

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_RD2098_01_f_2014_3				
Comment Code					
Inspector Comment					
RD 2098 Has on file O+M Manual.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_RD2098_01_f_2014_4				
Comment Code					
Inspector Comment					
RD 2098 Has Emergency Supplies in storage along with Equipment.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start		Rating **	A	Issue No.	<b>5</b>
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_RD2098_01_f_2014_5				
Comment Code					
Inspector Comment					
RD 2098 Has their team well prepared for Flood Fight.					

No Photos

LM Start	<b>0.57</b>	Rating **	M	Issue No.	<b>13</b>
LM End	<b>1.06</b>	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Erosion / Bank Caving		38.320755 °	38.313700 °	
			-121.693982 °	-121.693639 °	
DWR ID	DWR_RD2098_01_s_2017_13				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP\_2018\_RD2098\_244\_13\_20180315\_00087.jpg



Monitor and repair erosion on waterside.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	<b>0.96</b>	Rating **	A/W	Issue No.	<b>19</b>
LM End	<b>0.96</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		38.315200 °	38.315100 °	
			-121.694100 °	-121.694100 °	

DWR ID DWR\_RD2098\_01\_s\_2018\_19

#### Comment Code

#### Inspector Comment

#### Levee Evaluation Comments

Description: The damage consists of cracking and sloughing of the lower landside levee slope.

Site ID No: 414

Site Designation: LMA-241

Repair Type: Erosion

Rating: Area of Concern

Field Date: 7/24/2017

Notes: Landside sloughing about 2' deep and extends to toe ditch.

LM Start	<b>0.96</b>	Rating **	A/W	Issue No.	<b>19 (cont)</b>
LM End	<b>0.96</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : LEVAL\_SP\_2018\_414\_3594.jpg



Photo 2 of 3 : LEVAL\_SP\_2018\_414\_3596.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	0.96	Rating **	A/W	Issue No.	19 (cont)
LM End	0.96	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.315200 °	38.315100 °
				-121.694100 °	-121.694100 °
DWR ID	DWR_RD2098_01_s_2018_19				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of cracking and sloughing of the lower landside levee slope.					
Site ID No:414					
Site Designation:LMA-241					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/24/2017					
Notes: Landside sloughing about 2' deep and extends to toe ditch.					

Photo 3 of 3 : LEVAL\_SP\_2018\_414\_3603.jpg



LM Start	1.55	Rating **	M	Issue No.	14
LM End	1.55	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.306628 °	38.306628 °
				-121.693632 °	-121.693632 °
DWR ID	DWR_RD2098_01_s_2018_14				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Trim and thin trees to allow inspection and access to landside slope and toe. Also, remove fallen tree on landside slope.					

Photo 1 of 1 : SP\_2018\_RD2098\_244\_14\_20180315\_00088.jpg



Remove fallen tree and trim remaining trees.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	1.57	Rating **	C	Issue No.	15
LM End	1.91	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.306388 °	38.301405 °
				-121.693573 °	-121.693620 °
DWR ID	DWR_RD2098_01_s_2017_15				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Gravel surface is stabile and smooth.					

No Photos

LM Start	1.76	Rating **	M	Issue No.	18
LM End	1.76	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.303611 °	38.303611 °
				-121.693607 °	-121.693607 °
DWR ID	DWR_RD2098_01_s_2018_18				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP\_2018\_RD2098\_244\_18\_20180315\_00089.jpg



Monitor and repair erosion.

LM Start	1.79	Rating **	C	Issue No.	16
LM End	3.59	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.303127 °	38.277510 °
				-121.693615 °	-121.696247 °
DWR ID	DWR_RD2098_01_s_2017_16				
Comment Code					
V9 : Keep the crown roadway free of vegetation.					
Inspector Comment					
Crown is free of vegetation.					

No Photos

<b>* Location</b>		<b>** Rating</b>		<b>+ Issue Type</b>	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.21	Rating **	A/W	Issue No.	21
LM End	2.22	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.297100 °	38.297000 °
				-121.693300 °	-121.693300 °
DWR ID	DWR_RD2098_01_s_2018_21				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description: The damage consists of erosion, cracking, and sloughing of the waterside levee slope.					
Site ID No: 416					
Site Designation: LMA-243					
Repair Type: Erosion					
Rating: Serious					
Field Date: 7/24/2017					
Notes: Erosion with sloughing. About 2' vertical cut at top of erosion.					

