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SUPPLEMENT TO STANDARD  
OPERATION AND MAINTENANCE  
MANUAL

LOWER SAN JOAQUIN RIVER AND  
TRIBUTARIES PROJECT, CALIFORNIA

UNIT NO. 12

WEST LEVEE OF SAN JOAQUIN RIVER  
FROM OPPOSITE MOUTH OF TUOLUMNE RIVER  
DOWNSTREAM TO STANISLAUS COUNTY LINE  
WITHIN R. D. NOS. 2099, 2100, 2101 AND 2102



U. S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
SACRAMENTO, CALIFORNIA

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CORPS OF ENGINEERS  
US ARMY

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SUPPLEMENT TO STANDARD  
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SAN JOAQUIN RIVER AND TRIBUTARIES PROJECT

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Sacramento District  
Corps of Engineers  
US Army  
December 1968

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<u>Exhibit</u>	<u>Description</u>	
A	Flood Control Regulations - - - - -	Unattached
A-1	Location Map - - - - -	1 Sheet
B	"As Constructed" Drawings - - - - -	Unattached
C	Plates of Suggested Flood Fighting Methods - - - - -	Unattached
D	Suggested Check List No. 1 - Levee Inspection Report - - - - - (Contained in Standard Manual)	Unattached
E	Suggested Check List - Levee, Channels and Structures - - - - -	Sheets 1 thru 7
F	Letters of Transfer to Local Interests - - - - -	1 Sheet
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**SUPPLEMENT TO STANDARD  
OPERATION AND MAINTENANCE MANUAL  
SAN JOAQUIN RIVER FLOOD CONTROL PROJECT**

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WEST LEVEE OF SAN JOAQUIN RIVER  
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<b>LOCATION</b>	<b>ADDITION OR REVISION</b>	<b>DATE</b>
Exhibit F	Add copy of letter of acceptance dated 20 Jan 1970	Jan 1970
1-04	Add subparagraph d	Mar 1984
Exhibit B	Add drawing no. 7-4-1845	Mar 1984
Exhibit F	Add copy of letter of transfer dated 16 Nov 1983	Mar 1984
Exhibit F	Add copy of letter of transfer dated 30 Nov 1966	25 May 2011
1-04	Add subparagraph e	25 May 2011
Exhibit F	Add copy of letter of transfer dated 10 Oct 1969	25 May 2011
1-04	Add subparagraph f	25 May 2011
1-04	Add subparagraph g	25 May 2011
Exhibit B	Add plan sheet C-1	25 May 2011
Exhibit F	Add copy of letter of transfer dated 9 Nov 2000	25 May 2011

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SECTION I  
INTRODUCTION

1-01. Location. The improvement covered by this manual is that part of the San Joaquin River and Tributaries Project levee and channel that is located along the left bank of the San Joaquin River between the mouth of the Tuolumne River downstream to the north boundary line of Stanislaus County. The area lies about 14 miles southeast of the town of Tracy, California. Location by levee mileage along the left bank of the San Joaquin River is from mile 0.00 at the end of Stanislaus Road to mile 1.84 at the south end of R.D. No. 2102; mile 0.00 at Hospital Creek to mile 2.69 at the end of Stanislaus Road within R.D. No. 2100, mile 0.00 at the end of Center Road to mile 2.44 at Hospital Creek within R.D. No. 2099; and mile 0.00 near the Stanislaus County line to mile 3.20 at the southerly end of the levee within R.D. No. 2101. The area lies within the above-mentioned Reclamation Districts in Stanislaus County, California, and in the general vicinity as shown on the Location Map, EXHIBIT A-1.

1-02. Project Works. The project works covered by this manual is a part of the Lower San Joaquin River and Tributaries Project as authorized by the Flood Control Act of 22 December 1944, Public Law 534, Seventy-eighth Congress, Second Session, Section 10, and consists of the left bank levee and adjacent channel of the San Joaquin River from the vicinity of the mouth of the Tuolumne River to the north line of Stanislaus River, a total levee distance of about 10.17 miles.

1-03. Protection Provided. Levees along the left bank of the San Joaquin River, as described in this unit, provide direct protection to adjacent agricultural lands within Reclamation Districts No. 2102, 2100, 2099 and 2101. Along the San Joaquin River left bank levee, the grade of the adopted flood plane varies from elevation 42.7 at the upper end of R. D. No. 2102 to elevation 36.2 at the lower end of R.D. No. 2101. All elevations are referred to mean sea level datum (1929 adjustment). Levee grade within this unit provide for a freeboard of at least 3 feet above the adopted flood plane profile. Within this unit the project design flood for the San Joaquin River is 46,000 cubic feet per second.

