

Table 9-10. Summary of sedimentation results at end of 25-yr year simulation with no subsidence.

Reach	Load Entering Reach (1000 tons)	Total Deposition (1000 tons)	Total Volume Deposition (1000 yd <sup>3</sup> )	channel deposition tons (1000 tons)	Change in Average Channel Elevation (ft)
Alt 1 – Option B					
Reach4b2	302	115	95	47	2.6
Reach4b1-6	224	-101	-83	-49	-1.1
Reach4b1-5	306	92	75	-32	-0.9
Reach4b1-4	145	-162	-133	26	-0.2
Reach4b1-3	61	-69	-57	-14	-0.4
Reach4b1-2	847	775	638	20	0.3
Reach4b1-1	972	109	89	13	0.2
Reach4a	1864	853	702	45	1.1
Alt 1 – Option C					
Reach4b2	286	112	92	48	2.6
Reach4b1-6	175	-119	-98	-17	-0.5
Reach4b1-5	138	-42	-35	-24	-0.7
Reach4b1-4	92	-63	-52	31	0.0
Reach4b1-3	100	-17	-14	-6	-0.2
Reach4b1-2	599	524	431	5	0.0
Reach4b1-1	977	364	299	4	0.1
Reach4a	1864	853	702	45	1.1
Alt 2					
Reach4b2	647	388	319	51	2.8
Mariposa	1084	294	242	32	0.8
MESB-2	623	-470	-387	-48	-0.9
MESB -1	1700	1184	974	-1	0.0
Sand Slough	1195	71	59	0	-0.1
Reach4a	1890	680	559	31	0.7
Alt 2 - LESB					
LESB -2	2818	-420	-346	-53	-1.3
LESB -1	1669	-1152	-948	-127	-2.3
MESB -2	771	-921	-758	-115	-2.0
MESB -1	1740	1072	883	-12	-0.3
Sand Slough	1223	65	53	-4	-0.2
Reach4a	1890	680	559	31	0.7

Reach	Load Entering Reach (1000 tons)	Total Deposition (1000 tons)	Total Volume Deposition (1000 yd <sup>3</sup> )	channel deposition tons (1000 tons)	Change in Average Channel Elevation (ft)
Alt 3					
Reach4b2	140	49	41	47	2.7
Reach4b1-6	135	-6	-5	1	-0.1
Reach4b1-5	42	-98	-81	-15	-0.4
Reach4b1-4	131	86	71	11	-0.4
Reach4b1-3	69	-54	-45	-14	-0.4
Reach4b1-2	112	50	41	21	0.3
Reach4b1-1	173	57	47	50	1.0
Reach4a	1864	853	702	45	1.1
Alt 4					
Reach4b2	311	106	87	49	2.7
Reach4b1-6	329	18	15	-52	-1.1
Reach4b1-5	453	91	74	-112	-3.0
Reach4b1-4	640	189	156	-12	-1.5
Reach4b1-3	227	-406	-334	-74	-2.1
Reach4b1-2	631	444	365	19	0.2
Reach4b1-1	800	127	104	16	0.2
Reach4a	1864	853	702	45	1.1
No Action					
MESB -2	277	-573	-472	-140	-0.8
MESB -1	1563	1391	1145	119	1.0
Sand Slough	1070	76	62	10	0.8
Reach4a	1867	787	648	540	1.0



Table 9-11. Summary of sedimentation results at end of 25-yr year simulation with subsidence.

Reach	Load Entering Reach (1000 tons)	Total Deposition (1000 tons)	Total Volume Deposition (1000 yd <sup>3</sup> )	channel deposition tons (1000 tons)	Change in Average Channel Elevation (ft)
Alt 1 – Option B					
Reach4b2	286	97	80	44	1.1
Reach4b1-6	139	-170	-140	-223	-3.3
Reach4b1-5	207	97	80	-151	-4.8
Reach4b1-4	76	-149	-123	45	-6.4
Reach4b1-3	35	-9	-7	-34	-8.0
Reach4b1-2	573	534	440	25	-8.9
Reach4b1-1	924	365	301	61	-8.7
Reach4a	1856	851	700	613	-8.9
Alt 1 – Option C					
Reach4b2	270	93	77	44	1.1
Reach4b1-6	101	-176	-145	-100	-2.6
Reach4b1-5	79	-11	-9	-132	-4.8
Reach4b1-4	53	-55	-45	76	-6.1
Reach4b1-3	135	44	36	-21	-7.8
Reach4b1-2	357	282	232	-50	-9.5
Reach4b1-1	940	580	477	34	-9.1
Reach4a	1856	851	700	613	-8.9
Alt 2					
Reach4b2	388	286	236	39	0.8
Mariposa	689	173	143	46	-2.4
MESB-2	372	-313	-258	-239	-6.5
MESB -1	1364	1138	936	23	-8.4
Sand Slough	847	16	13	10	-9.3
Reach4a	1868	1002	825	586	-8.9
Alt 2 - LESB					
LESB -2	2614	-472	-388	-236	-2.8
LESB -1	1185	-1450	-1194	-1061	-5.1
MESB -2	476	-704	-580	-573	-7.5
MESB -1	1420	1082	890	-8	-8.6
Sand Slough	890	12	10	8	-9.4
Reach4a	1863	967	796	559	-9.0

Reach	Load Entering Reach (1000 tons)	Total Deposition (1000 tons)	Total Volume Deposition (1000 yd <sup>3</sup> )	channel deposition tons (1000 tons)	Change in Average Channel Elevation (ft)
Alt 3					
Reach4b2	120	46	38	45	1.3
Reach4b1-6	103	-20	-17	-12	-2.2
Reach4b1-5	33	-73	-60	-66	-4.4
Reach4b1-4	86	51	42	-6	-6.5
Reach4b1-3	40	-37	-31	-40	-8.0
Reach4b1-2	71	39	32	39	-8.8
Reach4b1-1	165	96	79	96	-8.0
Reach4a	1862	851	700	613	-8.9
Alt 4					
Reach4b2	288	101	83	46	1.3
Reach4b1-6	286	-23	-19	-188	-3.1
Reach4b1-5	289	-5	-4	-574	-6.8
Reach4b1-4	432	144	119	35	-7.1
Reach4b1-3	193	-232	-191	-194	-9.1
Reach4b1-2	423	289	238	22	-9.1
Reach4b1-1	764	314	259	109	-7.9
Reach4a	1862	851	700	613	-8.9
No Action					
Reach4b2					
Mariposa					
MESB -2	160	-551	-454	-156	-6.6
MESB -1	1226	1204	991	84	-7.9
Sand Slough	728	32	26	12	-9.0
Reach4a	1846	1105	909	686	-8.7

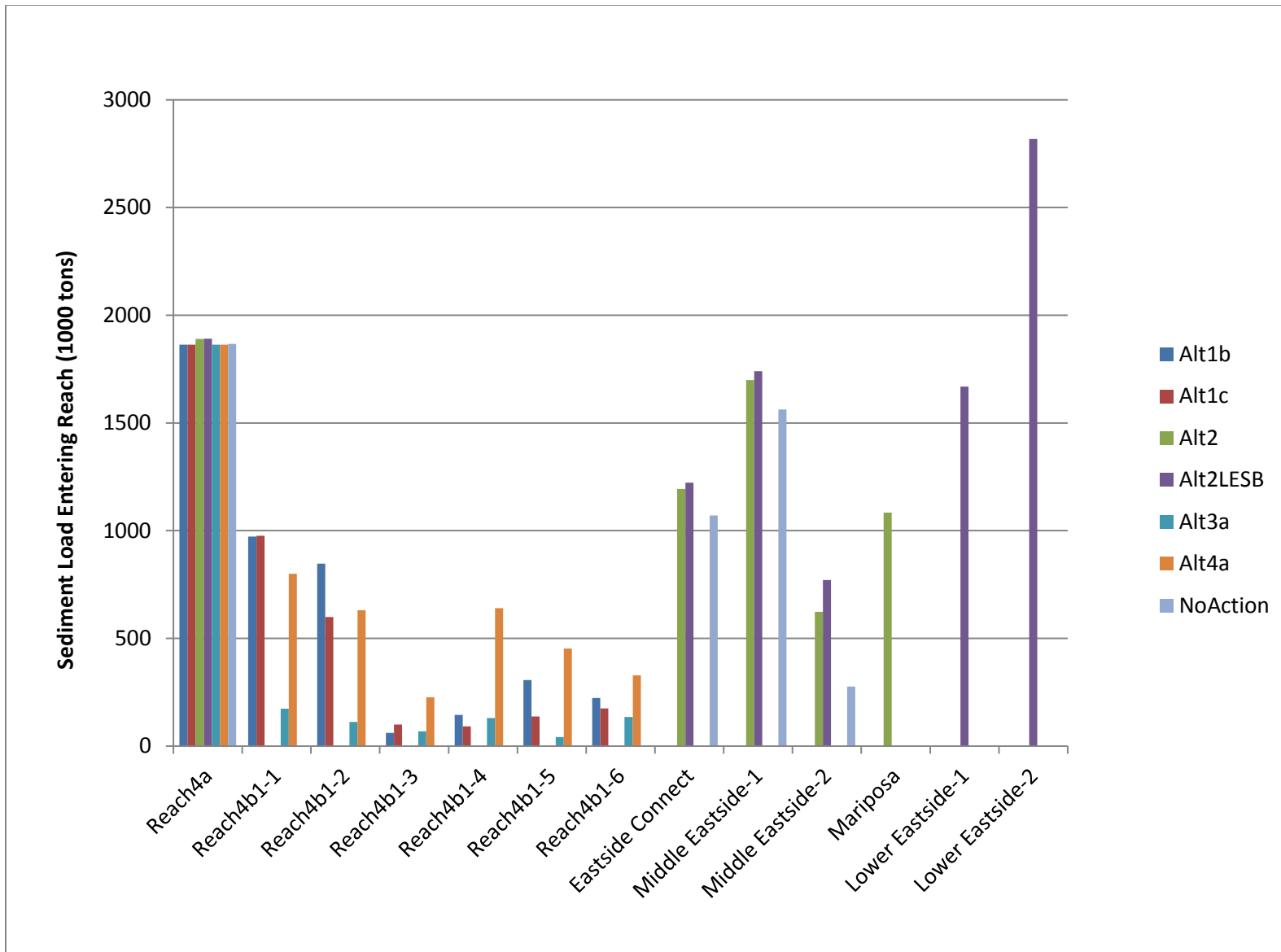


Figure 9-35. Sediment load entering reach for each alternative without subsidence for 25-yr simulation.

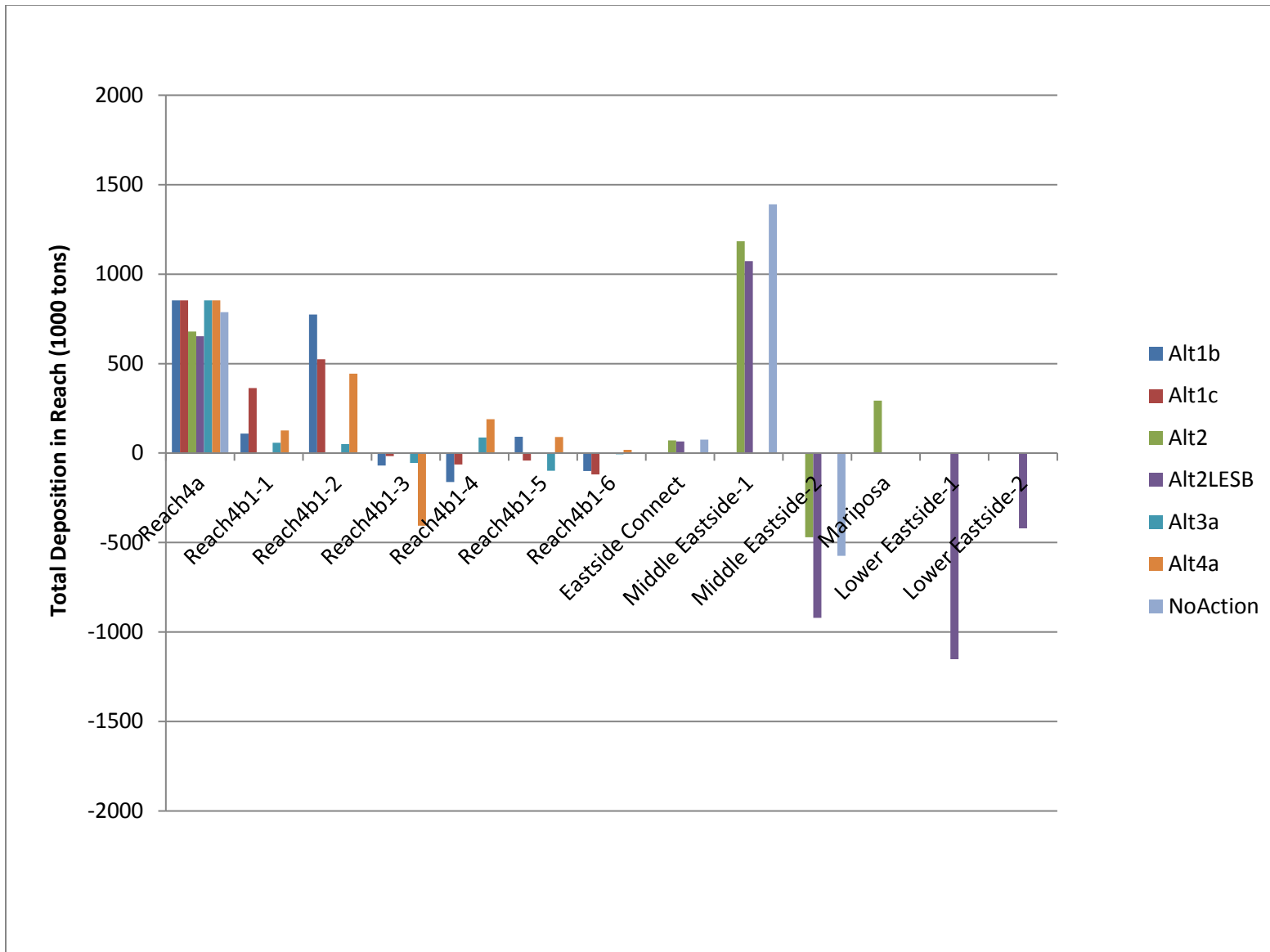


Figure 9-36. Deposition within each reach for each alternative without subsidence after 25-yr simulation.