Photo 1 of 3 : LEVAL\_SP\_2018\_416\_2726.jpg



Photo 2 of 3 : LEVAL\_SP\_2018\_416\_2727.jpg



LM Start	<b>2.21</b>	Rating **	A/W	Issue No.	<b>21 (cont)</b>
LM End	<b>2.22</b>	Issue Type +	Ma	Location *	

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---









**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.30	Rating **	A/W	Issue No.	20
LM End	2.32	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.295870 °	38.295430 °
				-121.693645 °	-121.693628 °
DWR ID	DWR_RD2098_01_s_2017_20				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Repair the erosion site listed.					

No Photos

LM Start	2.35	Rating **	M	Issue No.	28
LM End	2.39	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.295100 °	38.294500 °
				-121.693400 °	-121.693400 °
DWR ID	DWR_RD2098_01_f_2017_28				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour, sloughing, and cracking of the lower and mid waterside levee slope.					
Site ID No:423					
Site Designation:LMA-250					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/24/2017					
Notes: 2' of sloughing about half way up the slope.					

Photo 1 of 3 : SP\_2018\_RD2098\_244\_28\_20180305\_00021.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.35	Rating **	M	Issue No.	28 (cont)	
LM End	2.39	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			38.295100 °	38.294500 °	
				-121.693400 °	-121.693400 °	
DWR ID	DWR_RD2098_01_f_2017_28					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:The damage consists of scour, sloughing, and cracking of the lower and mid waterside levee slope.						
Site ID No:423						
Site Designation:LMA-250						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:7/24/2017						
Notes: 2' of sloughing about half way up the slope.						

Photo 2 of 3 : SP\_2018\_RD2098\_244\_28\_20180305\_00022.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_244\_28\_20180305\_00023.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.75	Rating **	A/W	Issue No.	34
LM End	2.78	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.289200 °	38.288800 °
				-121.693500 °	-121.693500 °
DWR ID	DWR_RD2098_01_f_2017_34				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the waterside levee slope.					
Site ID No:429					
Site Designation:LMA-256					
Repair Type: Erosion					
Rating:Serious					
Field Date:7/25/2017					
Notes: Erosion at WS toe, causing sloughing half-way down WS slope.					
10/26/17: Dutra repairs in progress.					

Photo 1 of 3 : SP\_2018\_RD2098\_244\_34\_20180305\_00036.jpg



Photo 2 of 3 : SP\_2018\_RD2098\_244\_34\_20180305\_00037.jpg



LM Start	<b>2.75</b>	Rating **	A/W	Issue No.	<b>34 (cont)</b>
LM End	<b>2.78</b>	Issue Type +	Ma	Location *	

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---









**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.80	Rating **	M	Issue No.	11
LM End	2.97	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.288590 °	38.286013 °
				-121.693645 °	-121.693632 °
DWR ID	DWR_RD2098_01_f_2017_11				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Nearby construction operations forced termination of goat grazing.					
Vegetation should be cleared.					

Photo 1 of 1 : SP\_2018\_RD2098\_244\_11\_20180305\_00001.jpg



Nearby construction operations forced termination of goat grazing.  
Vegetation should be cleared.

LM Start	2.80	Rating **	M	Issue No.	12
LM End	3.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.288590 °	38.277458 °
				-121.693645 °	-121.696303 °
DWR ID	DWR_RD2098_01_f_2017_12				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Nearby construction opertions forced termination of goat grazing.					
Vegetation should be cleared.					

Photo 1 of 1 : SP\_2018\_RD2098\_244\_12\_20180305\_00002.jpg



Nearby construction operations forced termination of goat grazing.  
Vegetation should be cleared.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.91	Rating **	A/W	Issue No.	36
LM End	2.93	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.286900 °	38.286700 °
				-121.693500 °	-121.693500 °
DWR ID	DWR_RD2098_01_f_2017_36				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the waterside levee slope.					
Site ID No:431					
Site Designation:LMA-258					
Repair Type: Erosion					
Rating:Serious					
Field Date:7/25/2017					
Notes: Erosion of WS toe, resulting in 8' verticle wall. 10/26/17: Dutra repairs in progress.					

Photo 1 of 3 : SP\_2018\_RD2098\_244\_36\_20180305\_00042.jpg



Photo 2 of 3 : SP\_2018\_RD2098\_244\_36\_20180305\_00043.jpg



LM Start	<b>2.91</b>	Rating **	A/W	Issue No.	<b>36 (cont)</b>
LM End	<b>2.93</b>	Issue Type +	Ma	Location *	

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.91	Rating **	A/W	Issue No.	36 (cont)
LM End	2.93	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.286900 °	38.286700 °
				-121.693500 °	-121.693500 °
DWR ID	DWR_RD2098_01_f_2017_36				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the waterside levee slope.					
Site ID No:431					
Site Designation:LMA-258					
Repair Type: Erosion					
Rating:Serious					
Field Date:7/25/2017					
Notes: Erosion of WS toe, resulting in 8' verticle wall. 10/26/17: Dutra repairs in progress.					

