

**U.S. Bureau of Reclamation Delta Mendota Canal (DMC) Subsidence Monitoring Surveys  
Central Valley California**

DMC Mile Post	Bank	Free Adjustment - 2016 GPS			Desc	NAVD 1988 Elevation of Monitoring Point (feet)					Subsidence (feet)			
		NAD 83 (2007) CA Zone 3 - US Feet		NAVD 88		1984 Levels	2014 Levels	2016 GPS	2017 GPS	2018 GPS	1984 2014	2014 2016	2016 2017	2016 2018
		Northing	Easting	Elev										
3.12		2111831.19	6247228.48	97.80	USBR BM TUBE	97.83	97.83	97.80			0.00	-0.03		
39.67		1992220.14	6364923.10	238.97	HPGN CA 10 04 (138)		239.48	238.97				-0.51		
57.95	Lt.	1912591.49	6393421.15	183.22	USBR 57.95 (HS2494)	184.14	183.73	183.22			-0.41	-0.51		
68.67		1862875.96	6400647.99	256.25	NGS BM Q1139	256.93		256.25						
70.51		1844397.27	6399166.32	285.34	K 361 (146)			285.34						
89.51		1792413.18	6468015.66	314.16	HPGN D CA 10 BK (144)			314.16						
102.57		1810198.64	6542683.77	123.61	KELLIE (147)			123.61						
106.42		1785178.41	6571880.21	140.95	USGS X989 (101)			140.95						
108.02		1770519.76	6572542.14	145.69	HPGN CA 10 04 (129)			145.69						
108.58		1757753.65	6561144.92	183.78	DWIGHT (125)			183.78						
111.71		1770683.91	6593599.13	150.06	RBF 1026 (158)			150.06						
112.12		1756053.24	6581169.77	154.37	SHAWN (153)			154.37						
113.77		1758741.61	6598893.23	151.32	RBF 1027 (159)			151.32						
115.24		1715859.23	6573501.04	233.44	PEYTON (DH6671)			233.44						
115.75		1738762.84	6593218.14	167.59	ALEX5 (122)		168.01	167.59				-0.42		
					( ) = SJRRP Subsidence Survey Monitoring Point									
<b>Begin Pool 1</b>														
0.11	Rt.	2121644.71	6255684.29	17.48	BC FISH 1971 @ FISH COLLECTION FACILITY		17.45	17.48				0.02		
1.41	Rt.	2119988.21	6250053.48	9.01	USBR BC ON HW RR CULVERT OUTLET	9.04	9.07	9.01			0.03	-0.06		
2.51	Lt.	2114493.80	6248229.48	12.04	USBR BC ON CANAL LINING @ PUMPING PLANT		12.08	12.04				-0.04		
3.12		2111831.19	6247228.48	97.80	USBR BC "TUBE 1997"	97.83	97.83	97.80				-0.03		
3.49	Lt.	2109553.39	6247228.48	200.84	#6 REBAR - NEW POINT			200.84						
4.63		2105283.64	6249712.74	199.00	USBR BC C/L SIPHON OUTLET	199.03	199.04	199.00			0.01	-0.04		
4.98	Lt.	2103839.70	6250954.84	198.98	USBR BC U/S FARM BRIDGE ABUTMENT	199.00	199.01	198.98			0.01	-0.03		
5.67	Lt.	2100369.51	6250628.37	198.84	USBR BC U/S FARM BRIDGE ABUTMENT	198.88	198.85	198.84			-0.03	-0.02		
6.6	Lt.	2099341.86	6254434.03	203.98	USBR BC ON GRANTLINE RD BRIDGE	204.00	204.03	203.98			0.03	-0.05		
6.95	Lt.	2097488.78	6254432.90	198.50	USBR BC U/S FARM BRIDGE ABUTMENT	198.51	198.54	198.50			0.03	-0.04		
7.5	Lt.	2095564.12	6256470.23	201.19	MAG NAIL 109		201.23	201.19				-0.05		
8.51	Lt.	2092822.41	6260350.58	199.64	USBR BC ON TURNOUT	199.66	199.72	199.64			0.06	-0.08		
