February 2011 Central Valley Flood Protection Board Meeting
Flood Project Integrity and Inspection Branch
Briefing Handout

Table 1: Summary of Levee Maintenance Ratings for 2007 through 2010

	2007	2008	2009	2010
A=Acceptable	24	42	51	49
M=Minimally Acceptable	18	25	25	19
U=Unacceptable	64	39	30	38

Table 2: Summary of Channel and Structure Maintenance Ratings for 2007 through 2010

	2007	2008	2009	2010
Channels Ratings				
A=Acceptable	10	24	19	16
M=Minimally Acceptable	14	1	7	3
U=Unacceptable	1	0	0	1
Not Inspected	0	0	0	6
Structures Ratings				
A=Acceptable	32	37	36	36
M=Minimally Acceptable	9	5	7	7
U=Unacceptable	1	0	0	0
Not Inspected	0	0	0	0
Pumping Plant Ratings				
A=Acceptable	12	12	7	8
M=Minimally Acceptable	1	1	6	4
U=Unacceptable	0	0	0	0
Not Inspected	0	0	0	1

Table 3: Total of Maintenance Issue Lengths for 2009 and 2010

Total Project Length: 1573.98 miles	**Fall 2009**				**Fall 2010**				**Change**	
Rated Item	M Miles	U Miles	M+4U Miles	Threshold Percent	M Miles	U Miles	M+4U Miles	Threshold Percent	M+4U Miles	Threshold Percent
Vegetation	73.46	17.35	142.86	9.03%	93.04	9.06	129.28	8.20%	-13.58	-0.86%
Trim/Thin Trees	21.02	5.37	42.50	2.69%	18.92	4.52	37.00	2.35%	-5.50	-0.35%
Encroachments	14.11	0.69	16.87	1.07%	16.31	1.88	23.83	1.51%	6.96	0.44%
Animal Control	38.95	1.89	46.51	2.94%	21.74	0.11	22.18	1.41%	-24.33	-1.54%
Erosion	13.07	4.79	32.23	2.04%	16.62	14.18	73.34	4.65%	41.11	2.61%
Crown Surface	15.14	1.49	21.10	1.33%	10.25	0.02	10.33	0.66%	-10.77	-0.68%
Other	2.07	0.37	3.55	0.22%	0.23	0.05	0.43	0.03%	-3.12	-0.20%
Total	177.82	31.95	305.62	19.33%	177.11	29.83	296.39	18.80%	-9.23	-0.59%

Summary of LMA Maintenance Ratings for 2007 through 2010

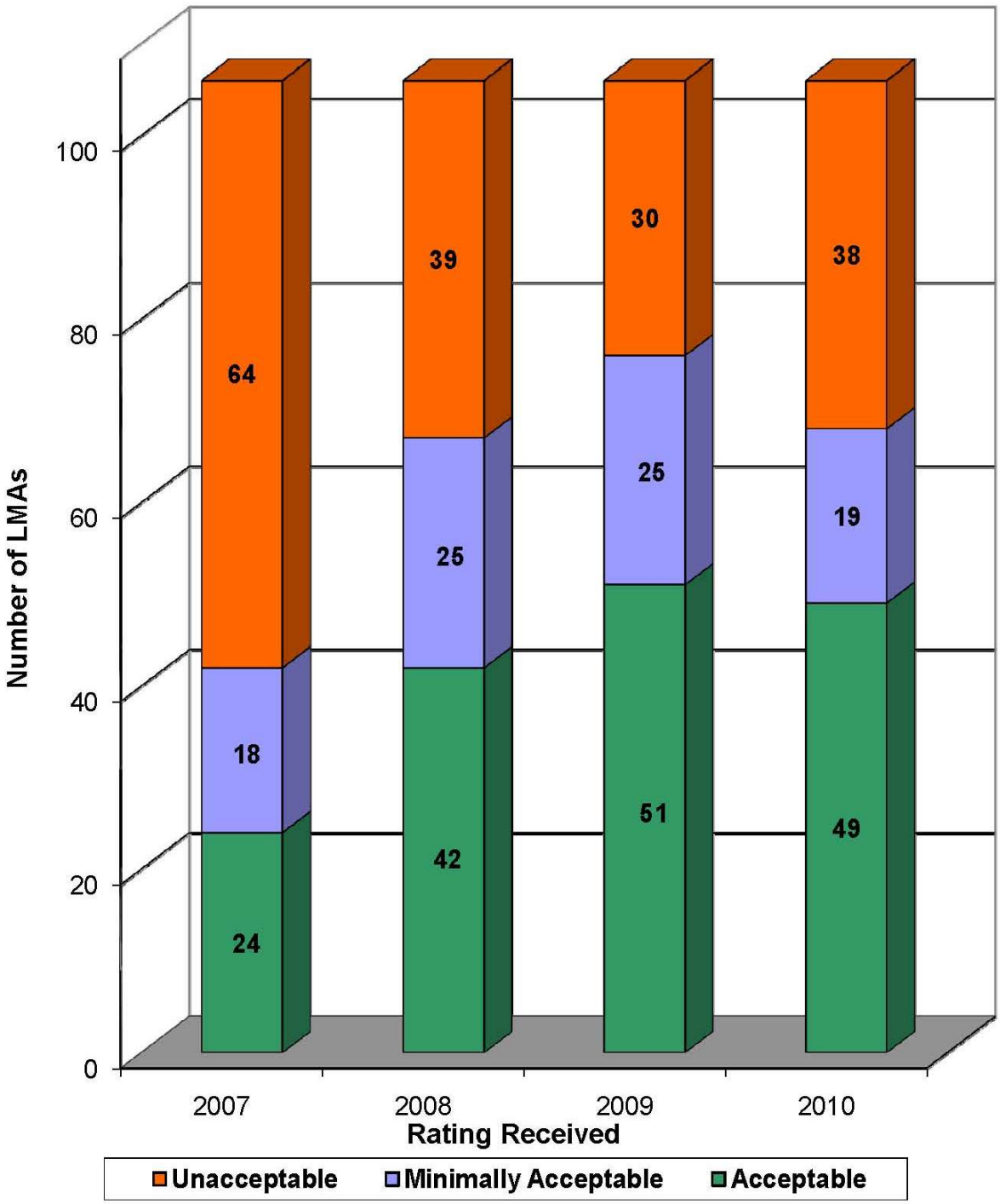

Figure 1

LMA Maintenance Rating Changes from Fall 2008 to Fall 2007, Fall 2009 to Fall 2008, and Fall 2009 to Fall 2010