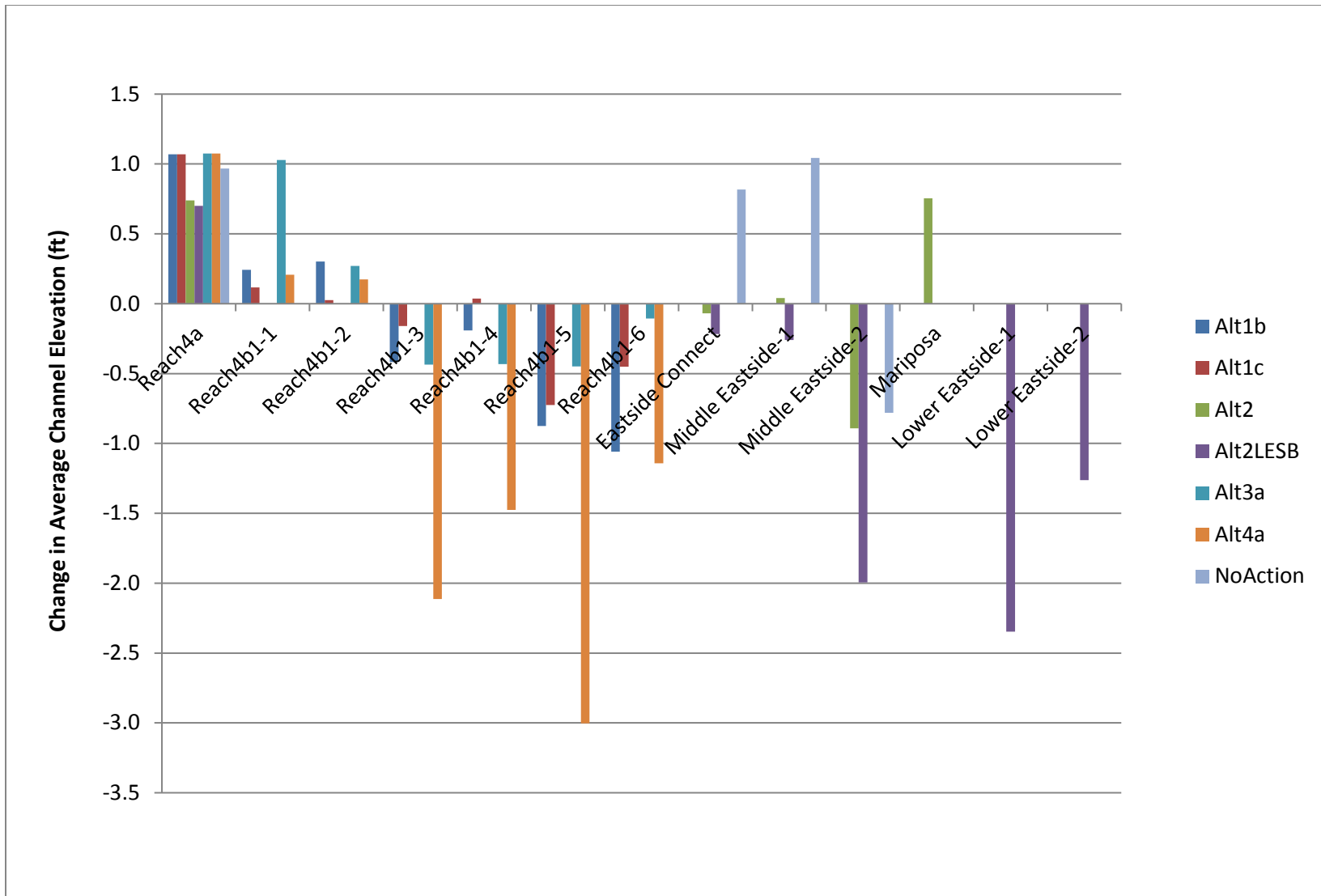


Figure 9-37. Change in average channel bed elevation within each reach for each alternative without subsidence after 25-yr simulation.

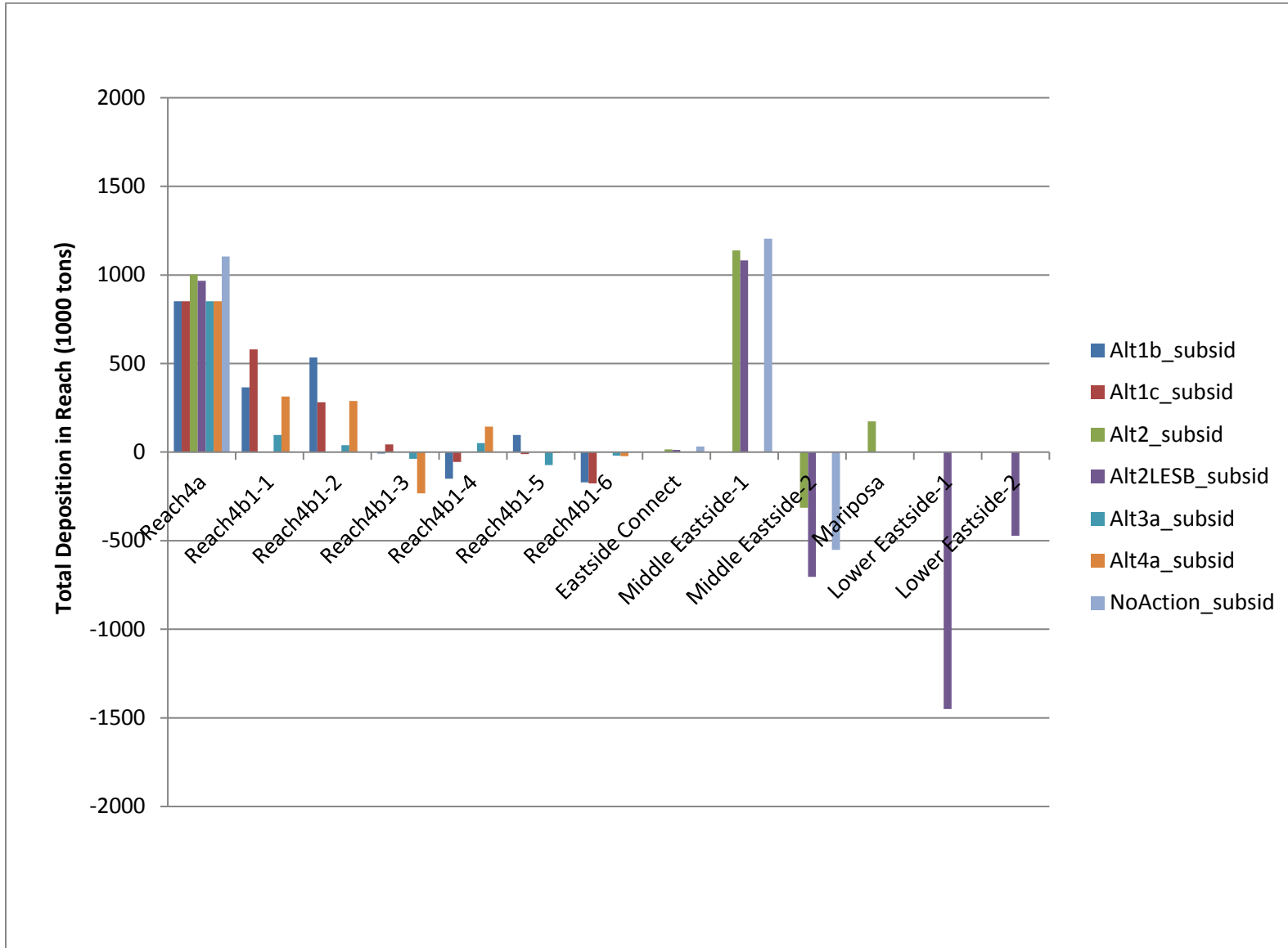


Figure 9-38. Deposition in tons within each reach for each alternative with subsidence.

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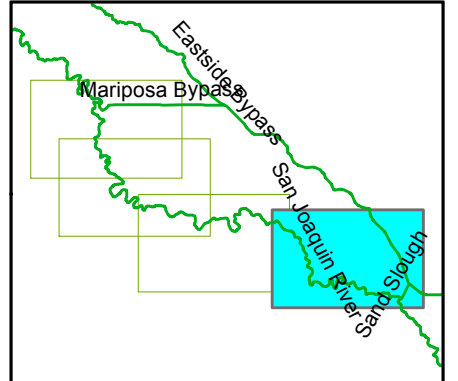
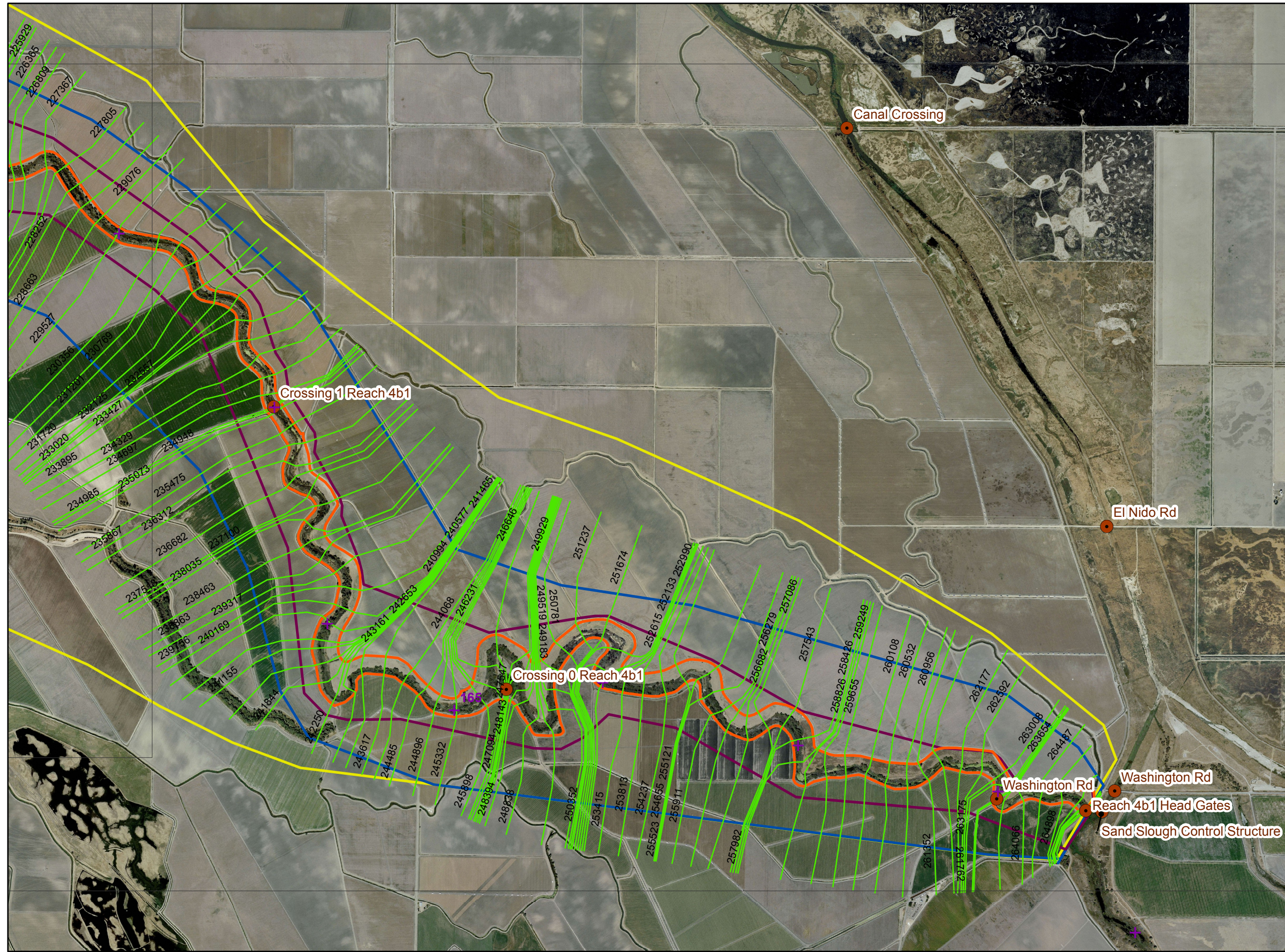
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# **11 Appendix A 1D Cross Section Layout for Reach 4B1**



See Page 2



**Reach 4b1 Cross Section Layout**

**San Joaquin River Restoration Project**

June 6, 2012

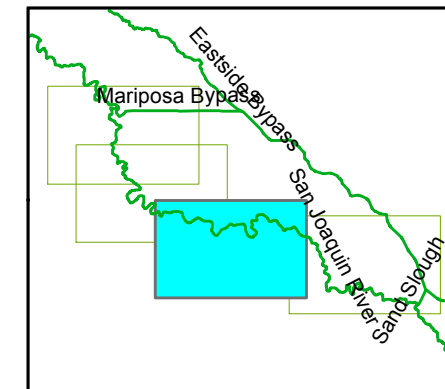
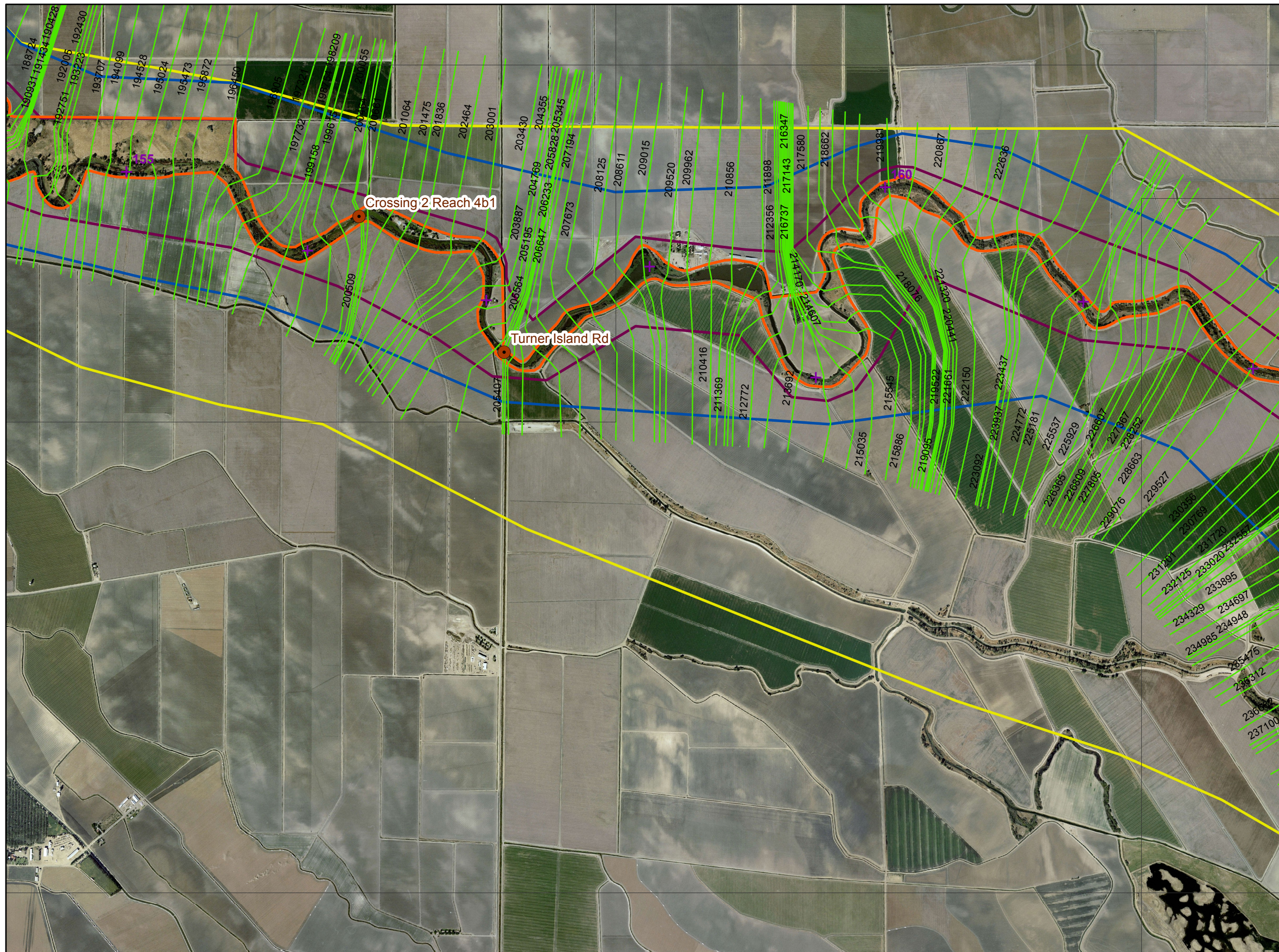


- Legend**
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  - Structures
  - XS Cut Lines
  - Levee Option A
  - Levee Option B
  - Levee Option C
  - Levee Option D
  - Index Grid
- 0 1,000 2,000 Feet

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**Reach 4b1 Cross Section Layout**