9.28	Lt.	2090217.68	6263304.21	205.53	MAG 112 NEAR GATE POST		205.59	205.53				-0.06		
9.87	Lt.	2088318.10	6265855.22	197.69	USBR BC U/S FARM BRIDGE ABUTMENT	197.72	197.74	197.69			0.02	-0.05		
10.28	Rt.	2086951.59	6267404.49	205.61	USBR BC ON SHULTE RD BRIDGE		205.63	205.61				-0.02		
10.62	Lt.	2085699.92	6268660.40	205.56	USBR BC ON HANSEN BRIDGE		205.59	205.56				-0.03		
11.35	Lt.	2083422.66	6271695.15	197.38	MAG NAIL ON DECK CHK #1	197.43	197.41	197.38			-0.02	-0.03		
<b>Begin Pool 2</b>														
12.31	Lt.	2081586.02	6275638.29	197.02	USBR BC U/S FARM BRIDGE ABUTMENT	197.07	197.00	197.02			-0.07	0.02		
13.25	Lt.	2078510.09	6279168.87	196.94	USC&GS BC ON LAMMERS LN BRIDGE	197.03	196.94	196.94			-0.09	0.00		
13.96	Lt.	2076510.96	6281837.26	196.33	USBR BC ON FARM BRIDGE ABUTMENT	196.43	196.37	196.33			-0.06	-0.04		
15.1	Lt.	2074624.22	6286945.37	201.50	USBR BC ON FARM BRIDGE ABUTMENT	201.65	201.62	201.50			-0.03	-0.11		
16.19 Mag Nail		2071110.15	6291129.76	195.69	MAG NAIL ON DECK CHK #2		195.77	195.69				-0.09		
16.19_BC		2071131.69	6291157.24	195.68	USBRBC ON DECK CHK #2	195.78	195.76	195.68			-0.02	-0.08		
<b>Begin Pool 3</b>														
16.65	Lt.	2069212.66	6292517.83	194.87	USBR BC U/S FARM BRIDGE ABUTMENT	195.06	194.98	194.87			-0.08	-0.11		
17.23	Rt.	2066662.83	6293605.41	194.61	USBR BC COUNTY BRIDGE "USBR BM 1723"	194.83	194.73	194.61			-0.10	-0.12		
18.05	Rt.	2063570.56	6296501.60	194.30	BC DS RT MACAUTHOR BRIDGE	194.66	194.45	194.30			-0.21	-0.15		
19.17	Lt.	2062178.12	6301766.24	192.42	BC US LT CHRISMAN BRIDGE	192.92	192.59	192.42			-0.33	-0.17		
20	Lt.	2060184.22	6305662.01	196.14	MAG NAIL TOP OF STEPS		196.31	196.14				-0.17		
20.62		2057863.39	6308036.67	194.11	1/2" CARRIAGE BOLT ON DECK CHK #3		194.27	194.11				-0.16		
<b>Begin Pool 4</b>														
20.96	Lt.	2057606.01	6309624.59	193.08	USBR BC ON FARM BRIDGE ABUTMENT	193.54	193.25	193.08			-0.29	-0.17		

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		Free Adjustment - 2016 GPS										Subsidence (feet)			
DMC		NAD 83 (2007) CA Zone 3 - US Feet		NAVD 88		NAVD 1988 Elevation of Monitoring Point (feet)					1984	2014	2016	2016	
Mile Post	Bank	Northing	Easting	Elev	Desc	1984 Levels	2014 Levels	2016 GPS	2017 GPS	2018 GPS	2014	2016	2017	2018	
21.48	Rt.	2057126.03	6312329.05	193.18	BC DS CURB BIRD RD BRIDGE	193.70	193.36	193.18			-0.34	-0.18			
22.2	Lt.	2056688.38	6315997.08	193.47	MAG NAIL IN [ ] MARK TOP OF STEPS		193.67	193.47				-0.20			
23.36	Lt.	2053272.85	6320209.37	192.44	USBR BC U/S FARM BRIDGE ABUTMENT	193.40	192.66	192.44			-0.74	-0.22			
23.81R	Lt.	2051538.49	6321761.50	196.40	MAG NAIL IN [ ] MARK TOP OF STEPS		196.63	196.40				-0.23			
