

CVFPB Meeting June 14, 2013

## USACE INSPECTION RESULTS

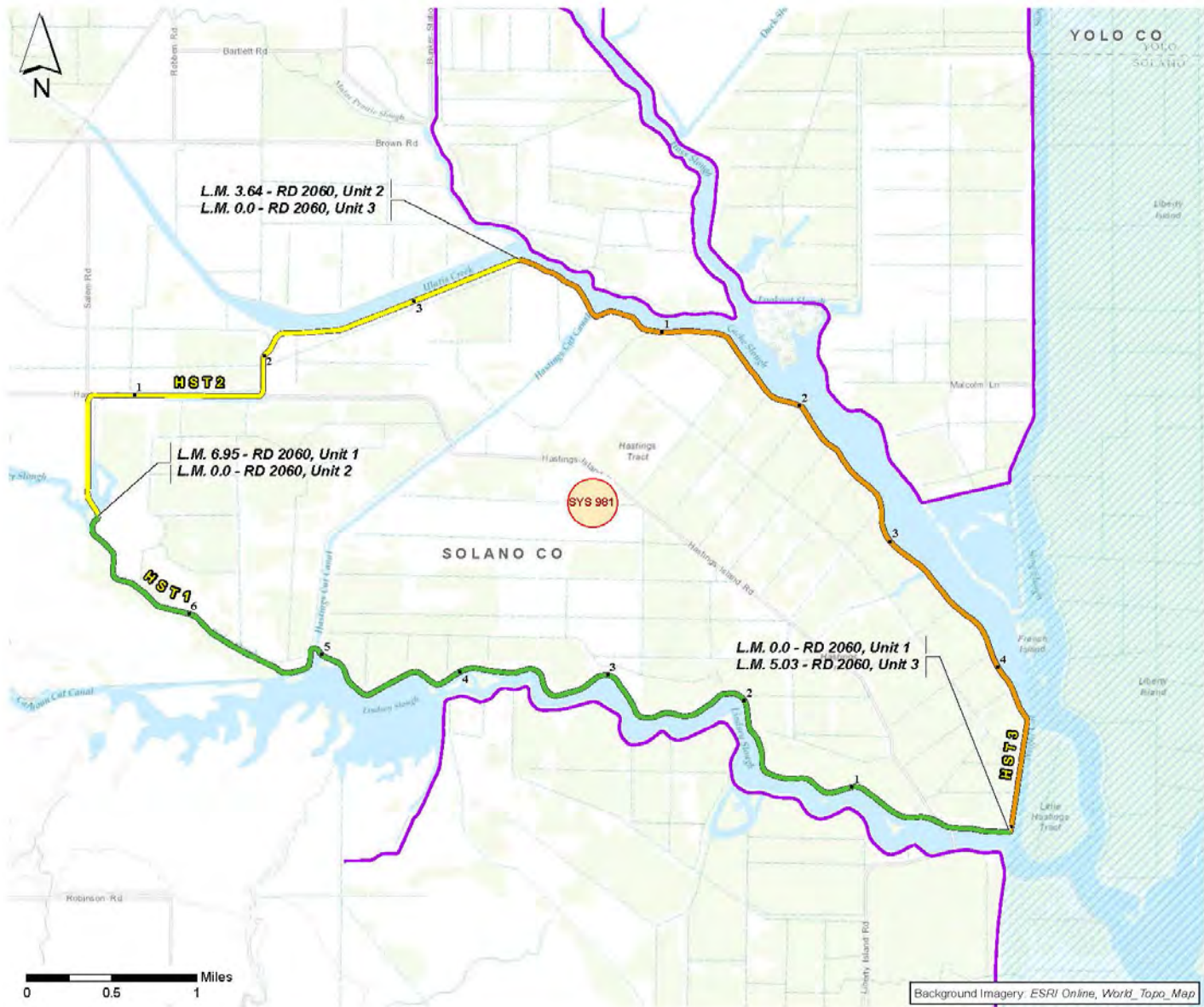
Meegan G Nagy, PE  
Levee Safety Program Manager



®

US Army Corps of Engineers  
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# RD 2060 – Hastings Tract



## Map Legend

Project Levees: NLD SYSTEMS and SEGMENTS  
(Levee Inspection System Code)

- SYSTEM 981**
- RD 2060 - Unit 1, Lindsey Slough (HST1)
  - RD 2060 - Unit 2, west levee (HST2)
  - RD 2060 - Unit 3, Cache Slough (HST3)
  - Other Federal Levees
  - Yolo Bypass
  - Levee Mile

FEDERAL LEVEE PROJECTS SYSTEM MAP
<b>RD 2060 - HASTINGS TRACT SYSTEM 0981</b>
U.S. ARMY CORPS OF ENGINEERS SACRAMENTO DISTRICT



# RD 2060 - Hastings Tract

## Unacceptable - Inactive

Hastings - Unit 1,  
Lindsey Slough (HST1)

Hastings - Unit 2, west  
levee (HST2)

Hastings - Unit 3,  
Cache Slough (HST3)

### General Items

Operations and Maintenance Manuals	A	A	A
Emergency Supplies and Equipment	A	A	A
Flood Preparedness and Training	A	A	A

### Levee Embankment Items

Vegetation Growth	U	U	U
Sod Cover	M	A	M
Encroachments	U	U	U
Closure Structures	N/A	N/A	N/A
Slope Stability	U	U	U
Erosion/Bank Caving	U	U	U
Settlement	M	A	A
Depressions/Rutting	U	U	U
Cracking	U	U	U
Animal Control	U	U	U
Culverts/Discharge Pipes	N/A	N/A	N/A
Riprap Revetments & Bank Protection	U	N/A	U
Revetments other than Riprap	N/A	N/A	N/A
Underseepage Relief Wells/Toe Drainage Systems	N/A	N/A	N/A
Seepage	A	M	A

Segment & System Ratings/PL 84-99 Eligibility

Likely Prevents Performance In Next Flood Event  
 Serious deficiency noted in past inspections has not been corrected within the established timeframe  
 Not Likely to Prevent Performance In Next Flood Event

### Legend

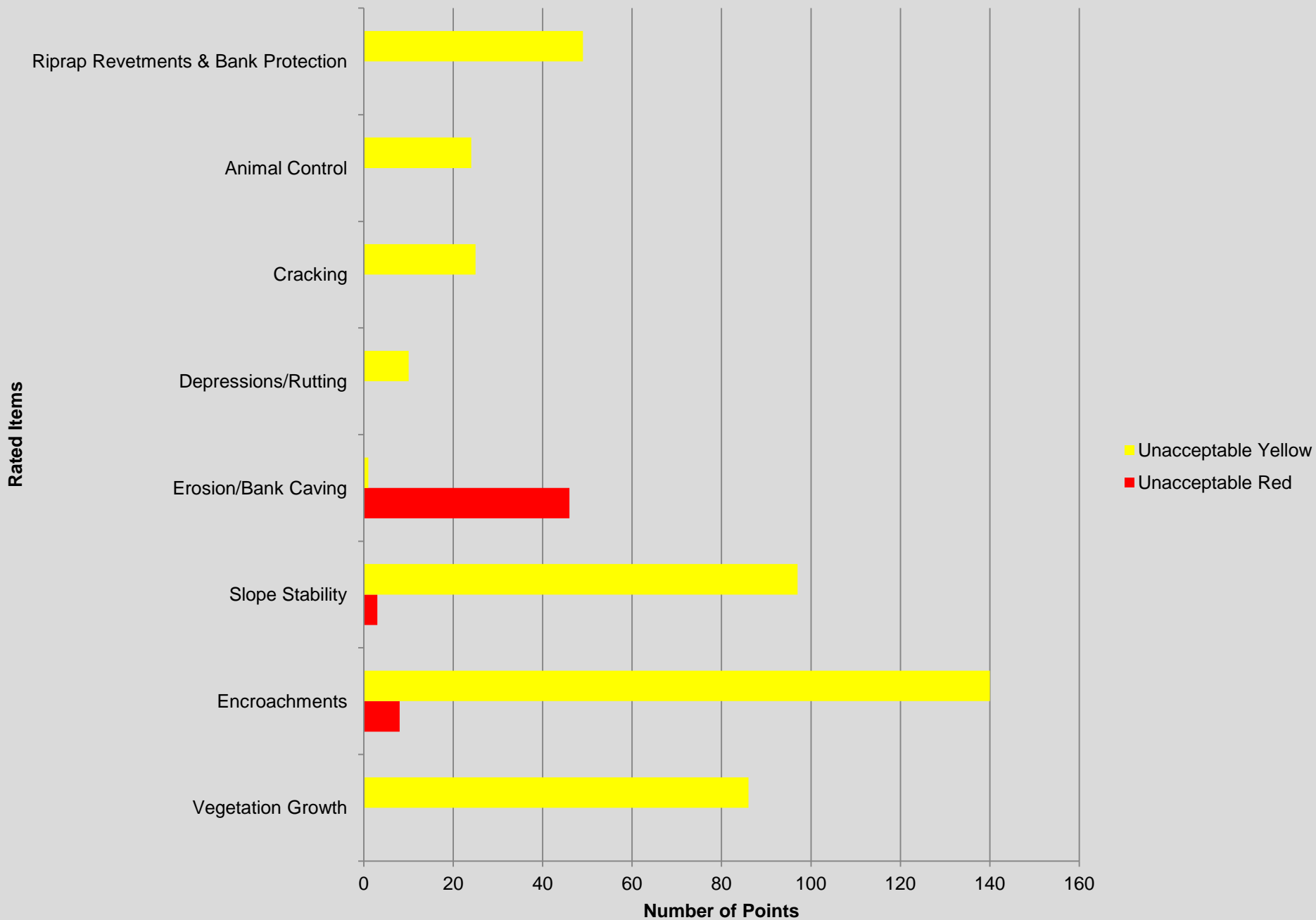
- A Acceptable
- M Minimally Acceptable
- U Unacceptable
- N/A Not Applicable