**San Joaquin River Restoration Project**

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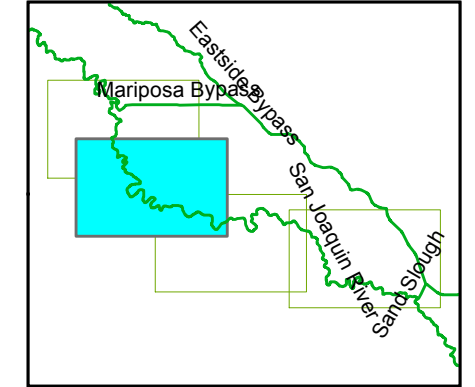
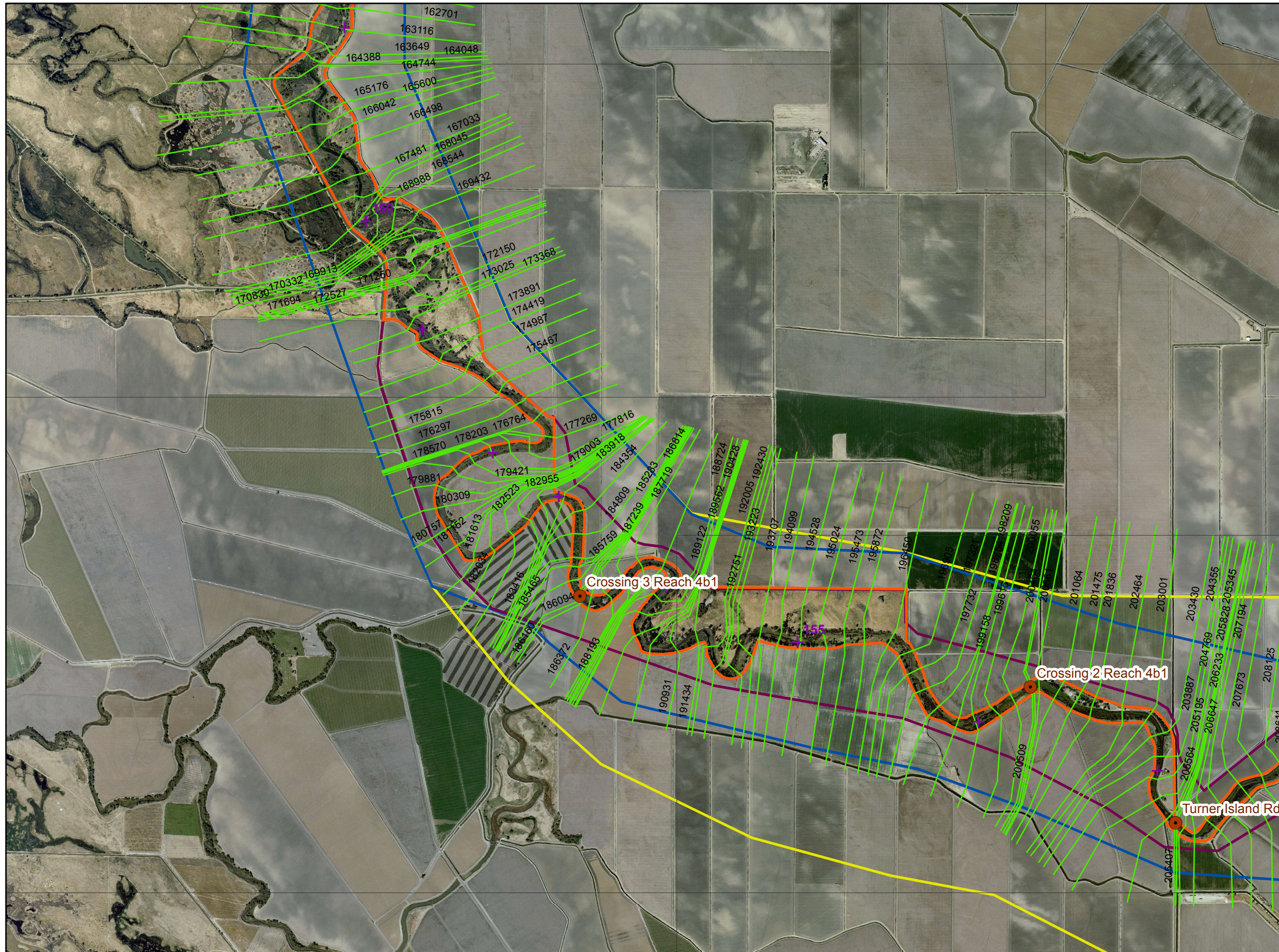
**Legend**

- + SJRRP Mile Posts
- Structures
- XS Cut Lines
- Levee Option A
- Levee Option B
- Levee Option C
- Levee Option D
- Index Grid

0 1,000 2,000  
Feet

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**Reach 4b1 Cross Section Layout**

**San Joaquin River Restoration Project**

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See Page 2

**Legend**

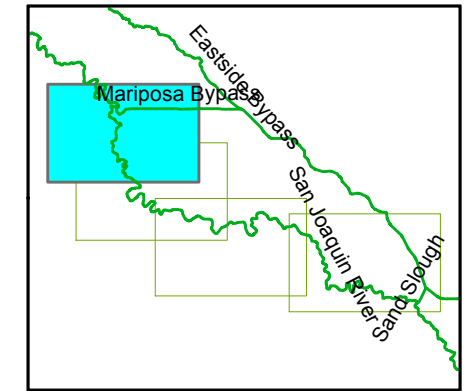
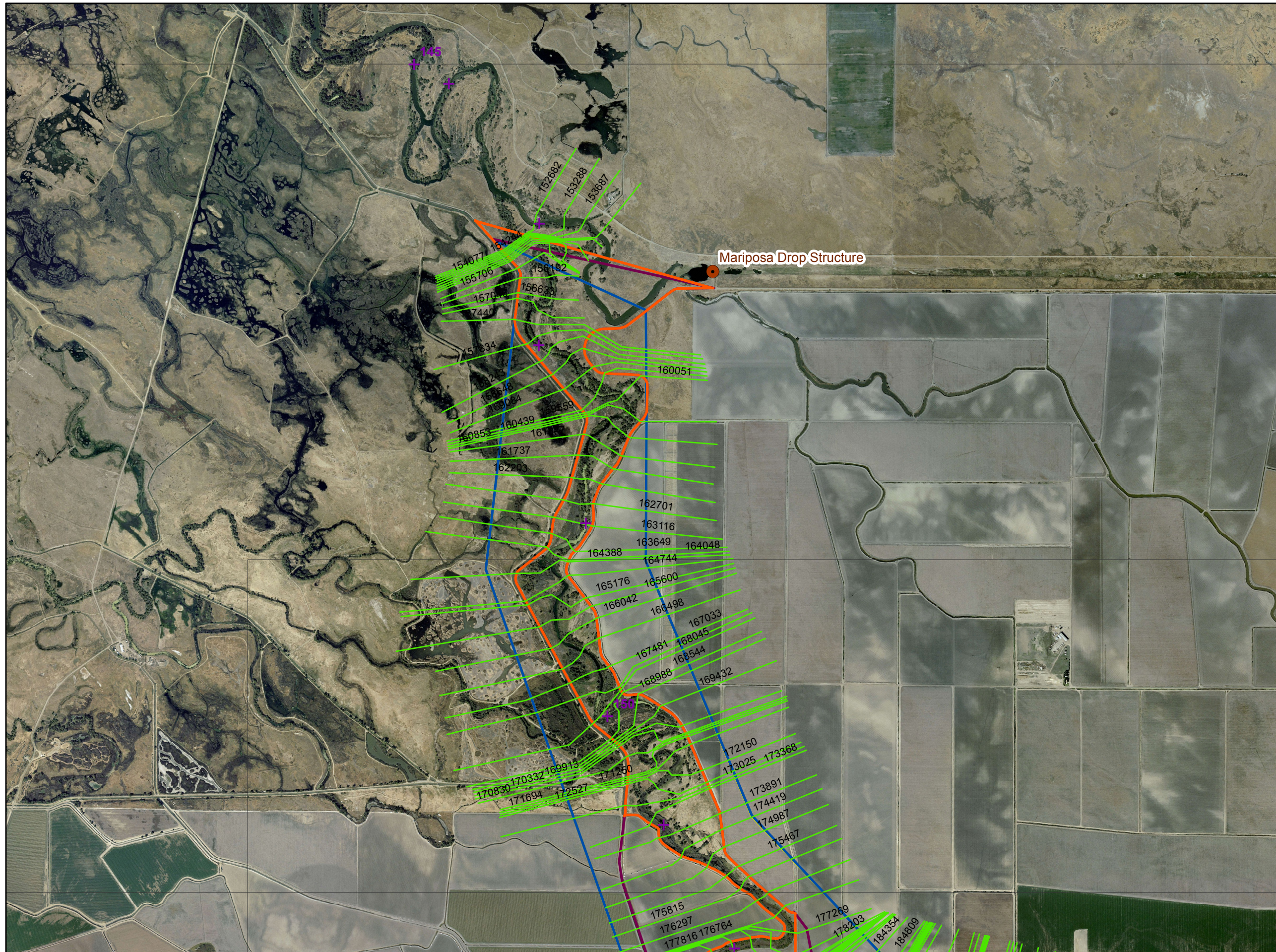
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- Structures
- XS Cut Lines
- Levee Option A
- Levee Option B
- Levee Option C
- Levee Option D
- Index Grid

0 1,000 2,000  

 Feet

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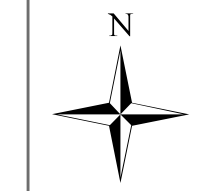




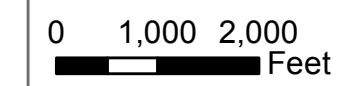
**Reach 4b1 Cross Section Layout**

**San Joaquin River Restoration Project**

**June 6, 2012**



- Legend**
- + SJRRP Mile Posts
  - Structures
  - XS Cut Lines
  - Levee Option A
  - Levee Option B
  - Levee Option C
  - Levee Option D
  - Index Grid

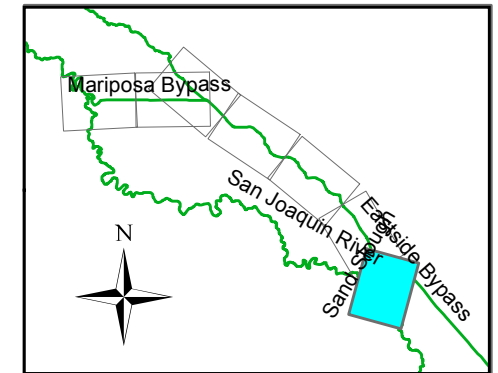
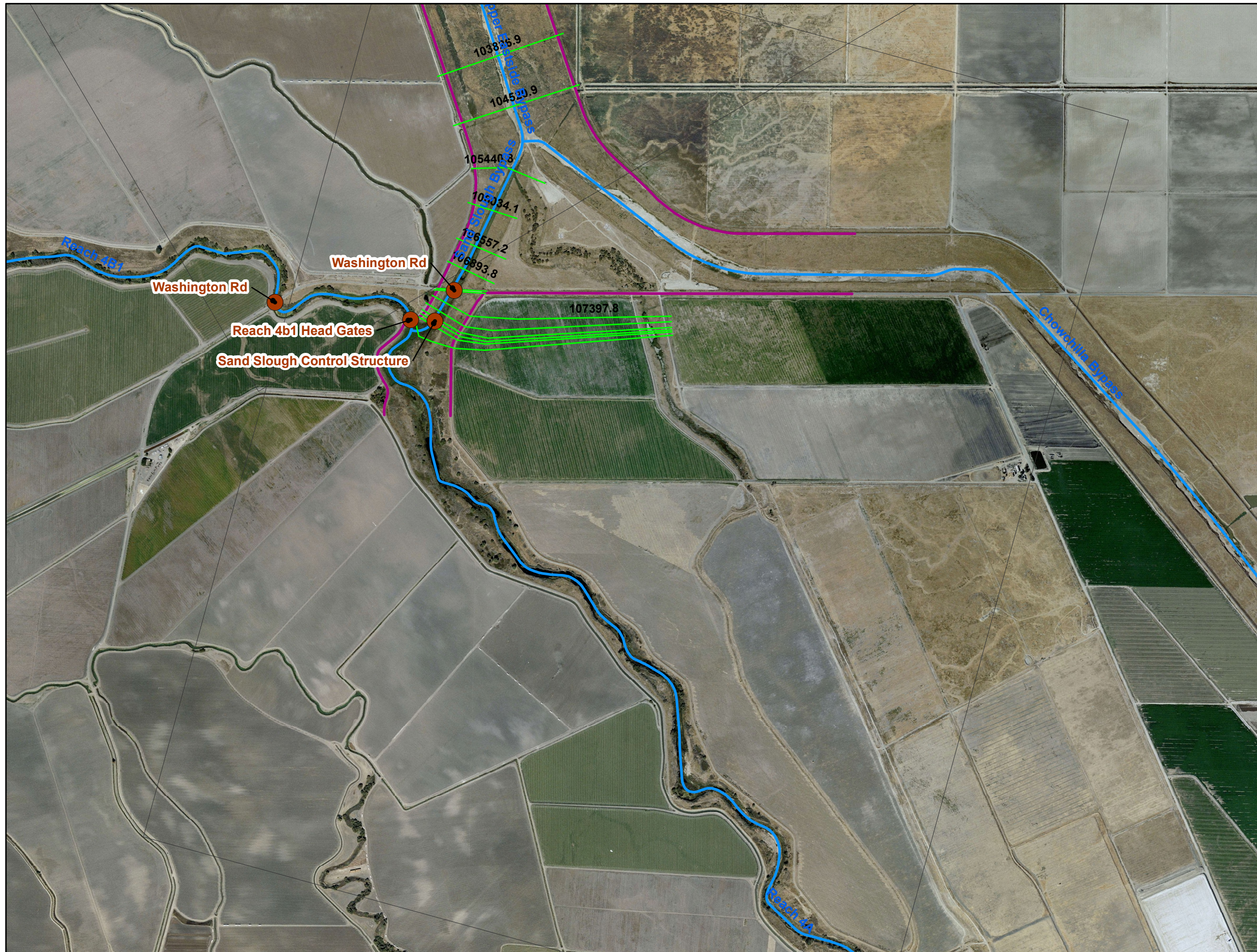


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# **12 Appendix B 1D Cross Section Layout for Eastside and Mariposa Bypasses**










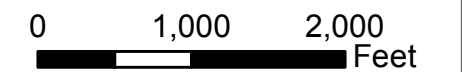
### Bypass Cross Section Layout

### San Joaquin River Restoration Project

June 6, 2012

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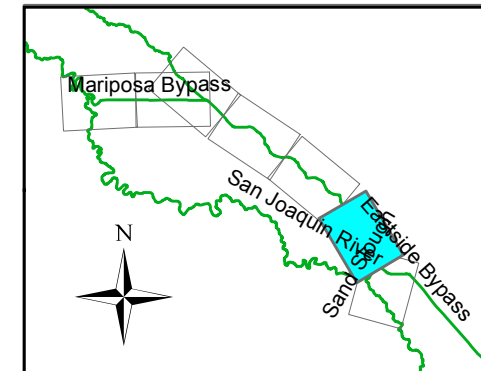
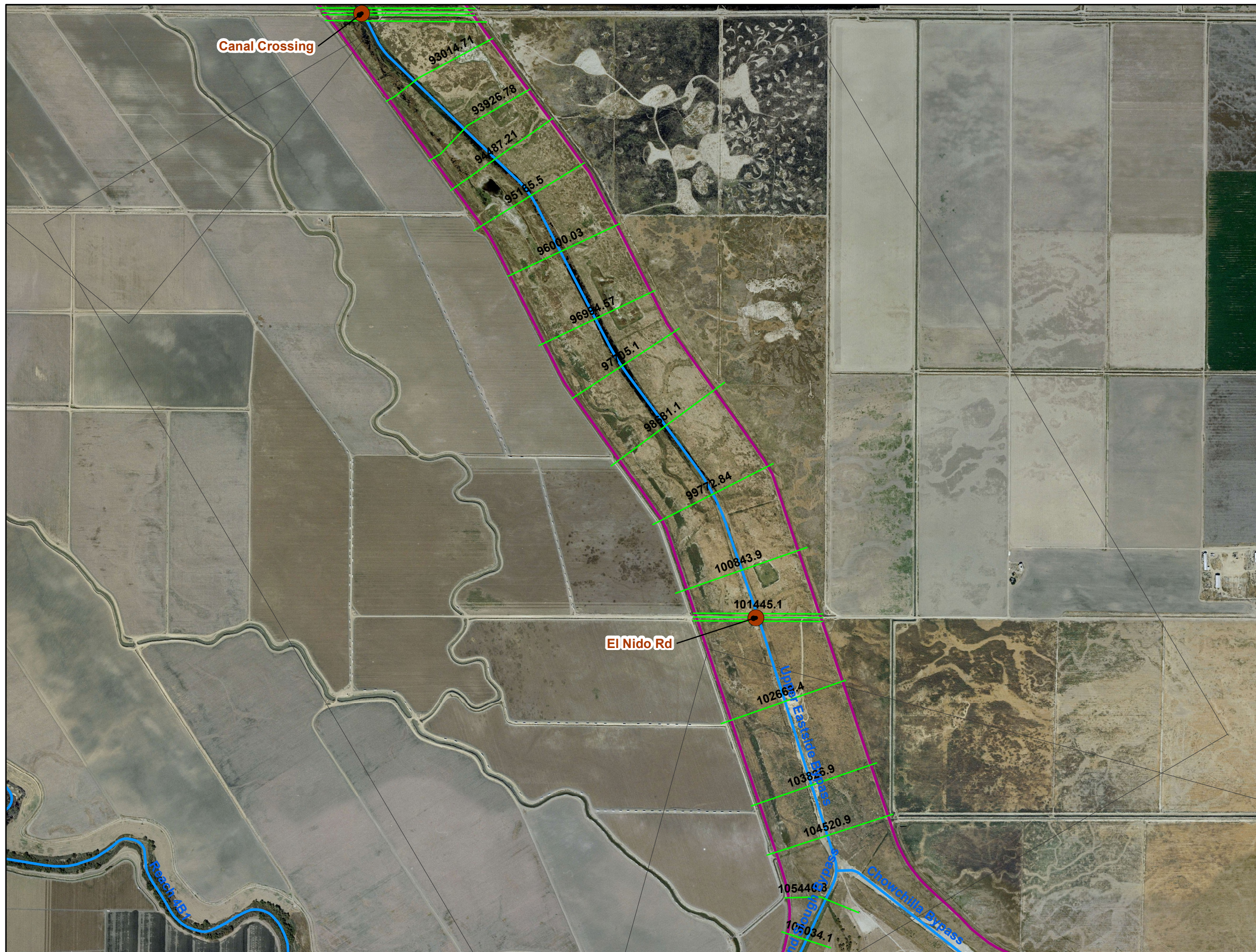
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-  XS Cut Lines
-  Bypass Levee
-  River and Bypasses
-  Index Grid