1-04. Construction Data and Contractor. Work required by the Corps of Engineers to bring levees of this unit to project standards was accomplished under the following contracts:

a. Emergency levee repairs in Stanislaus County was accomplished under Contract No. DA-04-167-CIVENG-59-44 by Lee Stephens, contractor, during the period from 13 October 1958 to 9 November 1958. Specification No. 2488, Drawing No. 7-4-1568.

b. Levee construction on the right and left banks of the San Joaquin River between the Tuolumne River and Stanislaus River was constructed under Contract No. DA-04-167-CIVENG-65-21 by M. Malfitano & Son during the period from 28 August 1964 to 20 January 1967. Specification No. 2894, Drawing No. 7-4-1666.

c. Completion phase, right and left banks San Joaquin River and Stanislaus River was accomplished under Contract No. DACW05-68-C-0086 by Elmer G. Wendt, Inc. and completed on 14 November 1968. Specification No. 3455, Drawing No. 7-4-1710.

d. Emergency repairs to project levees on the San Joaquin River left bank levee, Reclamation District 2100, was accomplished under Contract No. DACW05-84-C-0038 by World Enterprises, Inc. Specification No. 6898 Drawing No. 7-4-1845.

e. Repaired spur levee and project levee under PL 84-99 at Mile 76.4 left bank San Joaquin River and transferred to Reclamation Board. Drawing No. 7-4-1749, Contract No. DACW05-70-C-0018, Specification No. 3666 Letter 10 October 1969 to the State.

f. Repairs, in Reclamation District 2101, to scour hole and 300 foot long levee breach at Levee Mile 0.63, and wavewash repair between Levee Miles 0.20 – 0.60 and 0.63 – 2.7, both on the left levee of the San Joaquin River were completed on 24 September 1997 by Cal Inc., contractor, under Contract No. DACW05-97-C-0086. Specification No. 9873E, Drawing No. 7-4-1853.

g. Repairs, in Reclamation District 2101, consisting of a 450 foot impervious stability berm on the left bank of the San Joaquin River, between Levee Miles 0.60 – 0.65, and repair to previous wavewash damage along the left bank between Levee Miles 0.20 – 0.60 was completed in May 1999 by Cal Inc., contractor, under Contract No. DACW05-99-D-0001. Specification No. 9997E, Drawing No. RD2101EX.DWG.

1-05. Flood Flows. For purposes of this manual, the term “high water period” shall refer to periods when the water surface in the San Joaquin River reaches or exceeds the reading of 30.5 on the Vernalis gage. Gage is set with zero at mean sea level datum.

1-06. Assurances Provided by Local Interest. Assurance of cooperation by local interests is provided by State Legislation as contained in Chapters 1 & 2, Part 4, Division 5 of the State Water Code (see paragraph 2-02a of the Standard Manual).

1-07. Transfer to Local Interests. Responsibility for operating and maintaining this unit was officially accepted by the State Reclamation Board by letter dated 28 December 1966, see Exhibit F.

1-08. Inspection Procedure. Since the enactment by State Legislation of Chapter 1528, Statutes of 1947, the Department of Water Resources, State of California, has made semi-annual inspections of all levees of authorized flood control projects in the Sacramento-San Joaquin Drainage basin pursuant to the Federal Regulations of 16 August 1944 (Title 33), and reports its findings to the local agency, the State Reclamation Board and the Sacramento District, Corps of Engineers, US Army. This activity, initiated pursuant to section 208.10(a) of the Federal Regulations, has in effect provided for transfer from the local agencies to the Department of Water Resources, the obligation of compliance with Section 8371, 8372 and 8373 of the Water Code of the State of California. These sections of the Code require the local responsible agencies to submit a report to the State Department of Water Resources on or before 1 June of each year on the condition of the levees within their jurisdiction. Supervisory powers and duties of the Department are applicable to all works of the Lower San Joaquin River and Tributaries Flood Control Project maintained and operated by the local agencies without regard to status of completion, or expenditure of Federal funds on the construction of such works.

The following procedure is used in inspecting the levees of the responsible maintaining agency:

The personnel of the State Department of Water Resources make a detailed inspection in the spring and fall of each year and make a report on any required maintenance. The inspection objectives are to determine if the following items, which are a condensation of Federal Regulations, are being adhered to:

- a. That all brush, trees and wild growth other than sod are removed from the levee crown and slopes.
- b. That all weeds, grass and debris on the levee has been burned during the appropriate season, where not dangerous or impractical.
- c. That all grass and weeds on the levee have been mowed where removal by burning is dangerous or impracticable. This applies only on peat levees or where burning would constitute a hazard to improvements.
- d. That all burrowing animals have been exterminated.
- e. That all caves, sloughs, burrows, holes, slips or other damaged portions of the levee have been repaired.

f. That all irrigation and drainage structures through the levee are in good working condition.

g. That no revetment work or riprap have been displaced, washed out or removed.

h. That the crown of the levee is well shaped and maintained and that unauthorized vehicular travel is restricted.

i. That stock grazing on the levee is restricted to conditions and seasons when the levee would not be seriously scarred or otherwise damaged thereby.

j. The encroachments are not being erected on the levee which would hinder travel authorized patrol vehicles.

k. Prevent the erection of structures on, additions to, or alterations of, the levee unless authorized by permit from the State Reclamation Board.

