

Appendix **E**

Supplemental Figures and Tables for the Inspection Program

This Appendix contains additional figures and tables for the results of the fall 2012 Levee Inspections.



The following figures supplement information contained in Sections 2 through 4 of the main report. In general, these figures present different ways of analyzing maintenance results such as plotting information separately for the Sacramento and San Joaquin river basins or plotting results by type of deficiency. Data shown in these figures and tables for the thirty-one Areas that were not inspected in 2010 are from fall 2009 data as discussed in the body of this report.

2012 Levee Maintenance Inspections

- Figure E-1 shows the levee maintenance inspection ratings grouped by Sacramento River, San Joaquin River, and Miscellaneous basins
- Figure E-2 shows the changes in ratings grouped by basin.
- Figure E-3 shows the percentage of miles of levees with deficiencies in the total system for each type of rated items. Vegetation deficiencies make up the vast majority of the miles in all years. In 2012 crown surface and animal control deficiencies were also significant contributor to the total length of levees with deficiencies.
- Figure E-4 shows the same information as Figure E-3 but is separated by basin. Encroachment issues with an Enforcement Issue Type are not included in these figures.
- Table E-1 shows the length, in miles, of Minimally Acceptable (M) and Unacceptable (U) issues for each category in the total system and the percentage of the total project length along which these lengths occur. Also shown in this table is the change in M and U lengths as well as the resultant change in the percent of total project lengths. Tables E-2, E-3, and E-4 show similar information to Table I-1 but only contain the lengths for the Sacramento River, San Joaquin River, and Miscellaneous basins, respectively.
- Figures E-5 and E-6 are maps of the Sacramento and San Joaquin systems, showing the location and rating of each LMA. To find the general location of an LMA, refer to Appendices A, B and C.