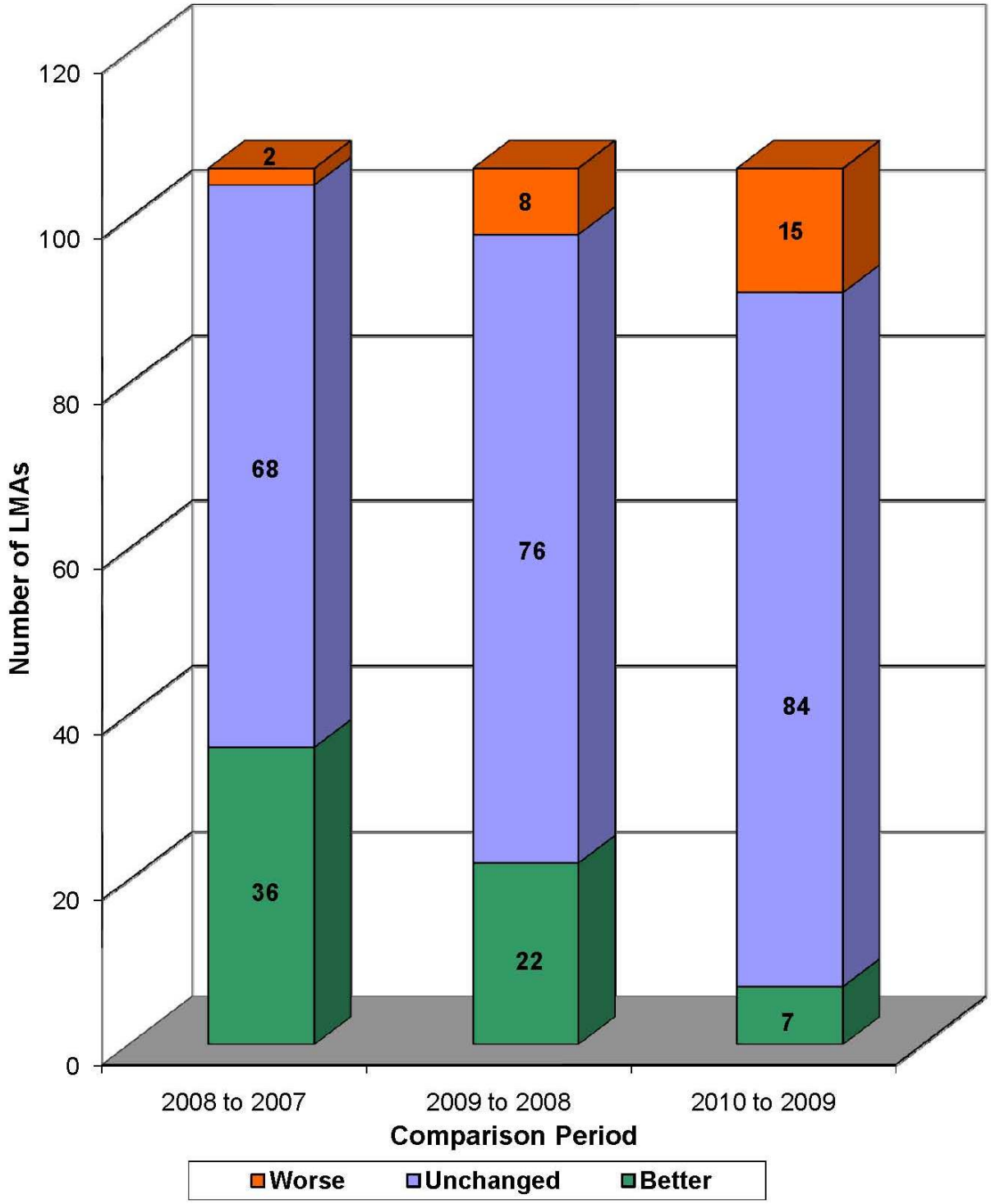

Figure 2

Percentage of Total System Levee Miles with Maintenance Deficiencies

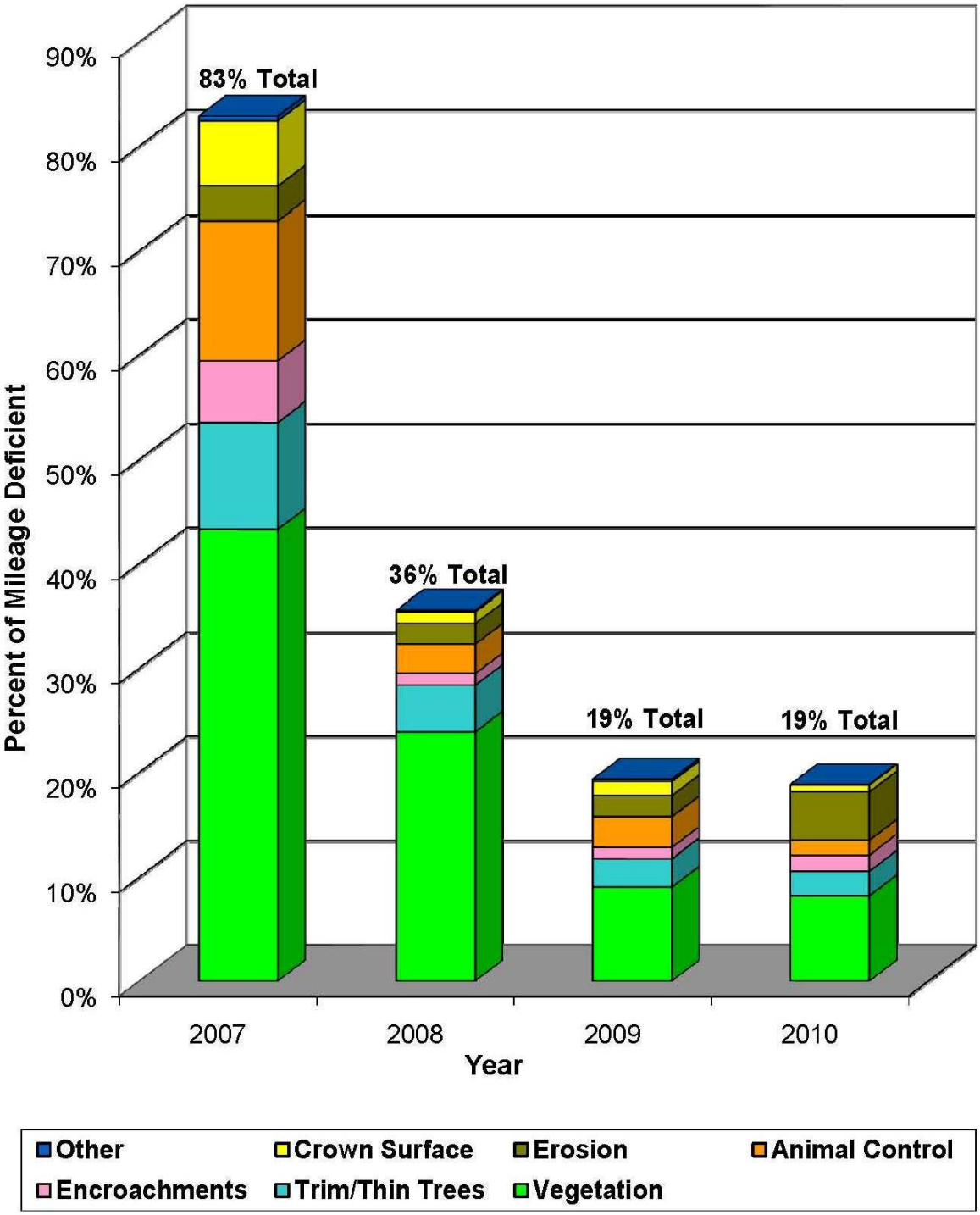

Figure 3

Percentage of Levee Miles with Maintenance Deficiencies by Basin