Following this detailed inspection a joint field inspection is made with representatives of the responsible maintaining agency and the State Department of Water Resources to review and discuss the inspection report.

Upon completion of the fall inspection, the State Department of Water Resources publishes an annual report entitled, "Status of Project Levee Maintenance" which indicates the degree of proficiency attained by each obligated local agency in providing required maintenance.

SECTION II  
FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

2-01. Levees.

a. The levees described in this manual lie along the left bank of the San Joaquin River from the mouth of the Tuolumne River to the mouth of the Stanislaus River, a total distance of about 10.17 miles. The levee has been reconstructed to project standards with a minimum crown width of 12 feet. The necessary drainage structures, road approaches, bank protection, and appurtenances were also included in the work. For more complete detail in construction of the above-mentioned levees, refer to the "As Constructed" drawings of EXHIBIT B.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

- (1) Maintenance - paragraph 4-02 of the Standard Manual.
- (2) Suggested Check Lists - EXHIBIT E of this Supplement Manual.
- (3) Operation - paragraph 4-04 of the Standard Manual.
- (4) Special Instructions - paragraph 4-05 of the Standard Manual.

2-02. Drainage and Irrigation Structures. Drainage and irrigation structures which extend through the levees are listed as follows:

Drainage and Irrigation Structures, Cont'd.

Levee Mile	Size of Pipe	Other Description	Feet Below Crown
<u>R.D. No. 2102</u>			
0.00	60"	Concrete pipe, slide gate W.S.	29.0
0.00	7' x 7'	Concrete culvert, 2 slide gates W.S.	30.0
1.73	24"	Flapgate W.S.	9.0
<u>R.D. No. 2100</u>			
0.15	24"	Flapgate W.S.	9.0
0.16	24"	Flapgate W.S.	11.0
1.04	2-24"	Flapgates W.S., risers L.S.	14.0
1.04	30"	Flapgate W.S., riser L.S.	20.0
2.42	30"	Connects to underground system	12.5
2.61	8"	Pump in riser L.S.	3.0

Drainage and Irrigation Structures, Cont'd

Levee Mile	Size of Pipe	Other Description	Feet Below Crown
<u>R.D. 2099</u>			
0.25	12"	Riser unit W.S.	10.5
0.26	24"	Flapgate W.S.	9.0
0.32	18"	Riser unit W.S.	3.5
0.32	24"	Pump L.S.	24.0
0.77	12"	Riser unit W.S.	19.0
0.96	24"	Riser unit W.S. Pump W.S.	7.0
0.18	24"	Riser unit W.S.	16.0
2.17	2-24"	Flapgates W.S.	17.0
<u>R.D. 2101, Unit No. 1</u>			
0.05	18"	Slidegate, W.S.	5.3
0.20	18"	Pump L.S.	4.0
0.31	24"	Flapgate W.S.	21.0
1.61	24"	Pump and Riser Unit W.S.	14.0
2.73	2-16"	Pump W.S.	10.0
2.73	20"	Pump W.S.	10.0
2.81	24"	Flapgate W.S.	11.5
2.85	24"	Flapgate W.S.	11.0
2.87	24"	Pump W.S.	11.0
2.87	30"	Pump W.S.	11.0
2.89	24"	Flapgate W.S.	12.5

Note on abbreviations:

L.S. = Landside  
W.S. = Waterside

b. For pertinent Requirements of the Code of Federal Regulations and other requirements see the following:

- (1) Maintenance - paragraph 5-02 of the Standard Manual.
- (2) Suggested Check Lists - EXHIBIT E of this Supplement Manual.
- (3) Operation - paragraph 5-04 of the Standard Manual.
- (4) Additional Requirements - paragraph 5-05 of the Standard Manual.
- (5) Safety Requirements - paragraph 5-06 of the Standard Manual.

## 2-03. Channels.

a. Description. The main channels and floodways of the San Joaquin and Stanislaus Rivers for this unit lie adjacent to the levees as described in paragraph 1-02. The project design capacities of said channels are listed in paragraph 1-03 of this manual.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

- (1) Maintenance - paragraph 6-02 of the Standard Manual.
- (2) Suggested Check Lists - EXHIBIT E of this Supplement Manual.
- (3) Operation - paragraph 6-04 of the Standard Manual.
- (4) Safety Requirements - paragraph 6-05 of the Standard Manual.