5/31/2012

Rev - 9/26/2012

The lowest rating is used to determine the overall segment & system ratings and PL 84-99 Rehabilitation Eligibility

# RD 2060 - Hastings Tract Unacceptable Points

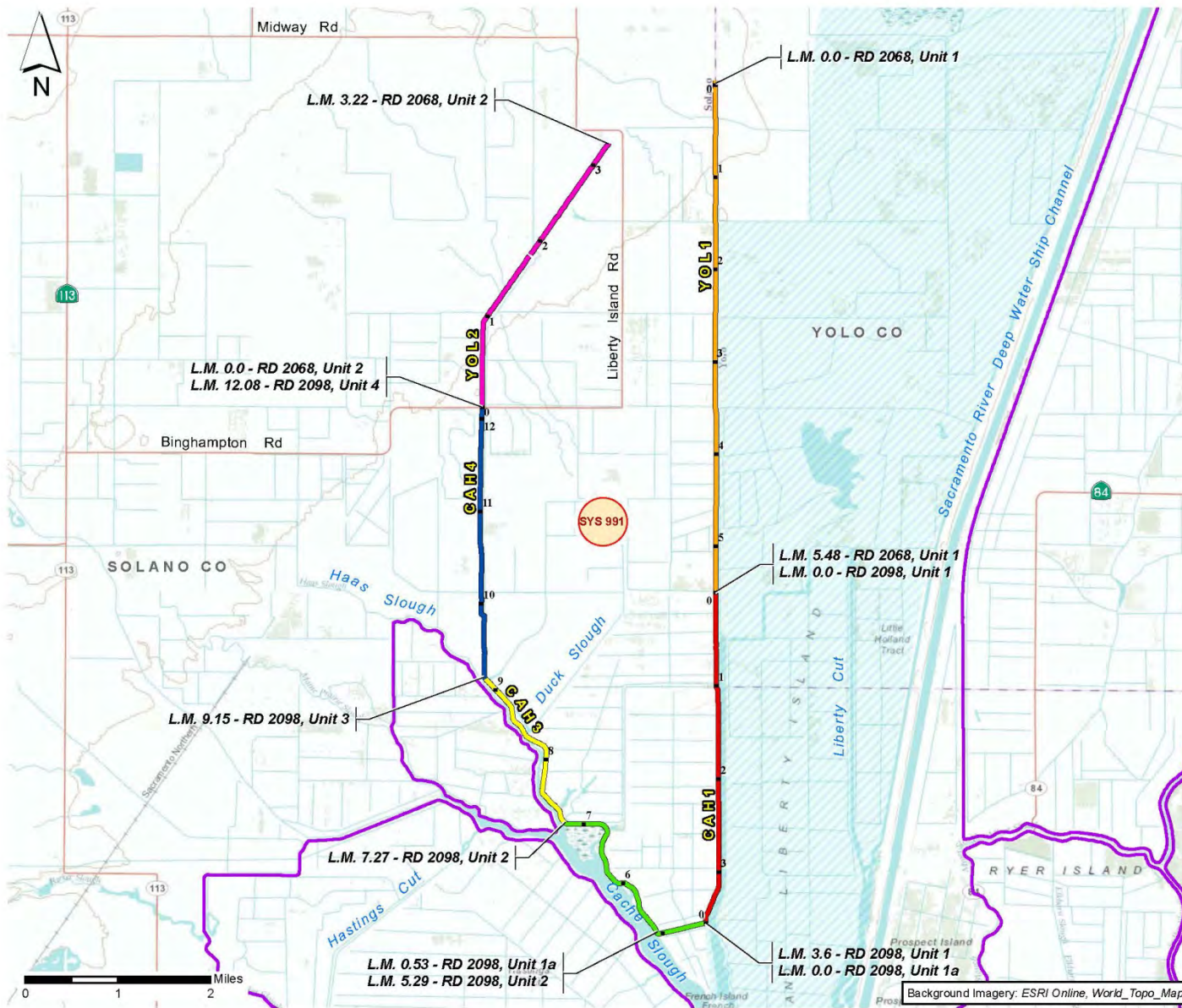















# RD 2068 – Yolano & RD 2098 – Cache-Haas Sloughs





## Map Legend

Project Levees: NLD SYSTEMS and SEGMENTS  
(Levee Inspection System Code)

### SYSTEM 991

-  RD 2068 - Unit 1, Shag Slough (YOL1)
-  RD 2068 - Unit 2 (YOL2)
-  RD 2098 - Unit 1, Shag Slough (CAH1)
-  RD 2098 - Unit 2, Cache Slough (CAH2)
-  RD 2098 - Unit 3, Haas Slough (CAH3)
-  RD 2098 - Unit 4 (CAH4)
-  Other Federal Levees

 Yolo Bypass

 Levee Mile

FEDERAL LEVEE PROJECTS  
SYSTEMS MAP

**RD 2068-YOLANO AND  
RD 2098-CACHE-HAAS SLOUGHS**

U.S. ARMY CORPS OF ENGINEERS  
SACRAMENTO DISTRICT

Background Imagery: ESRI Online, World\_Topo\_Map

**RD 2068 and RD 2098 - Yolano-  
Cache Slough  
Unacceptable - Inactive**

RD 2068 - Yolano -  
Unit 1, Shag Slough  
(YOL1)

RD 2068 - Yolano -  
Unit 2 (YOL2)

RD 2098 - Cache  
Slough-Haas Slough -  
Unit 1, Shag Slough  
(CAH1)

RD 2098 - Cache  
Slough-Haas Slough -  
Unit 2, Cache Slough  
(CAH2)

RD 2098 - Cache  
Slough-Haas Slough -  
Unit 3, Haas Slough  
(CAH3)

RD 2098 - Cache  
Slough-Haas Slough -  
Unit 4 (CAH4)

**General Items**

Operations and Maintenance Manuals	A	A	A	A	A	A
Emergency Supplies and Equipment	A	A	A	A	A	A
Flood Preparedness and Training	M	M	M	M	M	M

**Levee Embankment Items**

Vegetation Growth	U	U	U	U	U	U
Sod Cover	A	A	A	A	A	A
Encroachments	U	U	U	U	U	U
Closure Structures	N/A	N/A	N/A	N/A	N/A	N/A
Slope Stability	U	U	U	U	U	U
Erosion/Bank Caving	U	U	U	U	U	U
Settlement	A	A	A	A	A	A
Depressions/Rutting	M	M	U	M	U	M
Cracking	U	U	U	U	U	U
Animal Control	U	M	M	U	M	M
Culverts/Discharge Pipes	N/A	N/A	N/A	N/A	N/A	N/A
Riprap Revetments & Bank Protection	M	A	U	U	A	M
Revetments other than Riprap	N/A	N/A	N/A	N/A	N/A	N/A
Underseepage Relief Wells/Toe Drainage Systems	N/A	N/A	N/A	N/A	N/A	N/A
Seepage	A	A	A	A	A	A

Segment & System Ratings/PL 84-99 Eligibility

Likely Prevents Performance In Next Flood Event

Serious deficiency noted in past inspections has not been corrected within the established timeframe

