

**State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES**



**2005
PROJECT CHANNEL REPORT**

**INSPECTION OF
FLOOD CONTROL PROJECT CHANNELS ON THE
SACRAMENTO AND SAN JOAQUIN RIVERS AND
THEIR TRIBUTARIES AND THE TRUCKEE RIVER**

**Prepared By The
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CONTENTS

	PAGE
Organization	ii
Contents	iii
Introduction	1
Channel Index	145

Authorization for Inspection

Chapter I – Inspected on the Sacramento River and Tributaries

Ash Creek-Modoc County.....	3
Dry Creek-Modoc County	9
McClure Creek	13
Salt Creek.....	17
Big Chico Creek.....	25
Lindo Channel and Sandy Gulch	31
Little Chico Creek.....	37

Chapter II – Inspected on the Truckee River and the Fairfield Vicinity Streams

Truckee River.....	45
McCoy Creek.....	51
Laurel Creek.....	55
Union Avenue Diversion	61

Chapter III – Inspected on the San Joaquin River and Tributaries

Bear Creek	67
Black Rascal Creek	75
Burns Creek	81
Mariposa Creek.....	85
Miles Creek	91
Owens Creek.....	97
Ash Slough	101
Berenda Slough.....	107
Chowchilla River.....	113
Fresno River.....	121
North Littlejohn Creek.....	127
Duck Creek Diversion	131
South Littlejohn Creek	135
South Littlejohn Creek, North Branch	141

INTRODUCTION

This is a report of the inspection of flood control project channels on the Sacramento, San Joaquin rivers and their tributaries and the Truckee River. The inspected channels are not confined by project levees. The purpose of the inspection is to identify and report to the constructing authority and the maintaining agency any conditions, which may diminish channel capacity. In general, maintaining the channels to the condition that existed after the completion of the initial construction will preserve their flood flow characteristics. The standard of comparison for the inspection is, therefore, the condition immediately after construction.

The U.S. Army Corps of Engineers and the State of California constructed the improved channels and floodways included herein. The constructing authority issued operation and maintenance manuals to the maintaining agency. Maintaining agencies are local agencies or the State of California. These agencies agreed to be responsible for maintenance at the time of project construction or at a later time. The State conducts periodic inspections of the quality of the maintenance accomplished by the maintaining agencies, and reports its findings to these agencies. The Division of Flood Management, Flood Operations Branch, and Flood Project Inspection Section perform the inspections on behalf of The Reclamation Board.

CHAPTER I

PROJECT CHANNELS INSPECTED ON THE SACRAMENTO RIVER AND TRIBUTARIES 2005

**MODOC COUNTY
July 2005**

**ASH CREEK
(Maintained by Adin Community Services District)**

On July 11, 2005 an inspection was made of the Ash Creek Channel. Project channel limits begin at the gauging station upstream of State Highway 299 and extend downstream for 1.0 mile. The entire one-mile was inspected. The photos on the following pages are typical of, but do not show all the growth in the channel. Evidence of previously moderate to heavy erosion has occurred along both banks downstream of Ash Street. The log dam located at the downstream boundary was replaced in October 1999 with a concrete dam and fish ladder by the Department of Fish and Game. The District has an excellent maintenance program.

MODOC COUNTY

July 2005

Date of Inspection:
7/11/05

Channel/Waterway:
ASH CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments	X			S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
				M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling	X			S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating **S**

2005 CHANNEL REPORT

**MODOC COUNTY
July 2005**

ASH CREEK



Upstream from Main Street (Highway 299) towards the gauging station



Downstream from Main Street (Hwy. 299) at the Ash St. low water crossing

2005 CHANNEL REPORT

**MODOC COUNTY
July 2005**

ASH CREEK



Downstream from Ash Street, moderate tree growth and bank erosion



Downstream at a sharp left bend moderate erosion on both banks

**MODOC COUNTY
July 2005**

ASH CREEK



Upstream from the downstream limit



Dam with fish ladder and metal walkway, constructed Oct. 1999 by the Dept. of Fish and Game

2005 CHANNEL REPORT

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**MODOC COUNTY
July 2005**

**DRY CREEK
(Maintained by Adin Community Services District)**

On July 11, 2005 an inspection was made of the Dry Creek channel. The project channel begins at the intersection of Adin and Cedar Streets in Adin and extends downstream for 0.2 miles to its confluence with Ash Creek. The entire 0.2 miles was inspected. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show, all of the growth in the channel. There is light to moderate willow growth along the entire reach of the channel.