It shall be the duty of the local agency responsible for maintenance to keep in contact with the State Department of Water Resources' Flood Operation Center during all periods of flood danger, and maintain a patrol of the project works in their area during periods of flood in excess of a reading of 30.5 on the Vernalis gage.

The Flood Operation Center is responsible for Data Collection and issuance of a joint river forecast with the US Weather Bureau and coordinates with the Sacramento District Engineer and other agencies to keep apprised of the current situation in accordance with terms of the Memorandum of Understanding dated 1 November 1965, between the Division Engineer, US Army Engineer Division, South Pacific and the Director, Department of Water Resources, State of California, for cooperative action during flood emergencies.

## 2-04. Miscellaneous Facilities.

a. Description. Miscellaneous structures or facilities which were constructed as a part of, or in conjunction with, the protective works, and which might affect their functioning, include the following:

- (1) Utility Relocation. Because of the nature of the construction of structures by local interests, records of utility relocations are not available.
- (2) Hydrologic Facilities. Hydrologic facilities for this unit consists of the existing San Joaquin River Stream Gaging Station near Vernalis located on the left bank of the river 80 feet upstream from the Durham Ferry road bridge. This station is equipped with a staff gage and a continuous water stage recorder with an on-call type radio system for reporting stages to the Federal-State Flood Control Center in Sacramento.

b. For pertinent Requirements of the Code of Federal Regulations and other requirements, see the following:

- (1) Maintenance - paragraph 7-02 of the Standard Manual.
- (2) Suggested Check Lists - paragraph 7-03 of the Standard Manual.
- (3) Operation - paragraph 7-04 of the Standard Manual.

## SECTION III

### REPAIR OF DAMAGE TO PROJECT WORKS AND METHODS OF COMBATING FLOOD CONDITIONS

3-01. Repair of Damage. In the event of serious damage to the project works, whether due to flood conditions or other causes, and which may be beyond the capability of local interests to repair, the local agency responsible for maintenance will contact a representative of the Department of Water Resources, State of California, who coordinates maintenance of project works of the Lower San Joaquin River and Tributaries Flood Control Project. The State representative will give assistance or advise, or will determine appropriate action to be taken.

3-02. Applicable methods of combating floods. For applicable methods of combating flood conditions, reference is made to Section VIII of the Standard Operation and Maintenance Manual where the subject is fully covered.

EXHIBIT A

FEDERAL FLOOD CONTROL REGULATIONS

(SEE STANDARD MANUAL)