24.42	Rt.	2048536.63	6322646.95	192.75	USBR BC ON DECK CHK #4	193.28	193.00	192.75			-0.28	-0.24			
Begin Pool 5															
25.02	Lt.	2045313.05	6322722.10	210.81	MAG NAIL IN [ ] MARK TOP OF STEPS		211.05	210.81				-0.25			
26.21	Rt.	2039990.62	6325171.96	193.46	BC DS CURB GAFFERY BRIDGE	193.94	193.71	193.46			-0.23	-0.25			
26.93	Lt.	2037404.89	6327943.61	191.93	USBR BC U/S FARM BRIDGE ABUTMENT	192.43	192.21	191.93			-0.22	-0.28			
27.42	Lt.	2035946.67	6330055.04	194.55	MAG NAIL IN [ ] MARK TOP OF STEPS		194.82	194.55				-0.27			
28.27	Lt.	2033199.85	6333507.74	191.49	BC DS CURB WELTY RD BRIDGE	192.10	191.81	191.49			-0.29	-0.32			
29.19	Lt.	2029316.87	6335872.85	194.28	USBR BC DS HAMILTON RD BRIDGE	194.86	194.61	194.28			-0.25	-0.32			
29.82	Lt.	2027360.75	6338270.58	191.40	1/2" CARRIAGE BOLT ON DECK CHK #5	192.02	191.80	191.40			-0.22	-0.40			
Begin Pool 6															
29.93	Lt.	2027265.43	6338777.72	190.39	MAG NAIL IN [ ] MARK TOP OF STEPS	191.00	190.72	190.39			-0.28	-0.33			
30.96	Lt.	2026159.09	6343433.08	192.87	MAG NAIL IN [ ] MARK TOP OF STEPS		193.24	192.87				-0.37			
31.12	Lt.	2025606.26	6344039.49	190.37	USBR BC U/S FARM BRIDGE ABUTMENT	191.18	190.74	190.37			-0.44	-0.38			
31.59	Lt.	2023974.70	6345568.50	189.94	USBR BC U/S FARM BRIDGE ABUTMENT	190.66	190.27	189.94			-0.39	-0.33			
32.1	Lt.	2021334.88	6346208.74	190.04	USBR BC U/S FARM BRIDGE ABUTMENT	190.75	190.38	190.04			-0.37	-0.34			
32.61	Lt.	2018664.38	6346436.65	190.26	BC HOWARD RD BRIDGE	190.92	190.59	190.26			-0.33	-0.33			
33.29	Lt.	2016969.20	6349413.21	190.10	USBR BC U/S FARM BRIDGE ABUTMENT	190.80	190.45	190.10			-0.35	-0.35			
34.41	Lt.	2013277.60	6353335.22	190.01	1/2" CARRIAGE BOLT ON DECK CHK #6	191.03	190.60	190.01			-0.43	-0.59			
Begin Pool 7															
34.89	Lt.	2010862.48	6353722.49	189.70	USBR BC U/S FARM BRIDGE ABUTMENT	190.40	190.08	189.70			-0.32	-0.39			
35.39	Lt.	2008257.67	6353881.00	189.60	USBR BC U/S FARM BRIDGE ABUTMENT	190.32	190.02	189.60			-0.30	-0.42			
36.39	Lt.	2006571.08	6358039.43	186.75	USBR BC ON TURNOUT HEADWALL	187.45	187.16	186.75			-0.29	-0.41			
37.28	Lt.	2003042.34	6360149.67	187.14	MAG NAIL DEL PURETO CREEK BRIDGE	187.87	187.59	187.14			-0.28	-0.45			
38.14	Lt.	1998899.04	6362006.49	188.50	USBR BC U/S FARM BRIDGE ABUTMENT	189.26	188.95	188.50			-0.31	-0.45			
38.67	Lt.	1996609.57	6362928.23	188.91	1/2" CARRIAGE BOLT ON DECK CHK #7	189.66	189.43	188.91			-0.23	-0.52			
Begin Pool 8															
39.21	Lt.	1994940.47	6365093.34	188.38	USBR BC D/S CURB ROGERS RD BRIDGE	189.16	188.89	188.38			-0.27	-0.51			
39.81	Lt.	1992278.23	6366556.72	194.21	1/2" CARRIAGE BOLT SPERRY RD BRIDGE		194.73	194.21				-0.52			
