

SJRRP Subsidence Dec2011-Dec2012 Comparison.xlsx

San Joaquin River Restoration Program (SJRRP)
Subsidence Monitoring - GPS Network Comparison Report

POINT NAME	NAD 1983 (2007), California Zone 4 (USFT)		Elevation (NAVD 88 - USFT)			Elevation Deltas		
	NORTHING	EASTING	12/2011	7/2012	12/2012	7/12 - 12/11	12/12 - 7/12	12/12 - 12/11
109.28	2420921.46	6035543.20	111.23	111.09	111.14	-0.14	0.04	-0.09
604.164	2246626.09	6356803.60	606.83	Original survey only. Not part of ongoing subsidence monitoring				
375 USE	2244410.19	6123306.15	129.83	129.59	129.45	-0.24	-0.14	-0.38
ALEX 5	2166402.74	6153888.56	168.13	168.04	168.06	-0.09	0.02	-0.07
BLYTHE	2078118.26	6305388.32	N/S	233.20	233.02		-0.18	
BURNSIDE	2062741.59	6223016.03	N/S	196.80	196.72		-0.08	
CBP/SJB	2167436.03	6185519.86	180.72	Original survey only. Not part of ongoing subsidence monitoring				
CTK	2248471.85	6351131.20	384.97	Original survey only. Not part of ongoing subsidence monitoring				
D 158 RESET	2280839.16	6138903.29	149.62	149.42	149.37	-0.20	-0.05	-0.26
DNB	2187923.16	6279022.68	227.15	Original survey only. Not part of ongoing subsidence monitoring				
DWIGHT	2185890.22	6122120.08	184.29	184.17	184.18	-0.12	0.01	-0.11
DWR 154.33	2256922.86	6143246.20	N/S	149.83	149.62		-0.21	
E 1420	2355392.90	6132094.66	167.39	167.35	167.33	-0.04	-0.02	-0.06
EBM	2326052.94	6067401.81	106.76	Original survey only. Not part of ongoing subsidence monitoring				
ELN	2304707.55	6093792.60	109.71	Original survey only. Not part of ongoing subsidence monitoring				
F 158 RESET	2280427.67	6163347.89	N/S	180.97	180.86		-0.11	
F 928	2114491.90	6074855.73	619.39	619.32	619.31	-0.06	-0.02	-0.08
FIREPORT	2198475.36	6133714.08	146.46	146.38	146.34	-0.08	-0.04	-0.12
FREEMONT	2365903.80	6000988.78	73.27	73.23	73.24	-0.05	0.01	-0.04
G 706 RESET 1962	2332746.46	6191751.93	243.18	243.23	243.19	0.05	-0.04	0.02
G 990	2249201.50	6122773.80	127.21	126.94	126.82	-0.27	-0.12	-0.39
GRF	2173745.74	6226012.84	210.96	Original survey only. Not part of ongoing subsidence monitoring				
H 1235 RESET	2273311.28	6111332.01	122.33	122.21	121.98	-0.12	-0.22	-0.35
H41 1941	2202620.46	6330007.54	290.16	290.25	290.03	0.09	-0.23	-0.14
HARMON	2256684.60	6084032.50	N/S	113.44	113.37		-0.08	
HELMER	2210796.63	6330511.58	373.04	Original survey only. Not part of ongoing subsidence monitoring				
HETFIELD	2232976.76	6129496.44	N/S	133.74	133.64		-0.11	
HPGN CA 06 03	2280213.65	6203601.72	236.80	236.74	236.60	-0.06	-0.14	-0.20
HPGN CA 06 06	2138252.60	6339533.07	288.95	289.18	288.98	0.23	-0.20	0.03
HPGN CA 06 07	2068328.35	6163767.92	N/S	330.11	330.06		-0.05	
HPGN D CA 06 NF	2099649.76	6250234.96	187.18	187.06	186.98	-0.12	-0.08	-0.20
HPGN D CA 06 QF	2172846.99	6309610.23	292.58	292.63	292.51	0.05	-0.12	-0.07
HPGN D CA 06 RF	2207496.69	6274591.72	285.55	285.53	285.38	-0.02	-0.15	-0.18
HPGN D CA 06 RG	2239184.36	6329797.99	430.54	430.68	430.41	0.14	-0.27	-0.13
HPGN D CA 06 SG	2282575.61	6342236.42	1107.32	Original survey only. Not part of ongoing subsidence monitoring				
HPGN CA 10 01	2271706.39	6053044.18	101.09	101.04	100.98	-0.05	-0.06	-0.10
HPGN CA 10 04	2423374.02	5929562.77	239.03	239.00	239.04	-0.03	0.03	0.00
HPGN D CA 10 BK	2221992.47	6029550.82	314.29	314.309	314.29	0.02	-0.02	0.00