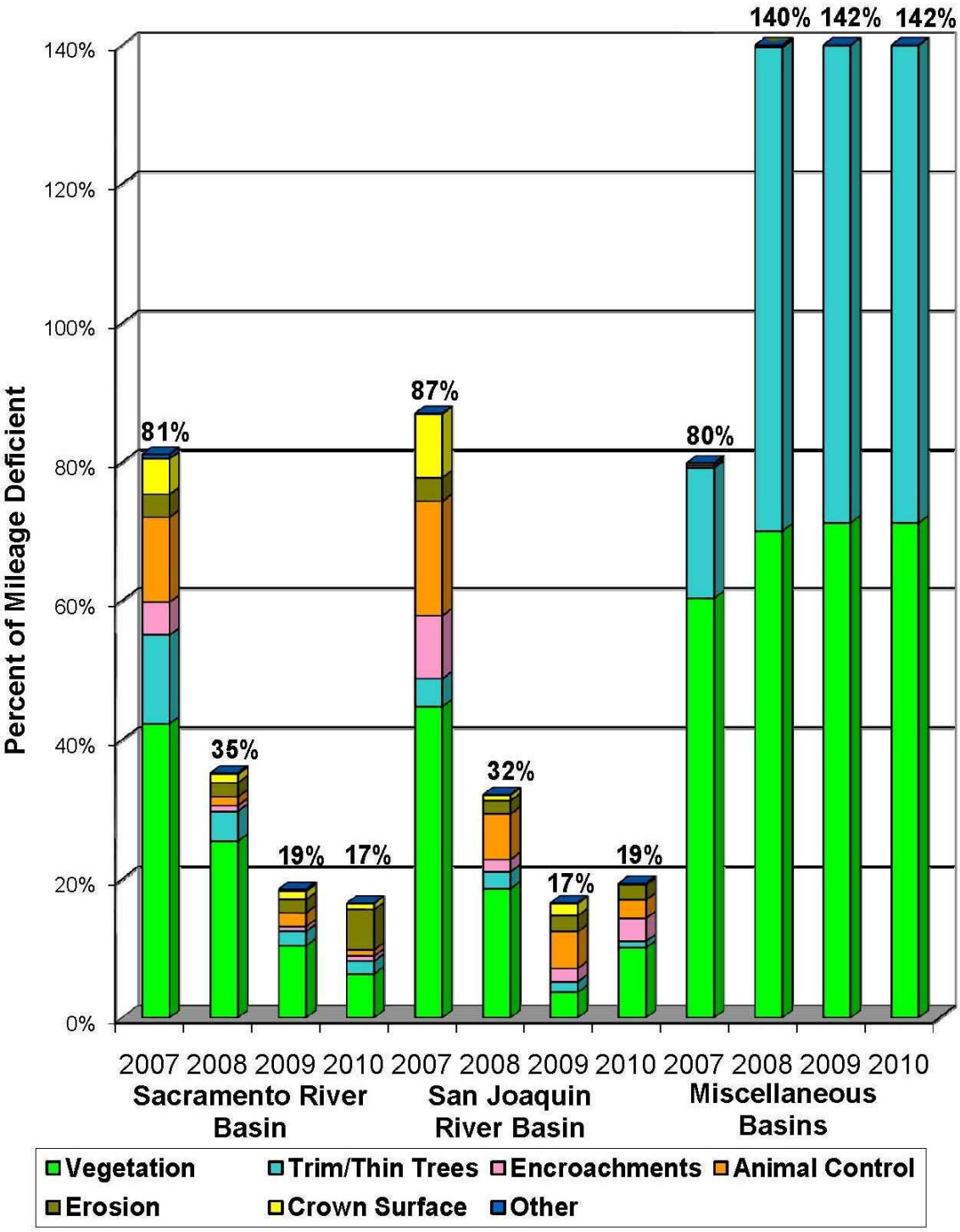

Figure 4

Channel Overall Ratings Comparison 2007 to 2010

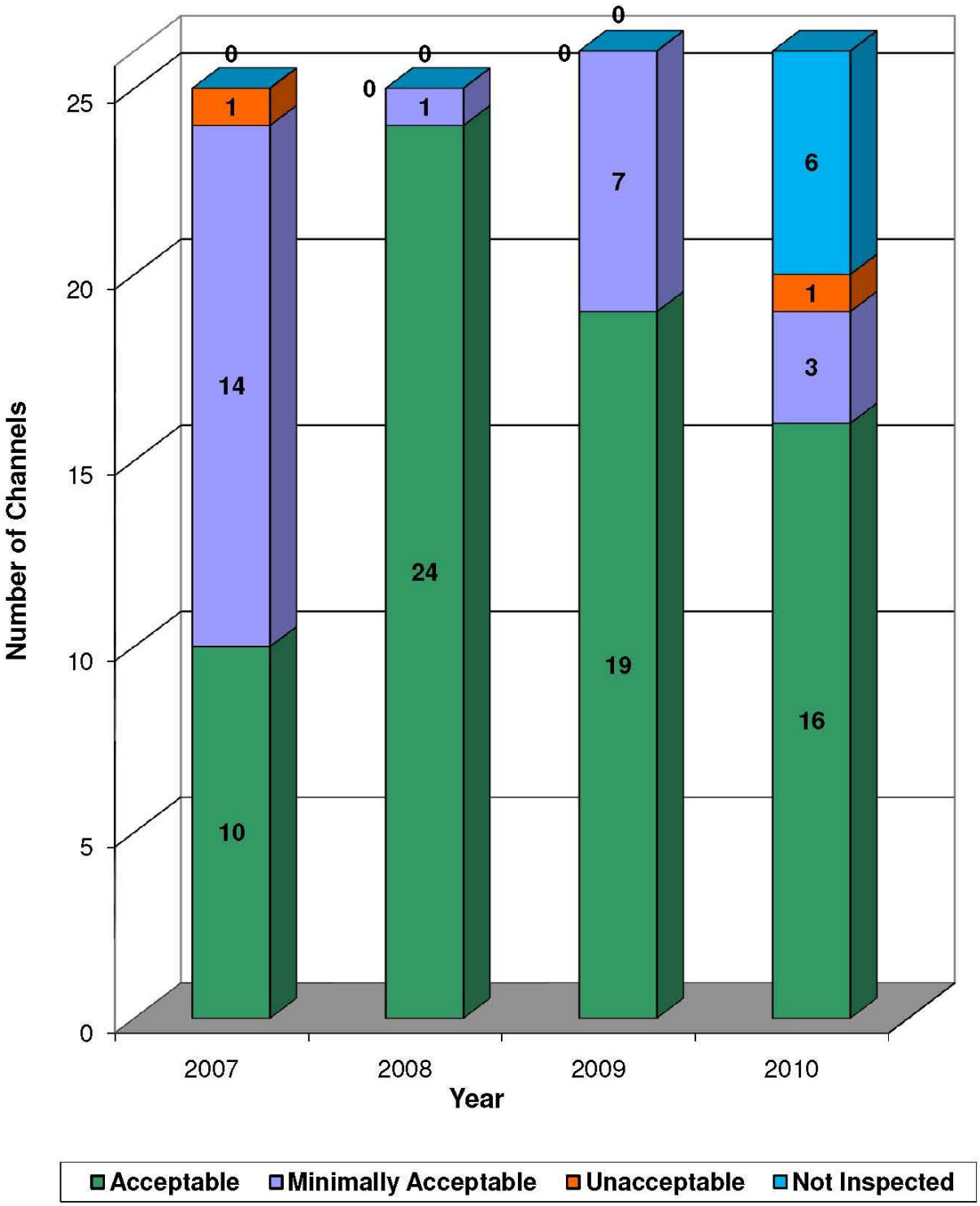

Figure 5

Structure Overall Ratings Comparison 2007 to 2010