Photo 3 of 3 : SP\_2018\_RD2098\_244\_36\_20180305\_00044.jpg



LM Start	2.99	Rating **	A/W	Issue No.	37
LM End	3.29	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.285700 °	38.281500 °
				-121.693500 °	-121.694300 °
DWR ID	DWR_RD2098_01_f_2017_37				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the waterside levee slope.					
Site ID No:432					
Site Designation:LMA-259					
Repair Type: Erosion					
Rating:Serious					
Field Date:7/25/2017					
Notes: Varying erosion and sloughing at WS toe. Revetment at end of levee section. 10/26/17: Dutra repairs in progress.					

Photo 1 of 3 : SP\_2018\_RD2098\_244\_37\_20180305\_00045.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	2.99	Rating **	A/W	Issue No.	37 (cont)
LM End	3.29	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.285700 °	38.281500 °
				-121.693500 °	-121.694300 °
DWR ID	DWR_RD2098_01_f_2017_37				
Comment Code					
Inspector Comment					
Levee Evaluation Comments Description: The damage consists of scour and sloughing of the waterside levee slope. Site ID No: 432 Site Designation: LMA-259 Repair Type: Erosion Rating: Serious Field Date: 7/25/2017 Notes: Varying erosion and sloughing at WS toe. Revetment at end of levee section. 10/26/17: Dutra repairs in progress.					

Photo 2 of 3 : SP\_2018\_RD2098\_244\_37\_20180305\_00046.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_244\_37\_20180305\_00047.jpg



LM Start	<b>2.99</b>	Rating **	A/W	Issue No.	<b>37 (cont)</b>
LM End	<b>3.29</b>	Issue Type +	Ma	Location *	

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	3.15	Rating **	M	Issue No.	38 (cont)	
LM End	3.15	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			38.283472 °		38.283472 °
				-121.693600 °		-121.693600 °
DWR ID	DWR_RD2098_01_f_2017_38					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:						
Site ID No:115						
Site Designation:DWR_RD2098_01_s_2012_12						
Repair Type: Erosion						
Rating:Critical						
Field Date:6/9/2017						
Notes: noticable sloughing along Wsslope for entire levee reach						
10/26/17: Dutra has repaired erosion at 3.12-3.14.						

Photo 3 of 3 : SP\_2018\_RD2098\_244\_38\_20180305\_00050.jpg



LM Start	3.18	Rating **	M	Issue No.	17
LM End	3.60	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.283035 °	38.277458 °
				-121.693617 °	-121.696303 °
DWR ID	DWR_RD2098_01_f_2017_17				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---





## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

Photo 3 of 3 : SP\_2018\_RD2098\_244\_39\_20180305\_00053.jpg



Photo 1 of 3 : SP\_2018\_RD2098\_244\_40\_20180305\_00054.jpg



* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	03/15/2018 03/15/2018	Keith Millard

LM Start	3.50	Rating **	M	Issue No.	40 (cont)	
LM End	3.56	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	2017 Storm Damage			38.278700 °	38.278000 °	
				-121.695900 °	-121.696100 °	
DWR ID	DWR_RD2098_01_f_2017_40					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:The damage consists of scour and sloughing of the lower and mid waterside levee slope.						
Site ID No:435						
Site Designation:LMA-262						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:7/25/2017						
Notes: Two combined sloughing sites adjacent to each other on lower waterside slope. Existing rip rap on beginning 100' section of site 262.						
This site is combined with site 263.						

Photo 2 of 3 : SP\_2018\_RD2098\_244\_40\_20180305\_00055.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_244\_40\_20180305\_00056.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01A Cross Levee	Right	0.53	03/15/2018 03/15/2018	Keith Millard

LM Start	0.00	Rating **	M	Issue No.	1
LM End	0.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.277382 °	38.275722 °
				-121.696270 °	-121.705675 °
DWR ID	DWR_RD2098_01A_s_2017_1				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Remove the wild grasses other than native from the levee slope.					

Photo 1 of 1 : SP\_2018\_RD2098\_245\_1\_20180305\_00001.jpg



RD 2098 1A Looking upstream from levee mile 0.00-0.52 landside slope.