Not Likely to Prevent Performance In Next Flood Event

**Legend**

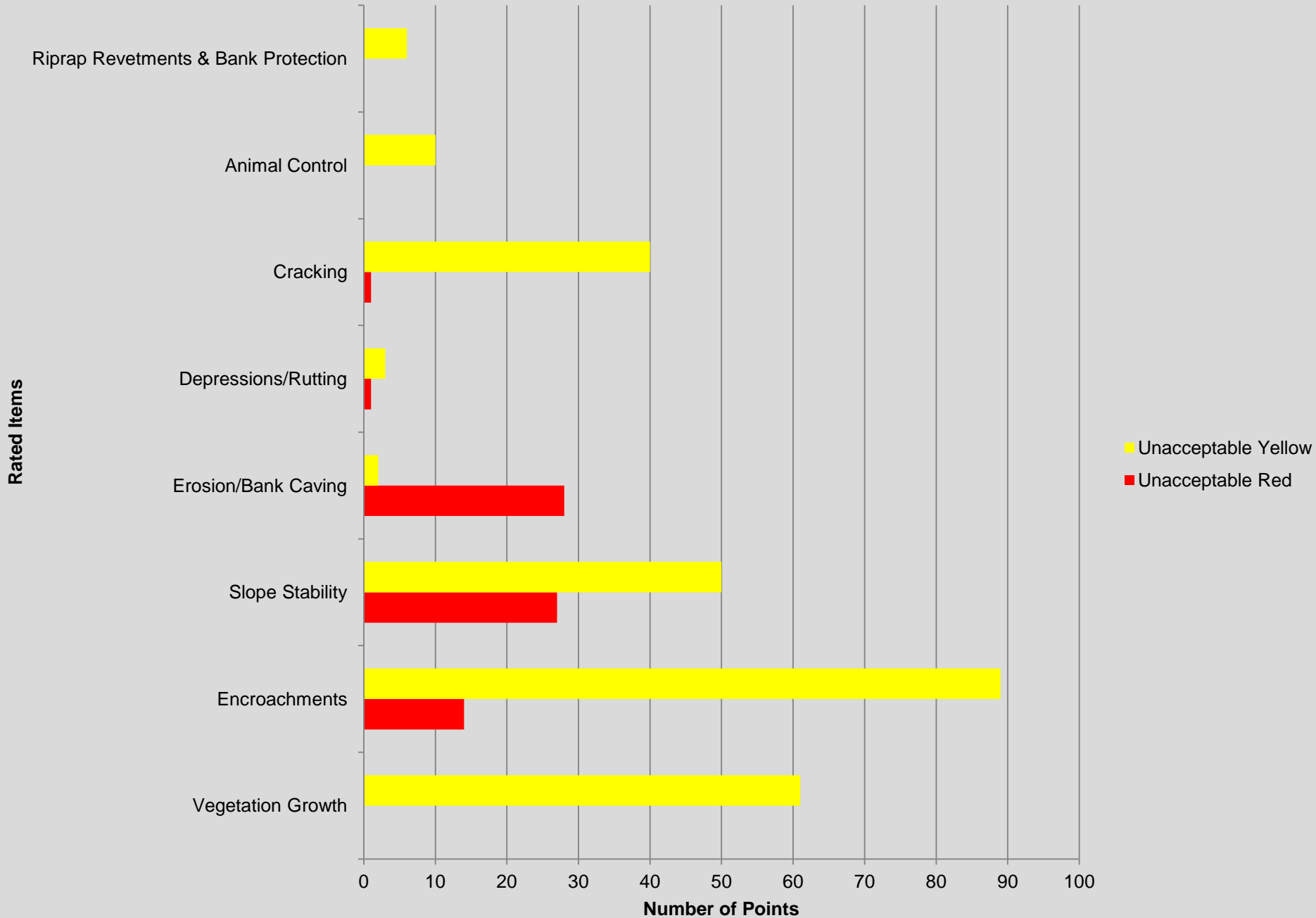
- A Acceptable
- M Minimally Acceptable
- U Unacceptable
- N/A Not Applicable

5/30/2012  
Rev - 9/26/2012

The lowest rating is used to determine the overall segment & system ratings and PL 84-99 Rehabilitation Eligibility



# RD 2068 & RD 2098 Unacceptable Points





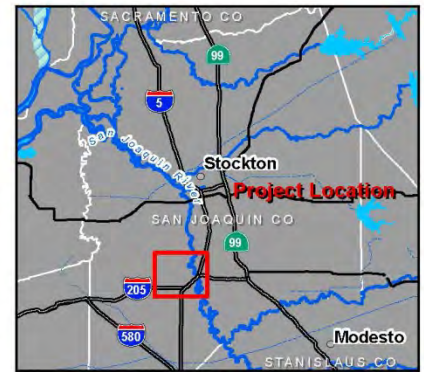
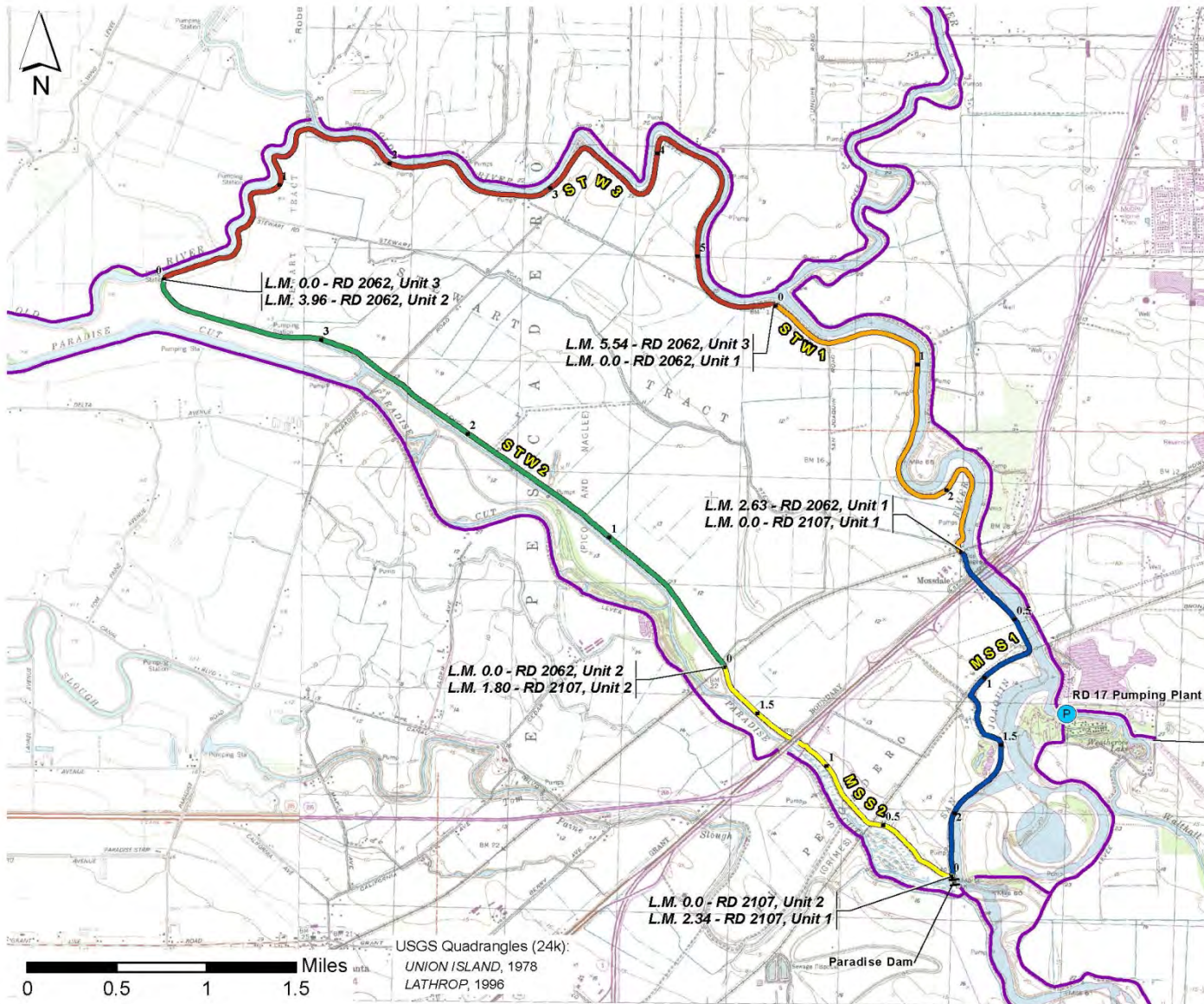








# RD 2062 & RD 2107 Stewart Tract



## Map Legend

Project Levees: NLD SYSTEMS and SEGMENTS  
 (Levee Inspection System Code)

### SYSTEM

- RD 2062-Stewart Tract - Unit 1, San Joaquin River (STW1)
- RD 2062-Stewart Tract - Unit 2, Paradise Cut (STW2)
- RD 2062-Stewart Tract - Unit 3, Old River (STW3)
- RD 2107-Mossdale - Unit 1, San Joaquin River (MSS1)
- RD 2107-Mossdale - Unit 2, Paradise Cut (MSS2)
- Other Federal Levees