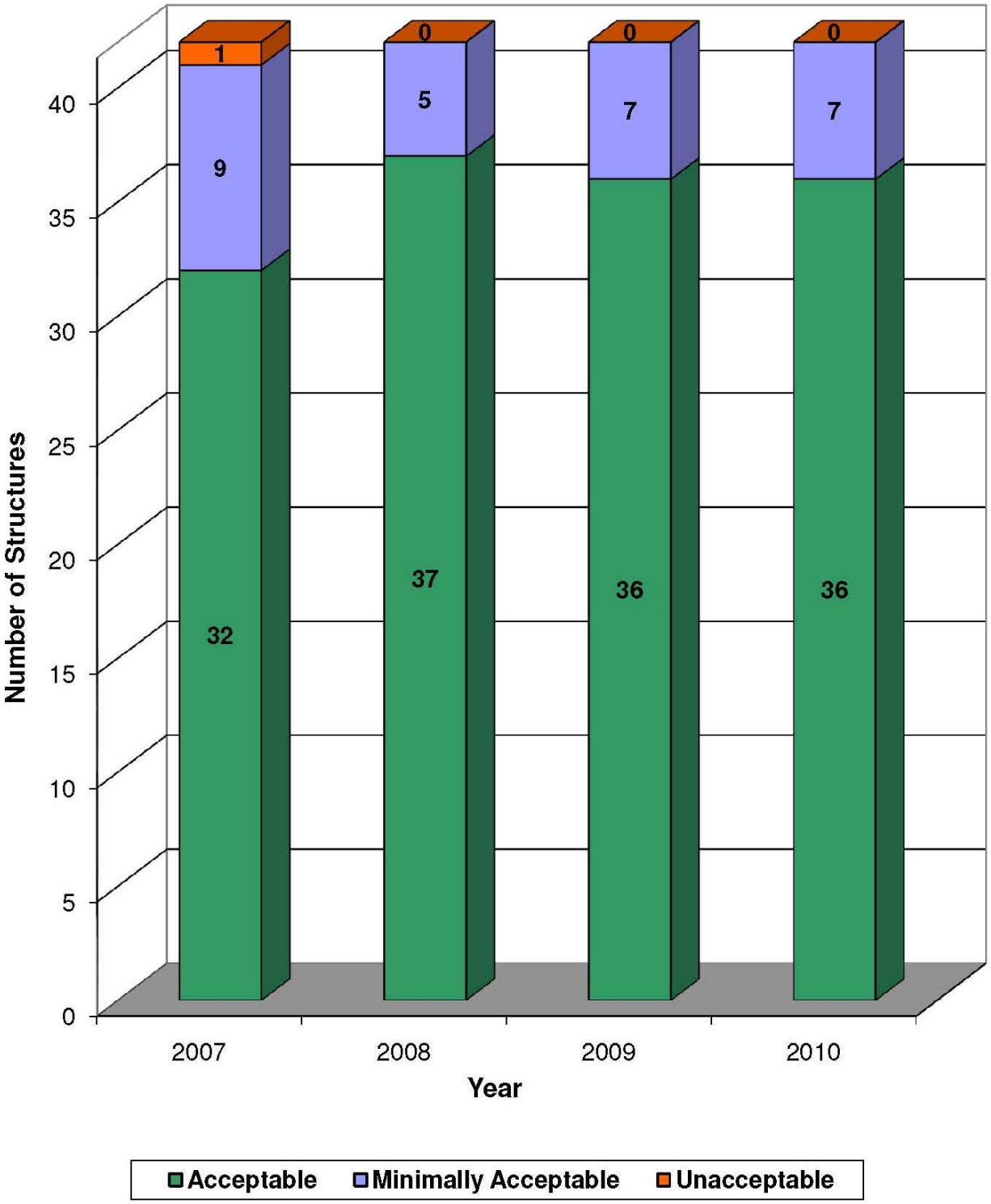

Figure 6

Pump Plant Overall Ratings Comparison 2007 to 2010

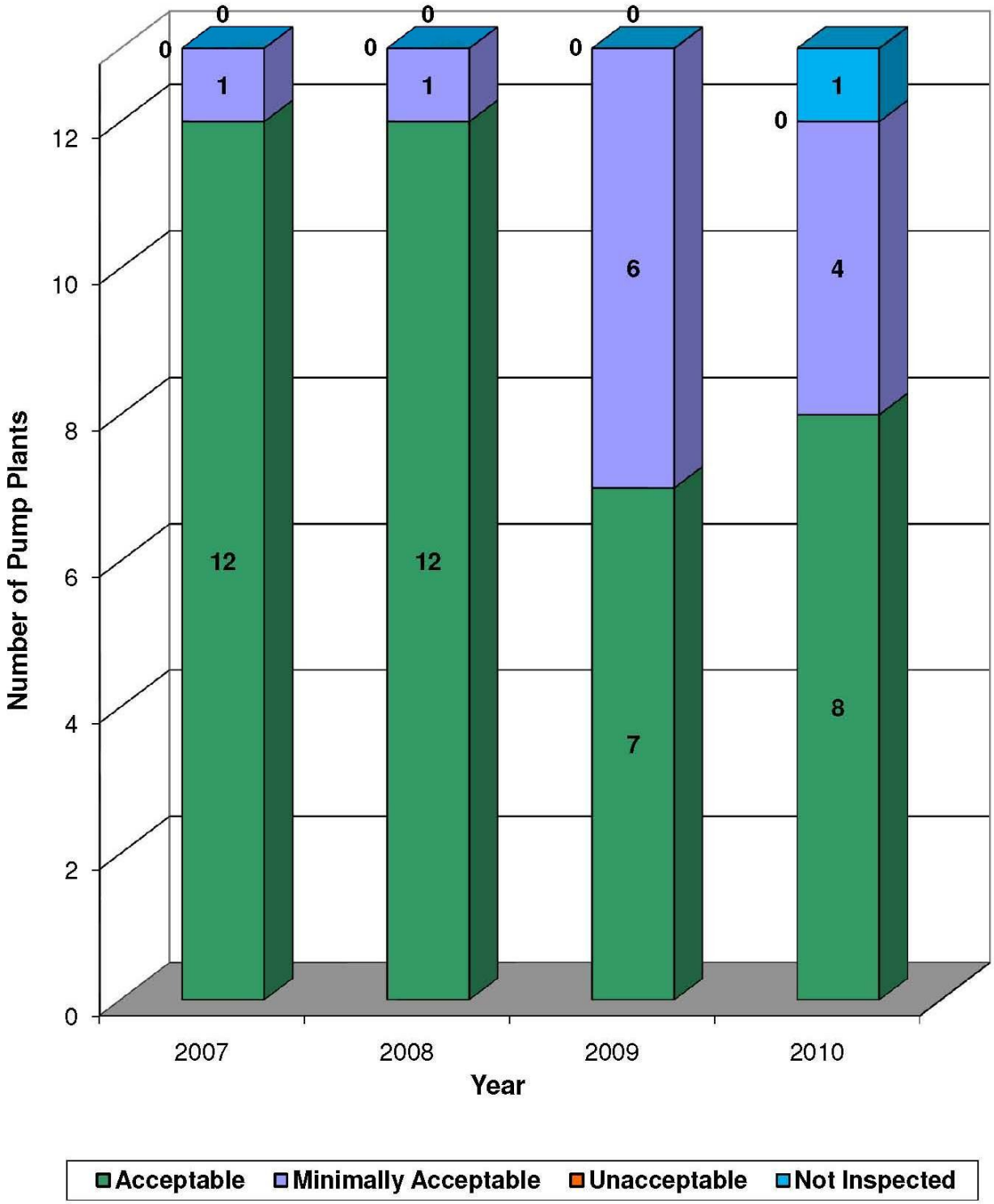

Figure 7

Length of Levees with Vegetation and Landscaping Issues