40.37	Lt.	1989850.56	6367647.28	188.14	USBR BC U/S FARM BRIDGE ABUTMENT	188.92	188.67	188.14			-0.25	-0.53			
40.62	Lt.	1989102.69	6368734.93	187.88	USBR BC U/S FARM BRIDGE ABUTMENT	188.67	188.40	187.88			-0.27	-0.52			
41.03	Lt.	1986978.05	6369339.23	185.20	USBR BC ON TURNOUT HEADWALL	185.98	185.71	185.20			-0.27	-0.51			
41.49	Lt.	1984916.34	6370271.40	187.64	USBR BC U/S FARM BRIDGE ABUTMENT	188.43	188.15	187.64			-0.28	-0.52			
42.08	Lt.	1984423.67	6373137.05	184.43	USBR BC ON TURNOUT HEADWALL	185.48	184.94	184.43			-0.54	-0.51			
42.53	Lt.	1984254.99	6375500.94	186.68	USBR BC U/S CURB WARD RD BRIDGE	188.10	187.15	186.68			-0.95	-0.48			
43.24	Lt.	1981622.45	6377804.01	185.93	USBR BC U/S CURB MARSHALL RD BRIDGE	187.01	186.46	185.93			-0.55	-0.54			
44.26	Lt.	1976080.51	6378520.15	187.48	1/2" CARRIAGE BOLT ON CHK #8	188.46	188.09	187.48			-0.37	-0.61			
Begin Pool 9															
44.73	Lt.	1973663.00	6378580.14	186.57	USBR BC U/S FARM BRIDGE ABUTMENT	187.49	187.08	186.57			-0.41	-0.50			
45.77	Lt.	1969130.11	6381149.89	186.52	MAG NAIL IN [ ] MARK TOP OF STEPS		187.01	186.52				-0.50			
R46.36	Lt.	1967515.93	6383800.36	185.51	USBR BC U/S FARM BRIDGE ABUTMENT	186.84	186.02	185.51			-0.82	-0.52			
46.84	Lt.	1965642.23	6385529.05	186.29	USBR BC U/S CURB FINK RD BRIDGE		186.80	186.29				-0.51			
47.38	Lt.	1962990.03	6386210.79	186.00	USBR BC U/S FARM BRIDGE ABUTMENT	187.00	186.52	186.00			-0.48	-0.52			
47.88	Lt.	1960340.78	6386172.73	185.89	USBR BC U/S FARM BRIDGE ABUTMENT	186.90	186.42	185.89			-0.48	-0.53			
48.38	Lt.	1957714.43	6386084.20	185.89	USBR BC U/S DELHI RD BRIDGE ABUTMENT	186.86	186.39	185.89			-0.47	-0.51			
48.61	Lt.	1956396.02	6386037.14	186.33	1/2" CARRIAGE BOLT ON DECK CHK #9	187.27	186.85	186.33			-0.42	-0.53			
Begin Pool 10															

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		NAD 83 (2007) CA Zone 3 - US Feet		NAVD 88 Elev		1984 Levels	2014 Levels	2016 GPS	2017 GPS	2018 GPS	1984 2014	2014 2016	2016 2017	2016 2018
49.55	Lt.	1951952.39	6384989.85	185.65	USBR BC U/S FARM BRIDGE ABUTMENT	186.47	186.15	185.65			-0.32	-0.50		
50.53	Lt.	1947348.00	6385071.75	185.16	USBR BC U/S FARM BRIDGE ABUTMENT	186.03	185.68	185.16			-0.35	-0.52		
51.17	Lt.	1944247.67	6385978.91	182.82	MAG NAIL CANAL LINING			182.82						
51.4	Lt.	1943130.51	6386362.97	184.90	USBR BC U/S STUHR RD BRIDGE	185.71	185.41	184.90			-0.30	-0.52		
52.01	Lt.	1940187.70	6386892.78	184.72	USBR BC U/S ORESTIMBA RD BRIDGE	185.54	185.23	184.72			-0.31	-0.51		
52.4	Lt.	1939011.15	6388348.69	180.57	USC&GS BC "H 564 1957" CANAL LINING	181.40	181.08	180.57			-0.32	-0.51		
53.43	Lt.	1933758.25	6389426.05	195.61	USBR BC D/S SHELL RD BRIDGE	196.43	196.11	195.61			-0.32	-0.50		