EXHIBIT A

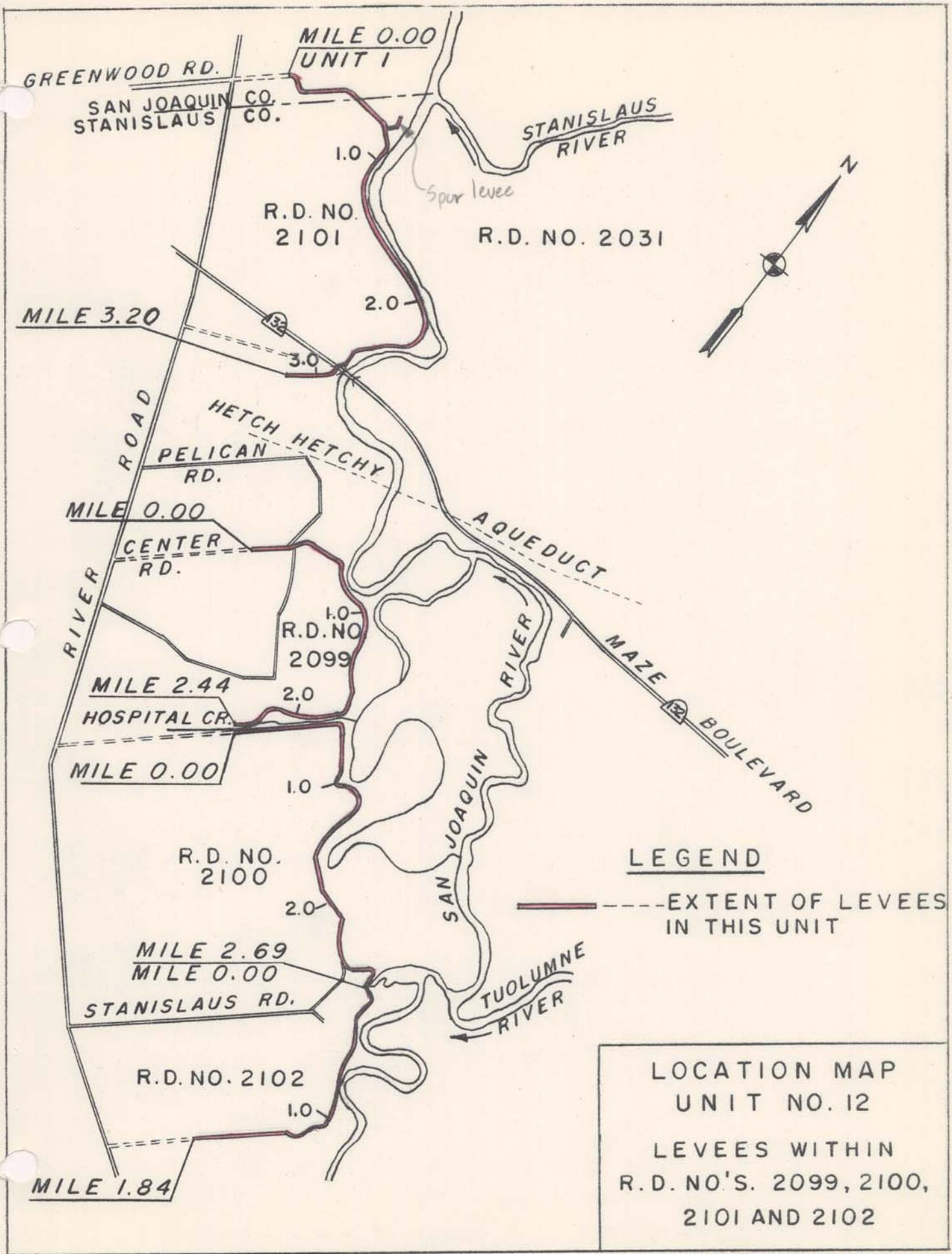


EXHIBIT A-1

**EXHIBIT B**  
**“AS CONSTRUCTED”**  
**DRAWINGS**

<u>File No.</u>	<u>Title</u>
7-4-1568	Emergency Levee Repairs, Right and Left Banks San Joaquin River, in 1 sheet.
7-4-1666	Levee Construction Right and Left Banks San Joaquin River between Tuolumne River and Stanislaus River, in 66 sheets.
7-4-1710	Completion Phase, Right and Left Banks San Joaquin River and Stanislaus River, in 5 sheets.
7-4-1845	Emergency Levee Repairs, Left Bank San Joaquin River R.D. 2100, in 1 sheet.
None	PL84-99 Levee Repair, Reclamation District 2101 San Joaquin River Levee, in 1 sheet.

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS

(SEE STANDARD MANUAL)

EXHIBIT C  
Unattached

EXHIBIT D

SUGGESTED CHECK LIST NO. I

LEVEE INSPECTION REPORT

(SEE STANDARD MANUAL)

EXHIBIT D

EXHIBIT E

SUGGESTED CHECK LISTS OF LEVEES

CHANNEL AND STRUCTURES

For definition of "flood" or "high water period", see paragraph 1-05 this manual.

SUGGESTED CHECK LIST NO. 2  
UNIT NO. 12  
SAN JOAQUIN RIVER

Inspector's Report Sheet No. \_\_\_\_\_ Inspector \_\_\_\_\_

Date \_\_\_\_\_ Superintendent \_\_\_\_\_

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing, or loss of grade	
(c) Erosion of both levee slopes	
(d) Condition of roadways, including ramps	
(e) Evidence of seepage	
(f) Condition of farm gates and fencing	
(g) Maintenance measures taken since last inspection	
(h) Comments	

Instruction for Completing Sheet 2, Exhibit E  
(To be printed on back of Sheet 2)

- Item (a) Indicate levee station of observation, obtained by pacing from nearest reference point; indicate right or left bank.
- Item (b) If sufficient settlement of earthwork has taken place to be noticeable by visual observation, indicate amount of settlement in tenths of a foot. If sloughing has caused a change in slope of the embankment sections, determine the new slope. Note areas where erosion or gullying of the section has occurred.
- Item (c) If sufficient erosion or gullying of back face of back toe of levee has taken place to be noticeable by visual inspection, indicate area affected and depth.
- Item (d) Note any natural change in any section of roadway or ramps. Indicate any inadequacy in surface drainage system.
- Item (e) Indicate any evidence of seepage through the embankment section.
- Item (f) Indicate the serviceability of all farm gates across the embankments and roadway, and indicate if repainting is required.
- Item (g) Indicate maintenance measures that have been performed since last inspection and their condition at the time of this inspection.
- Item (h) Record opinion, if any, of contributory causes for conditions observed and also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion, and one copy is to be attached to and submitted with the Superintendent's semi-annual report.