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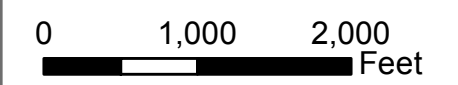
**Bypass Cross Section Layout**

**San Joaquin River Restoration Project**

June 6, 2012

**Legend**

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- Bypass Levee
- River and Bypasses
- Index Grid



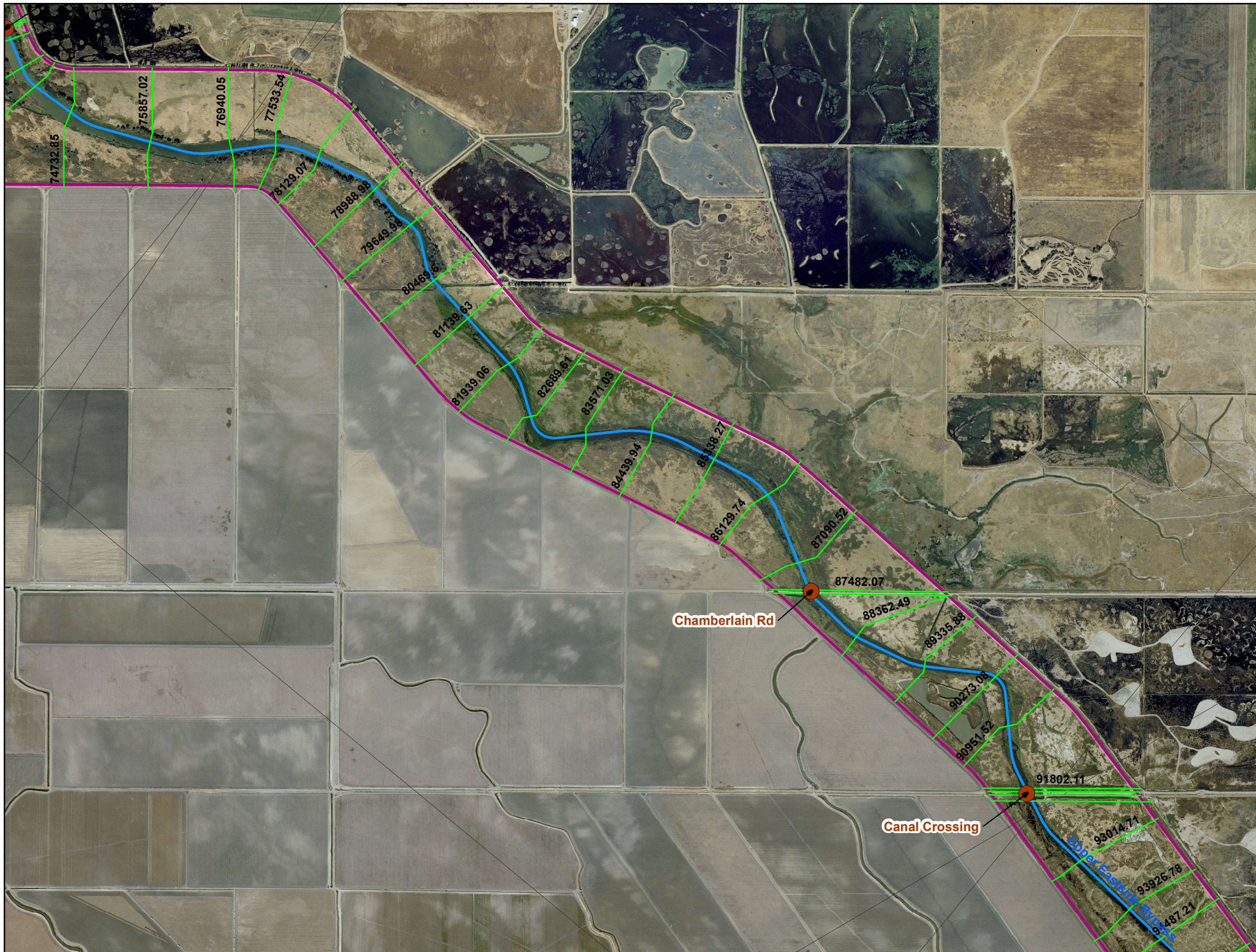
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2

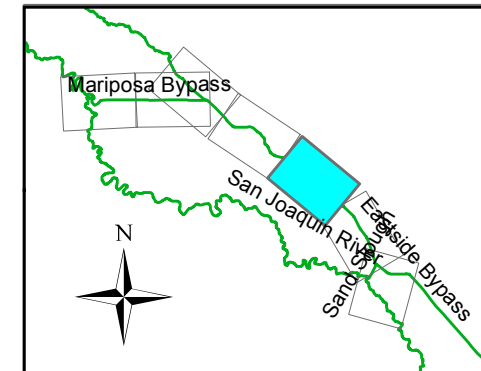


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



**Bypass Cross Section  
Layout**

**San Joaquin River  
Restoration Project**

June 6, 2012

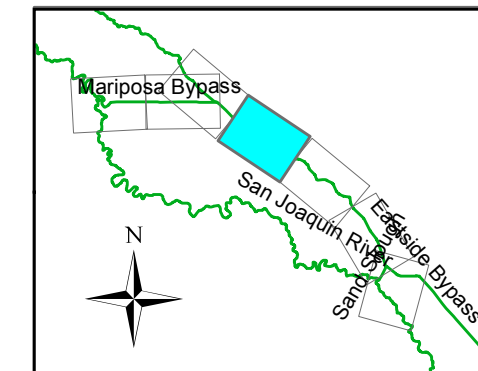
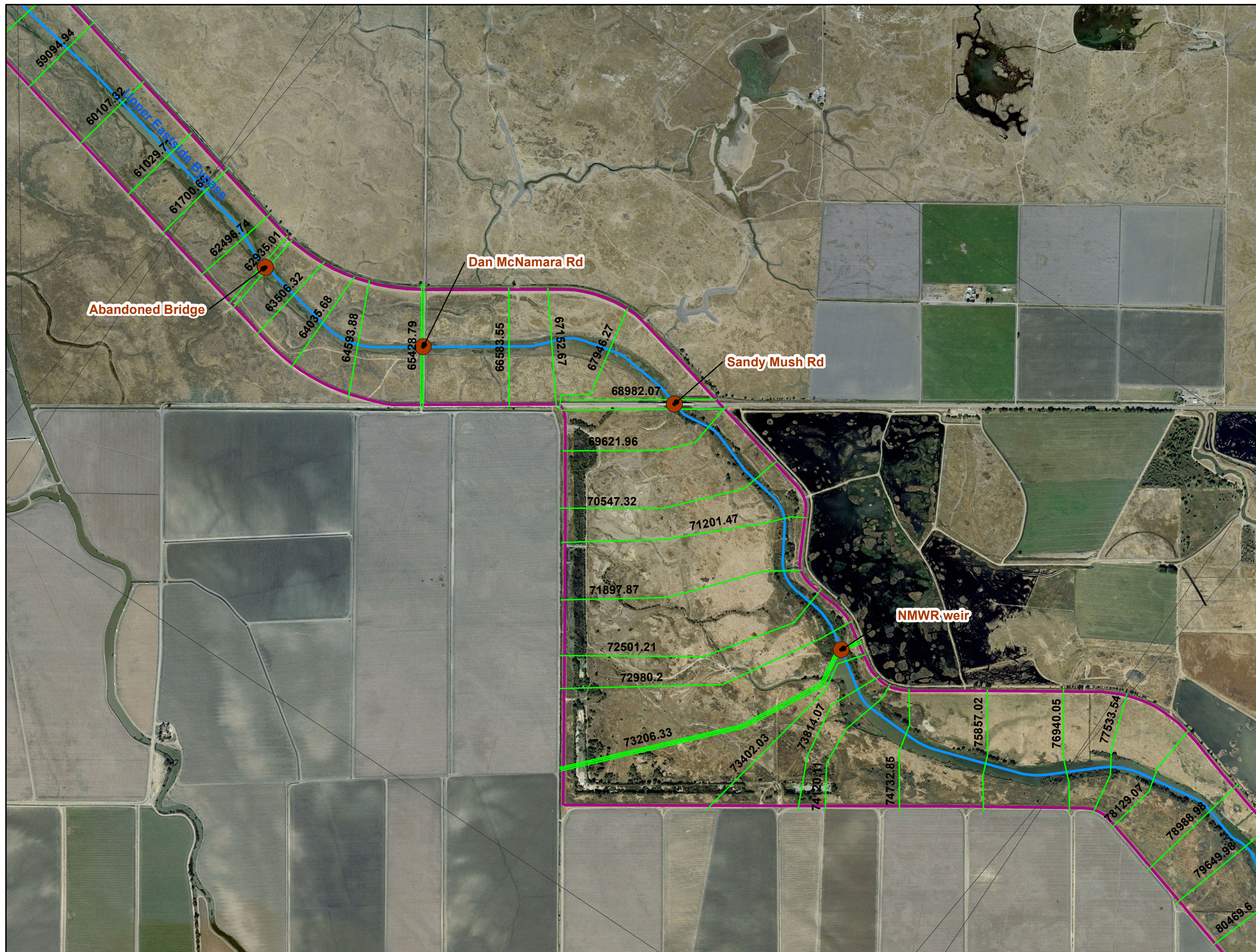
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-  XS Cut Lines
-  Bypass Levee
-  River and Bypasses
-  Index Grid



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



### Bypass Cross Section Layout

### San Joaquin River Restoration Project

June 6, 2012

### Legend

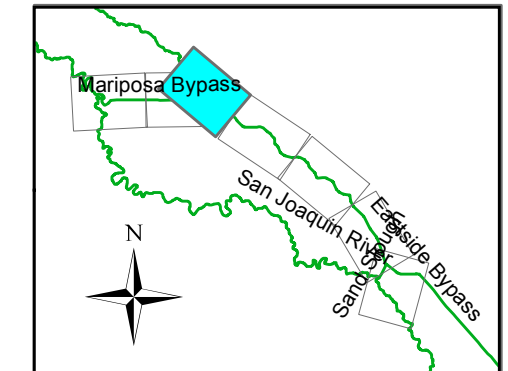
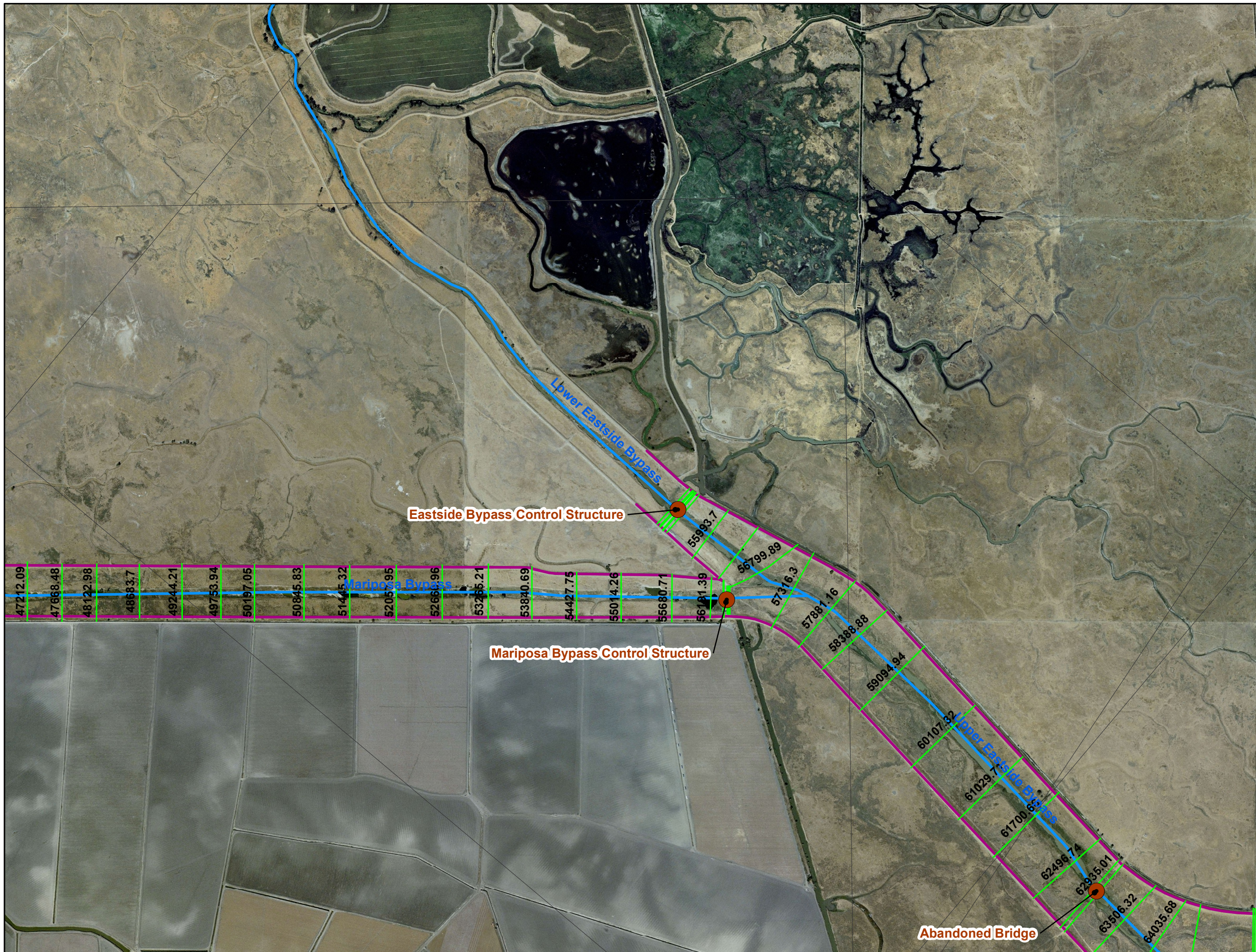
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-  River and Bypasses
-  Index Grid



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**Bypass Cross Section Layout**

**San Joaquin River Restoration Project**

June 6, 2012

**Legend**

- Structures
- XS Cut Lines
- Bypass Levee
- River and Bypasses
- Index Grid

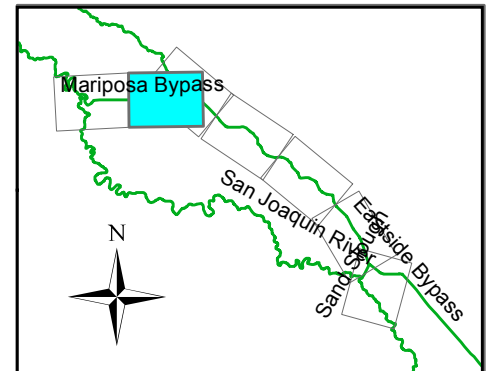
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