MODOC COUNTY

July 2005

Date of Inspection:
7/11/05

Channel/Waterway:
DRY CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
		X		U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	X			S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**MODOC COUNTY
July 2005**

DRY CREEK



Downstream where Dry Creek meets Ash Creek



Downstream at Cedar Street

2005 CHANNEL REPORT

**MODOC COUNTY
July 2005**

DRY CREEK



Downstream from Main Street (Highway 299), moderate growth in channel



Upstream from Main street (highway 299), moderate growth in channel

2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

McClure CREEK **(Maintained by Tehama County)**

On July 7, 2005, an inspection was made of the McClure Creek channel. The project channel begins 200 feet upstream of the extension of Fairfield Avenue and extends downstream 1.7 miles to 3,700 feet downstream of Road 99W. The views of the channel are from road intersections or crossings and at random distances measured from upstream of the Road 99W bridge. The photos on the following pages are typical of, but do not show, all of the growth in the channel. The channel is clear, although in some areas berry vines are beginning to encroach into the channel. The channel will easily carry the required capacity. Clearing of the entire channel was completed in 1996. Satisfactory maintenance program.

2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

Date of Inspection:
7/7/05

Channel/Waterway:
McClure CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion		X		S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

McClure CREEK



Upstream from extension of Truckee Avenue



Downstream from extension of Truckee Avenue

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

McClure CREEK



Upstream from Highway 99 W bridge



Downstream from Highway 99 W bridge

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

McClure CREEK



Downstream view approximately 2500 feet downstream of the Hwy 99 Bridge



Upstream from the downstream limit

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SACRAMENTO RIVER AND TRIBUTARIES

July 2005

SALT CREEK **(Maintained by Tehama County)**

On July 7, 2005 an inspection was made of the Salt Creek channel. The project channel begins 1.6 miles upstream of the Sacramento River and extends downstream 1.6 miles to Salt Creek's confluence with the Sacramento River. Inspection was limited to breaks in the dense vegetation, measured randomly with the vehicle distance meter. The photos on the following pages are typical of, but do not show all of the growth in the channel. Vegetation on both banks is dense and makes visual inspection difficult. Numerous downed trees and piles of debris in the channel should be removed and the channel should be cleared of vegetal growth before the next flood season. Little or no maintenance has been performed on this channel for the past several years. Tehama County needs to develop a maintenance program for this channel.

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

Date of Inspection:
7/7/05

Channel/Waterway:
SALT CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
			X	U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
				M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
			X	U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
			X	U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
			X	U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating U

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

SALT CREEK



Downstream of low water crossing logs and dense vegetation is encroaching in the channel



Down stream approximately 200 feet of erosion along the right bank

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

SALT CREEK



Logs and dense vegetation needs to be removed from channel



**Upstream, approximately 2800 feet from the downstream limit
dense vegetation on both banks**

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

SALT CREEK



**Upstream, approximately 700 feet upstream of the downstream limit
dense vegetation along both banks**



**Downstream, approximately 700 feet upstream from the confluence with the
Sacramento River**

2005 CHANNEL REPORT

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2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

BIG CHICO CREEK **(Maintained by City of Chico)**

On July 5, 2005 an inspection was made of the Big Chico Creek channel. The project channel begins at the Big Chico Creek Control Structure and extends 22.0 miles downstream to Big Chico Creek's confluence with the Sacramento River. Only 15 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all of the growth in the channel. Heavy amounts of vegetation exist along both banks of this channel. Vines extend across the channel at various locations. Little or no maintenance has been performed for the past several years. Thinning and removal of vegetation upstream of Manzanita Road and removal of snags on the right bank below the extension of Forest Avenue needs to be done before flood season.

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

Date of Inspection:
7/05/05

Channel/Waterway:
BIG CHICO CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
			X	U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	X			S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
5. Erosion				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

2005 CHANNEL REPORT

Overall Rating

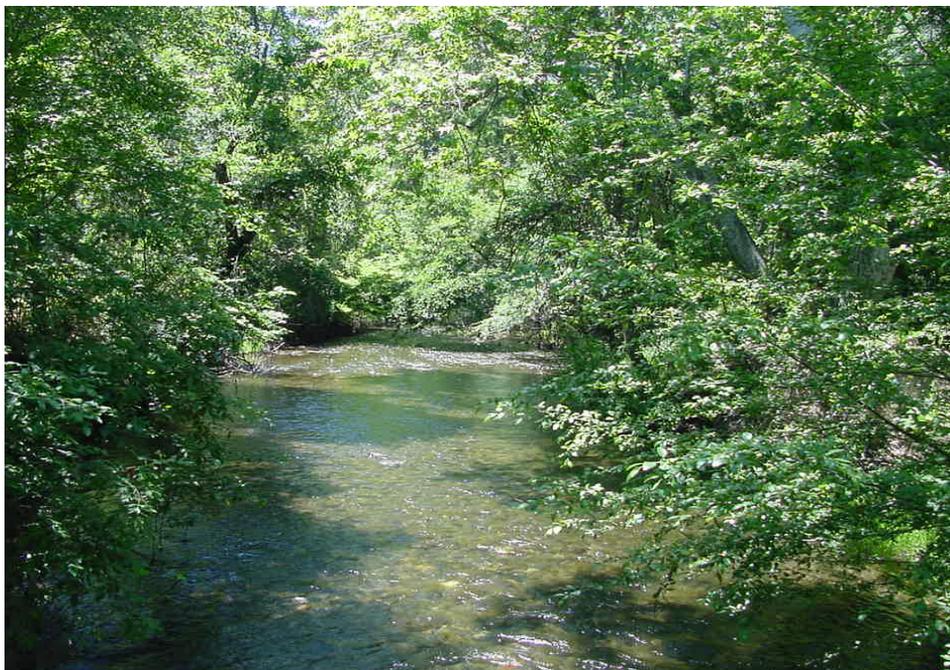
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**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