- Pump Station
- Levee Mile

FEDERAL LEVEE PROJECTS  
 SYSTEMS MAP

RD 2062 - RD 2107  
 STEWART TRACT

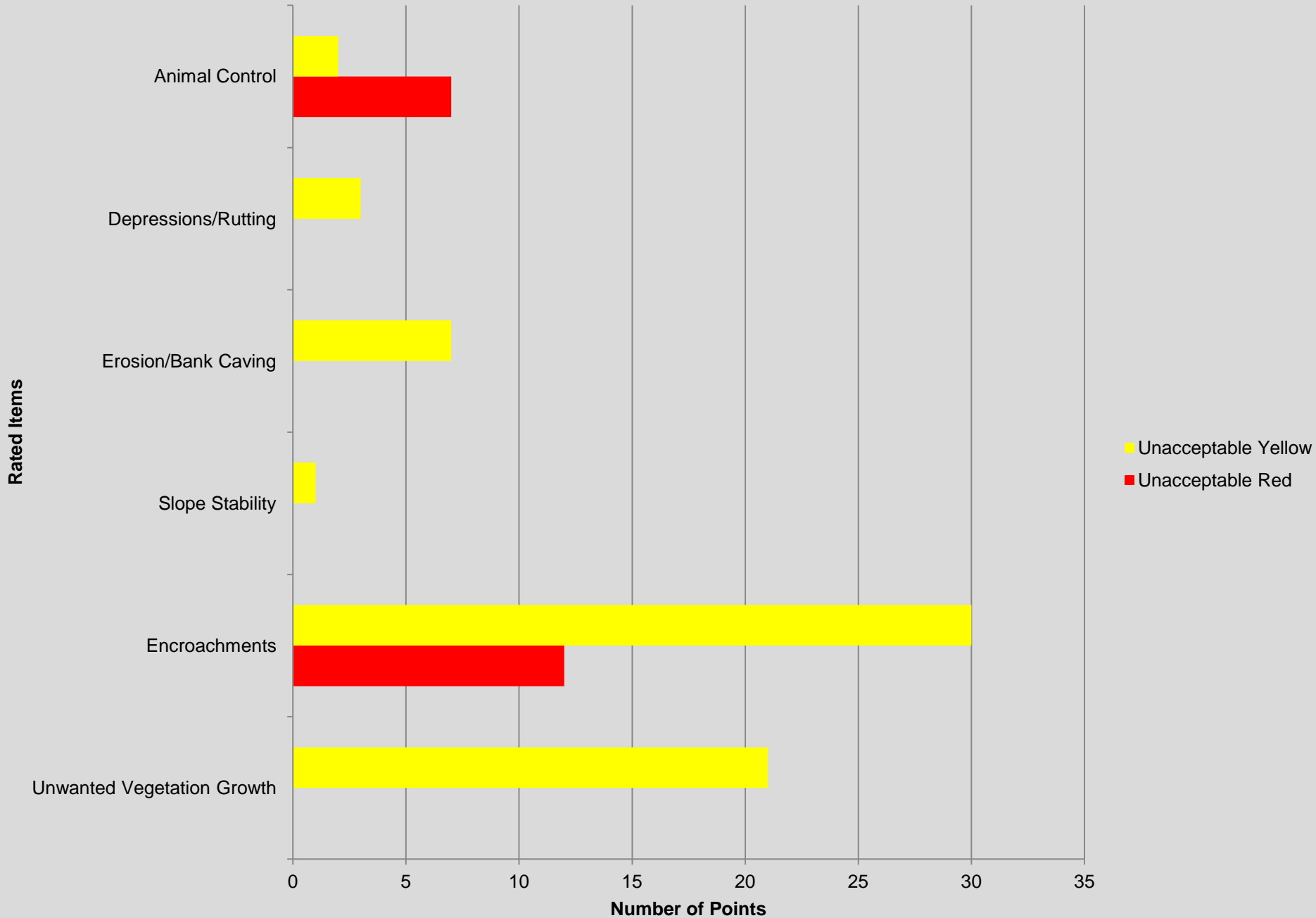
U.S. ARMY CORPS OF ENGINEERS  
 SACRAMENTO DISTRICT



		RD 2107 - Mossdale - Unit 1, San Joaquin River left bank (MSS1)		RD 2107 - Mossdale - Unit 2, Paradise Cut (MSS2)		RD 2062 - Stewart - Unit 1, San Joaquin River left bank (STW1)		RD 2062 - Stewart - Unit 2, Paradise Cut (STW2)		RD 2062 - Stewart - Unit 3, Old River (STW3)	
General	Operations and Maintenance Manuals	A	A	A	A	A	A				
	Emergency Supplies and Equipment	A	A	A	A	A	A				
	Flood Preparedness and Training	A	A	A	A	A	A				
Levee Embankments	Unwanted Vegetation Growth	U	U	U	U	U	U				
	Sod Cover	M	NA	NA	NA	NA	NA				
	Encroachments	U	U	U	U	U	U				
	Closure Structures	NA	NA	NA	NA	NA	NA				
	Slope Stability	A	U	A	A	A	A				
	Erosion/Bank Caving	U	U	A	U	U	U				
	Settlement	M	A	A	M	A	A				
	Depressions/Rutting	A	U	M	A	M	M				
	Cracking	A	A	A	A	A	A				
	Animal Control	U	U	U	U	U	U				
	Culverts/Discharge Pipes	NA	NA	NA	NA	NA	NA				
	Riprap Revetments & Bank Protection	NA	NA	NA	NA	NA	NA				
	Revetments other than Riprap	NA	NA	NA	NA	NA	NA				
	Underseepage Relief Wells/Toe Drainage Systems	NA	NA	NA	NA	NA	NA				
Seepage	A	A	A	A	A	A					
Flood Damage Reduction Channels	Vegetation and Obstructions	A	A	A	A	A	A				
	Shoaling	A	A	A	A	A	A				
	Encroachments	U	A	M	A	A	A				
	Erosion	A	A	A	A	A	A				
	Concrete Surfaces	NA	NA	NA	NA	NA	NA				
	Tilting, Sliding, or Settlement of Concrete	NA	NA	NA	NA	NA	NA				
	Foundation of Concrete Structures	NA	NA	NA	NA	NA	NA				
	Slab and Monolith Joints	NA	NA	NA	NA	NA	NA				
	Flap Gates/Flap Valves/Pinch Valves	NA	NA	NA	NA	NA	NA				
	Riprap Revetments & Banks	NA	NA	NA	NA	NA	NA				
	Revetments other than Riprap	NA	NA	NA	NA	NA	NA				
										<b>Legend</b> A Acceptable M Minimally Acceptable U Unacceptable N/A Not Applicable	
Likely Prevents Performance In Next Flood Event/Inactive Serious deficiency noted in past inspections has not been corrected within the established timeframe Not Likely to Prevent Performance In Next Flood Event/Active The worst rating is used to determine the overall segment & system ratings and PL 84-99 Eligibility											