Figure E-1: LMA Maintenance Rating Comparison for 2007 through 2012 by Basin

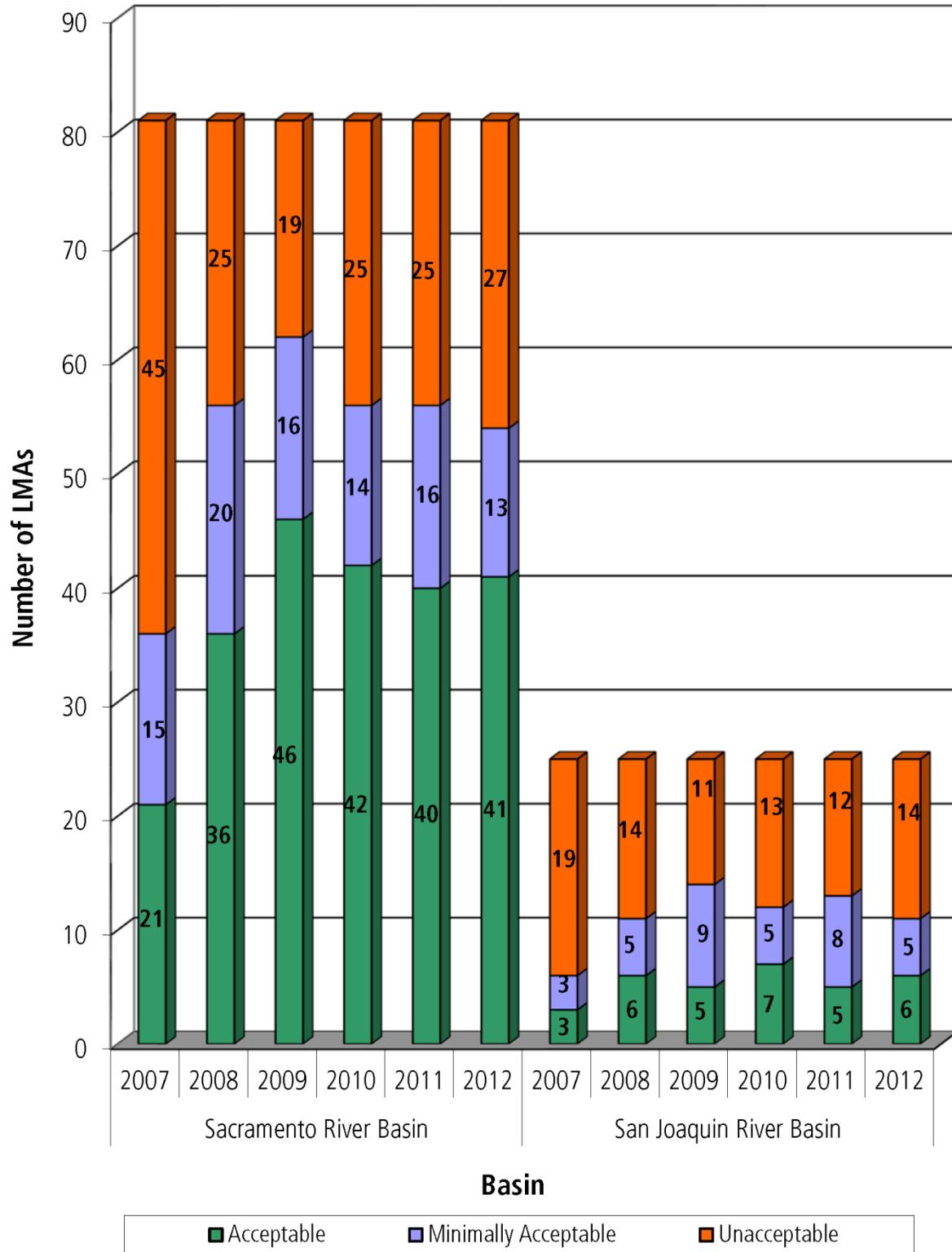


Figure E-2: LMA Maintenance Rating Changes from Fall 2007 to Fall 2012 by Basin

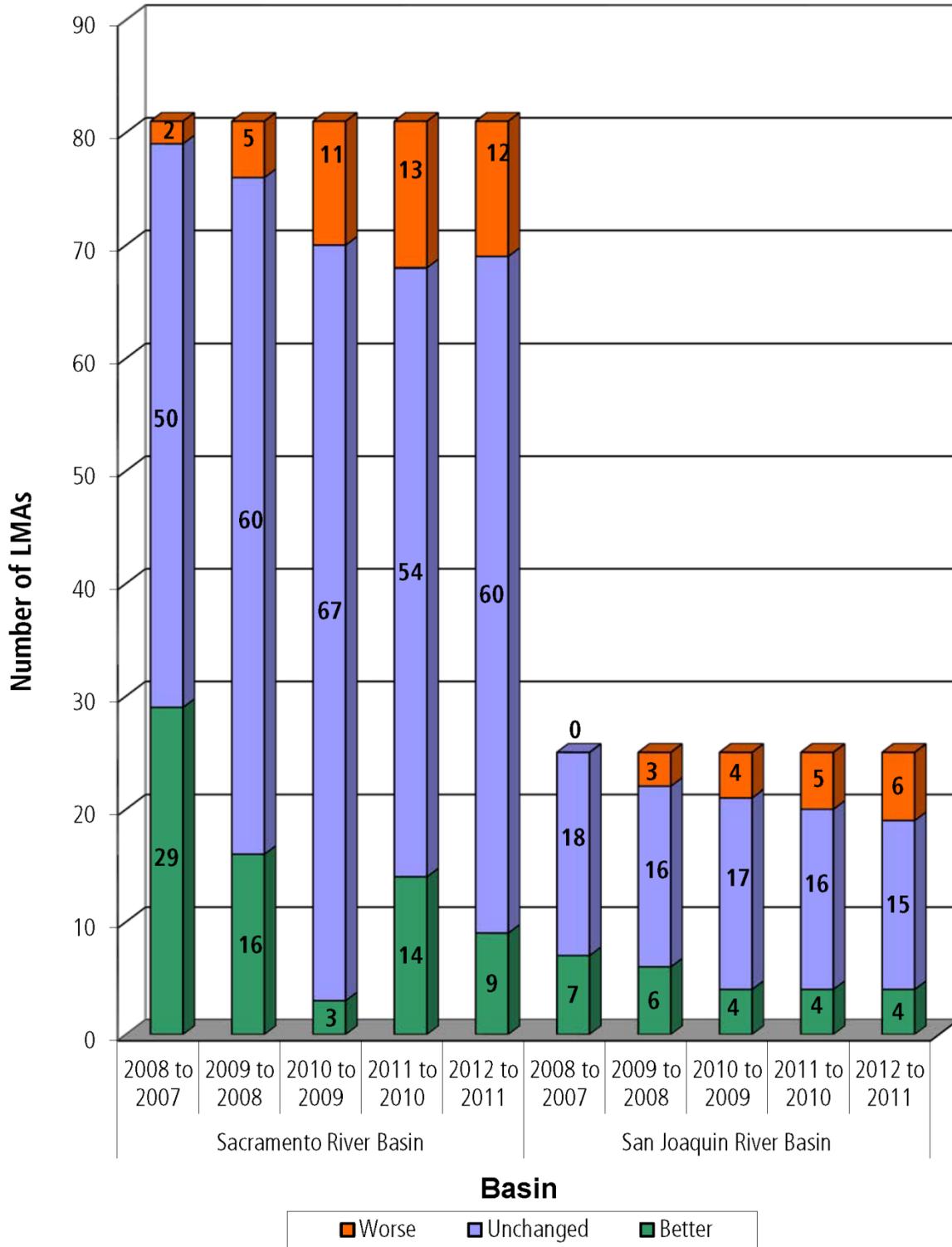


Figure E-3: Percentage of Total System Levee Miles with Maintenance Deficiencies

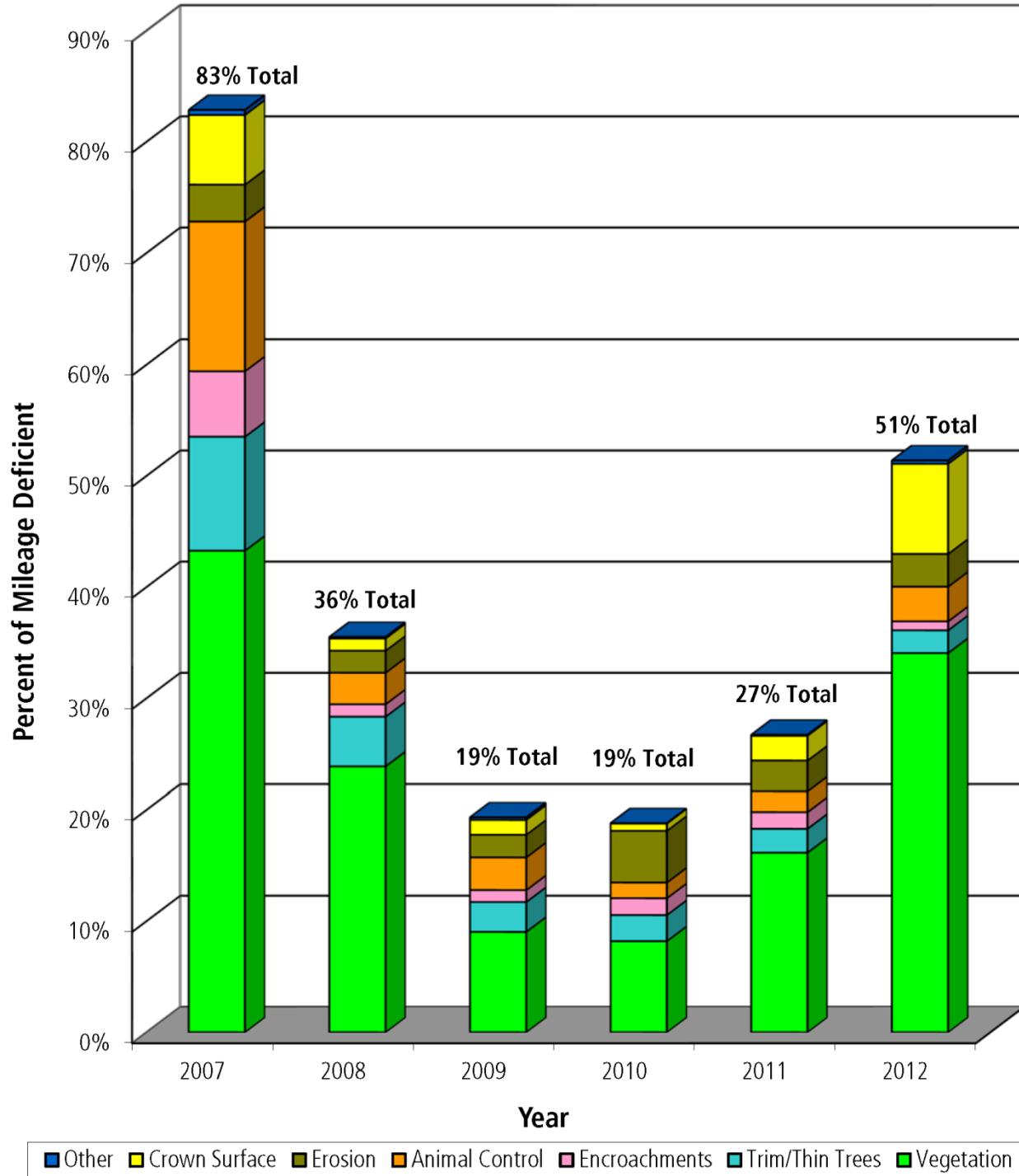


Figure E-4: Percentage of Levee Miles with Maintenance Deficiencies by Basin

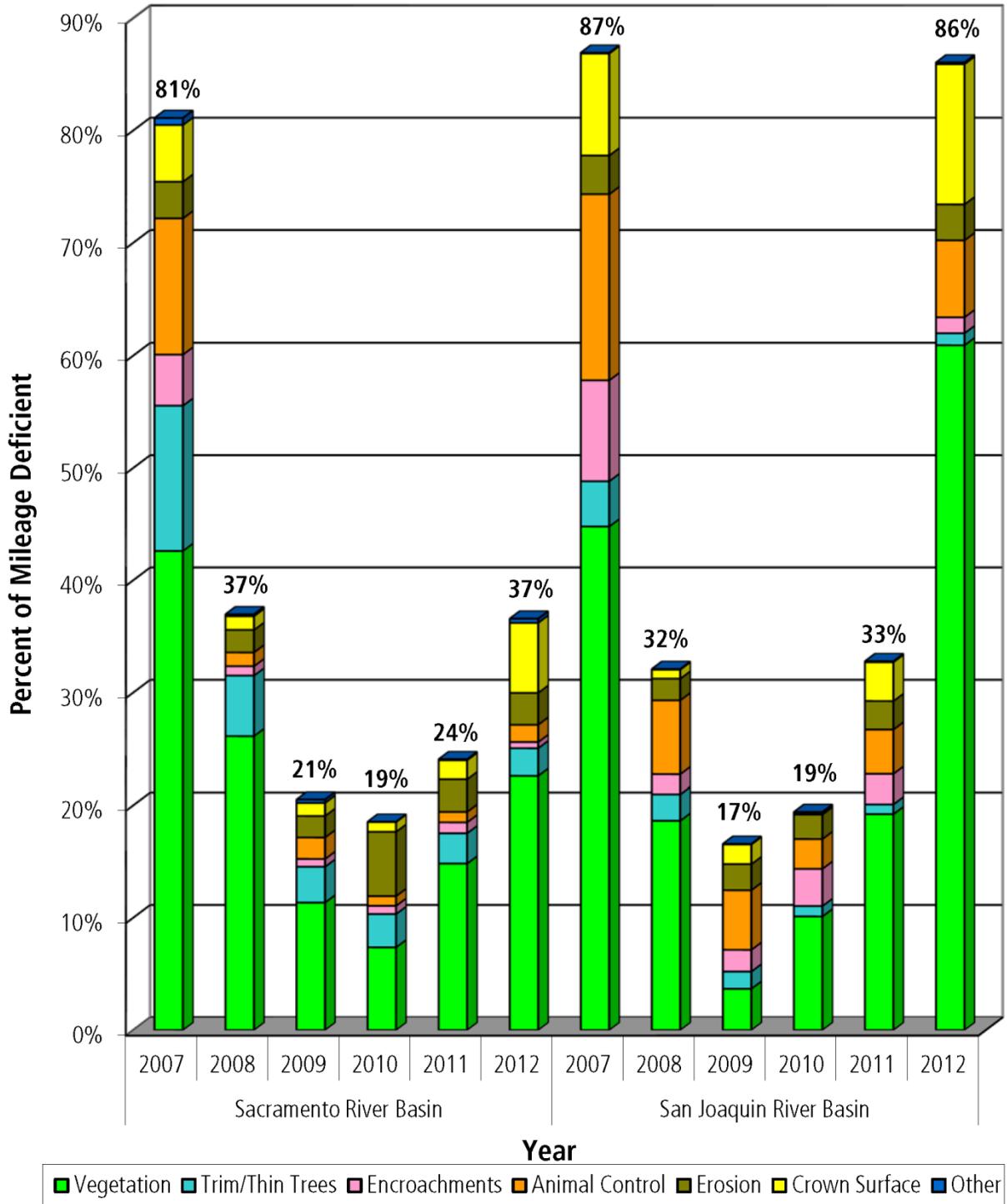


Table E-1: Total of Maintenance Issue Lengths for 2011 and 2012

Total Project Length: 1576.04 miles	Fall 2011				Fall 2012				Change			
	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent
Rated Item												
Vegetation	185.58	17.28	254.70	16.16%	377.95	39.75	536.95	34.07%	192.37	22.47	282.25	19.71%