LM Start	0.00	Rating **	M	Issue No.	2
LM End	0.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.277382 °	38.275722 °
				-121.696270 °	-121.705675 °
DWR ID	DWR_RD2098_01A_s_2017_2				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Remove the wild grasses other than native from the levee section.					

Photo 1 of 1 : SP\_2018\_RD2098\_245\_2\_20180315\_00002.jpg



Thick vegetation on waterside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	5.30	Rating **	M	Issue No.	8
LM End	6.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.275757 °	38.284800 °
				-121.705818 °	-121.715200 °
DWR ID	DWR_RD2098_02_s_2017_8				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Remove the wild weed growth from the landside levee slope and berm.					

Photo 1 of 1 : SP\_2018\_RD2098\_246\_8\_20180305\_00002.jpg



RD 2098 Unit 2 Levee mile 5.30-7.14 wild growth on the landside slope.

LM Start	5.30	Rating **	M	Issue No.	9
LM End	6.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.275757 °	38.284800 °
				-121.705818 °	-121.715200 °
DWR ID	DWR_RD2098_02_s_2017_9				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Remove the wild weed growth from the waterside levee slope.					

Photo 1 of 1 : SP\_2018\_RD2098\_246\_9\_20180305\_00003.jpg



RD 2098 Unit 2 levee mile 5.30- 7.14 waterside levee slope and shoulder.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018**

**Reclamation District No. 2098 Cache and Haas Slough**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	5.88	Rating **	M	Issue No.	11
LM End	5.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.282946 °	38.282946 °
				-121.710902 °	-121.710902 °
DWR ID	DWR_RD2098_02_s_2018_11				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
This waterside slump site is not new, and is somewhat protected by riprap and thich brushy vegetation, but it has the potential to erode into crown during high water with a strong south wind. It currently has a two-foot vertical scarp at the levee shoulder. It should be monitored and considered for repair.					

Photo 1 of 1 : SP\_2018\_RD2098\_246\_11\_20180315\_00049.jpg



Monitor slumping on waterside slope.

LM Start	6.12	Rating **	M	Issue No.	12
LM End	6.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.284348 °	38.284348 °
				-121.714682 °	-121.714682 °
DWR ID	DWR_RD2098_02_f_2016_12				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove this nut tree from the landside slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---







**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	6.47	Rating **	A/W	Issue No.	17 (cont)
LM End	6.48	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.288900 °	38.289000 °
				-121.717000 °	-121.717000 °
DWR ID	DWR_RD2098_02_f _ 2017_17				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the lower and mid waterside levee slope.					
Site ID No:441					
Site Designation:LMA-268					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/25/2017					
Notes: Sloughing on waterside slope due to toe erosion.					

Photo 2 of 3 : SP\_2018\_RD2098\_246\_17\_20180305\_00013.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_246\_17\_20180305\_00014.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	<b>6.48</b>	Rating **	M	Issue No.	<b>7</b>
LM End	<b>6.74</b>	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.289080 °	38.292467 °	
			-121.716852 °	-121.716140 °	
DWR ID	DWR_RD2098_02_f_2017_7				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

No Photos

LM Start	<b>6.64</b>	Rating **	A/W	Issue No.	<b>18</b>
LM End	<b>6.65</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		38.291300 °	38.291400 °	
			-121.716100 °	-121.716000 °	
DWR ID	DWR_RD2098_02_f_2017_18				
Comment Code					
Inspector Comment					
Levee Evaluation Comments Description: The damage consists of scour, cracking, instability, and sloughing of the waterside levee slope. Site ID No: 442 Site Designation: LMA-269 Repair Type: Erosion Rating: Serious Field Date: 7/25/2017 Notes: Two sloughing sections along waterside slope due to toe erosion.					

Photo 1 of 3 : SP\_2018\_RD2098\_246\_18\_20180305\_00015.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	<b>6.64</b>	Rating **	A/W	Issue No.	<b>18 (cont)</b>
LM End	<b>6.65</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		38.291300°	38.291400°	
			-121.716100°	-121.716000°	

DWR ID DWR\_RD2098\_02\_f\_2017\_18

Comment Code

Inspector Comment

## Levee Evaluation Comments

Description: The damage consists of scour, cracking, instability, and sloughing of the waterside levee slope.

Site ID No: 442

Site Designation: LMA-269

Repair Type: Erosion

Rating: Serious

Field Date: 7/25/2017

Notes: Two sloughing sections along waterside slope due to toe erosion.