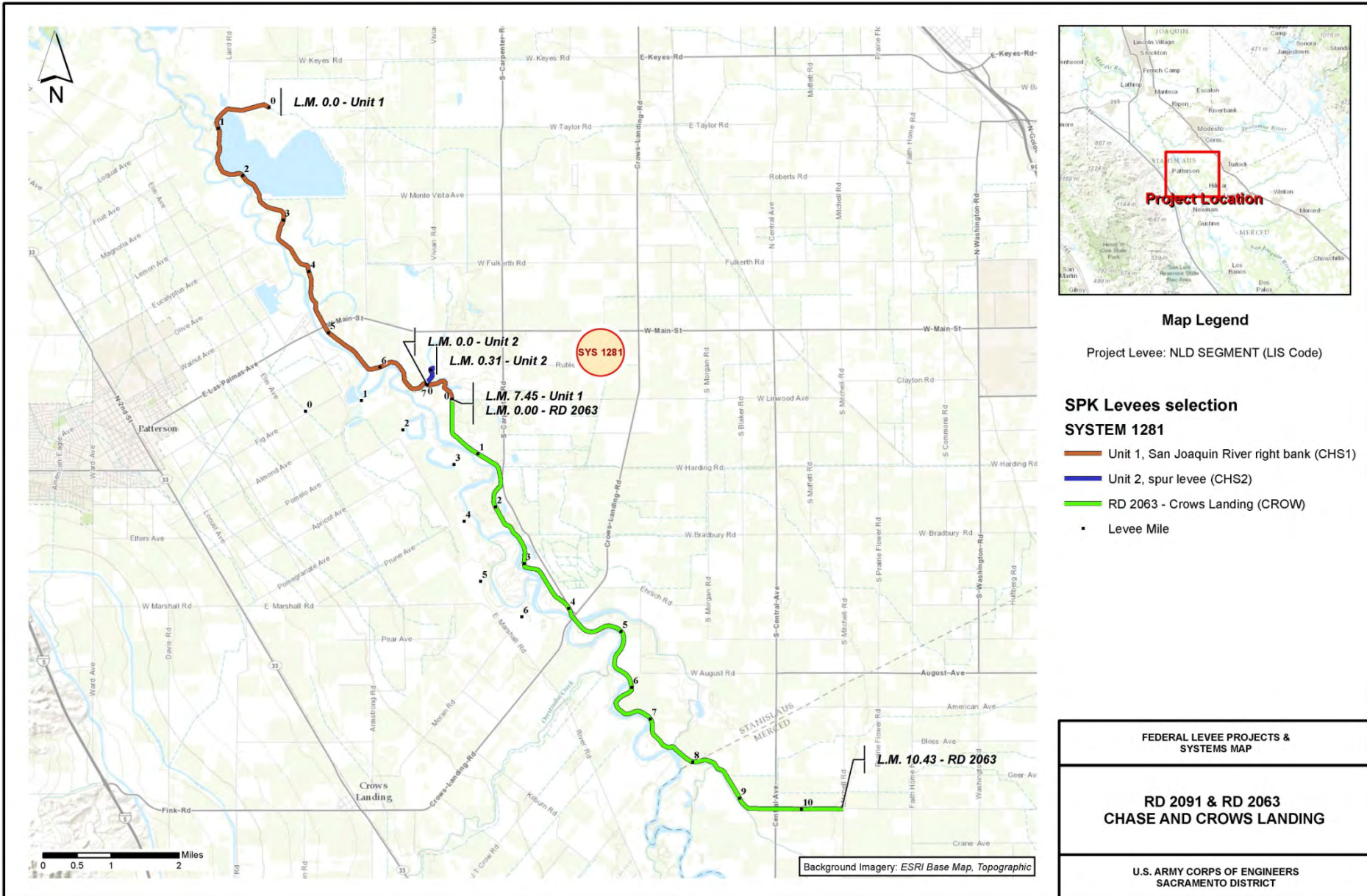
# RD 2062 & RD 2107 Unacceptable Points







# RD 2091 & RD 2063 Chase and Crows Landing



**System  
RD 2091 and RD 2063 - Chase  
and Crows Landing  
Unacceptable - Inactive**

RD 2091 - Chase- U 1, San Joaquin  
River right bank (CHS1)  
RD 2091 - Chase- U2, Spur  
levee (CHS2)  
RD 2063 - Crows Landing  
(CROW)

General	Operations and Maintenance Manuals	A	A	A					
	Emergency Supplies and Equipment	A	A	A					
	Flood Preparedness and Training	A	A	A					
Levee Embankments	Unwanted Vegetation Growth	U	A	U					
	Sod Cover	NA	NA	NA					
	Encroachments	U	U	U					
	Closure Structures	NA	NA	NA					
	Slope Stability	A	A	M					
	Erosion/Bank Caving	M	A	A					
	Settlement	A	A	A					
	Depressions/Rutting	M	A	U					
	Cracking	A	A	A					
	Animal Control	U	U	U					
	Culverts/Discharge Pipes	U	NA	NA					
	Riprap Revetments & Bank Protection	NA	NA	NA					
	Revetments other than Riprap	NA	NA	NA					
	Underseepage Relief Wells/Toe Drainage Systems	NA	NA	NA					
Seepage	A	A	A						
Flood Damage Reduction Channels	Vegetation and Obstructions	A	A	M					
	Shoaling	A	A	A					
	Encroachments	A	A	U					
	Erosion	A	A	A					
	Concrete Surfaces	NA	NA	NA					
	Tilting, Sliding, or Settlement of Concrete	NA	NA	NA					
	Foundation of Concrete Structures	NA	NA	NA					
	Slab and Monolith Joints	NA	NA	NA					
	Flap Gates/Flap Valves/Pinch Valves	NA	NA	NA					
	Riprap Revetments & Banks	NA	NA	NA					
Revetments other than Riprap	NA	NA	NA						

**Legend**

A	Acceptable
M	Minimally Acceptable
U	Unacceptable
N/A	Not Applicable

Likely Prevents Performance in Next Flood Event/Inactive

Serious deficiency noted in past inspections has not been corrected within the established timeframe

Not Likely to Prevent Performance In Next Flood Event/Active

The worst rating is used to determine the overall segment & system ratings and PL 84-99 Eligibility

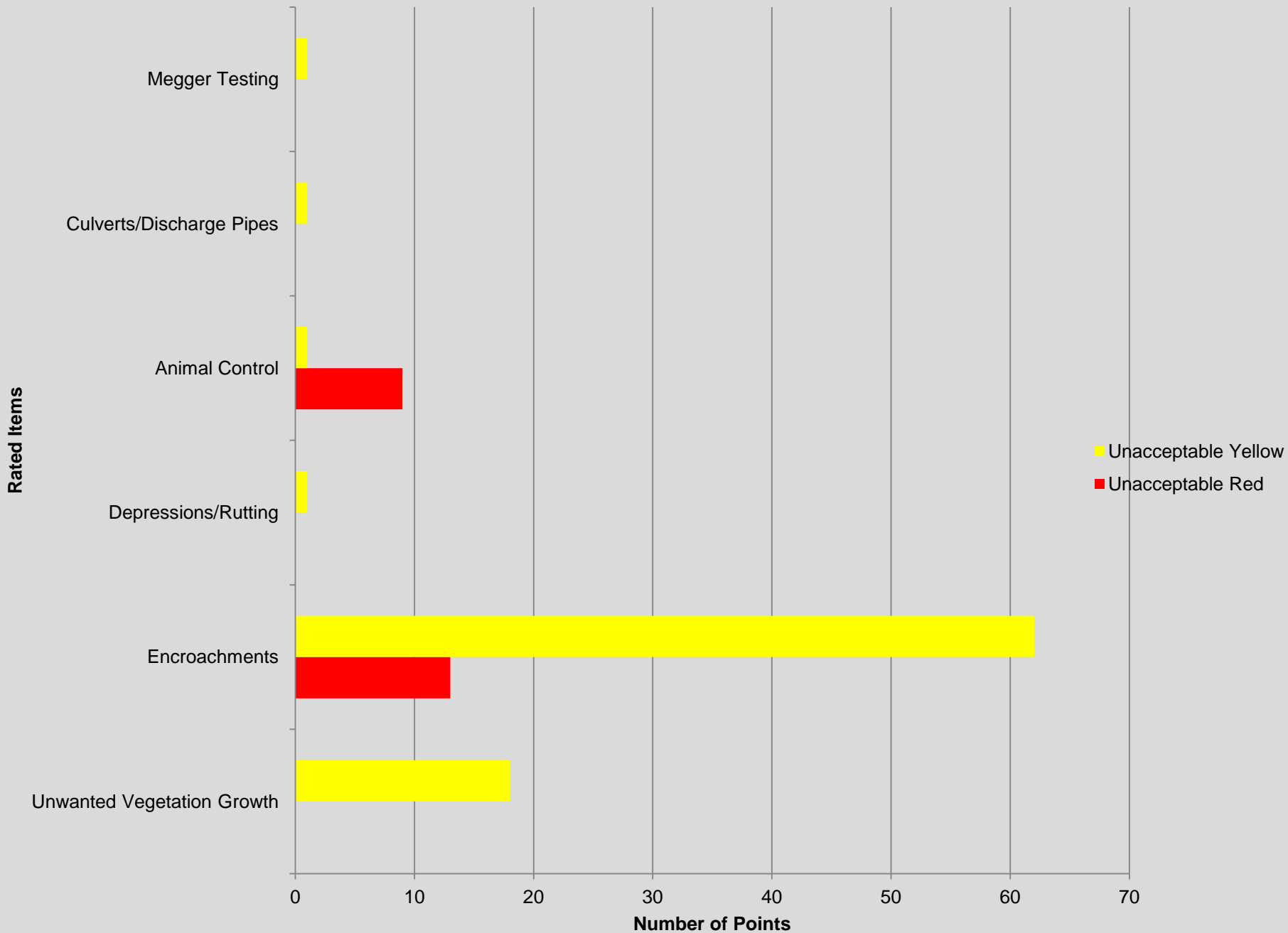


# Report Card Continued Pump Station

System RD 2091 and RD 2063 - Chase and Crows Landing Unacceptable - Inactive		RD 2091 - Chase- U 1, San Joaquin River right bank (CHS1)			RD 2091 - Chase- U 2, Spur levee (CHS2)			RD 2063 - Crows Landing (CROW)		
Pump Stations	Operating, Maintenance, Training Records	A	A	A						
	Operations and Maintenance Equipment Manuals	A	A	A						
	Safety Compliance	A	A	A						
	Communications	A	A	A						
	Plan Building	A	A	A						
	Fencing and Gates	A	N/A	N/A						
	Pumps	M	A	A						
	Motors, Engines, Fans, Gear Reducers Etc.	A	A	A						
	Sumps/ Wet well	A	A	A						
	Mechanical Operating Trash Rakes	N/A	N/A	N/A						
	Non-Mechanical Trash Racks	A	N/A	N/A						
	Fuel System for Pump Engines	N/A	N/A	N/A						
	Power source	M	A	A						
	Electrical Systems	A	A	A						
	Megger Testing on Pump Motors and Power Cables	U	A	A						
	Enclosures, Panels, Conduit and Ducts	A	A	A						
	Intake and Discharge Pipelines	A	A	A						
	Sluice/Slide Gates	M	N/A	N/A						
	Flap Gates/ Flap Valves/ Pinch Valves	A	N/A	N/A						
	Cranes	N/A	N/A	N/A						
Other Metallic Items	N/A	N/A	N/A							
<p><b>Likely Prevents Performance In Next Flood Event/Inactive</b></p> <p>Serious deficiency noted in past inspections has not been corrected within the established timeframe</p> <p><b>Not Likely to Prevent Performance In Next Flood Event/Active</b></p> <p>The worst rating is used to determine the overall segment &amp; system ratings and PL 84-99 Eligibility</p>										
<p><b>Legend</b></p> <p>A Acceptable</p> <p>M Minimally Acceptable</p> <p>U Unacceptable</p> <p>N/A Not Applicable</p>										