54.39		1928766.49	6390683.00	184.82	TACK IN LEAD DECK CHK #10	185.70	185.32	184.82			-0.38	-0.50		
<b>Begin Pool 11</b>														
55.19	Lt.	1925360.06	6389323.05	186.31	MAG NAIL IN [] MARK TOP OF STEPS		186.80	186.31				-0.49		
56.02	Lt.	1921462.14	6389375.47	183.13	USBR BC U/S FARM BRIDGE ABUTMENT	184.37	183.62	183.13			-0.75	-0.48		
56.6	Lt.	1918580.40	6390162.82	182.95	1/2" CARRIAGE BOLT NEW MILLER RD BRIDGE			182.95						
57.46	Lt.	1915104.38	6392986.92	184.84	MAG NAIL IN [] MARK TOP OF STEPS		185.32	184.84				-0.48		
57.95	Lt.	1912591.53	6393421.23	183.24	USBR BC U/S SULLIVAN BRIDGE ABUTMENT	184.14	183.73	183.24			-0.41	-0.49		
58.28		1910859.31	6393569.02	183.61	MAG NAIL DECK CHK #11	184.51	184.05	183.61			-0.46	-0.44		
<b>Begin Pool 12</b>														
58.46R	Lt.	1909958.04	6393641.36	182.82	1/2" CARRIAGE BOLT GRAVEL PIT RD BRIDGE			182.82						
59.5	Lt.	1904721.33	6395096.16	179.07	MAG NAIL IN CHISLD [] DS/LT PIER PIPE Xing	179.92	179.52	179.07			-0.40	-0.45		
60.06	Lt.	1902001.00	6396171.10	182.37	USBR BC U/S CURB TAGLIO RD BRIDGE	183.19	182.81	182.37			-0.38	-0.45		
61.06	Lt.	1896715.43	6396131.19	182.24	USBR BC U/S CURB SNYDER RD BRIDGE	183.05	182.66	182.24			-0.39	-0.42		
62.09	Lt.	1891441.17	6396721.30	185.85	USBR BC U/S COTTONWOOD RD BRIDGE	186.60	186.21	185.85			-0.39	-0.37		
62.67	Lt.	1888697.93	6397701.42	182.86	MAG NAIL IN [] MARK TOP OF STEPS		183.25	182.86				-0.39		
63.98		1884723.69	6402632.68	182.19	TACK IN LEAD DECK CHK #12		182.55	182.19				-0.36		
<b>Begin Pool 13</b>														
64.3	Lt.	1883261.19	6403009.67	187.40	MAG NAIL U/S CURB BUTTS RD BRIDGE			187.40						
65.35	Lt.	1878195.55	6404575.81	178.63	USBR BC ON TURNOUT HEADWALL	179.43	178.99	178.63			-0.44	-0.36		
66.06	Lt.	1874701.09	6403280.20	178.44	USBR BC ON TURNOUT HEADWALL	179.21	178.79	178.44			-0.42	-0.35		
67.15	Lt.	1869160.12	6404718.32	180.74	USBR BC U/S FARM BRIDGE ABUTMENT	181.49	181.08	180.74			-0.41	-0.34		
68.03	Lt.	1864865.05	6405978.40	180.63	1/2" CARRIAGE BOLT MCCABE RD BRIDGE			180.63						
68.58	Lt.	1862200.40	6405002.03	181.39	USC&GS BC M-1133	182.13	181.71	181.39			-0.42	-0.32		
69.3		1858830.85	6404138.53	185.58	USBR BC "F.B. BRIDGE" O'NIELL INLET BRIDGE	186.29		185.58						
ONIELL OUTLET		1858720.06	6401652.67	238.51	MAG NAIL IN RETAIN WALL		238.77	238.51				-0.26		
70.01	Lt.	1856012.00	6405030.31	180.27	MAG NAIL DECK CHK #13		180.51	180.27				-0.24		
<b>Begin Pool 14</b>														
71.31	Rt.	1853431.63	6411115.28	182.00	USBR BC U/S CURB JENSEN RD BRIDGE	182.67	182.26	182.00			-0.41	-0.26		
72.33	Lt.	1852462.14	6416351.29	177.57	USBR BC U/S FARM BRIDGE ABUTMENT	178.30	177.86	177.57			-0.44	-0.30		
