

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2092	Overall LMA Rating	Total LMA Miles						
Reclamation District No. 2092 Dos Rios	A	3.76						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Encroachments					1.32			
Animal Control	0.02		0.02	0.53%				
LMA Totals:	0.02	0.00	0.02	0.53%	1.32	0.00	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2013 Levee Inspection Results

Reclamation District No. 2092 Dos Rios

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Reclamation District No. 2092 Dos Rios

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Right	3.76
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	04/18/2013 - 04/18/2013		10/03/2013 - 10/03/2013	
DWR Inspector	Pavel Kazi		Pavel Kazi	
Accompanied By	Steve Sheppard River Partner		Steve Sheppard River Partner	
			Kevin King River Partner	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway				Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River				Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

LMR No.	Levee Mile		Category	Item	Location + Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End					Start	End	Photo
1	0.00	0.00	Earthen Levee	Flood Preparedness & Training	LS Ma	Inspector Comments: River Partner crews will attend the upcoming flood fighting class offered in their area. A few members of the company have already been through a few flood events and received proper training.	°	°	18
DWR ID: DWR_RD2092_01_f_2012_18									
2	0.00	0.00	Earthen Levee	Operations & Maintenance Manuals	LS Ma	Inspector Comments: They have the latest O&M manual for their district.	°	°	24
DWR ID: DWR_RD2092_01_s_2012_24									
3	0.00	0.00	Earthen Levee	Emergency Supplies & Equipment	LS Ma	Inspector Comments: They have adequate flood fighting supplies.	°	°	26
DWR ID: DWR_RD2092_01_s_2012_26									
4	0.18	0.18	Earthen Levee	Encroachments	CR En	RA : Ramp	37.602038 ° -121.161273 °	37.602038 ° -121.161273 °	1 Y
DWR ID: DWR_RD2092_01_f_2013_1									
5	0.77	0.77	Earthen Levee	Trim / Thin Trees	WS Ma	T5 : Tree stumps. Inspector Comments: The LMA will remove the tree stump from the waterside slope of the levee.	37.597260 ° -121.168504 °	37.597260 ° -121.168504 °	6 Y
DWR ID: DWR_RD2092_01_s_2013_6									
6	0.77	1.33	Earthen Levee	Encroachments	LS En	DT : Ditch	37.597291 ° -121.168496 °	37.590568 ° -121.164028 °	968 Y
DWR ID: DWR_RD2092_01_s_2012_968									
7	1.34	1.57	Earthen Levee	Encroachments	LS En	DT : Ditch	37.590479 ° -121.163844 °	37.587758 ° -121.162349 °	7 Y
DWR ID: DWR_RD2092_01_s_2012_7									
8	1.34	1.34	Earthen Levee	Encroachments	LS A/W Ma	PI : Pipe Inspector Comments: A sand boil appeared on the landside toe of the levee because of an underground pipe leakage. The pipe and boil have been repaired but should be monitored.	37.590467 ° -121.163822 °	37.590467 ° -121.163822 °	10 Y
DWR ID: DWR_RD2092_01_s_2012_10									
9	1.37	1.37	Earthen Levee	Slope Stability	LS Ma	S1 : Repair slope instability.	37.590287 ° -121.163414 °	37.590287 ° -121.163414 °	9 Y
DWR ID: DWR_RD2092_01_s_2013_9									
10	1.38	1.38	Earthen Levee	Slope Stability	LS Ma	S1 : Repair slope instability. Inspector Comments: LMA fixed the slope instability issue.	37.590160 ° -121.163185 °	37.590160 ° -121.163185 °	4 Y
DWR ID: DWR_RD2092_01_f_2013_4									
11	1.58	1.58	Earthen Levee	Vegetation	WS Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	37.587609 ° -121.162433 °	37.587609 ° -121.162433 °	13 Y
DWR ID: DWR_RD2092_01_f_2013_13									
12	1.58	1.58	Earthen Levee	Vegetation	LS Ma	V1 : Control annual grass and weeds on the levee slopes and easements.	37.587608 ° -121.162433 °	37.587608 ° -121.162433 °	12 Y
DWR ID: DWR_RD2092_01_f_2013_12									
13	1.59	1.87	Earthen Levee	Encroachments	WS En	DT : Ditch	37.587575 ° -121.162454 °	37.584057 ° -121.162387 °	8 Y
DWR ID: DWR_RD2092_01_s_2012_8									

*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway					Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River					Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
14	1.96	1.96	Earthen Levee	Animal Control	LS Ma	A	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.584413 ° -121.160554 °	37.584413 ° -121.160554 °	14 Y
DWR ID: DWR_RD2092_01_f_2013_14										
15	1.96	1.96	Earthen Levee	Animal Control	LS Ma	C	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.584409 ° -121.160587 °	37.584409 ° -121.160587 °	11 Y
DWR ID: DWR_RD2092_01_s_2013_11										
16	2.07	2.07	Earthen Levee	Animal Control	LS Ma	C	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.584295 ° -121.158809 °	37.584295 ° -121.158809 °	971 Y
DWR ID: DWR_RD2092_01_s_2012_971										
17	2.13	2.13	Earthen Levee	Animal Control	WS Ma	C	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.584014 ° -121.157849 °	37.584014 ° -121.157849 °	20 Y
DWR ID: DWR_RD2092_01_f_2012_20										
18	2.13	2.13	Earthen Levee	Animal Control	LS Ma	M	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.584014 ° -121.157849 °	37.584014 ° -121.157849 °	31 Y
DWR ID: DWR_RD2092_01_f_2012_31										
19	2.62	2.62	Earthen Levee	Slope Stability	LS Ma	A	S1 : Repair slope instability. Inspector Comments: Slope instability was repaired by the LMA.	37.577911 ° -121.157065 °	37.577911 ° -121.157065 °	15 Y
DWR ID: DWR_RD2092_01_f_2013_15										
20	2.62	2.62	Earthen Levee	Slope Stability	LS Ma	C	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	37.577864 ° -121.157070 °	37.577864 ° -121.157070 °	35 Y
DWR ID: DWR_RD2092_01_f_2012_35										
21	2.73	2.73	Earthen Levee	Animal Control	LS Ma	M	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.576383 ° -121.157208 °	37.576383 ° -121.157208 °	17 Y
DWR ID: DWR_RD2092_01_f_2013_17										
22	2.84	3.09	Earthen Levee	Encroachments	LS En	M	FE : Fence Inspector Comments: Barbed wire fence on landward slope.	37.574973 ° -121.156647 °	37.574001 ° -121.152183 °	972 Y
DWR ID: DWR_RD2092_01_s_2012_972										