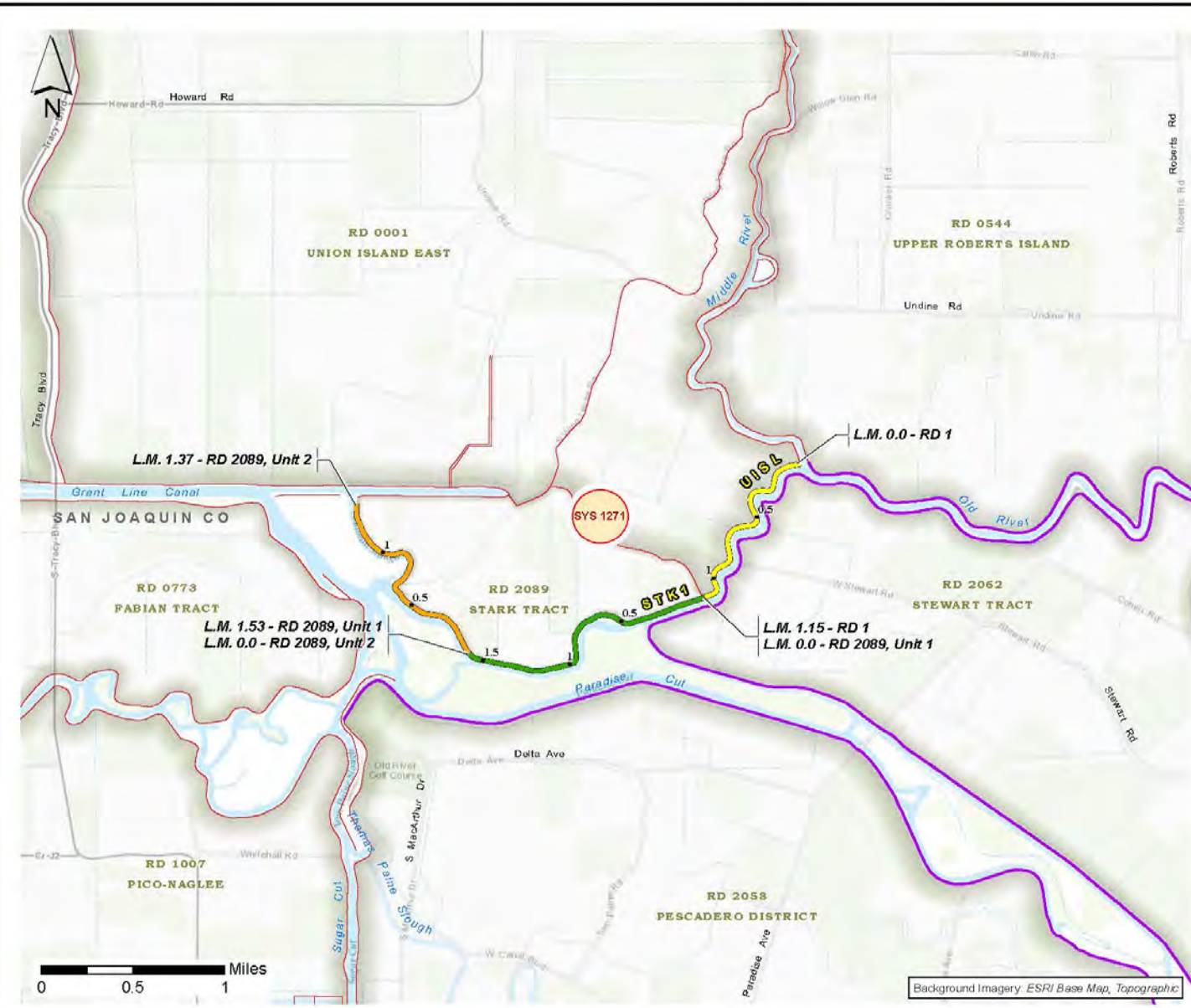
# RD 2091 & RD 2063 Unacceptable Points








# RD 1 Union Island & RD 2089 Stark



### Map Legend

Project Levees: NLD SYSTEMS and SEGMENTS  
(Levee Inspection System Code)

#### SYSTEM 1271

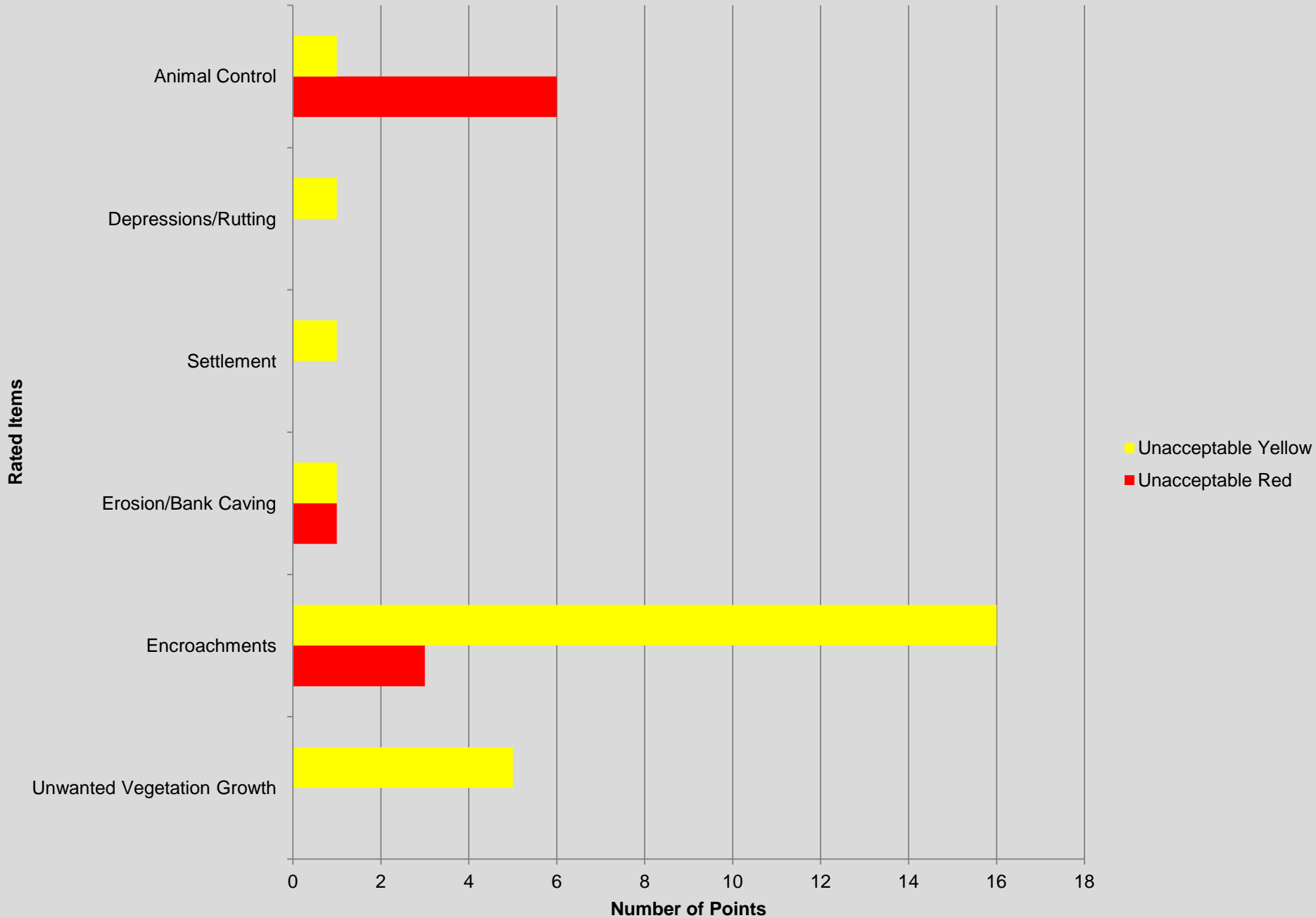
-  RD 0001-Union Island (UISL)
-  RD 2089-Stark - Unit 1, Old River (STK1)
-  RD 2089-Stark - Unit 2, Salmon Slough (STK2)
-  Other Federal Levees
-  Non-Federal Levee
-  Levee Mile