Trim/Thin Trees	17.53	4.08	33.85	2.15%	15.82	4.10	32.22	2.04%	-1.71	0.02	-1.63	-0.10%
Encroachments	17.61	1.47	23.49	1.49%	11.71	0.26	12.75	0.81%	-5.90	-1.21	-10.74	-0.68%
Animal Control	27.24	0.44	29.00	1.84%	40.64	2.12	49.12	3.12%	13.40	1.68	20.12	1.28%
Erosion	25.97	4.40	43.57	2.76%	24.07	5.60	46.47	2.95%	-1.90	1.19	2.86	0.18%
Crown Surface	33.91	0.30	35.11	2.23%	88.11	9.90	127.71	8.10%	54.20	9.60	92.60	5.87%
Other	0.93	0.08	1.25	0.08%	4.45	0.06	4.69	0.30%	0.09	-0.02	0.01	0.00%
Total	308.77	28.05	420.97	26.71%	562.75	61.79	809.91	51.38%	250.55	33.73	385.47	24.45%

Table E-2: Sacramento River Basin Maintenance Issue Lengths for 2011 and 2012

Sacramento Project Length: 1104.22 miles	Fall 2011				Fall 2012				Change			
	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent
Rated Item												
Vegetation	109.45	13.35	162.85	14.82%	150.40	24.77	249.48	22.59%	40.95	11.42	86.63	7.89%
Trim/Thin Trees	14.30	3.85	29.70	2.70%	13.16	3.50	27.16	2.46%	-1.14	-0.35	-2.54	-0.23%
Encroachments	7.59	0.77	10.67	0.97%	5.57	0.12	6.05	0.55%	-2.02	-0.65	-4.62	-0.42%
Animal Control	10.02	0.04	10.18	0.93%	16.82	0.05	17.02	1.54%	6.80	0.01	6.84	0.62%
Erosion	22.86	2.15	31.46	2.86%	20.71	2.66	31.35	2.84%	-2.15	0.51	-0.11	-0.01%
Crown Surface	18.29	0.07	18.57	1.69%	30.13	9.67	68.81	6.23%	11.84	9.60	50.24	4.57%
Other	0.77	0.03	0.89	0.08%	3.86	0.04	4.02	0.36%	0.12	0.01	0.16	0.01%
Total	183.28	20.26	264.32	24.06%	240.65	40.81	403.89	36.58%	54.40	20.55	136.60	12.44%

Table E-3: San Joaquin River Basin Maintenance Issue Lengths for 2011 and 2012

San Joaquin Project Length: 471.82 miles	Fall 2011					Fall 2012					Change					
	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent
Rated Item																
Vegetation	76.13	3.93	91.85	19.23%	227.55	14.98	287.47	60.93	192.37	22.47	282.25	17.91%				
Trim/Thin Trees	3.23	0.23	4.15	0.87%	2.66	0.60	5.06	1.075	-1.71	0.02	-163	-0.10%				
Encroachments	10.02	0.70	12.82	2.68%	6.14	0.14	6.70	1.425	-5.90	-1.21	-10.74	-0.68%				
Animal Control	17.22	0.40	18.82	3.94%	23.82	2.07	32.10	6.805	13.40	1.68	20.12	1.28%				
Erosion	3.11	2.25	12.11	2.53%	3.36	2.94	15.12	3.205	-1.90	1.19	2.86	0.18%				
Crown Surface	15.62	0.23	16.54	3.46%	57.98	0.23	58.90	12.485	54.20	9.60	92.60	5.87%				
Other	0.16	0.05	0.36	0.08%	0.59	0.02	0.67	0.145	0.09	0.02-	0.01	0.00%				
Total	125.49	7.79	156.65	32.79%	322.10	20.98	406.02	86.055	250.55	33.73	385.47	24.45%				