### Bypass Cross Section Layout

### San Joaquin River Restoration Project

June 6, 2012

### Legend

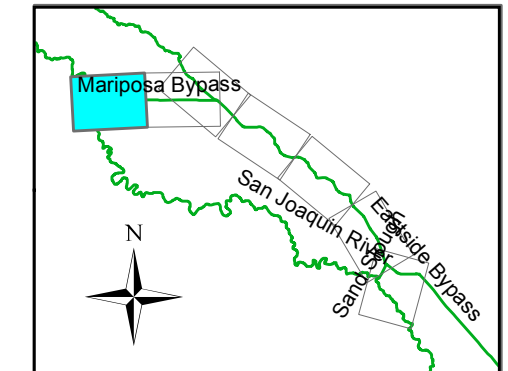
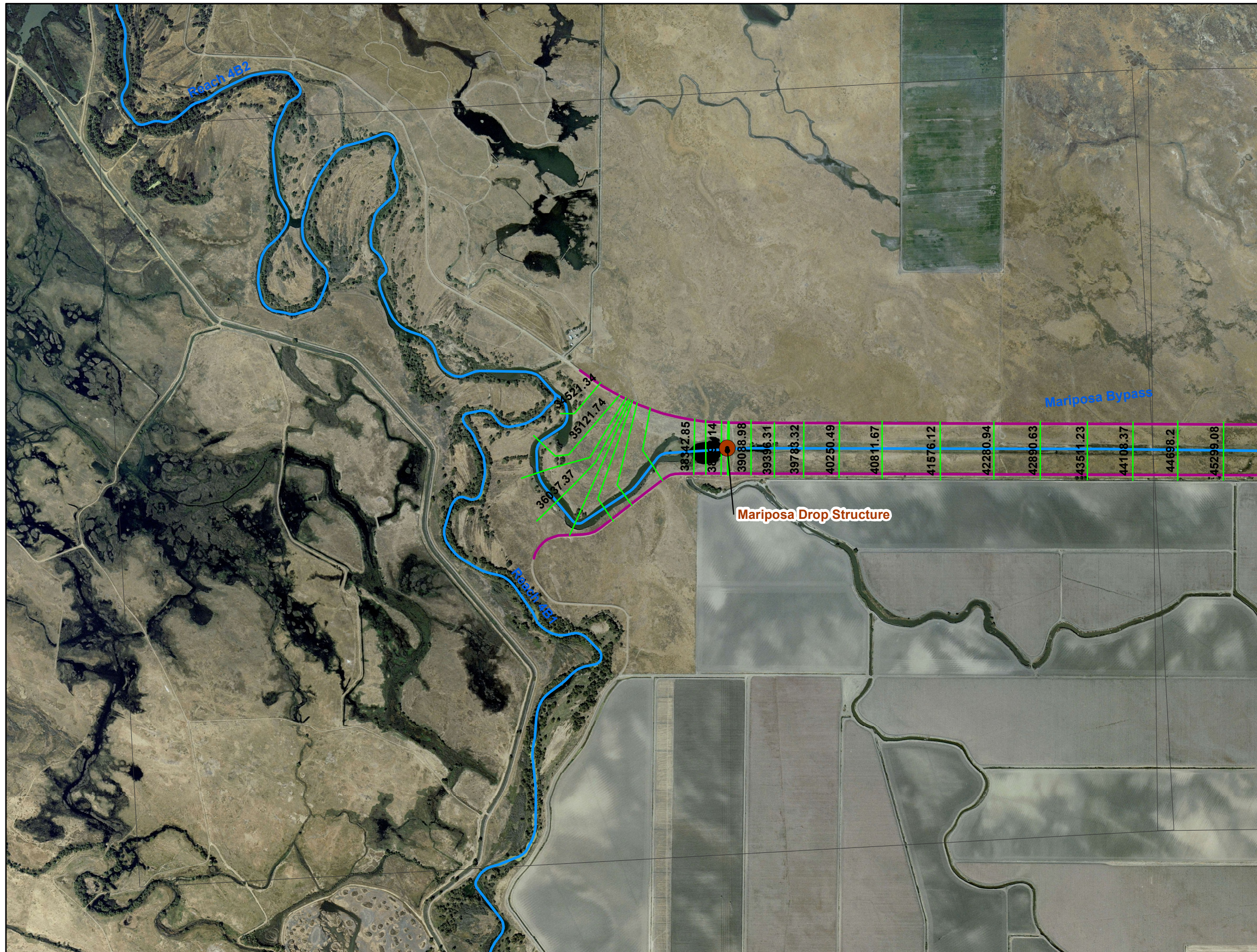
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-  Bypass Levee
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-  Index Grid

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



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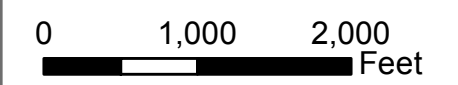
**San Joaquin River Restoration Project**

June 6, 2012

**Legend**

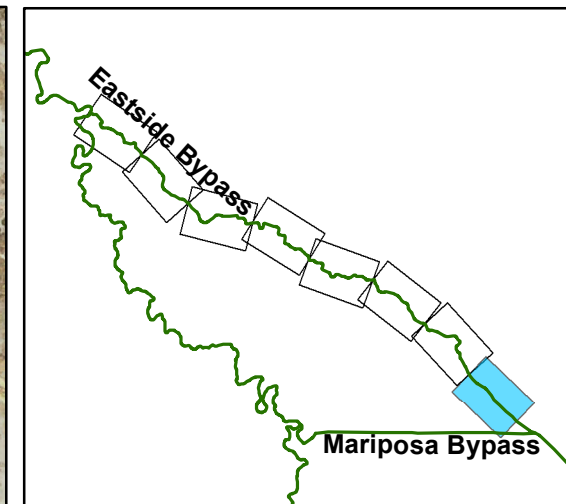
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-  XS Cut Lines
-  Bypass Levee
-  River and Bypasses
-  Index Grid

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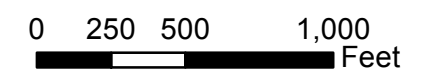


**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

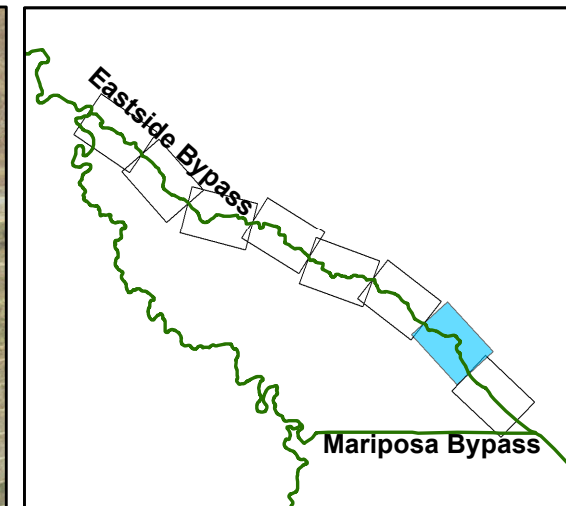
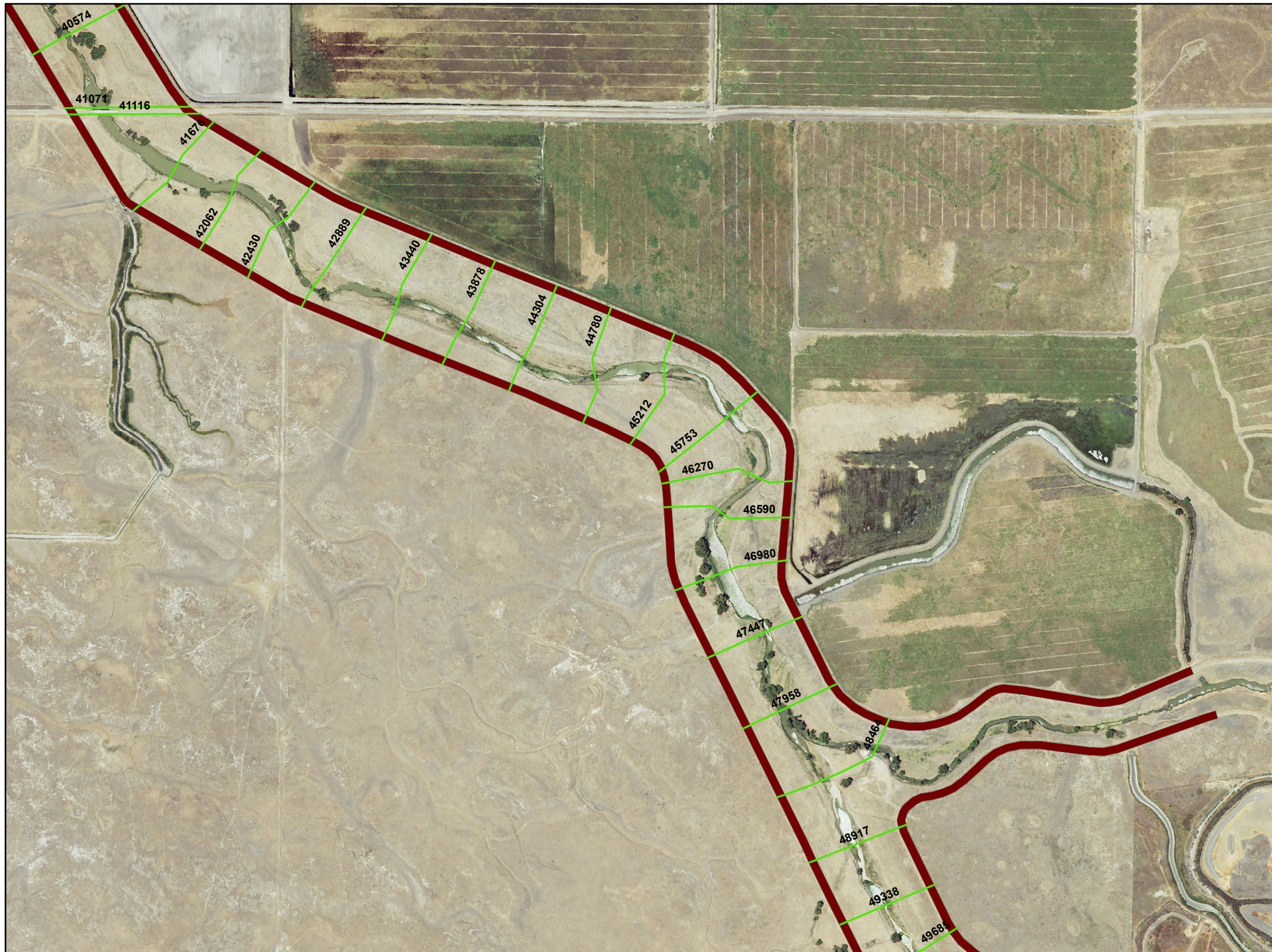
**Legend**

- XS cut lines
- █ Bypass Levees



Sedimentation and River  
Hydraulics Group  
Technical Service Center  
Bureau of Reclamation  
Denver, CO



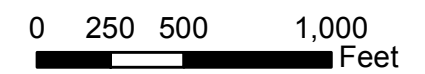


**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

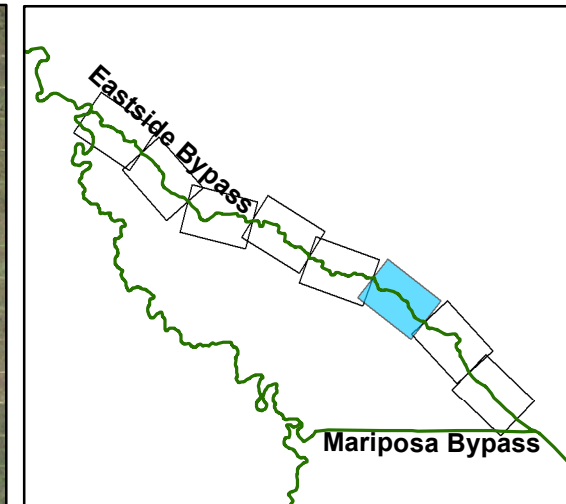
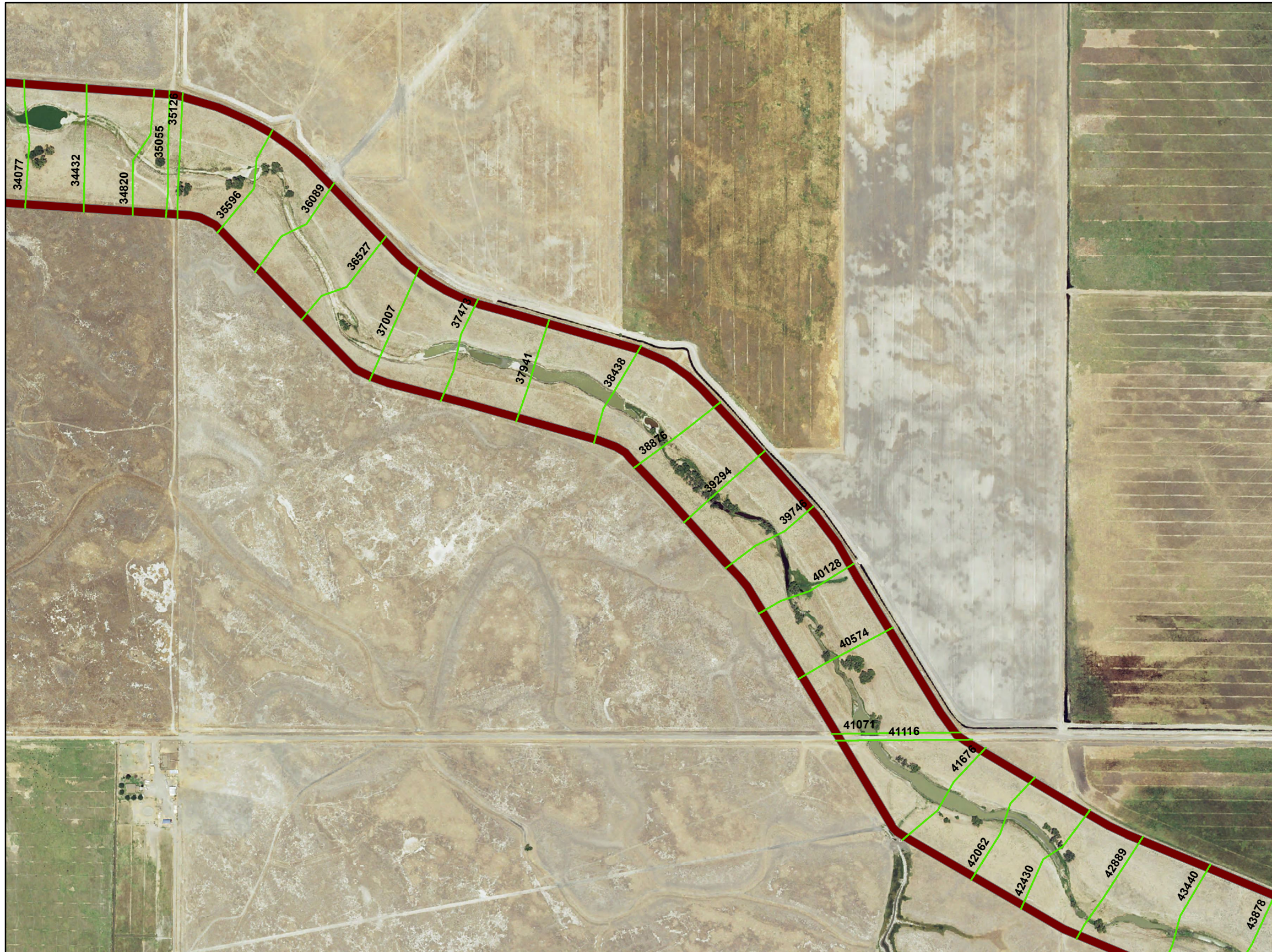
**Legend**

- XS cut lines
- █ Bypass Levees



Sedimentation and River  
Hydraulics Group  
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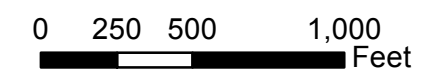