FEDERAL LEVEE PROJECTS SYSTEM MAP
<b>RD 1-UNION ISLAND AND RD 2089-STARK</b>
U.S. ARMY CORPS OF ENGINEERS SACRAMENTO DISTRICT

System RD 1 and RD 2089 - Union Island Unacceptable - Inactive		RD 2089 - Stark - Unit 1, Old River (STK1)			RD 2089 - Stark - Unit 2, Salmon Slough (STK2)			RD 1 - Union Island (UISL)																																																			
General	Operations and Maintenance Manuals	A	A	A																																																							
	Emergency Supplies and Equipment	A	A	A																																																							
	Flood Preparedness and Training	A	A	A																																																							
Levee Embankments	Unwanted Vegetation Growth	U	U	U																																																							
	Sod Cover	NA	NA	NA																																																							
	Encroachments	U	U	U																																																							
	Closure Structures	NA	NA	NA																																																							
	Slope Stability	A	A	A																																																							
	Erosion/Bank Caving	A	U	A																																																							
	Settlement	U	M	A																																																							
	Depressions/Rutting	M	U	A																																																							
	Cracking	A	A	A																																																							
	Animal Control	U	U	U																																																							
	Culverts/Discharge Pipes	NA	NA	NA																																																							
	Riprap Revetments & Bank Protection	NA	NA	NA																																																							
	Revetments other than Riprap	NA	NA	NA																																																							
	Underseepage Relief Wells/Toe Drainage Systems	NA	NA	NA																																																							
Seepage	A	A	A																																																								
<table border="0"> <tr> <td colspan="10"><b>Likely Prevents Performance In Next Flood Event/Inactive</b></td> </tr> <tr> <td colspan="10">Serious deficiency noted in past inspections has not been corrected within the established timeframe</td> </tr> <tr> <td colspan="10"><b>Not Likely to Prevent Performance In Next Flood Event/Active</b></td> </tr> <tr> <td colspan="10">The worst rating is used to determine the overall segment &amp; system ratings and PL 84-99 Eligibility</td> </tr> </table>										<b>Likely Prevents Performance In Next Flood Event/Inactive</b>										Serious deficiency noted in past inspections has not been corrected within the established timeframe										<b>Not Likely to Prevent Performance In Next Flood Event/Active</b>										The worst rating is used to determine the overall segment & system ratings and PL 84-99 Eligibility																			
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<table border="0"> <tr> <td colspan="10"><u>Legend</u></td> </tr> <tr> <td colspan="10">A    Acceptable</td> </tr> <tr> <td colspan="10">M    Minimally Acceptable</td> </tr> <tr> <td colspan="10">U    Unacceptable</td> </tr> <tr> <td colspan="10">N/A    Not Applicable</td> </tr> </table>										<u>Legend</u>										A    Acceptable										M    Minimally Acceptable										U    Unacceptable										N/A    Not Applicable									
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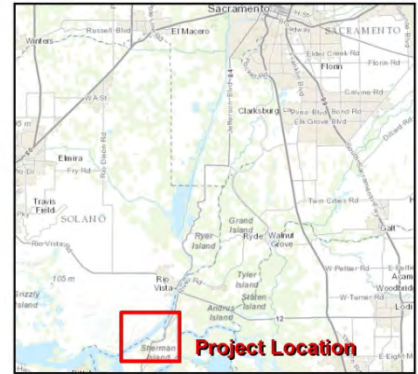
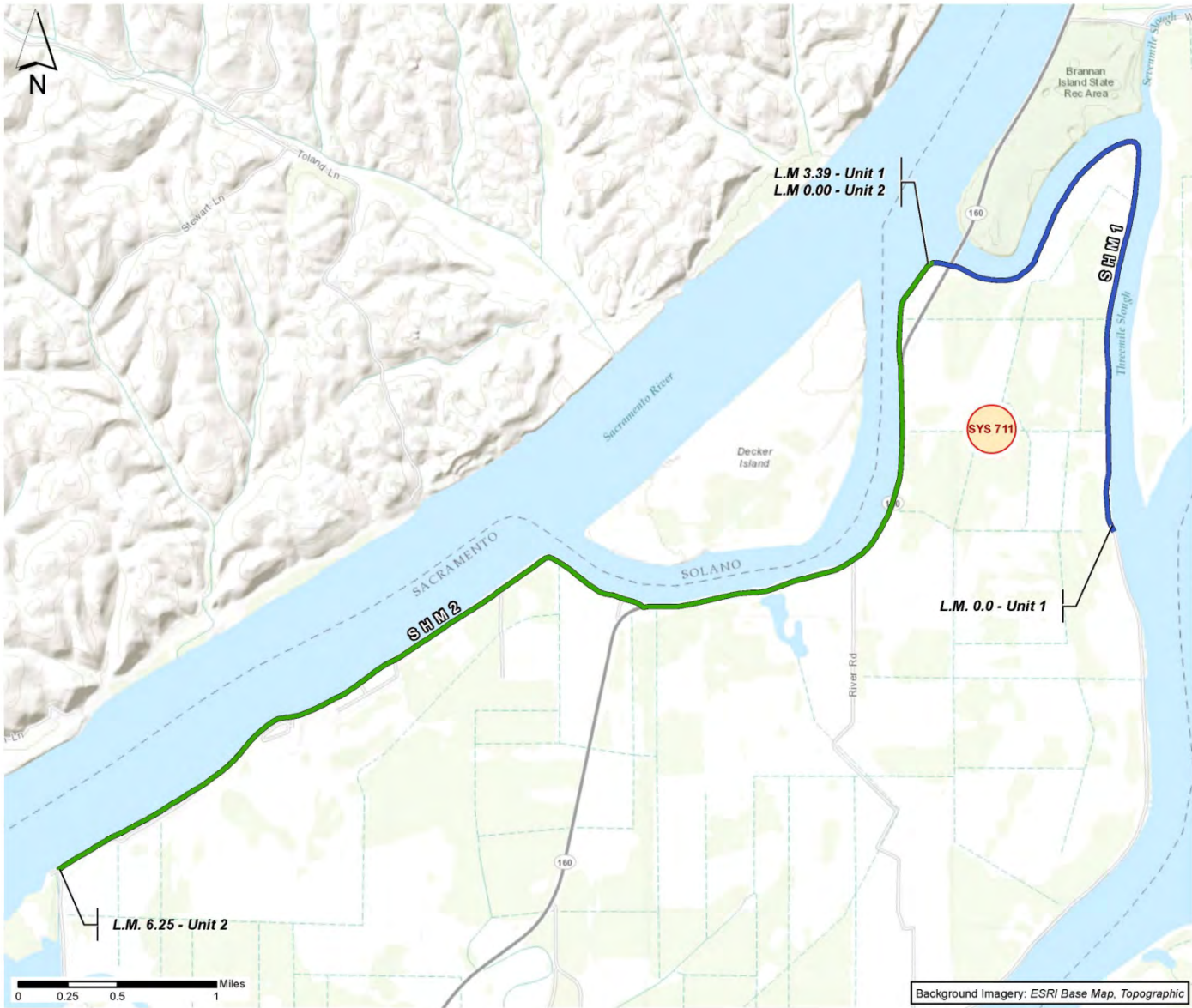
# RD 1 & RD 2089 Unacceptable Points







# RD 341 – Sherman Island



### Map Legend

Project Levees: NLD SYSTEMS and SEGMENTS (LIS Code)

### SPK Levees

#### SYSTEM 711

- Unit 1, Three Mile Slough (SHM1)
- Unit 2, Sacramento River (SHM2)