73.43	Lt.	1850381.52	6421838.35	183.69	MAG NAIL IN [] MARK TOP OF STEPS		183.94	183.69				-0.26		
74.4		1847115.98	6425513.60	179.73	1/2" CARRIAGE BOLT ON DECK CHK # 14	180.37	179.99	179.73			-0.38	-0.26		
<b>Begin Pool 15</b>														
74.77	Rt.	1845739.13	6426733.48	180.41	USBR BC D/S CURB MORAGA AVE BRIDGE	181.07	180.65	180.41			-0.42	-0.24		
75.84	Lt.	1843374.58	6431153.65	182.69	CAL DOT AC "X816 RESET" HWY 152 BRIDGE		183.18	182.69				-0.49		
76.77	Lt.	1839936.55	6434195.66	181.41	MAG NAIL IN [] MARK TOP OF STEPS		181.68	181.41				-0.27		
77.2	Lt.	1838114.44	6435501.36	177.51	USBR BC U/S PIONEER RD BRIDGE ABUTMENT	178.29	177.77	177.51			-0.52	-0.26		
77.63	Lt.	1836486.42	6436994.81	175.87	USBR BC U/S VOLTA RD BRIDGE ABUTMENT	176.71	176.15	175.87			-0.56	-0.29		
77.98	Lt.	1835093.86	6438188.15	173.00	USBR BC ON TURNOUT HEADWALL		173.30	173.00				-0.31		
79.12	Rt.	1830725.16	6442240.35	176.17	USBR BC U/S CANYON RD BRIDGE	177.21	176.46	176.17			-0.75	-0.29		
79.63		1829552.98	6444704.71	176.54	1/2" CARRIAGE BOLT ON DECK CHK #15	177.61	176.83	176.54			-0.78	-0.29		
<b>Begin Pool 16</b>														
80.34	Rt.	1827198.99	6447480.77	175.70	USBR BC D/S CREEK RD BRIDGE	176.66	175.96	175.70			-0.70	-0.25		
80.62	Lt.	1826289.37	6448563.71	174.07	USBR BC U/S FARM BRIDGE ABUTMENT	175.03	174.32	174.07			-0.71	-0.25		

**U.S. Bureau of Reclamation Delta Mendota Canal (DMC) Subsidence Monitoring Surveys  
Central Valley California**

DMC Mile Post	Bank	Free Adjustment - 2016 GPS			Desc	NAVD 1988 Elevation of Monitoring Point (feet)					Subsidence (feet)			
		NAD 83 (2007) CA Zone 3 - US Feet		NAVD 88		1984 Levels	2014 Levels	2016 GPS	2017 GPS	2018 GPS	1984	2014	2016	2016
		Northing	Easting	Elev							2014	2016	2017	2018
81.69	Rt.	1822091.08	6452087.14	175.58	USBR BC D/S CURB ALMOND DR BRIDGE	176.57	175.84	175.58			-0.73	-0.25		
81.8	Rt.	1821821.55	6452620.78	175.12	USBR BC D/S CURB ORTIGALITA RD BRIDGE	176.12	175.37	175.12			-0.75	-0.25		
82.52	Rt.	1820797.79	6455879.14	174.13	USBR BC U/S FARM BRIDGE ABUTMENT	175.28	174.40	174.13			-0.88	-0.27		
83.07	Rt.	1818815.09	6457910.90	174.63	USBR BC D/S CURB CENTER RD BRIDGE	175.81	174.91	174.63			-0.90	-0.28		
83.57	Lt.	1817888.01	6460305.03	171.08	USBR BC U/S RETAIN WALL PIPE Xing	172.54	171.41	171.08			-1.13	-0.33		
83.88	Rt.	1816791.31	6461485.20	173.44	USNBR BC D/S CURB CHARLESTON RD BRIDGE	174.97	173.77	173.44			-1.20	-0.34		
84.38	Rt.	1814641.43	6463122.30	173.60	USBR BC D/S CURB MERCY SPRINGS BRIDGE	175.09	173.92	173.60			-1.17	-0.32		
84.82	Lt.	1812743.04	6464268.85	171.54	USBR BC U/S FARM BRIDGE ABUTMENT	173.06	171.86	171.54			-1.20	-0.32		
85.09		1811346.93	6464755.75	174.42	1/2" CARRIAGE BOLT ON DECK CHK #16	175.93	174.78	174.42			-1.15	-0.36		