LM Start	<b>6.64</b>	Rating **	A/W	Issue No.	<b>18 (cont)</b>
LM End	<b>6.65</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : SP\_2018\_RD2098\_246\_18\_20180305\_00016.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_246\_18\_20180305\_00017.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	---	--	---	--





**Flood Control Project Maintenance  
Levee Inspections**

**Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018**

**Reclamation District No. 2098 Cache and Haas Slough**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	6.71	Rating **	M	Issue No.	22 (cont)
LM End	6.71	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.292194 °	38.292194 °
				-121.715853 °	-121.715853 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:33784 DS_ID:20976 EP_NO: 10172 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Headwalls on WS toe failing at outlet. It is unclear if these were permanent installations or something that was installed as a temporary fix. FIELD_STRUCT_DESC: 1 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-foot-diameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)]. FS Date: 3/18/2014					

Photo 3 of 3 : UCIP\_SP\_2018\_33784\_61160.jpg



View inside CMP riser on WS shoulder.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	6.72	Rating **	M	Issue No.	23
LM End	6.72	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.292234 °	38.292234 °
				-121.715875 °	-121.715875 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:32285  
DS\_ID:20961  
EP\_NO: 10172  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: Headwalls at WS toe failing. It is uncertain if these retaining walls were a permanent fixture or a temporary fix that failed.  
FIELD\_STRUCT\_DESC: 2 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-foot-diameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch pipes [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers).  
[Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)].  
FS Date: 3/18/2014

LM Start	<b>6.72</b>	Rating **	M	Issue No.	<b>23 (cont)</b>
LM End	<b>6.72</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP\_SP\_2018\_32285\_58749.jpg



Inlet not visible on LS toe.

Photo 2 of 3 : UCIP\_SP\_2018\_32285\_58748.jpg



7-foot diameter CMP riser with two slide gates inside.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	6.72	Rating **	M	Issue No.	23 (cont)	
LM End	6.72	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.292234 °	38.292234 °	
				-121.715875 °	-121.715875 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:32285 DS_ID:20961 EP_NO: 10172 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Headwalls at WS toe failing. It is uncertain if these retaining walls were a permanent fixture or a temporary fix that failed. FIELD_STRUCT_DESC: 2 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-foot-diameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch pipes [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)]. FS Date: 3/18/2014						

Photo 3 of 3 : UCIP\_SP\_2018\_32285\_58747.jpg



7-foot diameter CMP riser with two slide gates inside.

LM Start	6.74	Rating **	A/W	Issue No.	19
LM End	6.75	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.292500 °	38.292600 °
				-121.716100 °	-121.716200 °
DWR ID	DWR_RD2098_02_f_2017_19				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the landside levee slope.					
Site ID No:443					
Site Designation:LMA-270					
Repair Type: Stability					
Rating:Area of Concern					
Field Date:7/25/2017					
Notes: Sloughing on crown into upper portion of landside levee slope.					

Photo 1 of 3 : SP\_2018\_RD2098\_246\_19\_20180305\_00018.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---







**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	<b>6.77</b>	Rating **	A/W	Issue No.	<b>20 (cont)</b>
LM End	<b>6.80</b>	Issue Type +	Ma	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	2017 Storm Damage		38.292900 °	38.293000 °	
			-121.716600 °	-121.717000 °	

DWR ID DWR\_RD2098\_02\_f\_2017\_20

#### Comment Code

#### Inspector Comment

#### Levee Evaluation Comments

Description: The damage consists of cracking of the levee crest.

Site ID No: 444

Site Designation: LMA-271

Repair Type: Erosion

Rating: Area of Concern

Field Date: 7/25/2017

Notes: Two combined sloughing locations (271 and 272) within levee crown into waterside and landside slopes. Sloughing on landside slope bulges into ditch at toe.

LM Start	<b>6.77</b>	Rating **	A/W	Issue No.	<b>20 (cont)</b>
LM End	<b>6.80</b>	Issue Type +	Ma	Location *	

Photo 3 of 4 : SP\_2018\_RD2098\_246\_20\_20180305\_00023.jpg



Photo 4 of 4 : SP\_2018\_RD2098\_246\_20\_20180305\_00024.jpg



10/26/17: Notice depression in crown road and slumping toward the left/landside (bulge at toe of levee).

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	03/15/2018 03/15/2018	Keith Millard

LM Start	7.14	Rating **	C	Issue No.	5
LM End	7.14	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Repair Gates			38.292962 °	38.292962 °
				-121.723312 °	-121.723312 °
DWR ID	DWR_RD2098_02_f_2013_5				
Comment Code					
Inspector Comment					
Gate damage, make repairs to this gate. This gate could cause injury to someone.					