BIG CHICO CREEK



Downstream from the Big Chico Creek Control Structure



Upstream from bridge near Forest Avenue heavy growth along both banks

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

BIG CHICO CREEK



Upstream from Highway 99 heavy growth along both banks



Downstream from Highway 99 dense vegetation in channel

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

BIG CHICO CREEK



Upstream from the Esplanade heavy growth on both banks



Downstream from Highway 32 heavy growth on both banks

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

BIG CHICO CREEK



**Upstream approximately 500 feet upstream
of the confluence with the Sacramento River**



Downstream towards the confluence with the Sacramento River

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

LINDO CHANNEL AND SANDY GULCH **(Maintained by State of California)**

On July 6, 2005 an inspection was made of Lindo Channel and Sandy Gulch. The project channel begins at the Lindo Channel Diversion Structure and extends downstream 13.0 miles to the channel's confluence with Big Chico Creek. Only 10.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all of the growth in the channel. The portion of the channel from Manzanita Avenue to Big Chico Creek has heavy vegetation along both banks, but the channel is clear. Small growth in channel should be removed.

SACRAMENTO RIVER AND TRIBUTARIES

Date of Inspection:
7/06/05

Channel/Waterway:
LINDO CHANNEL

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	█	█	█	S There are minimal obstructions or vegetation blocking the channel
	█	█	█	M The channel is obstructed by minor log jams, snags or vegetation.
	█	█	X	U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments	█	█	█	S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	█	█	█	M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
	█	X	█	U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	█	█	█	S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
	X	█	█	M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
	█	█	█	U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling	█	█	█	S No shoaling present.
	█	█	█	M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
	█	X	█	U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	█	█	█	S No erosion or horizontal deviation observed.
	█	█	█	M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
	█	X	█	U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency.
U-Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES

LINDO CHANNEL



Downstream from the Lindo Channel Diversion Structure



Downstream from Manzanita Avenue

2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES July 2005

LINDO CHANNEL



Upstream from the bike path bridge at the extension of Madrone Avenue



Upstream from Mariposa

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

LINDO CHANNEL



Downstream from the Esplanade



Upstream from Highway 32

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

SANDY GULCH



Downstream from Oak Ave



Downstream from Grape Way

2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

LITTLE CHICO CREEK (Maintained by the City of Chico)

On July 6, 2005 an inspection was made of the Little Chico Creek channel. The project channel begins at the Little Chico Creek Control and Weir Structure and extends downstream for 18.0 miles to Alberton Road. Only 12.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all of the growth in the channel. Growth between the control structure and Lone Pine Avenue is moderate to heavy along both banks, but channel is clear. Selective thinning and fallen tree removal should be done prior to next flood season.

2005 CHANNEL REPORT

SACRAMENTO RIVER AND TRIBUTARIES

July 2005

Date of Inspection:
7/06/05

Channel/Waterway:
LITTLE CHICO CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
			X	U Obstructions or vegetation growth have obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
			X	U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

U

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

LITTLE CHICO CREEK



**Downstream from the control structure on Little Chico Creek
moderate growth in the channel**



Downstream from Bruce Road

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

LITTLE CHICO CREEK



Downstream from Forest Avenue



Downstream of Highway 99

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

LITTLE CHICO CREEK



Upstream from Boucher Street. Dense growth on both banks



Downstream from Mill Street. Dense growth on both banks

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

LITTLE CHICO CREEK



Downstream from Olive Street



Upstream from Chestnet Street. Heavy overhead growth in channel

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
July 2005**

LITTLE CHICO CREEK



Upstream from Crouch Avenue



Upstream from Alberton Avenue Scouring on left bank and in channel

CHAPTER II

PROJECT CHANNELS INSPECTED ON THE TRUCKEE RIVER AND THE FAIRFIELD VICINITY STREAMS

**PLACER COUNTY
August 2005**

**TRUCKEE RIVER
(Maintained by Placer County)**

On August 2, 2005 an inspection was made of the Truckee River channel. The project channel begins at the Lake Tahoe Outlet Works and extends downstream for 0.6 mile. The entire 0.6-mile was inspected. The photos on the following pages are typical views of the channel. The channel does not have flow impairing vegetal growth and obstructions. Placer County has monitored this channel for years and has not had to do maintenance to the project. Although this is a visual inspection, the channel appears that it would carry designed flow if required.