*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

Levee Mile Report Line	4
Start Levee Mile	0.18
End Levee Mile	0.18
Location	Crown
Category	Earthen Levee
Item	Encroachments

A ramp was found on the crown of the levee looking upstream.

pkazi_f_20131014_930.JPG



Levee Mile Report Line	5
Start Levee Mile	0.77
End Levee Mile	0.77
Location	Water Side
Category	Earthen Levee
Item	Trim / Thin Trees

A damaged cottonwood was found on the waterside slope of the levee looking upstream. The LMA will be removing the remaining portion of the tree including the stump.

pkazi_f_20131001_915.JPG



Levee Mile Report Line	6
Start Levee Mile	0.77
End Levee Mile	1.33
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of agricultural ditch at the landward toe looking upstream.

pkazi_f_20131001_926.jpg



*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

Levee Mile Report Line	7
Start Levee Mile	1.34
End Levee Mile	1.57
Location	Land Side
Category	Earthen Levee
Item	Encroachments

An agricultural ditch was found on the toe of the landside of the levee looking upstream.

pkazi_f_20131001_916.jpg



Levee Mile Report Line	8
Start Levee Mile	1.34
End Levee Mile	1.34
Location	Land Side
Category	Earthen Levee
Item	Encroachments

A sand boil was found on the landside of the levee. It was caused by a pipe leak couple of feet below the boil location. LMA was notified to repair it as soon as possible. The picture was taken from the crown looking upstream.

pkazi_f_20131001_919.jpg



Levee Mile Report Line	8
Start Levee Mile	1.34
End Levee Mile	1.34
Location	Land Side
Category	Earthen Levee
Item	Encroachments

During spring inspection 2012, the sand boil was not active but materials were present on the landside toe of the levee. The sand boil occurred due to an underground irrigation pipe leakage. The picture was taken from the crown looking toward the toe of the levee. The area was repaired but should be monitored.

pkazi_f_20131001_920.jpg



*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

Levee Mile Report Line	10
Start Levee Mile	1.38
End Levee Mile	1.38
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

The slope instability was fixed by the LMA on the landside of the levee looking upstream.

pkazi_f_20131014_931.JPG



Levee Mile Report Line	11
Start Levee Mile	1.58
End Levee Mile	1.58
Location	Water Side
Category	Earthen Levee
Item	Vegetation

View of the waterside slope of the levee looking upstream.

pkazi_f_20131014_933.JPG



Levee Mile Report Line	12
Start Levee Mile	1.58
End Levee Mile	1.58
Location	Land Side
Category	Earthen Levee
Item	Vegetation

View of the landside slope of the levee looking upstream.

pkazi_f_20131014_932.JPG



*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

Levee Mile Report Line	13
Start Levee Mile	1.59
End Levee Mile	1.87
Location	Water Side
Category	Earthen Levee
Item	Encroachments

View of an agricultural ditch at the waterward toe of the slope.

pkazi_f_20131001_917.jpg



Levee Mile Report Line	14
Start Levee Mile	1.96
End Levee Mile	1.96
Location	Land Side
Category	Earthen Levee
Item	Animal Control

The LMA has repaired the animal holes on the landside slope of the levee looking upstream.

pkazi_f_20131014_934.JPG



Levee Mile Report Line	18
Start Levee Mile	2.13
End Levee Mile	2.13
Location	Land Side
Category	Earthen Levee
Item	Animal Control

Rodent holes were found on the landside slope of the levee looking upstream.

pkazi_f_20131001_924.jpg



*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

Levee Mile Report Line	18
Start Levee Mile	2.13
End Levee Mile	2.13
Location	Land Side
Category	Earthen Levee
Item	Animal Control

Animal holes were found on the landside of the levee looking upstream during fall 2013 inspection.

pkazi_f_20131014_935.JPG



Levee Mile Report Line	19
Start Levee Mile	2.62
End Levee Mile	2.62
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Slope instability was repaired by the LMA on the landside of the levee looking upstream.

pkazi_f_20131014_936.JPG



Levee Mile Report Line	21
Start Levee Mile	2.73
End Levee Mile	2.73
Location	Land Side
Category	Earthen Levee
Item	Animal Control

An animal hole was found on the landside shoulder of the levee looking downstream.

pkazi_f_20131014_937.JPG



*** Location**

LS : Land Side
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

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Reclamation District No. 2092 Dos Rios

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	3.76	10/03/2013 10/03/2013	Pavel Kazi

Levee Mile Report Line	22
Start Levee Mile	2.84
End Levee Mile	3.09
Location	Land Side
Category	Earthen Levee
Item	Encroachments
View of barbed wire fence along the waterward slope looking upstream.	
pkazi_f_20131001_929.jpg	



* Location LS : Land Side 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
--	---	---