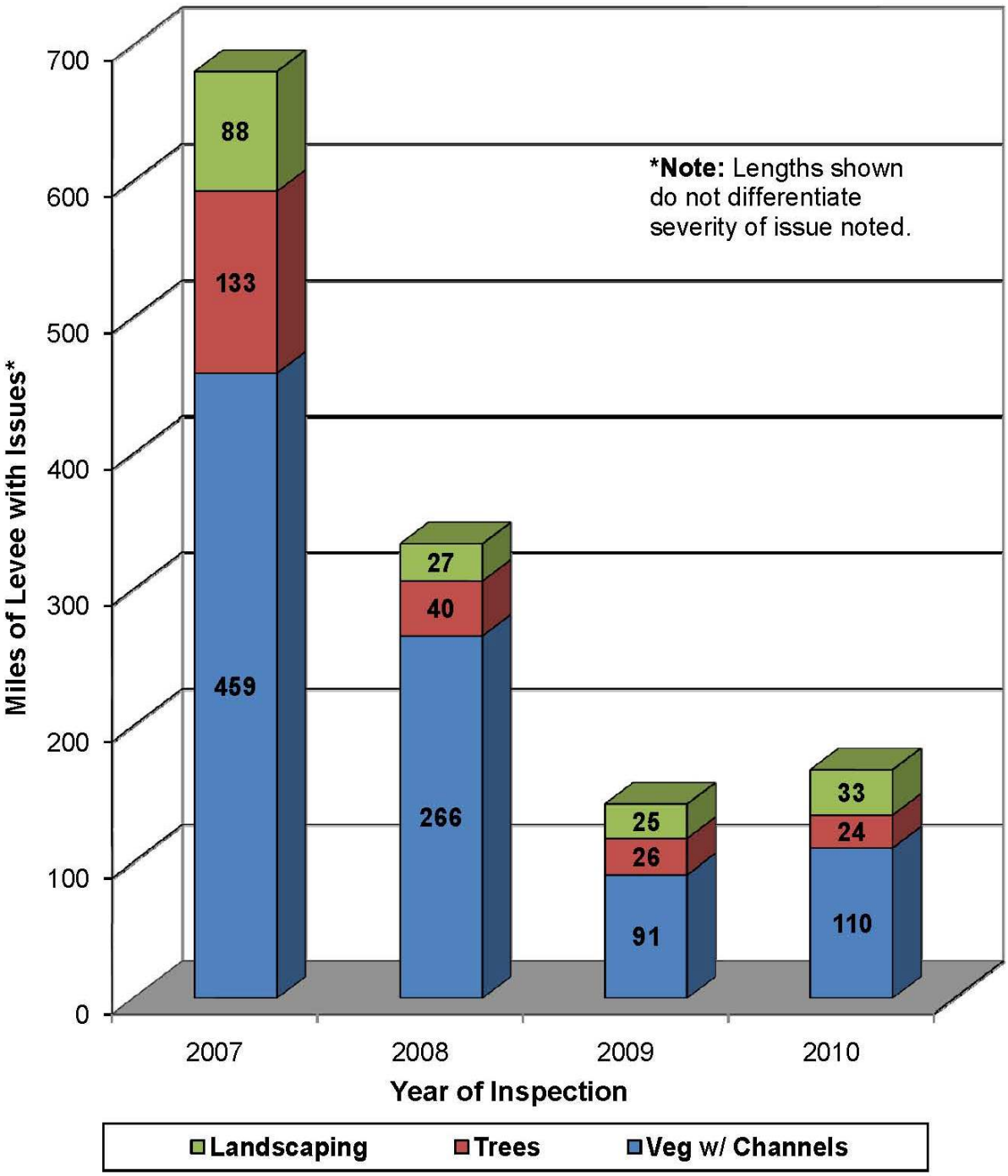

Figure 8

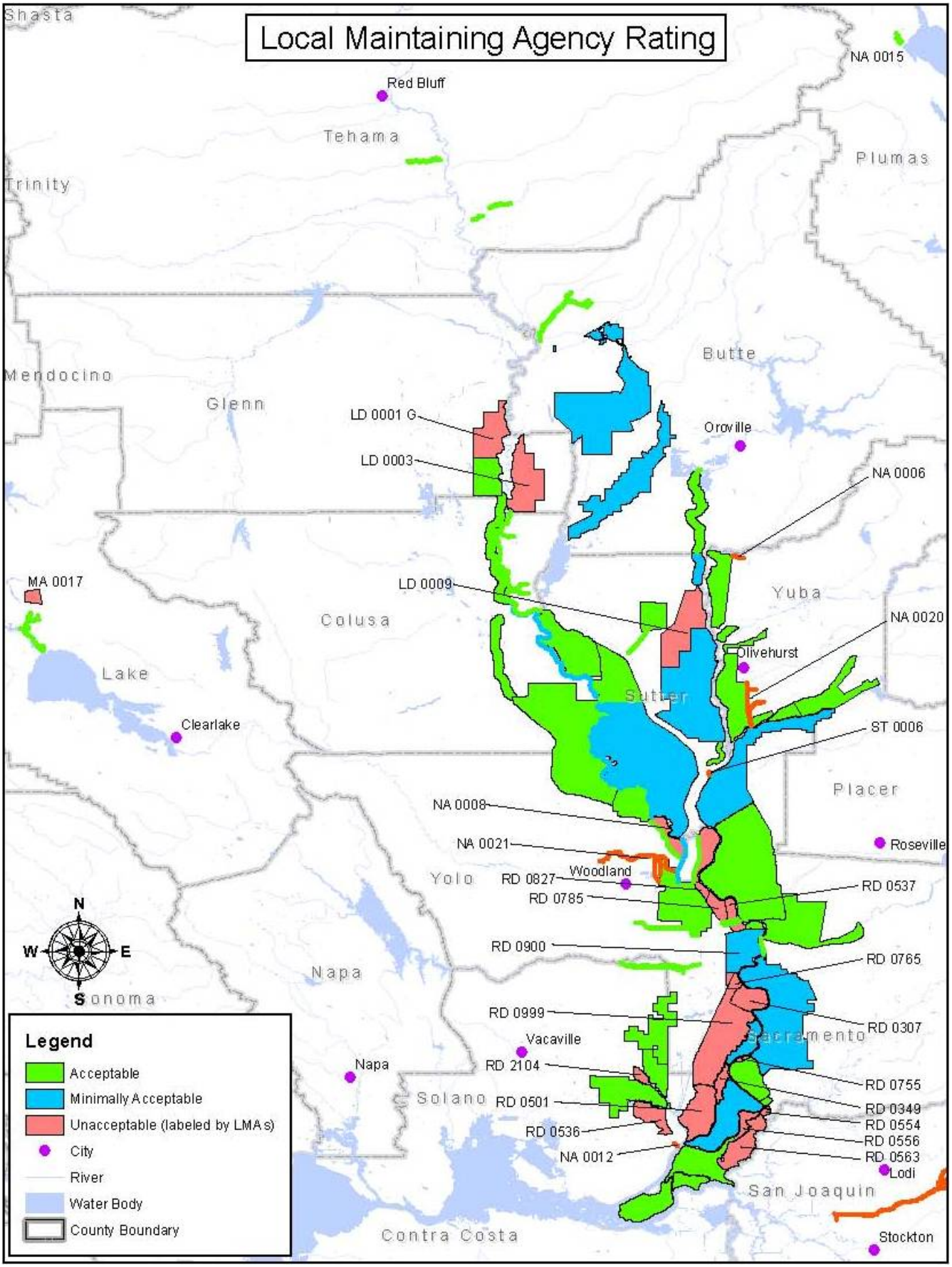
Local Maintaining Agency Rating
Shasta
Red Bluff
Tehama
Trinity
Plumas
NA 0015
Mendocino
Glenn
Butte
LD 0001 G
LD 0003
Oroville
NA 0006
MA 0017
LD 0009
Yuba
Colusa
NA 0020
Olivehurst
Lake
Sutter
Clearlake
ST 0006
Placer
NA 0008
NA 0021
Roseville
Yolo
RD 0827
Woodland
RD 0537
RD 0785
RD 0900
RD 0765
Napa
Sonoma
RD 0999
RD 0307
Sacramento
Vacaville
RD 2104
Napa
RD 0755
Solano
RD 0501
RD 0349
RD 0554
RD 0536
RD 0556
NA 0012
RD 0563
Lodi
San Joaquin
Contra Costa
Stockton
N
W
E
S
Legend
Acceptable
Minimally Acceptable
Unacceptable (labeled by LMAs)
City
River
Water Body
County Boundary