**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

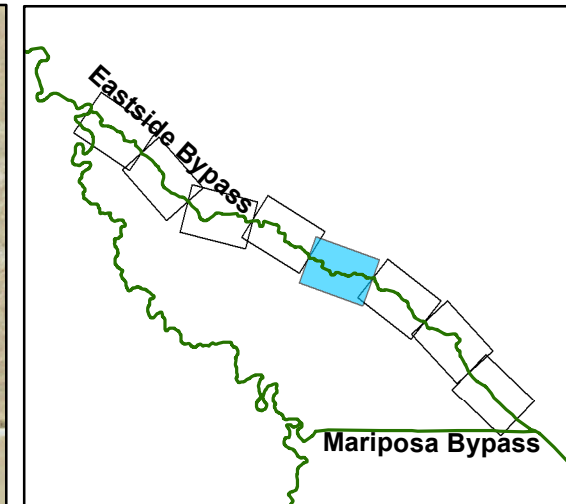
**Legend**

- XS cut lines
- Bypass Levees



Sedimentation and River  
Hydraulics Group  
Technical Service Center  
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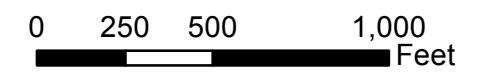


**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

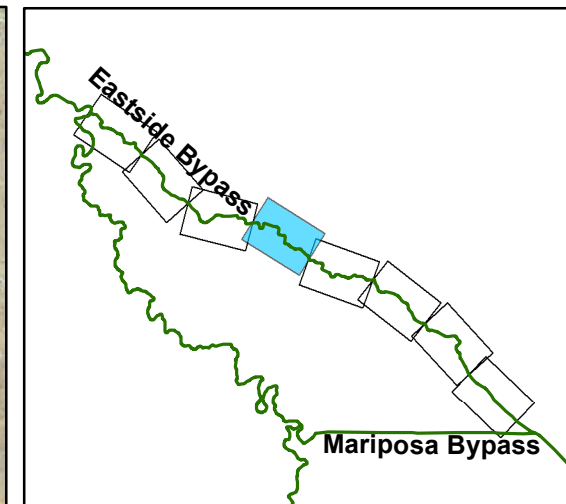
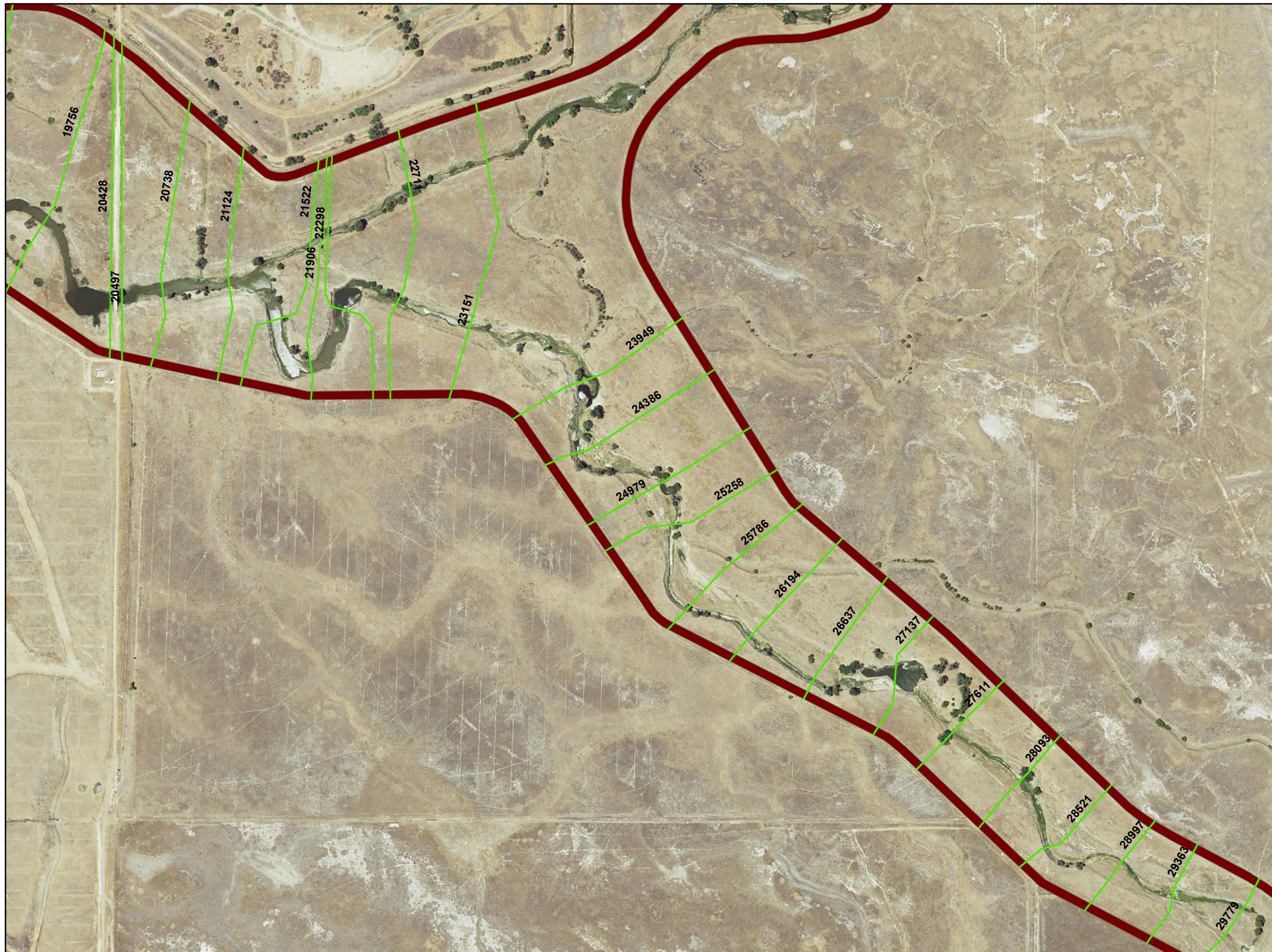
**Legend**

- XS cut lines
- █ Bypass Levees



Sedimentation and River  
Hydraulics Group  
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**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

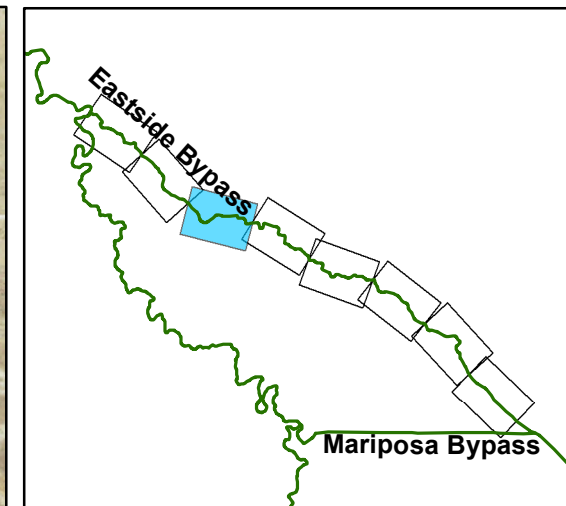
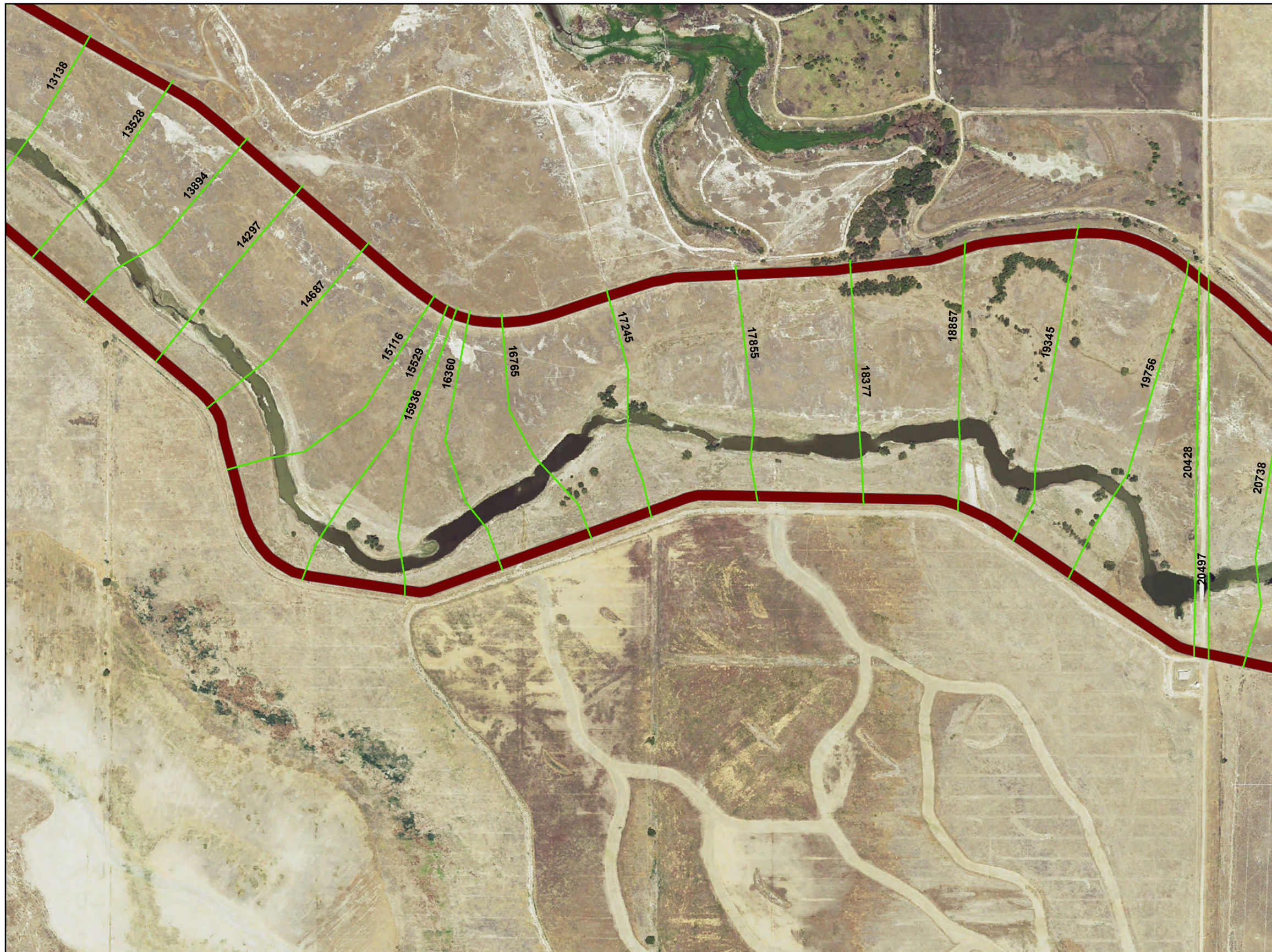
**Legend**

- XS cut lines
- █ Bypass Levees



Sedimentation and River  
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**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

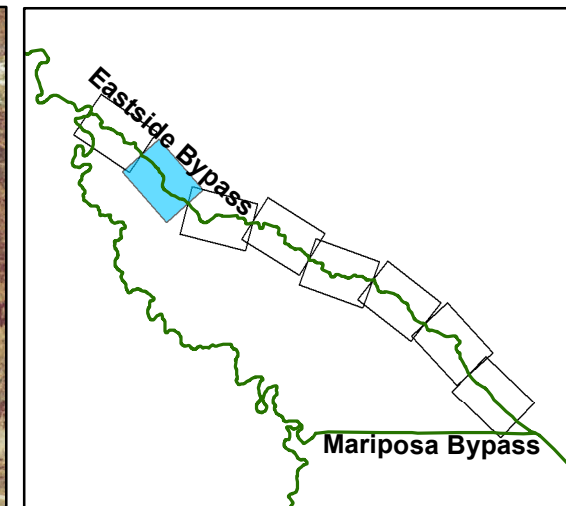
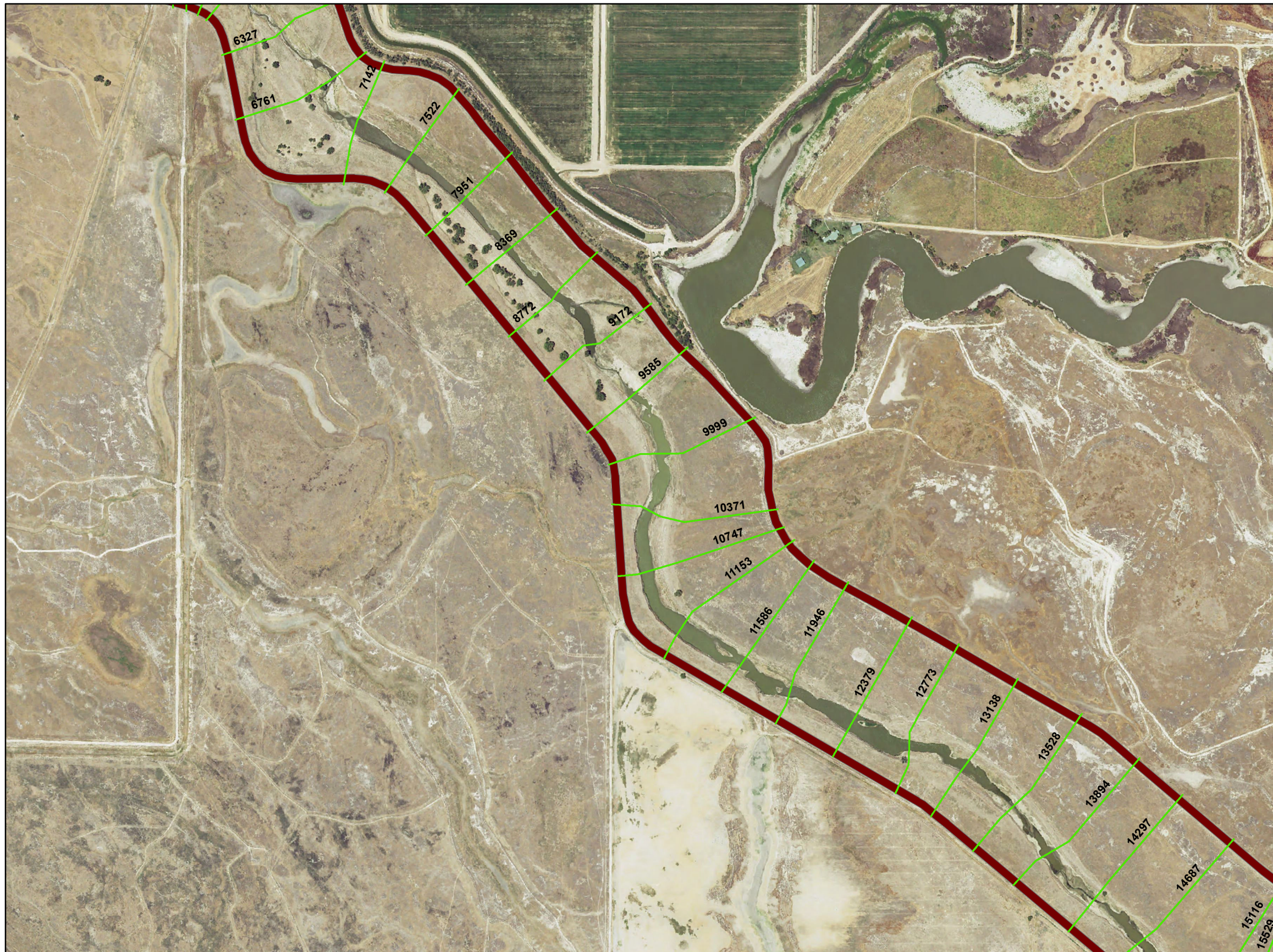
**Legend**

- XS cut lines
- Bypass Levees



Sedimentation and River  
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**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