No Photos

LM Start	7.24	Rating **	A/W	Issue No.	25	
LM End	7.24	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.293741 °	38.293741 °	
				-121.724787 °	-121.724787 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:32303 DS_ID:20978 EP_NO: 10171 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 09/14/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 10171, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana) FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel dual-purpose irrigation and drainage pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall around the pipe. Pipe has welded steel plate over end on the landside (LS) slope and is not visible on the waterside (WS) slope. (24-inch pipe [HLM 7.23] authorized under Automatic Board Order (ABO) issued as Permit No. 10171, 1974 - Glenn A. Bowsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 7.28)]. FS Date: 3/18/2014 7:07:14 AM						

Photo 1 of 3 : UCIP\_SP\_2018\_32303\_58782.jpg



Pipe visible under new pipe on LS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---





**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.19	Rating **	A/W	Issue No.	2
LM End	7.31	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.293178 °	38.294705 °
				-121.724220 °	-121.725130 °
DWR ID	DWR_RD2098_03_f_2016_2				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Landside vegetation is acceptable; continue to maintain.					

Photo 1 of 2 : SP\_2018\_RD2098\_247\_2\_20180305\_00003.jpg



RD 2098 Looking downstream from levee mile 7.19-7.31

LM Start	<b>7.19</b>	Rating **	A/W	Issue No.	<b>2 (cont)</b>
LM End	<b>7.31</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : SP\_2018\_RD2098\_247\_2\_20180305\_00004.jpg



RD 2098 Looking downstream from levee mile 7.19 landside slope.

LM Start	7.19	Rating **	A/W	Issue No.	8
LM End	7.31	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.293178 °	38.294705 °
				-121.724215 °	-121.725133 °
DWR ID	DWR_RD2098_03_f_2016_8				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Waterside vegetation is acceptable; continue to maintain.					

Photo 1 of 1 : SP\_2018\_RD2098\_247\_8\_20180305\_00006.jpg



RD 2098 Unit 3 levee mile 7.19-7.31 waterside slope.

**\* Location**  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.33	Rating **	M	Issue No.	3
LM End	7.72	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.294858 °	38.299606 °
				-121.725433 °	-121.728621 °
DWR ID	DWR_RD2098_03_f_2016_3				
Comment Code					
Inspector Comment					
2011 - Large vertical erosion pockets and bank slumping. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: HAS_7-9_L]					

No Photos

LM Start	7.37	Rating **	A/W	Issue No.	11
LM End	8.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.295418 °	38.305932 °
				-121.725657 °	-121.730000 °
DWR ID	DWR_RD2098_03_f_2016_11				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Waterside vegetation is acceptable; continue to maintain.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.42	Rating **	C	Issue No.	12
LM End	7.64	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.295935 °	38.298372 °
				-121.726343 °	-121.728678 °
DWR ID	DWR_RD2098_03_s_2017_12				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Gravel surface is stabile and smooth.					

No Photos

LM Start	7.51	Rating **	M	Issue No.	1
LM End	7.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.296846 °	38.296846 °
				-121.727546 °	-121.727546 °
DWR ID	DWR_RD2098_03_f_2016_1				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Make the repairs to the erosion site listed.					

Photo 1 of 3 : SP\_2018\_RD2098\_247\_1\_20180305\_00001.jpg



Close up. Looking upstream.

Photo 2 of 3 : SP\_2018\_RD2098\_247\_1\_20180305\_00002.jpg



Looking downstream.

LM Start	<b>7.51</b>	Rating **	M	Issue No.	<b>1 (cont)</b>
LM End	<b>7.51</b>	Issue Type +	Ma	Location *	LS

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	---	--	---	--



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.51	Rating **	M	Issue No.	1 (cont)	
LM End	7.51	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Slope Stability			38.296846 °	38.296846 °	
				-121.727546 °	-121.727546 °	
DWR ID	DWR_RD2098_03_f_2016_1					
Comment Code						
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.						
Inspector Comment						
Make the repairs to the erosion site listed.						

Photo 3 of 3 : SP\_2018\_RD2098\_247\_1\_20180315\_00027.jpg



Erosion site on 03/15/18.

LM Start	7.61	Rating **	M	Issue No.	10
LM End	7.62	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.297900 °	38.298100 °
				-121.728900 °	-121.728900 °
DWR ID	DWR_RD2098_03_f_2017_10				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of sloughing of the lower and mid waterside levee slope.					
Site ID No:449					
Site Designation:LMA-276					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/27/2017					
Notes: Sloughing on waterside slope due to erosion at waterside toe.					