PLACER COUNTY

August 2005

Date of Inspection:
8/02/05

Channel/Waterway:
TRUCKEE RIVER

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments	X			S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
				M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	X			S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling	X			S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	X			S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating S

2005 CHANNEL REPORT

**PLACER COUNTY
August 2005**

TRUCKEE RIVER



The outlet structure upstream from Highway 89



Downstream from Highway 89 bridge

2005 CHANNEL REPORT

**PLACER COUNTY
August 2005**

TRUCKEE RIVER



**Upstream from the bike bridge, 1,100 feet
down stream of the Lake Tahoe Outlet Structure**



Downstream from the bike bridge

2005 CHANNEL REPORT

**PLACER COUNTY
August 2005**

TRUCKEE RIVER



Upstream from the Tahoe City Lumber Yard



**Downstream from the Tahoe City Lumber Yard
nearing the downstream limit of the project**

2005 CHANNEL REPORT

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**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VICINITY STREAMS
September 2005**

**McCoy CREEK
(Maintained by Fairfield-Suisun Sewer District)**

On September 13, 2005 an inspection was made of the McCoy Creek channel. The project channel begins at Prosperity Lane and extends downstream 1.22 miles to McCoy Creeks' confluence with Buffer Channel. The entire 1.22 miles were inspected. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. Vegetation is minimal and should not affect the flow. The patrol roads should be sterilized prior to flood season. The maintaining agency has an excellent maintenance program.

SACRAMENTO RIVER AND TRIBUTARIES FAIRFIELD VACINITY STREAMS September 2005

Date of Inspection:
9/13/05

Channel/Waterway:
McCoy Creek

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments	X			S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
				M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	X			S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling	X			S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	X			S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

McCoy Creek



Downstream from Bella Vista Drive



Downstream from Emperor Drive

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VICINITY STREAMS
September 2005**

McCoy Creek



Upstream from Pintail Avenue



Upstream from Anderson Drive

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VICINITY STREAMS
September 2005**

**LAUREL CREEK
(Maintained by Fairfield-Suisun Sewer District)**

On September 13, 2005 an inspection was made of the Laurel Creek Channel. The project channel begins at Gulf Drive and extends downstream 2.78 miles to Laurel Creek's confluence with McCoy Creek. The entire 2.78 miles were inspected. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. Vegetation is minimal in the channel and does not affect the flow, however, new growth should be removed or sprayed. The Maintaining agency has an excellent maintenance program.

SACRAMENTO RIVER AND TRIBUTARIES FAIRFIELD VACINITY STREAMS September 2005

Date of Inspection:
9/13/05

Channel/Waterway:
LAUREL CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
	X			M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
	X			M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
	X			M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

LAUREL CREEK



Upstream from Cement Hill Road towards Gulf Drive



Downstream from Cement Hill Road

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

LAUREL CREEK



Downstream from Meadowlark Drive



Downstream from Blossom Road

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

LAUREL CREEK



**Downstream from Matthew Road towards
Railroad culvert under crossing**



Downstream from Worley Road towards the confluence with McCoy Creek

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**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

**UNION AVENUE DIVERSION
(Maintained by Fairfield-Suisun Sewer District)**

On September 13, 2005, an inspection was made of the Union Avenue Diversion Channel. The project channel begins at North Texas Street and extends downstream 0.73 mile to Gulf Drive. The entire 0.73-mile was inspected. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. Vegetation is minimal in the channel and does not affect the flow, however, new growth should be removed or sprayed. The maintaining agency has an excellent maintenance program.

SACRAMENTO RIVER AND TRIBUTARIES FAIRFIELD VACINITY STREAMS September 2005

Date of Inspection:
9/13/05

Channel/Waterway:
UNION AVENUE DIVERSION CHANNEL

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
	X			M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
	X			M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
	X			M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

UNION AVENUE DIVERSION CHANNEL



Downstream from North Texas Street



Downstream from Camrose Avenue

**SACRAMENTO RIVER AND TRIBUTARIES
FAIRFIELD VACINITY STREAMS
September 2005**

UNION AVENUE DIVERSION CHANNEL



Downstream from Dover Ave



Upstream from the downstream limits at Gulf Drive

CHAPTER III

PROJECT CHANNELS INSPECTED ON THE SAN JOAQUIN RIVER AND TRIBUTARIES

2005 CHANNEL REPORT

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2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

**BEAR CREEK
(Maintained by the Merced Irrigation District for Merced County)**

On July 18, 2005 an inspection was made of Bear Creek. The project channel begins 2.0 miles upstream of the confluence with Burns Creek and extends downstream 21.0 miles to Bert Crane Road. Only 15 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show, all the growth in the channel. Moderate to heavy growth exists along both banks from the confluence with Burns Creek to approximately the Merced City limits. From Franklin Road to Dickerson Ferry Road, the channel and banks are minimal overgrown. A clearing program should be implemented . However, The California Department of Fish and Game has stopped the channel-clearing program. Both agencies are working to resolve the issues and continue channel maintenance.