Begin Pool 17														
86.19	Rt.	1806191.27	6467079.13	172.24	USBR BC D/S COTTON GIN BRIDGE ABUTMENT	173.88	172.56	172.24			-1.32	-0.32		
86.72	Lt.	1803533.71	6468001.96	173.69	MAG NAIL IN [] MARK TOP OF STEPS		174.03	173.69				-0.33		
87.48	Rt.	1799700.85	6468244.44	168.82	MAG NAIL IN [] MARK U/S PIER KALJEAN PP	170.07	169.10	168.82			-0.97	-0.28		
87.66	Rt.	1799123.80	6469122.79	174.06	USC&GS BC "H-513" DRAIN HEADWALL		174.34	174.06				-0.28		
88.13	Rt.	1797870.53	6471127.01	175.18	USBR BC D/S WOO RD BRIDGE ABUTMENT	176.49	175.45	175.18			-1.04	-0.27		
89.56	Lt.	1796312.54	6478281.86	167.08	MAG NAIL ON TURNOUT HEADWALL		167.48	167.08				-0.40		
90.54		1793609.92	6482700.47	168.74	1/2" CARRIAGE BOLT ON DECK CHK #17	171.20	169.14	168.74			-2.06	-0.40		
Begin Pool 18														
90.91	Lt.	1792744.87	6484345.68	166.81	USBR BC U/S FARM BRIDGE ABUTMENT	169.63	167.18	166.81			-2.45	-0.37		
91.71	Lt.	1789876.81	6487283.79	165.12	MAG NAIL IN [] MARK HW PIPE Xing	168.41	165.50	165.12			-2.91	-0.38		
92.73	Rt.	1787978.41	6492178.95	167.65	USBR BC U/S FARM BRIDGE ABUTMENT	169.85	168.04	167.65			-1.81	-0.39		
93.24	Lt.	1788228.09	6494894.91	167.33	USBR BC U/S FARM BRIDGE ABUTMENT	169.47	167.72	167.33			-1.75	-0.39		
94.26	Lt.	1787333.07	6500174.99	164.79	USBR BC HW IRRIGATION CROSSING	167.33	165.28	164.79			-2.05	-0.49		
95.14	Lt.	1785614.16	6504363.14	164.29	USBR BC HEADWALL PIPE Xing	166.80	164.77	164.29			-2.03	-0.48		
95.95	Lt.	1784587.98	6508426.67	163.93	USBR BC TURNOUT HEADWALL	166.54	164.43	163.93			-2.11	-0.50		
96.61	Rt.	1782726.64	6510947.52	163.70	USBR BCD/S CURB ALTHEA RD BRIDGE	166.12	164.19	163.70			-1.93	-0.49		
96.81	Rt.	1782378.76	6512006.78	166.09	USBR BC ON DECK CHK #18	168.52	166.59	166.09			-1.93	-0.50		
Begin Pool 19														
97.68	Lt.	1782502.48	6516543.33	163.25	USBR BC U/S RETAIN WALL RUSSELL AVE BRIDGE	165.98	163.83	163.25			-2.15	-0.58		
98.62	Lt.	1781313.20	6521398.63	160.84	MAG NAIL @ END OF SLD CONCRETE LINER			160.84						
99.82	Rt.	1779617.62	6527222.32	164.71	USBR BC D/S FARM BRIDGE ABUTMENT	167.39	165.23	164.71			-2.16	-0.52		
100.85	Rt.	1778688.34	6532519.63	165.03	USBR BC D/S FARM BRIDGE ABUTMENT	167.52	165.36	165.03			-2.16	-0.33		
101.84	Rt.	1778323.64	6537640.69	163.42	USBR BC ON HW DRAIN INLET	166.00	163.80	163.42				-0.38		
102.03	Rt.	1778130.28	6538604.18	163.64	USBR BC D/S FARM BRIDGE ABUTMENT	166.07	164.00	163.64			-2.07	-0.36		
102.93	Rt.	1776668.71	6543184.75	165.06	USBR BC D/S CURB FAIRFAX BRIDGE	167.44	165.46	165.06			-1.98	-0.40		
103.56	Rt.	1776056.24	6546438.77	161.97	USBR BC UNDER DRAIN HEADWALL	164.51	162.37	161.97			-2.14	-0.40		
104.22	Rt.	1776688.27	6549770.41	163.13	USBR BC D/S FARM BRIDGE ABUTMENT	165.80	163.51	163.13			-2.29	-0.38		