Photo 1 of 3 : SP\_2018\_RD2098\_247\_10\_20180305\_00007.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.61	Rating **	M	Issue No.	10 (cont)	
LM End	7.62	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			38.297900 °		38.298100 °
				-121.728900 °		-121.728900 °
DWR ID	DWR_RD2098_03_f_2017_10					
Comment Code						
Inspector Comment						
Levee Evaluation Comments						
Description:The damage consists of sloughing of the lower and mid waterside levee slope.						
Site ID No:449						
Site Designation:LMA-276						
Repair Type: Erosion						
Rating:Area of Concern						
Field Date:7/27/2017						
Notes: Sloughing on waterside slope due to erosion at waterside toe.						

Photo 2 of 3 : SP\_2018\_RD2098\_247\_10\_20180305\_00008.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_247\_10\_20180305\_00009.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.63	Rating **	M	Issue No.	13
LM End	7.64	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.298300 °	38.298400 °
				-121.728800 °	-121.728800 °
DWR ID	DWR_RD2098_03_f_2017_13				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the waterside levee slope.					
Site ID No:450					
Site Designation:LMA-277					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/27/2017					
Notes: Sloughing on waterside due to waterside toe erosion.					

Photo 1 of 3 : SP\_2018\_RD2098\_247\_13\_20180305\_00010.jpg



LM Start	<b>7.63</b>	Rating **	M	Issue No.	<b>13 (cont)</b>
LM End	<b>7.64</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : SP\_2018\_RD2098\_247\_13\_20180305\_00011.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---





**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.66	Rating **	M	Issue No.	15 (cont)
LM End	7.68	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 Storm Damage			38.298700 °	38.299000 °
				-121.728700 °	-121.728600 °
DWR ID	DWR_RD2098_03_f _ 2017_15				
Comment Code					
Inspector Comment					
Levee Evaluation Comments					
Description:The damage consists of scour and sloughing of the lower and mid waterside levee slope.					
Site ID No:451					
Site Designation:LMA-278					
Repair Type: Erosion					
Rating:Area of Concern					
Field Date:7/27/2017					
Notes: Sloughing on waterside slope due to watwrside toe erosion.					

Photo 2 of 3 : SP\_2018\_RD2098\_247\_15\_20180305\_00015.jpg



Photo 3 of 3 : SP\_2018\_RD2098\_247\_15\_20180305\_00016.jpg



<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	7.87	Rating **	M	Issue No.	9
LM End	7.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.301707 °	38.301707 °
				-121.728045 °	-121.728045 °
DWR ID	DWR_RD2098_03_s_2014_9				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove the dead tree from the waterside slope.					

No Photos

LM Start	8.07	Rating **	A/W	Issue No.	5
LM End	8.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.304553 °	38.304553 °
				-121.727853 °	-121.727853 °
DWR ID	DWR_RD2098_03_f_2017_5				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
Cracks in waterside shoulder parallel to levee should be monitored for additional movement. Currently up to 2 inches wide and 50 feet long. Probed to 3.5 feet deep. Up to 1 inch of vertical offset observed on 10/26/17. No change as of 03/15/18.					

Photo 1 of 1 : SP\_2018\_RD2098\_247\_5\_20180305\_00005.jpg



View upstream of cracks in waterside shoulder.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	8.16	Rating **	A/W	Issue No.	17
LM End	8.16	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.305462 °	38.305462 °
				-121.728881 °	-121.728881 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51453  
DS\_ID:20981  
EP\_NO: 10174  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 12/22/2016 Crossing has been downgraded from Urgent to No Action Needed walkways on both WS and LS have been rebuilt and the WS gate has been upgraded to stainless steel where previous corrodable material was present. (O. Magana - DWR UCIP)03/19/2014 Current walkway to slidegate on WS toe does not provide safe access to operate slidegate. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 36-inch steel dual-purpose irrigation and drainage pipe through the levee, 26 feet below the crown. Two corrugated metal cutoff walls around the pipe. Walkway to the slide gate on the waterside (WS) end. Combination slide and flap gate on the landside (LS) end. 48-inch corrugated metal pipe (CMP) riser and an adjoining pump on a metal pier at the LS toe. (36-inch pipe [HLM 8.20] authorized under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.20)].  
FS Date: 12/22/2016

LM Start	<b>8.16</b>	Rating **	A/W	Issue No.	<b>17 (cont)</b>
LM End	<b>8.16</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP\_SP\_2018\_51453\_76858.jpg



Walkway has been re-built, photo 1 of 2.