SAN JOAQUIN RIVER AND TRIBUTARIES MERCED STREAM GROUP September 2005

Date of Inspection:
07/18/05

Channel/Waterway:
BEAR CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	X			S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BEAR CREEK



Downstream from 0.5 mile upstream of the Bonner Road bridge



Downstream from Arboleda Drive

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BEAR CREEK



Downstream from Kibby Road



Downstream from McKee Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BEAR CREEK



Downstream from "M" Street



Downstream from Buhach Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BEAR CREEK



Upstream toward Highway 140



Downstream from Franklin Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BEAR CREEK



Downstream from Dickerson Ferry Road



Upstream from Bert Crane Road

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**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

**BLACK RASCAL CREEK
(Maintained by the Merced Irrigation District for Merced County)**

On August 20, 2007 an inspection was made of Black Rascal Creek Channel. The project channel begins at Crocker Dam and extends downstream 6.5 miles to Black Rascal Creek's confluence with Bear Creek. The entire 6.5 miles were inspected. Views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. The wild growth should be cleared to allow proper design flow.

SAN JOAQUIN RIVER AND TRIBUTARIES MERCED STREAM GROUP September 2005

Date of Inspection:
7/18/05

Channel/Waterway:
BLACK RASCAL CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
	X			M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
	X			M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
	X			M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BLACK RASCAL CREEK



Downstream from the Crocker Dam



Downstream from Franklin Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BLACK RASCAL CREEK



Downstream from Highway 140



Downstream from Oak Avenue

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BLACK RASCAL CREEK



Upstream from Quinley Road



At the confluence of Black Rascal & Bear Creek

2005 CHANNEL REPORT

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2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

**BURNS CREEK
(Maintained by Merced Irrigation District for Merced County)**

The project channel begins 2.0 miles upstream of Burns Creek's confluence with Bear Creek and extends 2.0 miles downstream to the confluence. Only 1.0 mile of channel could be inspected due to inaccessibility. The photos on the following pages are typical of, but do not show all the growth in the channel. Merced County should mechanically clear and maintenance sprays the channel. However, The California Department of Fish and Game has stopped the channel-clearing program. Both agencies are working to resolve the issues and continue channel maintenance.

SAN JOAQUIN RIVER AND TRIBUTARIES MERCED STREAM GROUP September 2005

Date of Inspection:
07/19/05

Channel/Waterway:
BURNS CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
	X			M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
	X			M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
	X			M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

BURNS CREEK



Upstream from Bonner Road on Flying "S" Ranch



Low water crossing along Burns Creek

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2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

**MARIPOSA CREEK/DUCK SLOUGH
(Maintained by the Merced Irrigation District for Merced County)**

On July 19, 2005 an inspection was made of Mariposa Creek/Duck Slough channel. The project channel begins 4.0 miles upstream of Fresno Road, and extends downstream for 16.5 miles to Highway 59. Only 12.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. The wild growth should be cleared . However, The California Department of Fish and Game has stopped the channel-clearing program. Both agencies are working to resolve the issues and continue channel maintenance.

SAN JOAQUIN RIVER AND TRIBUTARIES MERCED STREAM GROUP September 2005

Date of Inspection:
07/19/05

Channel/Waterway:
MARIPOSA CREEK/DUCK SLOUGH

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

MARIPOSA CREEK/DUCK SLOUGH



Upstream from Fresno Road



Upstream of White Rock Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

MARIPOSA CREEK/DUCK SLOUGH



Downstream of Wheatland Road



Downstream from Plainsburg Road

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

MARIPOSA CREEK/DUCK SLOUGH



Downstream from Arboleda Road



Downstream from Healy Road

2005 CHANNEL REPORT

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2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

**MILES CREEK
(Maintained by the Merced Irrigation District for Merced County)**

On July 19, 2005 an inspection was made of Miles Creek channel. The project channel begins 1.5 miles upstream of Childs Avenue and extends downstream for 12.0 miles to Highway 59. Only 7.0 miles of the channel could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. There is intermittent heavy brush growth throughout the system. The channel is constricted by trees and brush from the start of the inspection to the Miles Creek Dam and should be cleared before next flood season. However, The California Department of Fish and Game has stopped the channel-clearing program. Both agencies are working to resolve the issues and continue channel maintenance.

SAN JOAQUIN RIVER AND TRIBUTARIES MERCED STREAM GROUP September 2005

Date of Inspection:
07/19/2005

Channel/Waterway:
MILES CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
			X	U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments	X			S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
				M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency.
U-Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

MILES CREEK



Downstream from Childs Avenue



Downstream from Santa Fe Drive

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

MILES CREEK



Downstream from Arboleda Drive



Downstream from Healy Road

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

MILES CREEK



**Upstream from Highway 59.
The channel is overgrown with wild growth**

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2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

**OWENS CREEK
(Maintained by the Merced Irrigation District for Merced County)**

On July 19, 2005 an inspection was made of Owens Creek channel. The project channel begins at Cunningham Road and extends downstream for 2.0 miles to Owens Creek Diversion channel. The entire channel was inspected. Heavy dense tule growth was found in the channel. Tules should be sprayed to control growth. However, The California Department of Fish and Game has stopped the channel-clearing program. Both agencies are working to resolve the issues and continue channel maintenance.