L.M. 0.0 - Unit 1

L.M. 3.39 - Unit 1  
L.M. 0.00 - Unit 2

L.M. 6.25 - Unit 2

Background Imagery: ESRI Base Map, Topographic

FEDERAL LEVEE PROJECT &  
SYSTEM MAP

RD 341  
SHERMAN ISLAND

U.S. ARMY CORPS OF ENGINEERS  
SACRAMENTO DISTRICT

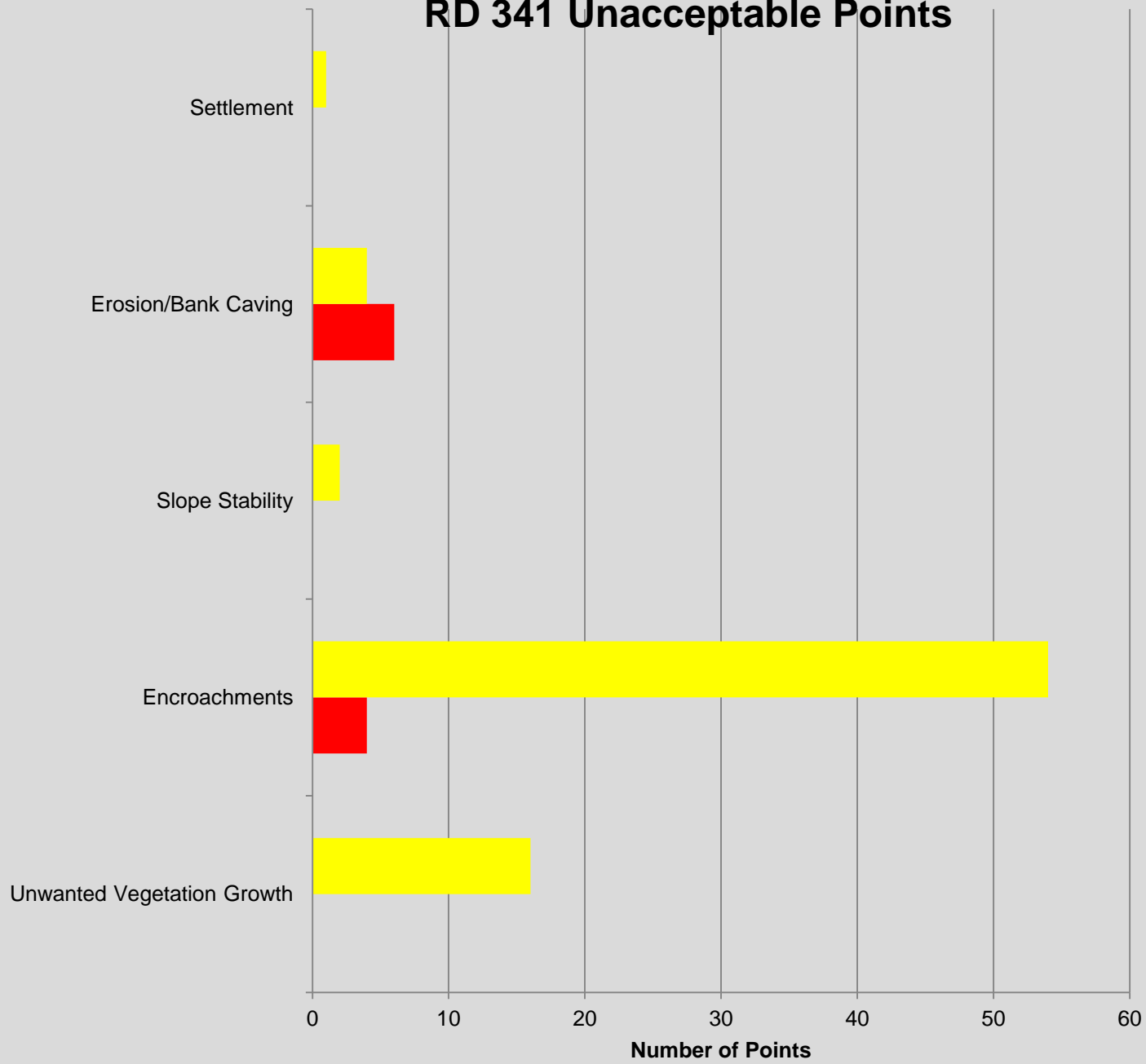
		System							
		RD 0341 - Sherman Island - Units 1&2 Unacceptable - Inactive		RD 0341 - Sherman - Unit 1, Three Mile Slough (SHM1)		RD 0341 - Sherman - Unit 2, Sacramento River (SHM2)			
General	Operations and Maintenance Manuals	A	A						
	Emergency Supplies and Equipment	A	A						
	Flood Preparedness and Training	A	A						
Levee Embankments	Unwanted Vegetation Growth	U	U						
	Sod Cover	NA	NA						
	Encroachments	U	U						
	Closure Structures	NA	NA						
	Slope Stability	A	U						
	Erosion/Bank Caving	U	U						
	Settlement	A	U						
	Depressions/Rutting	A	M						
	Cracking	A	A						
	Animal Control	A	A						
	Culverts/Discharge Pipes	NA	NA						
	Riprap Revetments & Bank Protection	NA	NA						
	Revetments other than Riprap	NA	NA						
	Underseepage Relief Wells/Toe Drainage Systems	NA	NA						
Seepage	A	A							
		<p><b>Legend</b></p> <p>A Acceptable</p> <p>M Minimally Acceptable</p> <p>U Unacceptable</p> <p>N/A Not Applicable</p>							
		<p>Likely Prevents Performance In Next Flood Event/Inactive</p> <p>Serious deficiency noted in past inspections has not been corrected within the established timeframe</p> <p>Not Likely to Prevent Performance In Next Flood Event/Active</p>							
		<p>The lowest rating is used to determine the overall segment &amp; system ratings and PL 84-99 Eligibility</p>							
		<p>3/27/2013</p>							





# RD 341 Unacceptable Points

Rated Item



Unacceptable Yellow  
Unacceptable Red





# Mellin Levee



## Map Legend

Project Levees: NLD SYSTEMS and SEGMENTS  
(LIS Code and Segment Length Map Miles)

### System 1401

- Mellin Levee (MELN - 0.62)
- Levee Mile

FEDERAL LEVEE PROJECTS  
LOCATION MAP

MELLIN LEVEE  
SOLANO COUNTY

U.S. ARMY CORPS OF ENGINEERS  
SACRAMENTO DISTRICT

System Mellin Levee - Rio Vista Minimally Acceptable - Active		Mellin Levee - Rio Vista (MELN)								
General	Operations and Maintenance Manuals	A								
	Emergency Supplies and Equipment	A								
	Flood Preparedness and Training	A								
Levee Embankments	Unwanted Vegetation Growth	A								
	Sod Cover	NA								
	Encroachments	U								
	Closure Structures	NA								
	Slope Stability	A								
	Erosion/Bank Caving	A								
	Settlement	U								
	Depressions/Rutting	U								
	Cracking	A								
	Animal Control	A								
	Culverts/Discharge Pipes	NA								
	Riprap Revetments & Bank Protection	NA								
	Revetments other than Riprap	NA								
	Underseepage Relief Wells/Toe Drainage Systems	NA								
Seepage	A									
<p><b>Likely Prevents Performance In Next Flood Event/Inactive</b></p> <p><b>Serious deficiency noted in past inspections has not been corrected within the established timeframe</b></p> <p><b>Not Likely to Prevent Performance In Next Flood Event/Active</b></p> <p>The lowest rating is used to determine the overall segment &amp; system ratings and PL 84-99 Eligibility</p>										<p><b>Legend</b></p> <p>A Acceptable</p> <p>M Minimally Acceptable</p> <p>U Unacceptable</p> <p>N/A Not Applicable</p>

3/27/2013







**BUILDING STRONG®**

# RD 1601 – Twitchell Island



Map Legend

Project Levee: NLD SEGMENT (LIS Code)

**SYSTEM 951**

— RD 1601 - Twitchell (TWIT)

FEDERAL LEVEE PROJECTS & SYSTEMS MAP

**RD 1601  
TWITCHELL ISLAND**

U.S. ARMY CORPS OF ENGINEERS  
SACRAMENTO DISTRICT



**System**  
**RD 1601 - Twitchell Island**  
**Minimally Acceptable/Active**

RD 1601 - Twitchell Island  
(TWIT)

General	Operations and Maintenance Manuals	A								
	Emergency Supplies and Equipment	A								
	Flood Preparedness and Training	A								
Levee Embankments	Unwanted Vegetation Growth	U								
	Sod Cover	NA								
	Encroachments	U								
	Closure Structures	NA								
	Slope Stability	A								
	Erosion/Bank Caving	M								
	Settlement	A								
	Depressions/Rutting	A								
	Cracking	A								
	Animal Control	A								
	Culverts/Discharge Pipes	NA								
	Riprap Revetments & Bank Protection	A								
	Revetments other than Riprap	NA								
	Underseepage Relief Wells/Toe Drainage Systems	NA								
Seepage	A									

Likely Prevents Performance in Next Flood Event/Inactive

Serious deficiency noted in past inspections has not been corrected within the established timeframe

Not Likely to Prevent Performance in Next Flood Event/Active

The lowest rating is used to determine the overall segment & system ratings and PL 84-99 Eligibility

**Legend**

- A Acceptable
- M Minimally Acceptable
- U Unacceptable
- N/A Not Applicable

3/26/2013





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