105.07	Rt.	1775334.62	6553983.30	164.17	USC&GS BC "Q 513" DECK CHK #19	167.13	164.57	164.17			-2.56	-0.40		
Begin Pool 20														
105.55	Rt.	1774418.00	6556386.27	161.98	USBR BC D/S FARM BRIDGE ABUTMENT	164.95	162.39	161.98			-2.56	-0.40		
106.58	Rt.	1770919.10	6560324.40	161.67	USBR BC D/S FARM BRIDGE ABUTMENT	164.95	162.09	161.67			-2.86	-0.42		
107.42	Lt.	1768269.82	6563937.52	162.69	USBR BC U/S CURB NEES AVE BRIDGE	165.60	163.06	162.69			-2.54	-0.37		
108.36	Rt.	1764265.02	6566804.26	160.61	USBR BC DRAIN INLET HEADWALL	163.39	161.01	160.61			-2.38	-0.40		
109.45	Rt.	1759974.16	6570576.35	160.16	USBR BC D/S CORNER OF TURNOUT	162.57	160.53	160.16			-2.04	-0.37		
110.12	Lt.	1758928.58	6573968.25	161.31	1/2" CARRIAGE BOLT U/S CURB WASHOE BRIDGE			161.31						
110.94		1760353.37	6578057.74	161.60	USBR BC SIPHON INLET HEADWALL	164.32	162.04	161.60			-2.28	-0.44		
111.25		1760451.86	6579446.50	161.69	USC&GS BC "R 513 1955" ON DECK CHK #20	164.19	162.08	161.69			-2.11	-0.39		
Begin Pool 21														
111.51	Rt.	1759800.45	6580603.93	161.06	USBR BC U/S CURB SIERRA AVE BRIDGE	163.62	161.44	161.06			-2.18	-0.39		
112.6	Rt.	1755768.75	6584414.89	152.85	MAG NAIL IN CHISEL [] in SLD CANAL LINING		153.04	152.85				-0.19		
113.55	Rt.	1752968.17	6588407.95	153.12	MAG NAIL IN CHISEL [] in SLD CANAL LINING		153.50	153.12				-0.39		

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DMC Mile Post	Bank	Free Adjustment - 2016 GPS			Desc	NAVD 1988 Elevation of Monitoring Point (feet)					Subsidence (feet)			
		NAD 83 (2007) CA Zone 3 - US Feet		NAVD 88							1984	2014	2016	2016
		Northing	Easting	Elev		1984 Levels	2014 Levels	2016 GPS	2017 GPS	2018 GPS	2014	2016	2017	2018
114.35	Rt.	1748675.57	6591503.69	154.26	NAIL LIP SLD LINING		154.65	154.26				-0.39		
115.1		1745854.76	6593320.81	156.49	USBR BC U/S HEADWALL BRIDGE OVER SLD	158.79	156.89	156.49			-1.90	-0.40		
115.57	Rt.	1744760.72	6594919.08	158.36	#5 REBAR @ SIPHON INLET GATE		158.75	158.36				-0.39		
116.48	Rt.	1742689.59	6598990.67	159.59	USBR BC D/S CURB BASS AVE BRIDGE CHK #21	162.61	160.01	159.59			-2.60	-0.42		
116.21		1745307.00	6598806.53	159.66	MENDOTA DAM USBR BC X510		160.06	159.66				-0.39		

NOTES:

- 1)   Free Adjustment X, Y, Z Control Point. This is the same point that is held fixed for the SJRRP Subsidence Surveys.
- 2) Benchmark Q1113 and SJRRP Subsidence Monitoring Points 101, 122, 125, 129, 138, 144, 146, 147, 153, 158, 159 and DH6671 are located away from the DMC so their mile posts are approximate.
- 3) The NAVD 88 elevations listed for the 1984 level survey were derived by adding 3.51 feet to the original NGVD 29 elevations.