SAN JOAQUIN RIVER AND TRIBUTARIES MERCED STREAM GROUP September 2005

Date of Inspection:
07/19/05

Channel/Waterway:
OWENS CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
			X	U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	X			S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling	X			S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

OWENS CREEK



Downstream from Cunningham Road



Downstream from Childs Avenue

**SAN JOAQUIN RIVER AND TRIBUTARIES
MERCED STREAM GROUP
September 2005**

OWENS CREEK



Upstream from the extension of Mission Avenue

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

**ASH SLOUGH
(Maintained by the Madera County Flood Control and Water Conservation
Agency)**

On July 20, 2005 an inspection was made Ash Slough channel. The project channel begins at the Ash and Berenda Slough Bifurcation Structure and extends downstream for 19.0 miles. Only 14.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. There are some willows and bamboo on the banks, but the channel appears to be in satisfactory condition. There has been no apparent maintenance in recent years. The new growth needs to be removed and maintenance sprayed.

2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES

November 2005

Date of Inspection:
07/20/05

Channel/Waterway:
ASH SLOUGH

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

ASH SLOUGH



Upstream at Highway 152



Upstream from Road 9

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

ASH SLOUGH



Downstream from Avenue 19



Upstream from Avenue 13

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

ASH SLOUGH



Upstream of Avenue 25 (Lost picture for site)



Downstream from Avenue 23 1/2

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2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

BERENDA SLOUGH

(Maintained by the Madera County Flood Control and Water Conservation Agency)

On July 21, 2005 an inspection was made of Berenda Slough channel. The project channel begins at the Ash and Berenda Slough Bifurcation Structure and extends downstream for 18.5 miles. Only 13.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. The channel has areas of willow and bamboo growth that should be cleared. There appears to have been little to no maintenance performed in the past several years. The wild growth should be cleared to allow proper design flow.

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

Date of Inspection:
07/21/05

Channel/Waterway:
BERENDA SLOUGH

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

BERENDA SLOUGH



Downstream from the Berenda Slough bifurcation structure



Upstream from Santa Fe Drive

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

BERENDA SLOUGH



Downstream from Avenue 26



Upstream from Road 19

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

BERENDA SLOUGH



Upstream of Avenue 22 ½ low water crossing



Upstream from Road 16

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

BERENDA SLOUGH



Upstream from Avenue 20



Downstream of Avenue 18 ½

2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

CHOWCHILLA RIVER **(Maintained by the Madera County Flood Control and Water Conservation Agency)**

On July 20, 2005 an inspection was made of the Chowchilla River channel. The project channel begins at Buchanan Dam and extends downstream for 28.5 miles to Schultz Road. Only 23.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. The channel east of Highway 99 is through pastureland with trees immediately upstream of Road 19 posing the only constriction. Downstream & Upstream of Road 13 bridge heavy brush and tree growth that should be cleared. The wild growth should be cleared to allow proper design flow.

SAN JOAQUIN RIVER AND TRIBUTARIES

November 2005

Date of Inspection:
07/20/05

Channel/Waterway:
CHOWCHILLA RIVER

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
	X			M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
	X			M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

CHOWCHILLA RIVER

Corrupted disk no picture

Upstream of bridge downstream of Buchanan Dam

Corrupted disk no picture

Downstream of bridge downstream of Buchanan Dam

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

CHOWCHILLA RIVER



Downstream from Road 13 / Vista Avenue



Downstream of Road 11 low water crossing

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

CHOWCHILLA RIVER



Downstream from Road 9 & Bliss Road (Trees should be removed 100 feet for bridge).



Upstream from Avenue 25 & Washington Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

CHOWCHILLA RIVER



Downstream from Santa Fe Drive



Upstream of White Rock Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

CHOWCHILLA RIVER



Downstream from Road 15 (Minturn Road)



Upstream of low water crossing Road 27

**SAN JOAQUIN RIVER AND TRIBUTARIES
November 2005**

CHOWCHILLA RIVER



Downstream from Avenue 25 crossing



Upstream from Shulte Road & Road 5 ½

2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

FRESNO RIVER

(Maintained by the Madera County Flood Control and Water Conservation Agency)

On July 21, 2005 an inspection was made of the Fresno River channel. The project channel begins at Hidden Dam and extends downstream for 13.0 miles to Road 18 ½. Only 9.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. There is some small willow growth in the channel but the maintaining agency does a good job of discing it annually so that the growth is kept under control. The District has an excellent maintenance program.

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

Date of Inspection:
07/21/05

Channel/Waterway:
FRESNO RIVER

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling		X		S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency.
U-Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

FRESNO RIVER



Downstream from Road 603 below hidden dam



Downstream from Cleveland Avenue (Corrupted Disk no new picture)

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

FRESNO RIVER



Downstream from Gateway Drive (Corrupted Disk no new picture)



Downstream Granada Avenue (Corrupted Disk no new picture)

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

FRESNO RIVER



Downstream from Road 20 (Corrupted Disk no new picture)



Upstream from the downstream boundary (Corrupted Disk no new picture)

2005 CHANNEL REPORT

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2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2003

NORTH LITTLEJOHN CREEK

(Maintained by the San Joaquin County Flood Control District)

On September 9, 2005 an inspection was made of the North Littlejohn Creek channel. The project channel begins at its bifurcation with South Littlejohn Creek and extends downstream for 18.0 miles to North Littlejohn Creek's confluence with French Camp Slough. Only about 16.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. There are areas, especially at the upper end, that have moderate tree growth in and around the channel. Wild growth in channel should be cleared.