Figure E-5: Map of 2012 Local Maintaining Agency Ratings; Northern Area

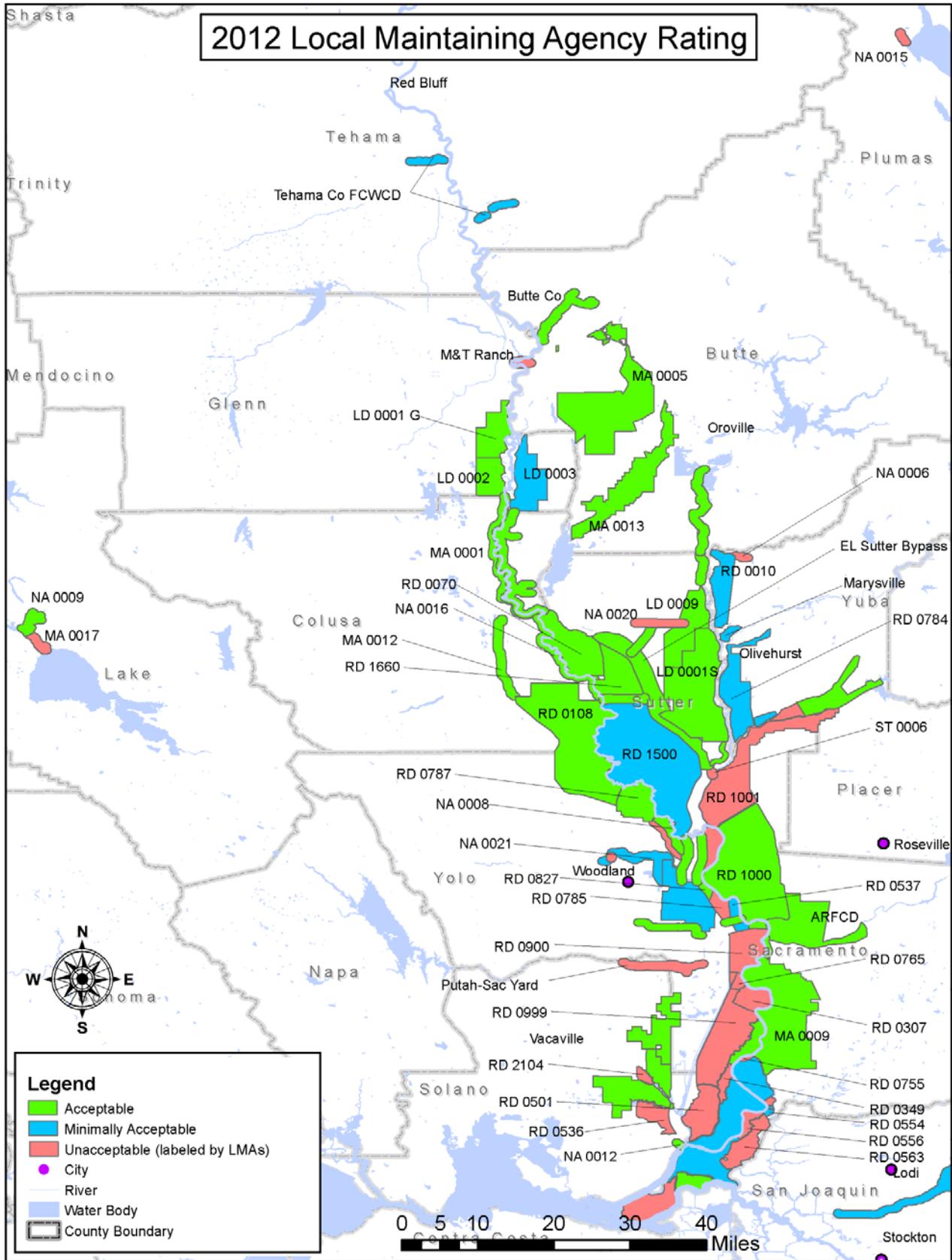


Figure E-5: Map of 2012 Local Maintaining Agency Ratings; Southern Area