Figure 9

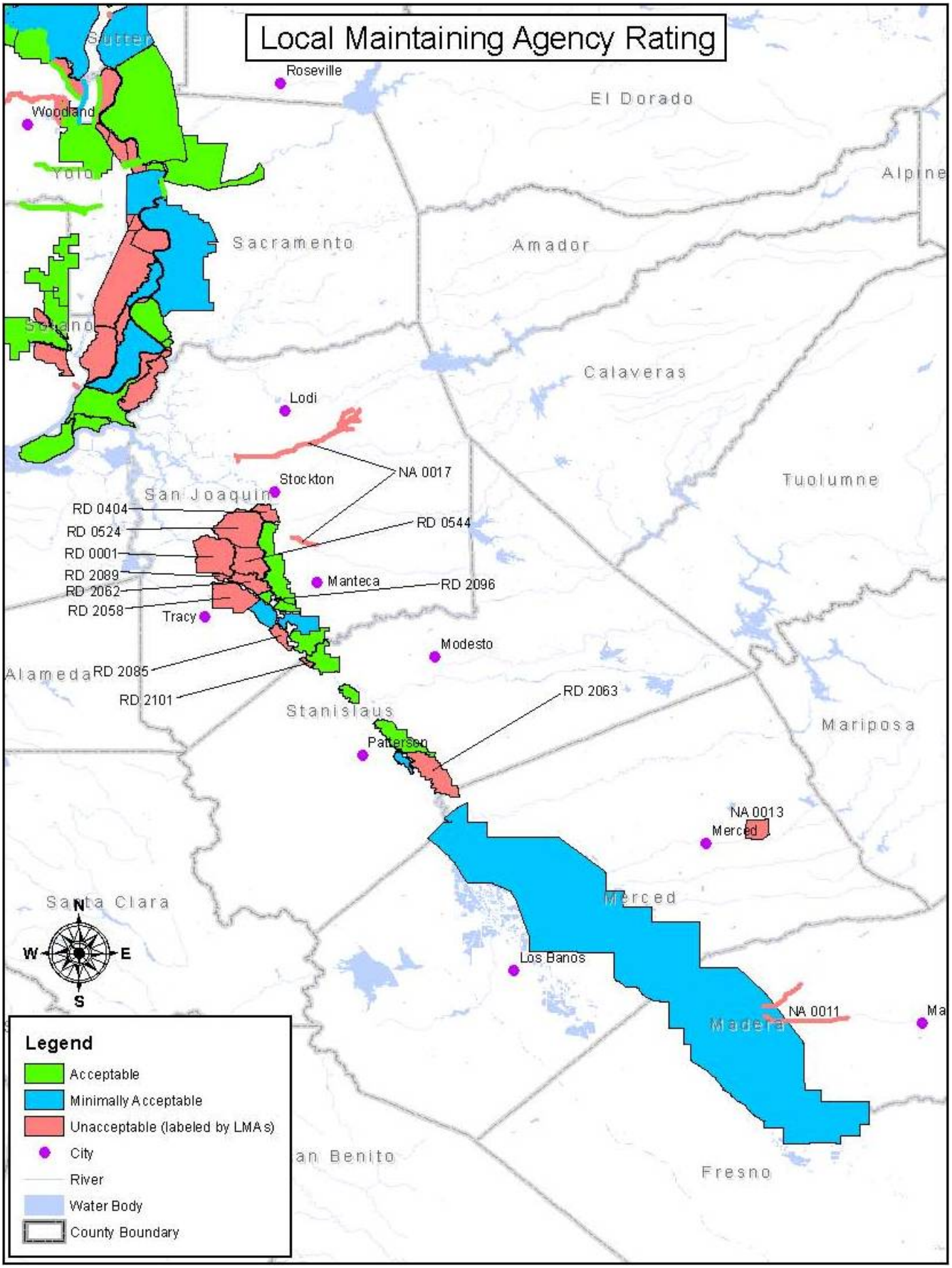
Local Maintaining Agency Rating
Roseville
Woodland
El Dorado
Alpine
Sacramento
Amador
Calaveras
Lodi
Stockton
NA 0017
Tuolumne
San Joaquin
RD 0404
RD 0524
RD 0001
RD 2089
RD 2062
RD 2058
RD 0544
Manteca
RD 2096
Tracy
Modesto
Alameda
RD 2085
RD 2101
RD 2063
Stanislaus
Mariposa
Patterson
NA 0013
Merced
Santa Clara
Merced
Los Banos
NA 0011
Madera
Fresno
N
W
E
S
Legend
Acceptable
Minimally Acceptable
Unacceptable (labeled by LMAs)
City
River
Water Body
County Boundary

Figure 10

Table 4: Selected DWR Levee Inspection Rating Criteria

FEATURE	CATEGORY	RATING	RATING DESCRIPTION
Earthen Levee	Vegetation	A	The Levee has a good grass cover with no unwanted vegetation (brush, bushes, undesirable weeds) blocking visibility or access.
		M	Tall grass, weeds, or brush partially block visibility of or access to the levee and/or to 10' beyond the landside toe.
		U	Tall grass, weeds, or brush completely block visibility of or access to the levee and/or to 10' beyond the landside toe.
		W	The vegetation complies with standards but should be monitored and maintained to avoid a future maintenance issue.
Earthen Levee	Trim/ Thin Trees	A	Any trees on the levee or the 10' landside toe easement are trimmed up at least 5 ' above the levee slope and spaced enough to allow visibility and flood fight access. Trees adjacent to the levee crown or patrol road are trimmed at least 12 ' above ground.
		M	Moderate density of limbs, leaves or the trees themselves are partially obstructing visibility and flood fight access to the levee slope and/or 10' beyond the landside toe.
		U	Significant density of limbs, leaves or the trees themselves are completely obstructing visibility and flood fight access to the levee slope and/or 10' beyond the landside toe.
		W	The tree(s) complies with standards but should be monitored and maintained to avoid a future maintenance issue.
Earthen Levee	Encroachments	A	No Trash or debris present. No excavation, structures, or other encroachments threatening levee integrity. No encroachments obstruct visibility or access to the levee or landside toe easement.
		M	Minimal trash or debris present. Minor excavation, structure, or other encroachment poses minor threat to levee integrity.
		U	Significant trash or debris present. Major excavation, structure, or other encroachment poses major threat to levee integrity.
		PO	An encroachment (Permitted or Non-Permitted) partially obstructs visibility and access to the levee and/or 10' beyond landside toe.
		CO	An encroachment (Permitted or Non-Permitted) completely obstructs visibility and access to the levee and/or 10' beyond landside toe.
		W	The area complies with encroachment standards, but should be monitored and maintained to avoid a future maintenance issue.