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

Date of Inspection:
09/09/05

Channel/Waterway:
NORTH LITTLEJOHN CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	X			S No erosion or horizontal deviation observed.
		X		M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

NORTH LITTLEJOHN CREEK



Upstream at the bifurcation of North Littlejohn Creek



Structure at Hewit Lane

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

NORTH LITTLEJOHN CREEK



Upstream from Mariposa Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

**DUCK CREEK DIVERSION CHANNEL
(Maintained by the San Joaquin County Flood Control District)**

On September 9, 2005 an inspection was made of the Duck Creek Diversion channel. The project channel begins at the Duck Creek Diversion Weir and Control Structure and extends downstream for 5,000 feet to its confluence with South Littlejohn Creek. All 5,000 feet were inspected. The views of the channel are primarily at road crossings. The channel is clear of any growth. The District has a good maintenance program.

2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

Date of Inspection:
09/09/05

Channel/Waterway:
DUCK CREEK DIVERSION CHANNEL

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions	X			S There are minimal obstructions or vegetation blocking the channel
				M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks	X			S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
				M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling	X			S No shoaling present.
				M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	X			S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep. Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event. **M-Minimally Satisfactory:** This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U- Unsatisfactory:** The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

S

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

DUCK CREEK DIVERSION CHANNEL



Downstream from the diversion structure



**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

DUCK CREEK DIVERSION CHANNEL

Downstream from Highway 4



End of Duck Creek at confluence with South Littlejohn

SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005

DUCK CREEK DIVERSION CHANNEL

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

**SOUTH LITTLEJOHN CREEK
(Maintained by the San Joaquin County Flood Control District)**

On September 9, 2005 an inspection was made of the South Littlejohn Creek channel. The project channel begins at Farmington Dam and extends downstream for 21.7 miles to South Littlejohn Creek's confluence with Lone Tree Creek. Only about 17.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. The channel is clear, but from Jack Tone Rd. to Hwy. 99 there are large amounts of water grass in certain areas. Water grass should be sprayed.

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

Date of Inspection:
09/09/05

Channel/Waterway:
SOUTH LITTLEJOHN CREEK

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
		X		M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
		X		M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
		X		M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion	X			S No erosion or horizontal deviation observed.
				M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.

M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency. **U-**

Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

SOUTH LITTLEJOHN CREEK



Downstream from the confluence with Duck Creek



Downstream from Stanley Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

SOUTH LITTLEJOHN CREEK



Downstream from Van Allen Road



Down stream from Mariposa Road

2005 CHANNEL REPORT

SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005

SOUTH LITTLEJOHN CREEK



Upstream from Jack Tone Road



Upstream from Austin Road

2005 CHANNEL REPORT

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2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2003**

**SOUTH LITTLEJOHN CREEK, NORTH BRANCH
(Maintained by the San Joaquin County Flood Control District)**

On September 9, 2005 an inspection was made of the South Littlejohn Creek, North Branch channel. The project channel begins at bifurcation with South Littlejohn Creek and extends downstream for 6.1 miles to Highway 99. Only about 5.0 miles could be inspected due to limited access. The views of the channel are primarily at road crossings. The photos on the following pages are typical of, but do not show all the growth in the channel. The sections of growth need to be removed in the areas that are dense and restrict flows.

SAN JOAQUIN RIVER AND TRIBUTARIES

September 2005

Date of Inspection:
09/09/05

Channel/Waterway:
SOUTH LITTLEJOHN CREEK NORTH BRANCH

RATED ITEM(S)	RATING			EVALUATION
	S	M	U	
1. Vegetation and Obstructions				S There are minimal obstructions or vegetation blocking the channel
		X		M The channel is obstructed by minor log jams, snags or vegetation.
				U Obstructions or vegetation growth has obstructed over 20% of the channel.
2. Encroachments				S No trash, debris, excavations, structures, or other obstructions present within the project easement area. Encroachments which do not diminish proper functioning of the project have been previously approved by the Corps & Reclamation Board.
	X			M Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will not inhibit project operations and maintenance or emergency operations.
				U Trash, debris, excavation, structures, or other obstructions present, or inappropriate activities that will inhibit project operations and maintenance or emergency operations.
3. Riprap Revetments and Banks				S Existing riprap protection is properly maintained and is undamaged. Riprap clearly visible
	X			M No riprap displacement or scouring activity that could undercut banks, erode embankments, or restrict desired flow. Unwanted vegetation must be cleared and sprayed with an appropriate herbicide.
				U Dense brush, trees or grasses hide the rock protection, or meandering and/or scour activity is undercutting banks, eroding embankments, or impairing channel flows by causing turbulence or shoaling. Channel flow is impeded.
4. Shoaling				S No shoaling present.
	X			M Non-aquatic grasses present on shoal. No trees or brush is present on shoal, and channel flow is not impeded.
				U Shoaling is well established, stabilized by trees, brush, or other vegetation. Shoals are diverting flow to channel bank causing bank erosion and undercutting.
5. Erosion				S No erosion or horizontal deviation observed.
	X			M Erosion gullies greater than 15 cm (6 inches deep). Horizontal deviation not more than 1 foot from the designed grade or cross section.
				U Erosion gullies greater than 15 cm deep. Horizontal deviation of more than 30 cm (1 foot) from the designed grade or cross section. Corrective actions required to stop or slow erosion.

