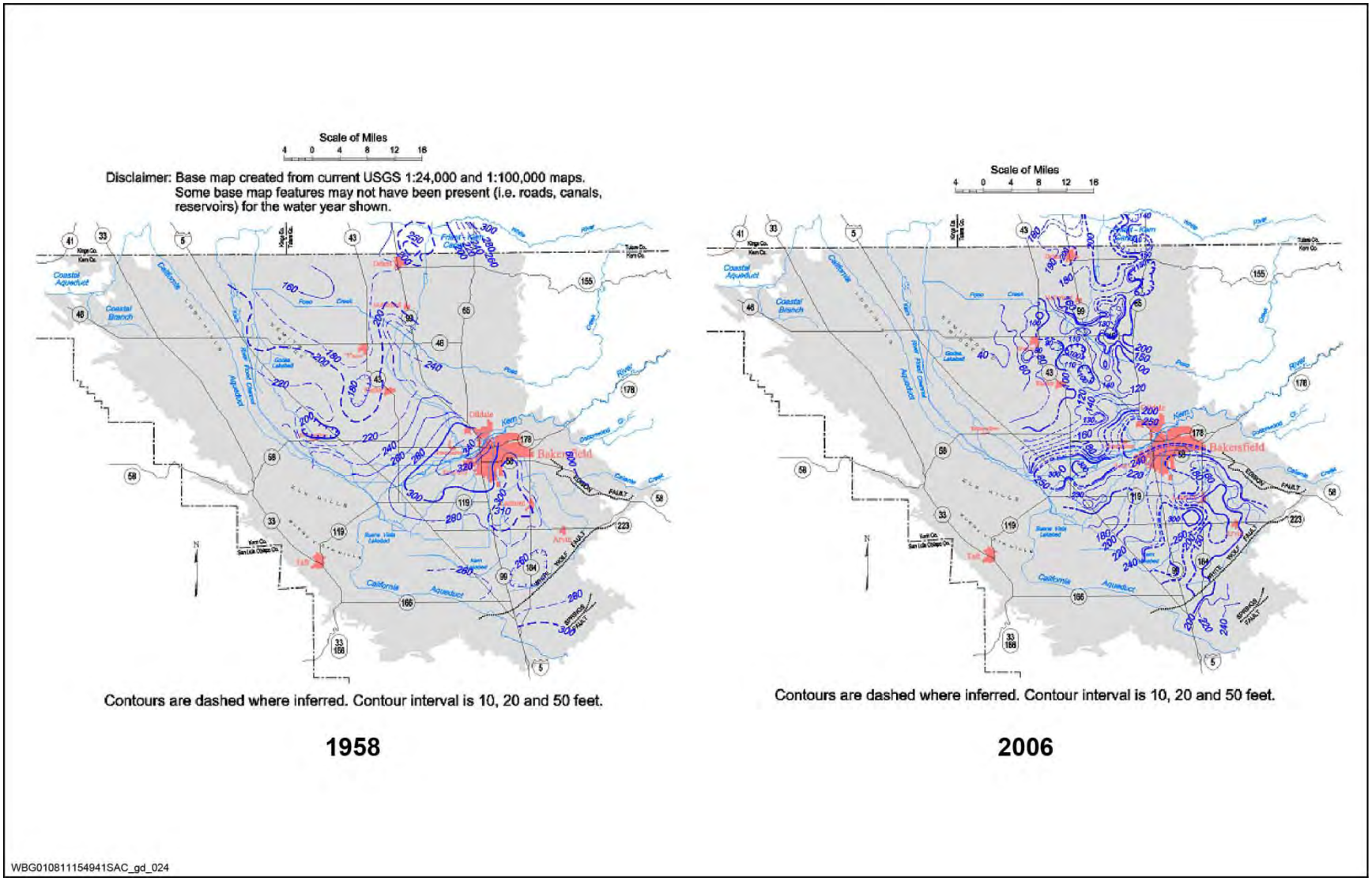



Figure E-14
Kern Subbasin, Lines of Equal Elevation of Water in Wells, Unconfined Aquifer
Source: DWR 2011e