Photo 2 of 3 : UCIP\_SP\_2018\_51453\_76861.jpg



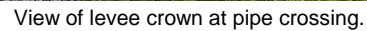
Walkway has been re-built, photo 2 of 2.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	--	--	---	--	---	--

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

FS\_ID:51453  
DS\_ID:20981  
EP\_NO: 10174  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 12/22/2016 Crossing has been downgraded from Urgent to No Action Needed walkways on both WS and LS have been rebuilt and the WS gate has been upgraded to stainless steel where previous corrodable material was present. (O. Magana - DWR UCIP)03/19/2014 Current walkway to slidegate on WS toe does not provide safe access to operate slidegate. (W. Wylie - DWR UCIP) FIELD\_STRUCT\_DESC: 36-inch steel dual-purpose irrigation and drainage pipe through the levee, 26 feet below the crown. Two corrugated metal cutoff walls around the pipe. Walkway to the slide gate on the waterside (WS) end. Combination slide and flap gate on the landside (LS) end. 48-inch corrugated metal pipe (CMP) riser and an adjoining pump on a metal pier at the LS toe. (36-inch pipe [HLM 8.20] authorized under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.20)].  
FS Date: 12/22/2016



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	8.35	Rating **	A/W	Issue No.	18
LM End	8.35	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.306916 °	38.306916 °
				-121.731984 °	-121.731984 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:32384 DS_ID:20962 EP_NO: 10174 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 25.5 feet below the crown. Walkway to the slide gates at both ends of the pipe. (Permit No. 1607, 1951 - R. F. Moore and Lorraine W. Zanetti. This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.40)]. FS Date: 3/19/2014					

LM Start	<b>8.35</b>	Rating **	A/W	Issue No.	<b>18 (cont)</b>
LM End	<b>8.35</b>	Issue Type +	Ma	Location *	

Photo 1 of 2 : UCIP\_SP\_2018\_32384\_58883.jpg



Slide gate at LS toe.

Photo 2 of 2 : UCIP\_SP\_2018\_32384\_58882.jpg



Walkway with slide gate on WS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---



**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	03/15/2018 03/15/2018	Keith Millard

LM Start	8.36	Rating **	C	Issue No.	14
LM End	9.11	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.306997 °	38.315668 °
				-121.732010 °	-121.739773 °
DWR ID	DWR_RD2098_03_s_2017_14				
Comment Code					
V9 : Keep the crown roadway free of vegetation.					
Inspector Comment					
Gravel surface is stabile and smooth.					

No Photos

**\* Location**  
 LS : Land Side    N/A : Not Applicable  
 WS : Water Side  
 CR : Crown

**\*\* Rating**  
 A : Acceptable                      N : Not Inspected/Rated  
 M : Minimally Acceptable        C : Corrected  
 U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**  
 Ma : Maintenance Deficiency  
 Ob : Design & System Obsolescence  
 En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	03/15/2018 03/15/2018	Keith Millard

LM Start	9.34	Rating **	C	Issue No.	13
LM End	9.60	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.318820 °	38.322600 °
				-121.740065 °	-121.740132 °
DWR ID	DWR_RD2098_04_s_2017_13				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Gravel surface is stabile and smooth.					

No Photos

LM Start	9.68	Rating **	M	Issue No.	8
LM End	9.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.323749 °	38.324467 °
				-121.740148 °	-121.740155 °
DWR ID	DWR_RD2098_04_s_2014_8				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Several areas of scalloped erosion at waterside toe. Should be monitored.					

Photo 1 of 1 : SP\_2018\_RD2098\_248\_8\_20180305\_00001.jpg



Several areas of scalloped erosion at waterside toe. Largest area is visible in distance in this photo.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	--	---

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	03/15/2018 03/15/2018	Keith Millard

LM Start	9.73	Rating **	C	Issue No.	14
LM End	9.77	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.324430 °	38.325085 °
				-121.740137 °	-121.740128 °
DWR ID	DWR_RD2098_04_s_2017_14				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					
Gravel surface is stable and smooth.					

No Photos

LM Start	10.02	Rating **	A/W	Issue No.	17
LM End	10.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.328368 °	38.328438 °
				-121.740617 °	-121.740612 °
DWR ID	DWR_RD2098_04_s_2017_17				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
Sloughing landside slope has been temporarily repaired at this specific location, but this area shows cracks along shoulder and should continue to be monitored.					

Photo 1 of 1 : SP\_2018\_RD2098\_248\_17\_20180315\_00021.jpg



Slumping landside slope should be monitored and repaired as needed.

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
---	--	--	--	--	--