SUGGESTED CHECK LIST NO. 3  
 CHANNEL AND RIGHT-OF-WAY  
 UNIT NO. 12  
 SAN JOAQUIN RIVER

Inspector's Report Sheet No. \_\_\_\_\_ Inspector \_\_\_\_\_

Date \_\_\_\_\_ Superintendent \_\_\_\_\_

Item	Remarks
(a) Name of Channel and Location by Stations	
(b) Vegetal growth in channel	
(c) Debris and refuse in channel	
(d) New construction within right-of-way	
(e) Extent of aggradation or degradation	
(f) Condition or riprapped section	
(g) Condition of bridges	
(h) Measures taken since last Inspection	
(i) Comments	

Instructions for Completing Sheet 4, Exhibit E  
(To be printed on back of Sheet 4)

- Item (a) Indicate station of observation obtained by pacing from nearest reference point.
- Item (b) Note nature, extent, and size of vegetal growth within the limits of flood flow channel.
- Item (c) Note nature and extent of debris and refuse that might cause clogging of the conduits of the irrigation intake works, souling of the tainter gates, or the bridges over the channel.
- Item (d) Report any construction along the diversion channel or above the diversion channel or above the diversion works that has come to the attention of the inspector and that might affect the functioning of the project.
- Item (e) Indicate any change in grade or alignment of the channels, either by deposition or sediment or scour, that is noticeable by visual inspection. Estimate amount and extent.
- Item (f) Indicate any change that has taken place in the riprap such as disintegration of the rock, erosion, or movement of the rock. Note the presence of vegetal growth through the riprap.
- Item (g) Note any damage or settlement of the footings of the bridges. Indicate condition of wooden structures and if repainting is required. Indicate condition of bridge approaches, headwalls, and other appurtenances.
- Item (h) Indicate maintenance measures that have been performed since the last inspection and their condition at time of this inspection.
- Item (i) Record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.

NOTE: One copy of the Inspector's Report is to be mailed to the District Engineer immediately on completion and one copy is to be attached to and submitted with the superintendent's semi-annual report.

SUGGESTED CHECK LIST NO. 4  
DRAINAGE AND IRRIGATION STRUCTURES  
UNIT NO. 12  
SAN JOAQUIN RIVER

Inspector's Report Sheet No. \_\_\_\_\_

Inspector \_\_\_\_\_

Date \_\_\_\_\_

Superintendent \_\_\_\_\_

(a)	Location by Levee Mileage						
(b)	Bank						
(c)	Debris or other obstruction to flow						
(d)	Damage or Settlement of Pipe or conduit						
(e)	Condition of concrete head- wall or invert paving						
(f)	Condition of right-of-way adjacent to structure						
(g)	Repair Measures taken since last inspection						
(h)	Comments						

San Joaquin River - Left Bank  
(As listed in Paragraph 2-02)

Instruction for Completing Sheet 6, Exhibit E  
(To be printed on back of Sheet 6)

- (1) Enter station of all structures under Column (a) for check list.
- (2) Inspect inlet, barrel, and outlet for accumulation of sediment, rubbish, and vegetal matter. Note condition under Column (c).
- (3) If any settlement or damage to the pipe, barrel, or invert of the drain has occurred, estimate the location and amount. Note particularly if any backfill has come into the pipe or been disturbed. Record observations under Column (d).
- (4) Inspect the concrete portions of the structures for evidence of settlement, cracks, "pop-outs", spaces, abrasive wear, or other deterioration. Record conditions under Column (e).
- (5) Inspect backfill area adjacent to structure for evidence of erosion caused by overflow of the drainage structure and note conditions in Column (f).
- (6) Under Column (g) indicate physical measures that have been taken to correct conditions reported in last inspection, and their condition at time of this inspection.
- (7) Under Column (h) record opinion, if any, of contributory causes for conditions observed, also any observations not covered under other columns.
- (8) A copy of the inspector's report is to be mailed to the District Engineer immediately on completion, and a record copy shall be attached to the Superintendent's semi-annual report.

EXHIBIT F

LETTERS OF ACCEPTANCE BY  
THE STATE RECLAMATION BOARD

EXHIBIT F



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
1325 J STREET  
SACRAMENTO, CALIFORNIA 95814-2922

transfer file -  
Lower San Joaquin

Civil Design Section B

Mr. Peter D. Rabbon  
General Manager  
The Reclamation Board  
State of California  
1416 9th Street, Room 1601  
Sacramento, California 95814

9 NOV 00

9 NOV 00

Dear Mr. Rabbon:

This is in regard to the joint inspection, made for the purpose of transferring a portion of the left levee of the San Joaquin River, from L.M. 0.20 - 2.7 in RD 2101, Basin No. SJ 11, to the State of California for operation and maintenance.