S-Satisfactory: The rated item is in satisfactory condition, with no deficiencies, and will function as designed and intended during the next flood event.
M-Minimally Satisfactory: This rated item has minor deficiencies that need to be corrected. The minor deficiencies will not seriously impair the functioning of the item during the next flood event. The overall reliability of the project will be lowered because of the minor deficiency.
U-Unsatisfactory: The deficiencies are serious enough that the rated item will not adequately function during the next flood event, compromising the project's ability to provide reliable flood protection.

Overall Rating

M

2005 CHANNEL REPORT

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

SOUTH LITTLEJOHN CREEK NORTH BRANCH



Upstream confluence of South Little John North Branch



Upstream from Jack Tone Road

**SAN JOAQUIN RIVER AND TRIBUTARIES
September 2005**

**SOUTH LITTLEJOHN CREEK
NORTH BRANCH**



Upstream Austin Road

CHANNEL INDEX

Inspection Date	Maintaining Agency	Channel & Flow Capacity	Remarks	Action	Page
7/11/05	Adin Community Service District	Ash Creek	Excellent Maintenance Program	No action needed at this time.	3
7/11/05	Adin Community Service District	Dry Creek	Light to moderate willow growth in channel	Remove or spray willow	9
7/11/05	Tehama County	McClure Creek	Satisfactory Maintenance Program	No action needed at this time.	13
7/11/05	Tehama County	Salt Creek	Poor Maintenance (Dense Veg.)	Develop a Maint. Program	17
7/05/05	City of Chico	Big Chico Creek (17,500 cfs)	Dense Vegetation along banks	Control wild growth	25
7/05/05	DWR	Lindo Channel (14,500 cfs)	Small wild growth in channel	Control wild growth	31
7/06/05	DWR	Sandy Gulch (6,000 cfs)	Dense wild growth along banks	Control wild growth	31
7/06/05	City of Chico	Little Chico Creek (13,000 cfs)	Dense to moderate wild growth	Selective thinning and fallen trees removed	37
7/06/05	Placer County	Truckee River (6,000 cfs)	Clear Channel	No action needed at this time	45
8/19/03	Fairfield Sewer District	McCoy Creek (2,000 cfs)	Clear Channel	Excellent Maintenance Program	51
8/19/03	Fairfield Sewer District	Laurel Cree (3,700 cfs)	Minimal vegetation	Remove small growth	55
8/19/03	Fairfield Sewer District	Union Ave. Diversion (2,600 cfs)	Minimal vegetation	Remove small growth	61
7/18/05	Merced I. D.	Bear Creek (2,000 cfs)	Moderate to heavy wild growth	A clearing program should be implemented	67
7/18/05	Merced I. D.	Black Rascal Creek (3,900 cfs)	Moderate wild growth	Control wild growth	75
7/19/05	Merced I. D.	Burns Creek (2,000 cfs)	Little maintenance performed	District should clear & maintenance spray channel	81
7/19/05	Merced I. D.	Mariposa Creek (2,250 cfs)	Moderate wild growth in channel	Clear to allow proper design flow	85
7/19/05	Merced I. D.	Miles Creek (1,000 cfs)	Intermittent dense brush growth throughout the system	District should clear & maintenance spray channel	91
7/20/05	Merced I. D.	Owens Creek (400 cfs)	Minor tule growth	Tule should be sprayed	97
7/20/05	Madera County	Ash Slough (31,000 cfs)	Minor willow & bamboo in channel	Remove new growth	101
7/20/05	Madera County	Berenda Slough (6,000 cfs)	Dense wild growth in channel	Remove wild growth	107
7/21/05	Madera County	Chowchilla River(21575 cfs)	Dense brush downstream of Hwy 99	Clear brush	113
7/21/05	Madera County	Fresno River (23,000 cfs)	Small willow new growth	Control new growth	121
9/09/05	San Joaquin Flood Control District	N. Littlejohn Creek (8,000 cfs)	Moderate tree growth	Control growth	127
9/09/05	San Joaquin Flood Control District	Duck Creek Diversion Ch (250 cfs)	Clear Channel	Good Maintenance Program	131
9/09/05	San Joaquin Flood Control District	S. Littlejohn Creek (8,000 cfs)	Water grass downstream of Hwy. 99	Spray water grass	135
9/09/05	San Joaquin Flood Control District	S. Littlejohn Creek North (16,000 cfs)	The channel is overall clear	No action needed at this time	141