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J 1233	2199134.60	6397420.35	494.28	494.50	494.21	0.22	-0.30	-0.08
K 361	2275034.32	5961519.30	285.34	285.34	285.34	0.00	0.00	0.00
KELLIE	2238612.29	6104481.32	124.29	124.20	124.12	-0.09	-0.08	-0.17
KRUGER	2366194.68	6030519.67	91.13	Original survey only. Not part of ongoing subsidence monitoring				
LDC	2224030.83	6348300.79	312.47	Original survey only. Not part of ongoing subsidence monitoring				
LIVINGSTON RESET	2392467.49	6061625.68	134.35	134.21	134.22	-0.14	0.01	-0.13
MARTIN	2099695.66	6220352.72	N/S	176.25	176.19		-0.06	
MELISSA	2256382.27	6184306.52	N/S	182.60	182.47		-0.13	
MEN	2181208.04	6158129.73	155.18	Original survey only. Not part of ongoing subsidence monitoring				
MSG	2348711.57	6006971.14	74.29	Original survey only. Not part of ongoing subsidence monitoring				
MURIETTA	2115864.76	6175004.36	N/S	166.02	165.96		-0.06	
NEES	2214707.70	6139071.21	N/S	139.99	N/S			
NEWMAN NW BASE	2376151.68	5971948.24	97.22	Original survey only. Not part of ongoing subsidence monitoring				
NLD206	2122146.25	6215832.94	173.34	Original survey only. Not part of ongoing subsidence monitoring				
NOTARB	2255715.30	6232765.41	N/S	279.43	279.27		-0.17	
R 940 RESET	2361312.03	6086633.83	N/S	123.76	123.78		0.02	
RBF1007 RESET	2224869.01	6157684.98	N/A	147.46	147.39	N/A	-0.07	N/A
RBF1009	2233366.75	6122386.62	N/S	129.44	129.39		-0.05	
RBF1026	2198310.22	6154768.94	150.79	150.72	150.72	-0.07	0.00	-0.07
RBF1027	2186287.83	6159874.92	151.86	151.80	151.81	-0.05	0.00	-0.05
RBF1047	2184438.14	6226802.77	214.51	214.47	214.39	-0.04	-0.08	-0.12
RBF1053	2243984.76	6157715.04	N/S	147.08	146.75		-0.33	
RBF1054	2254203.85	6157753.54	N/S	150.64	150.40		-0.24	
RBF1055	2265040.23	6131594.63	N/S	129.23	128.96		-0.27	
RBF1057	2284179.40	6121191.38	122.02	121.71	121.55	-0.31	-0.17	-0.47
RBF1125	2178561.31	6256399.72	249.82	Original survey only. Not part of ongoing subsidence monitoring				
SALT RM 1	2322364.17	6025789.03	84.69	84.65	84.62	-0.03	-0.03	-0.06
SHAWN	2183877.37	6142113.64	154.80	154.78	154.76	-0.02	-0.03	-0.05
SJF	2241351.63	6349234.51	309.19	Original survey only. Not part of ongoing subsidence monitoring				
SJN	2170239.70	6177218.94	165.36	Original survey only. Not part of ongoing subsidence monitoring				
SJS	2358524.11	6023075.46	79.65	Original survey only. Not part of ongoing subsidence monitoring				
SKAGGS	2185778.02	6243281.21	235.37	Original survey only. Not part of ongoing subsidence monitoring				
SMN/NEW	2379250.10	5986636.44	71.35	Original survey only. Not part of ongoing subsidence monitoring				
SPEAK AZ MK CADH	2149040.27	6261382.68	230.11	230.09	229.99	-0.02	-0.10	-0.12
SSH	2342536.69	6022775.67	79.13	Original survey only. Not part of ongoing subsidence monitoring				
T 987 CADWR	2319104.55	6078482.31	110.77	110.72	110.52	-0.05	-0.20	-0.25
USHER	2195250.81	6199772.70	N/S	183.07	182.89		-0.18	
V 513	2061261.05	6266141.17	N/S	199.42	199.28		-0.13	

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W 938 RESET	2322679.47	6128257.43	N/S	146.02	146.02		0.00	
W 990 CADWR	2292291.96	6098548.52	113.60	113.24	113.05	-0.36	-0.19	-0.55
WES	2232691.16	6167201.61	162.76	162.53	162.41	-0.22	-0.12	-0.34
WILLIAM3	2263167.61	6102759.06	114.94	114.87	114.75	-0.06	-0.12	-0.18
X989	2213141.17	6133281.34	141.89	141.76	141.78	-0.14	0.03	-0.11
Y549	2239271.51	6146221.46	N/S	141.37	141.35		-0.03	

Notes:

1. N/S - Not surveyed as part of that missions GPS network.
2. Free adjustment elevations were selected for the subsidence monitoring as it better represents station movement by removing adjustment distortion
3. December 2011 survey includes all stations observed by Reclamation. Due to various constraints not all stations became part of the subsequent subsidence monitoring program
4. The Bureau of Reclamation survey was accomplished with Trimble R8 GNSS capable GPS receivers using static observation techniques.
5. Geoid Model **Geoid03** was used for the determination of orthometric elevations.