The work consisted of repairing the left levee of the San Joaquin River damaged by levee breach and scour hole at L.M. 0.63, and wavewash from the January 1997 Flood, in SJ 11. The 300 ft long levee breach was repaired with compacted fill and dredged material. The entire scour hole was filled to one ft above the water surface with dredged fill material. The wavewash between L.M. 0.20 - 0.60, and L.M. 0.63 - 2.7, was repaired in accordance with information in the IDIQ Specification 02211B. The work as listed in the enclosure was completed on September 24, 1997 in accordance with Specification No. 9873E, Drawing File No. 7-4-1853, Contract No. DACW05-97-C-0086.

The 1998 Flood caused heavy seepage at the repaired levee breach site of the 1997 Flood, and wavewash damage between L.M. 0.20 - 0.60. The repair consisted of an impervious stability berm extending 150 ft from the waterside levee toe for approximately 450 ft between L.M. 0.60 - 0.65. The wavewash repair was done as per information in the IDIQ Specification 02211B, between L.M. 0.20 - 0.60. The work as listed in the enclosure was completed in May 1999, in accordance with Specification No. 9997E, Drawing File No. RD2101EX.DWG, Contract No. DACW05-99-D-0001.

The work was performed under the general authority of 33 U.S.C. 701n (69 Stat. 186) PL 84-99 and now meets the requirements of the San Joaquin River in SJ 11. Therefore, said flood control work, together with the waterway banks contiguous thereto, are transferred as of the date of this letter to the State of California for operation and maintenance.

This portion of the work will be added by amendment to the Operation and Maintenance Manual, San Joaquin River Flood Control Project.

Sincerely,

Michael J. Walsh  
Colonel, Corps of Engineers  
District Engineer

Unit 12

Enclosure



C  
O  
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DEPARTMENT OF THE ARMY  
SACRAMENTO DISTRICT, CORPS OF ENGINEERS  
650 CAPITOL MALL  
SACRAMENTO, CALIFORNIA 95814

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REPLY TO  
ATTENTION OF

November 16, 1983

Navigation and Flood Control Unit

The Reclamation Board  
State of California  
1416 - Ninth Street, Room 455-6  
Sacramento, California 95814

Members of the Board:

You are hereby notified that the Corps of Engineers has completed emergency repairs to project levees under authority of Section 5 of the Flood Control Act of August 18, 1941, as amended (Public Law 99, 84th Congress, 1st Session). The work was completed on November 7, 1983 and consisted of repairing the San Joaquin River left bank levee - Reclamation District 2100 in accordance with Contract No. DACW05-84-C-0038 and Drawing No. 7-4-1845. This work shall be maintained in accordance with the assurances which your Board provided for the Lower San Joaquin River and Tributaries Project. This portion of the work will be added by amendment to the Operation and Maintenance Manual Supplement, Unit No. 12, Lower San Joaquin River and Tributaries Project. Copies will be furnished your office at a later date.

Sincerely,

Arthur E. Williams  
Colonel, Corps of Engineers  
District Engineer

Copy Furnished:  
Commander, South Pacific Division, ATTN: SPDCO-0

EXHIBIT F

THE RECLAMATION BOARD  
STATE OF CALIFORNIA

COPY

20 January 1970

COPY

District Engineer  
Corps of Engineers  
U. S. Army  
650 Capitol Mall  
Sacramento, California 95814

Attention: Construction-Operations Division

Dear Sir:

Reference is made to the San Joaquin River Flood Control Project, and in particular to the Completion Phase, Right and Left Banks, San Joaquin River and Stanislaus River, Specification No. 3455, Contract No. DACW05-68-C-0086.

A review of this work was made in the field on December 27, 1968. The work was found to conform to the contract plans and specifications and the involved reclamation districts have been informed of the completion of project construction in this reach of the San Joaquin and Stanislaus Rivers.

Sincerely yours,

/s/ A. E. McCOLLAM  
A. E. McCOLLAM  
Chief Engineer and  
General Manager

EXHIBIT F

SPKCO-0

10 October 1969

The Reclamation Board  
State of California  
1416 - 9th Street, Room 1335  
Sacramento, California 95814

Gentlemen:

Reference is made to the emergency project levee restoration work in Reclamation District #2101, authorized under Section 5 of the Flood Control Act of 18 August 1941, as amended (Public Law 99, 84th Congress 1st Session).

The authorized emergency work referred to above was completed on 7 October 1969, in accordance with Specification No. 3666, Contract No. DACWO-5-70-C-0018, and Drawing No. 7-4-1749. This work consisted of repairing approximately 400 feet of eroded levee; repair an eroded spur levee; and place 100 feet of rock revetment on the spur levee along the left bank of the San Joaquin River at River Miles 76.2 and 74.9.

The completed flood emergency work, having restored <sup>the</sup> ~~the~~ project levee previously transferred to your Board, shall be maintained and operated by the State of California in accordance with the Supplement to the Standard Operation & Maintenance Manual, Unit No. 12, Lower San Joaquin River and Tributaries Project, California.