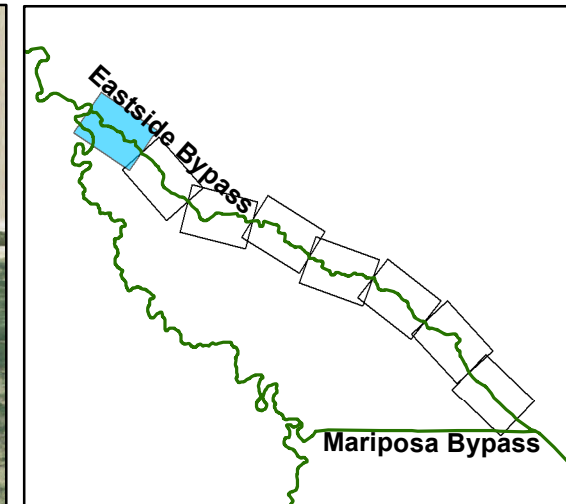
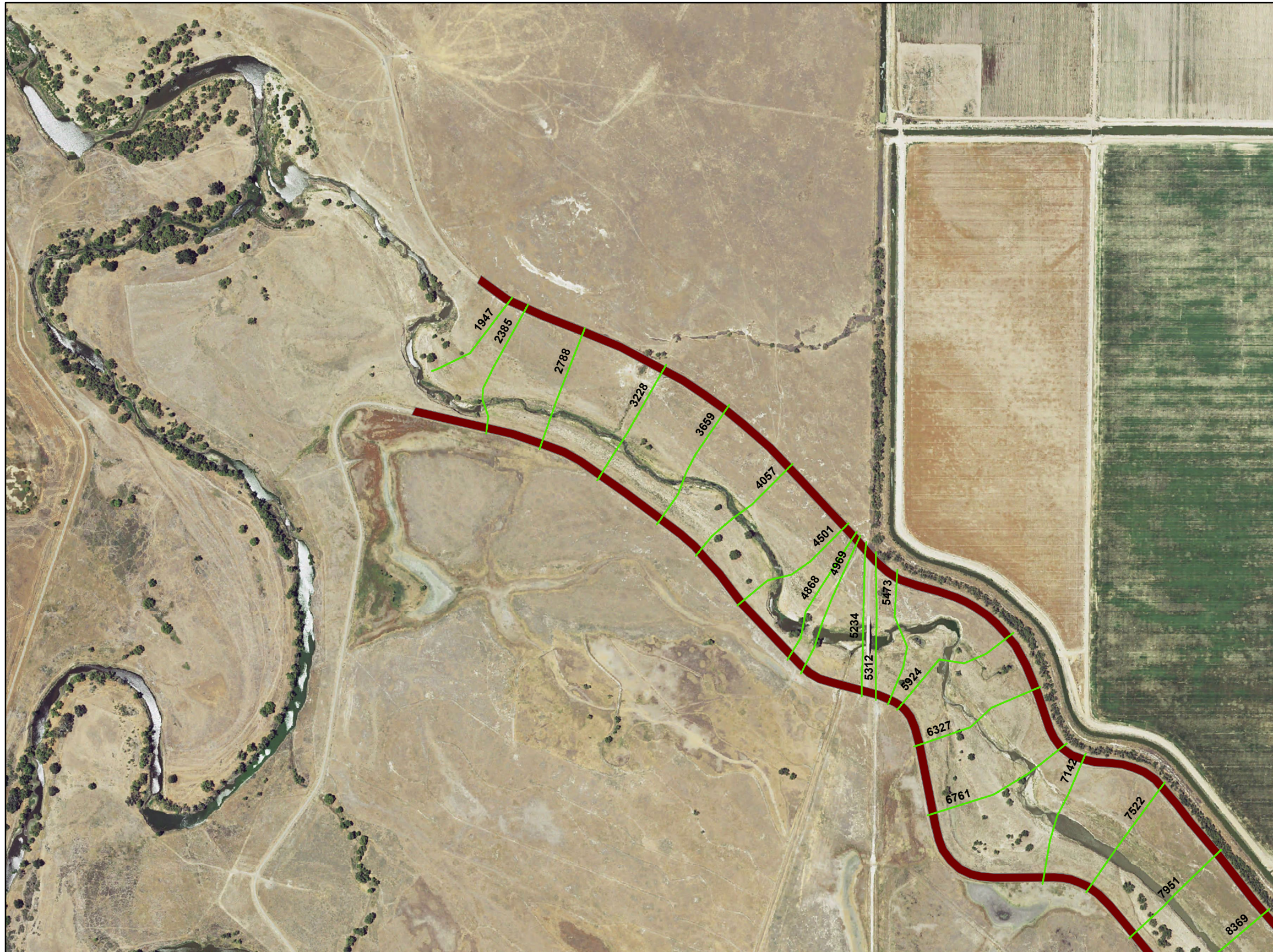
**Legend**

- XS cut lines
- Bypass Levees



Sedimentation and River  
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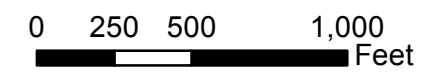


**Lower Eastside Bypass  
Cross Section Layout  
2014 Aerial Photograph**

**March 10, 2016**

**Legend**

- XS cut lines
- █ Bypass Levees



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# 13 Appendix C Flow Exceedance Data

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Reach 4b1 Existing

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough BifurcationOutflow1 Existing

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

**Sand Slough** Existing

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Sand Slough Bypass Outflow** Existing

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	47	0	0	0	0	0	0	0	0	0	0	0
45	0	250	15	0	0	0	0	0	0	0	0	0	0
40	0	529	146	0	0	0	0	0	0	0	0	0	0
35	0	687	319	0	0	0	0	0	0	0	0	0	0
30	0	786	407	0	0	0	0	0	0	0	0	0	0
25	0	915	576	180	0	17	0	0	0	0	0	0	0
20	0	1078	794	408	71	247	0	0	0	0	0	0	0
15	5	1153	994	868	875	656	0	0	0	0	0	0	189
10	954	1176	1073	1073	1087	850	225	0	0	0	0	0	784
8	1240	1197	1091	1291	1654	869	628	0	0	0	0	0	901
6	1252	1204	1111	2053	2060	883	835	0	0	0	0	38	1074
5	1276	1268	1168	2349	2238	1179	872	0	0	0	0	1035	1151
4	1726	1738	2546	2501	2549	1978	886	0	0	0	0	1206	1214
3	2765	2292	2917	2745	2713	2517	887	0	0	0	0	1246	1706
2	3085	3491	3112	3101	2940	3000	895	0	0	0	1113	1785	2399
1	3350	3935	3994	3732	3208	4706	1002	258	0	19	1765	2851	3118

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).



Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

<b>Eastside Bypass</b>	Existing
<b>Eastside Sand Slough ReturnOutflow</b>	Existing

Daily Average Flow (cfs) by Percent Exceedance and Month For:

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	1	15	17	0	0	0	0	0	0	0	0	0
60	0	25	22	17	2	0	0	0	0	0	0	0	0
55	0	81	37	17	5	0	0	0	0	0	0	0	0
50	0	262	71	17	12	0	0	0	0	0	0	0	0
45	0	453	127	17	20	0	0	0	0	0	0	0	0
40	0	640	250	17	23	0	0	0	0	0	0	0	0
35	0	787	422	17	24	0	0	0	0	0	1	0	2
30	0	915	600	69	29	24	0	0	0	0	3	0	11
25	15	1088	789	215	53	167	0	0	0	4	3	0	24
20	111	1291	1023	673	357	701	0	0	0	7	3	1	87
15	431	1739	1462	1086	1441	1242	3	0	0	8	87	24	461
10	1137	3307	2175	2664	4569	2863	555	0	0	17	305	102	1083
8	1704	3880	2683	3805	5507	4230	897	0	0	27	562	168	1494
6	2859	4546	3900	5008	6282	4976	1446	0	0	39	1075	685	2282
5	3852	5212	4788	5590	6779	5943	1676	0	0	45	1352	1410	3151
4	4585	6502	5832	6488	7407	6982	2111	0	0	53	1619	2528	4197
3	6525	7233	7357	7362	8602	8663	3738	0	0	64	1781	3225	5348
2	7926	8368	8019	8676	9559	10123	5186	2	0	82	1951	5263	6756
1	12954	9322	9428	9195	10195	13522	6140	326	0	155	2435	6893	9105

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Reach 4b1 Alternative 1

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough Bifurcation Outflow 1

Alternative 1

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	175	175	1	0	0	0	0	0	0	55	0	0
92.5	155	175	175	125	0	0	0	0	45	65	115	155	45
90	156	175	179	125	0	0	42	45	45	66	119	155	45
85	175	175	285	125	85	85	45	45	50	82	155	155	45
80	175	175	285	125	85	85	45	45	65	115	155	155	45
75	175	175	285	125	85	85	45	45	65	115	155	155	65
70	175	175	285	878	85	85	45	45	65	115	155	155	85
65	175	175	285	1239	85	85	45	45	65	115	155	155	85
60	175	175	296	1655	85	85	45	45	65	115	155	155	115
55	175	175	634	2022	85	85	45	45	65	115	155	155	115
50	175	175	872	2180	85	85	45	45	65	115	155	155	155
45	175	175	1126	2180	85	85	45	45	65	115	155	155	155
40	175	175	1225	2180	125	85	45	45	65	115	155	155	155
35	175	175	1225	2180	233	101	45	45	65	115	311	155	175
30	175	229	1225	2183	456	175	45	45	65	115	352	155	175
25	175	457	1225	2578	903	450	64	45	65	115	475	155	285
20	175	743	1225	3553	2112	913	85	45	65	115	475	155	485
15	175	1098	1354	3655	2957	1442	115	45	65	115	482	155	1225
10	763	1443	1781	3655	3876	2194	366	45	65	115	485	155	1880
8	1019	1856	2010	3961	4214	2782	860	45	65	115	485	155	2180
6	1718	2064	2256	4314	4260	3860	1273	45	65	115	485	158	2532
5	2208	2136	3160	4334	4294	4076	1568	45	65	115	485	452	3182
4	2873	3243	4217	4426	4317	4088	2046	45	65	115	485	955	3655
3	3826	4323	4272	4449	4346	4120	3291	47	65	115	485	1584	4052
2	4431	4403	4300	4500	4403	4258	3905	62	65	115	575	2505	4276
1	4483	4440	4366	4500	4500	4500	4103	365	65	115	1985	4347	4432

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Sand Slough Alternative 1

Daily Average Flow (cfs) by Percent Exceedance and Month For:

Sand Slough BypassOutflow

Alternative 1

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	16	0	0	0	0	0	0	0	0	0
1	0	0	0	138	44	257	0	0	0	0	0	0	0

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Eastside Bypass Alternative 1

Daily Average Flow (cfs) by Percent Exceedance and Month For:

Eastside Sand Slough ReturnOutflow

Alternative 1

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	1	0	0
40	0	0	0	0	0	0	0	0	0	0	3	0	0
35	0	0	0	0	0	0	0	0	0	0	3	0	0
30	0	0	8	0	0	0	0	0	0	0	19	0	0
25	0	109	15	0	0	0	0	0	0	0	62	0	0
20	0	264	82	0	0	0	0	0	0	0	79	0	0
15	3	478	245	11	0	0	0	0	0	2	109	0	2
10	135	762	545	358	0	0	0	0	0	6	191	22	66
8	200	972	735	822	492	0	0	0	0	8	212	59	159
6	292	1198	1168	1249	1595	3	0	0	0	8	257	148	317
5	565	1362	1462	2206	2112	692	0	0	0	8	289	214	520
4	948	1533	1930	2813	2789	1435	3	0	0	8	395	319	738
3	1636	1988	2196	3132	3319	2706	119	0	0	8	553	496	1186
2	2454	3469	3122	3595	4779	5218	523	0	0	8	645	974	2106
1	8227	6121	6148	5566	5575	6036	1716	0	0	8	714	1999	3973

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Reach 4b1 Alternative 2

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough BifurcationOutflow1

Alternative 2

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

**Sand Slough** Alternative 2

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Sand Slough BypassOutflow**

**Alternative 2**

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	175	175	1	0	0	0	0	0	0	55	0	0
92.5	155	175	175	125	0	0	0	0	45	65	115	155	45
90	156	175	179	125	0	0	42	45	45	66	119	155	45
85	175	175	285	125	85	85	45	45	50	82	155	155	45
80	175	175	285	125	85	85	45	45	65	115	155	155	45
75	175	175	285	125	85	85	45	45	65	115	155	155	65
70	175	175	285	878	85	85	45	45	65	115	155	155	85
65	175	175	285	1239	85	85	45	45	65	115	155	155	85
60	175	175	296	1655	85	85	45	45	65	115	155	155	115
55	175	175	634	2022	85	85	45	45	65	115	155	155	115
50	175	175	872	2180	85	85	45	45	65	115	155	155	155
45	175	175	1126	2180	85	85	45	45	65	115	155	155	155
40	175	175	1225	2180	125	85	45	45	65	115	155	155	155
35	175	175	1225	2180	233	101	45	45	65	115	311	155	175
30	175	229	1225	2183	456	175	45	45	65	115	352	155	175
25	175	457	1225	2578	903	450	64	45	65	115	475	155	285
20	175	743	1225	3553	2112	913	85	45	65	115	475	155	485
15	175	1098	1354	3655	2957	1442	115	45	65	115	482	155	1225
10	763	1443	1781	3655	3876	2194	366	45	65	115	485	155	1880
8	1019	1856	2010	3961	4214	2782	860	45	65	115	485	155	2180
6	1718	2064	2256	4314	4260	3860	1273	45	65	115	485	158	2532
5	2208	2136	3160	4334	4294	4076	1568	45	65	115	485	452	3182
4	2873	3243	4217	4426	4317	4088	2046	45	65	115	485	955	3655
3	3826	4323	4272	4449	4346	4120	3291	47	65	115	485	1584	4052
2	4431	4403	4300	4516	4403	4258	3905	62	65	115	575	2505	4276
1	4483	4440	4366	4638	4544	4757	4103	365	65	115	1985	4347	4432

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

**Eastside Bypass** Alternative 2

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Eastside Sand Slough ReturnOutflow**

**Alternative 2**

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	175	175	1	0	0	0	0	0	0	55	0	0
92.5	155	175	175	125	0	0	3	0	45	65	115	155	45
90	156	175	227	125	0	3	42	45	45	66	123	155	45
85	175	175	285	125	85	85	45	45	50	90	155	155	45
80	175	175	285	125	85	85	45	45	65	115	155	155	45
75	175	175	285	125	85	85	45	45	65	115	155	155	65
70	175	175	285	878	85	85	45	45	65	115	155	155	85
65	175	175	307	1257	85	85	45	45	65	115	155	155	85
60	175	175	579	1655	85	85	45	45	65	115	158	155	115
55	175	175	734	2091	85	85	45	45	65	115	180	155	123
50	175	175	1077	2180	85	85	45	45	65	115	231	155	155
45	175	245	1225	2180	85	85	45	45	65	115	305	155	155
40	175	327	1225	2180	125	85	45	45	65	115	347	155	175
35	175	503	1225	2180	233	101	45	45	65	115	394	155	175
30	175	674	1225	2267	456	175	45	45	65	115	475	155	236
25	175	902	1240	2745	903	450	64	45	65	115	478	155	375
20	203	1125	1399	3616	2112	913	85	45	65	115	485	155	671
15	382	1379	1712	3655	2957	1442	115	45	65	117	487	155	1225
10	948	1927	2167	3876	3890	2194	366	45	65	121	547	237	2043
8	1160	2136	2492	4457	4732	2782	860	45	65	123	581	331	2180
6	1909	2891	3797	5290	5846	3871	1273	45	65	123	664	650	2852
5	2541	3751	4250	6198	6373	4767	1568	45	65	123	723	1019	3553
4	3610	4788	4952	7042	7087	5525	2046	45	65	123	831	1534	3691
3	4650	5448	6195	7529	7607	6774	3871	47	65	123	999	2127	4575
2	6251	7293	6546	8009	9131	9466	4506	62	65	123	1195	3063	5957
1	12693	8534	8490	10066	10075	10536	5190	365	65	153	2270	5400	8052

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Reach 4b1 Alternative 3

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough Bifurcation Outflow 1

Alternative 3

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	175	175	1	0	0	0	0	0	0	55	0	0
92.5	155	175	175	125	0	0	0	0	45	65	115	155	45
90	156	175	179	125	0	0	42	45	45	66	119	155	45
85	175	175	285	125	85	85	45	45	50	82	155	155	45
80	175	175	285	125	85	85	45	45	65	115	155	155	45
75	175	175	285	125	85	85	45	45	65	115	155	155	65
70	175	175	285	475	85	85	45	45	65	115	155	155	85
65	175	175	285	475	85	85	45	45	65	115	155	155	85
60	175	175	296	475	85	85	45	45	65	115	155	155	115
55	175	175	475	475	85	85	45	45	65	115	155	155	115
50	175	175	475	475	85	85	45	45	65	115	155	155	155
45	175	175	475	475	85	85	45	45	65	115	155	155	155
40	175	175	475	475	125	85	45	45	65	115	155	155	155
35	175	175	475	475	233	101	45	45	65	115	311	155	175
30	175	229	475	475	456	175	45	45	65	115	352	155	175
25	175	457	475	475	475	450	64	45	65	115	475	155	285
20	175	475	475	475	475	475	85	45	65	115	475	155	475
15	175	475	475	475	475	475	115	45	65	115	475	155	475
10	475	475	475	475	475	475	366	45	65	115	475	155	475
8	475	475	475	475	475	475	475	45	65	115	475	155	475
6	475	475	475	475	475	475	475	45	65	115	475	158	475
5	475	475	475	475	475	475	475	45	65	115	475	452	475
4	475	475	475	475	475	475	475	45	65	115	475	475	475
3	475	475	475	475	475	475	475	47	65	115	475	475	475
2	475	475	475	475	475	475	475	62	65	115	475	475	475
1	475	475	475	475	475	475	475	365	65	115	475	475	475

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).



Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

**Sand Slough** Alternative 3

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Sand Slough BypassOutflow**

**Alternative 3**

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	403	0	0	0	0	0	0	0	0	0
65	0	0	0	764	0	0	0	0	0	0	0	0	0
60	0	0	0	1180	0	0	0	0	0	0	0	0	0
55	0	0	159	1547	0	0	0	0	0	0	0	0	0
50	0	0	397	1705	0	0	0	0	0	0	0	0	0
45	0	0	651	1705	0	0	0	0	0	0	0	0	0
40	0	0	750	1705	0	0	0	0	0	0	0	0	0
35	0	0	750	1705	0	0	0	0	0	0	0	0	0
30	0	0	750	1708	0	0	0	0	0	0	0	0	0
25	0	0	750	2103	428	0	0	0	0	0	0	0	0
20	0	268	750	3078	1637	438	0	0	0	0	0	0	10
15	0	623	879	3180	2482	967	0	0	0	0	7	0	750
10	288	968	1306	3180	3401	1719	0	0	0	0	10	0	1405
8	544	1381	1535	3486	3739	2307	385	0	0	0	10	0	1705
6	1243	1589	1781	3839	3785	3385	798	0	0	0	10	0	2057
5	1733	1661	2685	3859	3819	3601	1093	0	0	0	10	0	2707
4	2398	2768	3742	3951	3842	3613	1571	0	0	0	10	480	3180
3	3351	3848	3797	3974	3871	3645	2816	0	0	0	10	1109	3577
2	3956	3928	3825	4041	3928	3783	3430	0	0	0	100	2030	3801
1	4008	3965	3891	4163	4069	4282	3628	0	0	0	1510	3872	3957

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Eastside Bypass Alternative 3

Daily Average Flow (cfs) by Percent Exceedance and Month For:

Eastside Sand Slough ReturnOutflow

Alternative 3

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	403	0	0	0	0	0	0	0	0	0
65	0	0	15	782	0	0	0	0	0	0	0	0	0
60	0	0	176	1180	0	0	0	0	0	0	0	0	0
55	0	0	353	1616	0	0	0	0	0	0	0	0	0
50	0	0	602	1705	0	0	0	0	0	0	3	0	0
45	0	0	750	1705	0	0	0	0	0	0	3	0	0
40	0	94	750	1705	0	0	0	0	0	0	10	0	0
35	0	228	750	1705	0	0	0	0	0	0	10	0	0
30	0	400	750	1792	0	0	0	0	0	0	26	0	0
25	0	562	765	2270	428	3	0	0	0	0	65	0	30
20	3	743	959	3141	1637	438	0	0	0	0	88	0	285
15	200	996	1240	3180	2482	967	0	0	0	4	134	0	750
10	528	1477	1692	3401	3415	1719	3	0	0	6	198	76	1582
8	740	1661	2106	3982	4257	2307	385	0	0	8	239	152	1705
6	1534	2416	3322	4815	5371	3396	798	0	0	8	301	338	2383
5	2191	3301	3775	5723	5898	4292	1093	0	0	8	417	715	3078
4	3135	4313	4477	6567	6612	5050	1571	0	0	8	607	1074	3217
3	4175	4973	5720	7054	7132	6299	3396	0	0	8	661	1801	4100
2	5776	6818	6071	7534	8656	8991	4031	0	0	8	798	2633	5486
1	12218	8059	8015	9591	9600	10061	4715	0	0	35	1795	4948	7577

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Reach 4b1 Alternative 4

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough Bifurcation Outflow 1

Alternative 4

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	175	175	1	0	0	0	0	0	0	55	0	0
92.5	155	175	175	125	0	0	0	0	45	65	115	155	45
90	156	175	179	125	0	0	42	45	45	66	119	155	45
85	175	175	285	125	85	85	45	45	50	82	155	155	45
80	175	175	285	125	85	85	45	45	65	115	155	155	45
75	175	175	285	125	85	85	45	45	65	115	155	155	65
70	175	175	285	878	85	85	45	45	65	115	155	155	85
65	175	175	285	1239	85	85	45	45	65	115	155	155	85
60	175	175	296	1500	85	85	45	45	65	115	155	155	115
55	175	175	634	1500	85	85	45	45	65	115	155	155	115
50	175	175	872	1500	85	85	45	45	65	115	155	155	155
45	175	175	1126	1500	85	85	45	45	65	115	155	155	155
40	175	175	1225	1500	125	85	45	45	65	115	155	155	155
35	175	175	1225	1500	233	101	45	45	65	115	311	155	175
30	175	229	1225	1500	456	175	45	45	65	115	352	155	175
25	175	457	1225	1500	903	450	64	45	65	115	475	155	285
20	175	743	1225	1500	1500	913	85	45	65	115	475	155	485
15	175	1098	1354	1500	1500	1442	115	45	65	115	482	155	1225
10	763	1443	1500	1500	1500	1500	366	45	65	115	485	155	1500
8	1019	1500	1500	1500	1500	1500	860	45	65	115	485	155	1500
6	1500	1500	1500	1500	1500	1500	1273	45	65	115	485	158	1500
5	1500	1500	1500	1500	1500	1500	1500	45	65	115	485	452	1500
4	1500	1500	1500	1500	1500	1500	1500	45	65	115	485	955	1500
3	1500	1500	1500	1500	1500	1500	1500	47	65	115	485	1500	1500
2	1500	1500	1500	1500	1500	1500	1500	62	65	115	575	1500	1500
1	1500	1500	1500	1500	1500	1500	1500	365	65	115	1500	1500	1500

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

**Sand Slough** Alternative 4

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Sand Slough BypassOutflow**

**Alternative 4**

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	155	0	0	0	0	0	0	0	0	0
55	0	0	0	522	0	0	0	0	0	0	0	0	0
50	0	0	0	680	0	0	0	0	0	0	0	0	0
45	0	0	0	680	0	0	0	0	0	0	0	0	0
40	0	0	0	680	0	0	0	0	0	0	0	0	0
35	0	0	0	680	0	0	0	0	0	0	0	0	0
30	0	0	0	683	0	0	0	0	0	0	0	0	0
25	0	0	0	1078	0	0	0	0	0	0	0	0	0
20	0	0	0	2053	612	0	0	0	0	0	0	0	0
15	0	0	0	2155	1457	0	0	0	0	0	0	0	0
10	0	0	281	2155	2376	694	0	0	0	0	0	0	380
8	0	356	510	2461	2714	1282	0	0	0	0	0	0	680
6	218	564	756	2814	2760	2360	0	0	0	0	0	0	1032
5	708	636	1660	2834	2794	2576	68	0	0	0	0	0	1682
4	1373	1743	2717	2926	2817	2588	546	0	0	0	0	0	2155
3	2326	2823	2772	2949	2846	2620	1791	0	0	0	0	84	2552
2	2931	2903	2800	3016	2903	2758	2405	0	0	0	0	1005	2776
1	2983	2940	2866	3138	3044	3257	2603	0	0	0	485	2847	2932

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 1 - All flow less than Reach 4b1 capacity routed into Reach 4b1

Eastside Bypass Alternative 4

Daily Average Flow (cfs) by Percent Exceedance and Month For:

Eastside Sand Slough ReturnOutflow

Alternative 4

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	155	0	0	0	0	0	0	0	0	0
55	0	0	0	615	0	0	0	0	0	0	0	0	0
50	0	0	0	680	0	0	0	0	0	0	0	0	0
45	0	0	0	680	0	0	0	0	0	0	1	0	0
40	0	0	0	680	0	0	0	0	0	0	3	0	0
35	0	0	4	680	0	0	0	0	0	0	3	0	0
30	0	94	15	767	0	0	0	0	0	0	19	0	0
25	0	230	93	1246	0	0	0	0	0	0	62	0	0
20	0	420	248	2116	612	0	0	0	0	0	81	0	7
15	27	577	487	2155	1457	3	0	0	0	2	117	0	155
10	200	972	870	2376	2390	694	0	0	0	6	196	36	680
8	365	1343	1402	2957	3232	1282	0	0	0	8	227	85	759
6	867	1675	2350	3790	4346	2371	3	0	0	8	272	204	1492
5	1479	2405	2811	4698	4873	3267	68	0	0	8	366	330	2075
4	2158	3348	3500	5542	5587	4025	546	0	0	8	534	590	2234
3	3447	3979	4706	6029	6107	5274	2371	0	0	8	638	1195	3100
2	4751	6081	5334	6509	7631	7966	3006	0	0	8	685	2146	4532
1	11193	7111	7640	8566	8575	9036	3690	0	0	8	919	3940	6609

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 2: All Flood Flows in Bypass

Reach 4b1 Existing

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough BifurcationOutflow1 Existing

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 2: All Flood Flows in Bypass

**Sand Slough** Existing

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Sand Slough Bypass Outflow**

**Existing**

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	47	0	0	0	0	0	0	0	0	0	0	0
45	0	250	15	0	0	0	0	0	0	0	0	0	0
40	0	529	146	0	0	0	0	0	0	0	0	0	0
35	0	687	319	0	0	0	0	0	0	0	0	0	0
30	0	786	407	0	0	0	0	0	0	0	0	0	0
25	0	915	576	180	0	17	0	0	0	0	0	0	0
20	0	1078	794	408	71	247	0	0	0	0	0	0	0
15	5	1153	994	868	875	656	0	0	0	0	0	0	189
10	954	1176	1073	1073	1087	850	225	0	0	0	0	0	784
8	1240	1197	1091	1291	1654	869	628	0	0	0	0	0	901
6	1252	1204	1111	2053	2060	883	835	0	0	0	0	38	1074
5	1276	1268	1168	2349	2238	1179	872	0	0	0	0	1035	1151
4	1726	1738	2546	2501	2549	1978	886	0	0	0	0	1206	1214
3	2765	2292	2917	2745	2713	2517	887	0	0	0	0	1246	1706
2	3085	3491	3112	3101	2940	3000	895	0	0	0	1113	1785	2399
1	3350	3935	3994	3732	3208	4706	1002	258	0	19	1765	2851	3118

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 2: All Flood Flows in Bypass

<b>Eastside Bypass</b>	Existing
<b>Eastside Sand Slough ReturnOutflow</b>	Existing

Daily Average Flow (cfs) by Percent Exceedance and Month For:

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	1	15	17	0	0	0	0	0	0	0	0	0
60	0	25	22	17	2	0	0	0	0	0	0	0	0
55	0	81	37	17	5	0	0	0	0	0	0	0	0
50	0	262	71	17	12	0	0	0	0	0	0	0	0
45	0	453	127	17	20	0	0	0	0	0	0	0	0
40	0	640	250	17	23	0	0	0	0	0	0	0	0
35	0	787	422	17	24	0	0	0	0	0	1	0	2
30	0	915	600	69	29	24	0	0	0	0	3	0	11
25	15	1088	789	215	53	167	0	0	0	4	3	0	24
20	111	1291	1023	673	357	701	0	0	0	7	3	1	87
15	431	1739	1462	1086	1441	1242	3	0	0	8	87	24	461
10	1137	3307	2175	2664	4569	2863	555	0	0	17	305	102	1083
8	1704	3880	2683	3805	5507	4230	897	0	0	27	562	168	1494
6	2859	4546	3900	5008	6282	4976	1446	0	0	39	1075	685	2282
5	3852	5212	4788	5590	6779	5943	1676	0	0	45	1352	1410	3151
4	4585	6502	5832	6488	7407	6982	2111	0	0	53	1619	2528	4197
3	6525	7233	7357	7362	8602	8663	3738	0	0	64	1781	3225	5348
2	7926	8368	8019	8676	9559	10123	5186	2	0	82	1951	5263	6756
1	12954	9322	9428	9195	10195	13522	6140	326	0	155	2435	6893	9105

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).



Condition 2: All Flood Flows in Bypass

Reach 4b1 Alternative 1

Daily Average Flow (cfs) by Percent Exceedance and Month For:

SJR Sand Slough Bifurcation Outflow 1

Alternative 1

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	45	99	1	0	0	0	0	0	0	55	0	0
92.5	155	175	175	125	0	0	0	0	45	65	115	155	45
90	156	175	175	125	0	0	42	45	45	66	119	155	45
85	167	175	179	125	85	85	45	45	50	82	155	155	45
80	175	175	285	125	85	85	45	45	65	115	155	155	45
75	175	175	285	125	85	85	45	45	65	115	155	155	65
70	175	175	285	878	85	85	45	45	65	115	155	155	72
65	175	175	285	1225	85	85	45	45	65	115	155	155	85
60	175	175	285	1264	85	85	45	45	65	115	155	155	115
55	175	175	285	1901	85	85	45	45	65	115	155	155	115
50	175	175	285	2180	85	85	45	45	65	115	155	155	145
45	175	175	285	2180	85	85	45	45	65	115	155	155	155
40	175	175	671	2180	99	85	45	45	65	115	155	155	155
35	175	175	1225	2180	125	85	45	45	65	115	195	155	175
30	175	175	1225	2180	258	138	45	45	65	115	352	155	175
25	175	175	1225	2180	583	206	45	45	65	115	475	155	175
20	175	175	1225	2183	1920	360	50	45	65	115	475	155	285
15	175	175	1225	3553	2312	615	80	45	65	115	482	155	475
10	175	175	1225	3655	2731	1019	85	45	65	115	485	155	1225
8	175	175	1225	3655	2893	1175	94	45	65	115	485	155	1225
6	175	175	1225	3655	3055	1331	114	45	65	115	485	155	2022
5	175	175	1225	3655	3109	1400	139	45	65	115	485	155	2180
4	175	175	1225	3655	3217	1491	140	45	65	115	485	155	2180
3	175	175	1225	3655	3382	1597	184	45	65	115	485	155	2190
2	175	175	1225	3655	3616	1650	214	45	65	115	485	155	2947
1	178	189	1225	3655	3655	1758	240	53	65	115	485	155	3655

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).

Condition 2: All Flood Flows in Bypass

**Sand Slough** Alternative 1

Daily Average Flow (cfs) by Percent Exceedance and Month For:

**Sand Slough Bypass Outflow**

**Alternative 1**

% Exceed.	Month												Overall
	1	2	3	4	5	6	7	8	9	10	11	12	
	January	February	March	April	May	June	July	August	September	October	November	December	
99	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	56	0	0	0	0	0	0	0	0	0	0	0
25	0	292	209	0	0	0	0	0	0	0	0	0	0
20	0	587	482	0	40	198	0	0	0	0	0	0	0
15	0	924	684	157	374	630	0	0	0	0	0	0	0
10	591	1342	1022	788	1094	1386	275	0	0	0	0	0	363
8	844	1681	1219	917	1346	1714	785	0	0	0	0	0	689
6	1543	1889	1668	1248	1604	2348	1224	0	0	0	0	0	1032
5	2033	1961	2194	1585	1717	2574	1441	0	0	0	0	297	1272
4	2705	3068	3046	2030	1809	3012	2001	0	0	0	0	800	1650
3	3651	4148	3228	2140	1942	3275	3246	0	0	0	0	1429	1989
2	4256	4228	3980	2157	2109	3512	3797	0	0	0	338	2350	2673
1	4309	4265	4062	2269	2294	3729	4054	320	0	0	1765	4192	3957

Explanation: Table shows the flow that is equaled or exceeded for that percentage of days within that month for the entire run period (82 years).