Sincerely yours,

GEORGE B. FINK  
Colonel, CE  
District Engineer

*Unit 12*

RE: UNIT 80.

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THE RECLAMATION BOARD  
State of California

DEC 28 1966  
4130.37.401  
Contract No. 65-21

District Engineer  
Corps of Engineers  
US Army  
650 Capitol Mall  
Sacramento, California

Dear Sir:

Reference is made to your letter of November 30, 1966 concerning transfer to the State of California of the Lower San Joaquin River Flood Control Project between Stanislaus and Tuolumne Rivers, in accordance with Specification No. 2894.

The Reclamation Board, at its meeting of December 15, 1966, formally accepted the above referred to work for operation and maintenance subject to certain conditions.

The conditions mentioned above are the provisions of such additional work by the Corps of Engineers as was indicated in our letters to you of November 21 and December 12, 1966.

Sincerely yours,

/s/ A. E. McCOLLAM  
A. E. McCOLLAM  
General Manager

EXHIBIT F  
Sheet 1 of 1

*Transfer file*  
*DJ*

*Co*

30 November 1966

SPKGD-F

The Reclamation Board  
State of California  
1416 - 9th Street, Room 1335  
Sacramento, California 95814

Gentlemen:

Reference is made to the joint inspection of 2 & 7 November 1966, made for the purpose of transferring a completed portion of the flood control work on the Lower San Joaquin River and Tributaries Project to the State of California for operation and maintenance. This portion of work laps the reach of work that was completed on 21 December 1965, and transferred to the State of California on 4 January 1966.

The work consists of levee enlargement, shaping levee crown, levee construction, levee setback, bank sloping and stone protection on right and left banks of San Joaquin River between Tuolumne River and Stanislaus River. The work unit No. 80, as shown on the attached tabulation, was completed on 8 November 1966, in accordance with Specification No. 2894, Contract No. DA-04-167-CIVENG-65-21, and Drawing No. 7-4-1666. The work was performed under the general authority of the Lower San Joaquin River and Tributaries Project, which was authorized by the Flood Control Act of 1944, 78th Congress, 2nd Session.

This completed flood control work now meets the requirements of the Lower San Joaquin River and Tributaries Project. Therefore, said flood control work, together with the waterway banks contiguous thereto, are hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Lower San Joaquin River and Tributaries Project shall be performed in accordance with the inclosed Flood Control Regulations. These regulations have been prescribed by the Secretary of the Army pursuant to Section 3 of the Act of Congress, approved 22 June 1936, as amended and supplemented by a Standard Operation and Maintenance Manual for the Lower San Joaquin River and Tributaries Project. As provided under Paragraph 208.10(10) of these

*Unit 4/12*

*RE LTR TO RB*

**CERTIFIED MAIL**

**RETURN RECEIPT REQUESTED**

*10 OCT 69*

*FOR REPAIR OF*

*LEVEE @ 76.2 LEFT BANK*

SPEKO-7  
The Reclamation Board

30 November 1966

regulations, a supplement to the Standard Operation and Maintenance Manual covering the above work will be furnished to you upon completion.

Sincerely yours,

- 2 Incl  
1. Tabulation  
2. F.C. Regulations

T. S. MEADE  
Lieutenant Colonel, CE  
Acting District Engineer

Copy furnished:  
Dept Water Resources  
O.C.E.  
S.P.D.

cc: Engrg Div-Lev & Chan  
Engrg Div-Prog Dev  
Valley Res Ofc  
F&A (Cordano)

*Alm*  
MORGAN/KO-F/pnp  
*[Signature]*  
COLEMAN/KO-F

*TRB.*  
-HENSON/KO

*[Signature]*  
HART/UC

*[Signature]*  
MEADE/VA *M*

*cn*

*Unit H/12*

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

EXHIBIT G

TO: The District Engineer  
Sacramento District  
Corps of Engineers  
650 Capitol Mall  
Sacramento, California

( May 19\_\_ )  
( Nov 19\_\_ )

Dear Sir:

The semi-annual report for the period (1 May 19\_\_ to 31 October 19\_\_)  
(1 November 19\_\_ to 30 April 19\_\_ ) Unit No. 12 of the Lower San Joaquin  
River and Tributaries Project is as follows:

a. The physical condition of the protective works is indicated  
by the inspector's report, copies of which are inclosed, and may be sum-  
marized as follows:

(Superintendent's summary of conditions)

It is our intention to perform the following maintenance  
work in order to repair or correct the conditions indicated:

(Outline the anticipated maintenance operation for the  
following 6 months.)

b. During this report period, major high water periods (water  
level in excess of 30.5 feet on the gage on the San Joaquin River at  
Vernalis) occurred on the following dates:

<u>Dates</u>	<u>Maximum Elevation</u>
_____	_____
_____	_____
_____	_____