

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE
MANUAL
SACRAMENTO RIVER
FLOOD CONTROL PROJECT

UNIT NO.121
RIGHT LEVEE OF YOLO BYPASS FROM
WILLOW SLOUGH BYPASS TO WOODLAND ROAD
RECLAMATION DISTRICT NO.2035



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

CORPS OF ENGINEERS
U. S. ARMY

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Sacramento District
Corps of Engineers
U. S. Army
May 1959

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UNIT NO. 121

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LOCATION	ADDITION OR REVISION	DATE
1-04	Add subparagraph e	Jul 1984
Exhibit B	Added drawing no. 50-4-5596	Jul 1984
Exhibit F	Added transfer letter dated 13 Feb 1984	Jul 1984
Exhibit F	Add copy of letter of transfer dated 24 Jan 1946	22 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 6 Feb 1946	22 Dec 2010
Exhibit F	Add copy of letter of transfer dated 4 Dec 1951	22 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 18 Dec 1951	22 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 16 Dec 1958	22 Dec 2010
1-04	Add subparagraph f	22 Dec 2010
Exhibit F	Add copy of letter of transfer dated 4 Feb 1987	22 Dec 2010

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EXHIBITS

<u>Exhibits</u>	<u>Description</u>	
A	Flood Control Regulations. (Contained in Standard Manual)	Unattached
A-1	Location Map	1 Sheet
B	"As Constructed" Drawings.	Unattached
C	Plates of Suggested Flood Fighting Methods. (Contained in Standard Manual)	Unattached
D	Check List No. 1 - Levee Inspection Report (Contained in Standard Manual)	Unattached
E	Check Lists - Levees, Channels and Structures	Sheets 1 thru 7
F	Letters of Transfer to the State Reclamation Board.	Sheets 1 thru 4
G	Suggested Semi-Annual Report Form.	Sheets 1 and 2

SUPPLEMENT TO STANDARD
OPERATION AND MAINTENANCE MANUAL
UNIT NO. 121
RIGHT LEVEE OF YOLO BYPASS FROM
WILLOW SLOUGH BYPASS TO WOODLAND ROAD
RECLAMATION DISTRICT NO. 2035

SECTION I
INTRODUCTION

1-01. Location. The improvement covered by this manual is that part of the Sacramento River Flood Control Project which comprises the levee along the west side (right bank) of the Yolo Bypass from the Willow Slough Bypass upstream to the Woodland-Sacramento Road. The area lies about 11 miles northwesterly from the City of Sacramento and 5 miles east of Woodland, California.

1-02. Protection Provided. The levee of this unit is an essential feature of the Sacramento River Flood Control Project. It provides direct protection to agricultural land within Reclamation District No. 2035 that lies west of the Yolo Bypass. The grade of the adopted flood plane profile along Yolo Bypass varies from elevation 34.3 at the Woodland Road to elevation 28.8 at the Willow Slough Bypass. Elevations are referred to U. S. Corps of Engineers datum. The reach of the Yolo Bypass within this unit has a project design capacity of 377,000 cubic feet per second from Woodland Road to a point opposite the mouth of the Sacramento Bypass and 480,000 cubic feet per second to the new Willow Slough Bypass Outlet. The levee provides for a freeboard of at least 6 feet above the grade of the adopted flood plane within this unit.

1-03. Project Works. The flood control improvement covered by this manual is a part of the Sacramento River Flood Control Project authorized by the Flood Control Act of 1917, as modified by the Acts of 1928, 1937, and 1941, and consists of the westerly levee and channel of the Yolo Bypass extending for a distance of about 7.57 miles from the Woodland Road to the Willow Slough Bypass Levee. The above-described levee has been originally constructed by local interests and enlarged, shaped and raised by the Corps of Engineers to project standards.

1-04. Construction Data and Contractor. Construction required by the Corps of Engineers to bring the levee of this unit to project standards and to perform repair work to the locally-built levee was accomplished under the following contracts or job order:

a. Repair of levee breaks on the west levee of Yolo Bypass approximately 5 miles south of the Sacramento Northern Railroad, Woodland Branch was accomplished by hired labor under Job Order No. 614 and completed in July 1940.

b. Enlargement of the west levee of the Yolo Bypass from the Sacramento Northern Railroad south 1.6 miles and from Old Willow Slough southerly 2.0 miles was accomplished under Contract No. W-04-167-eng-602 by H. Earl Parker, Contractor, and completed on 13 December 1945.

c. Enlargement of the west levee of the Yolo Bypass was accomplished under Contract No. W-04-167-eng-1309 by Peter L. and John M. Ferry, Contractor, during the period from 7 July 1947 to 31 August 1948.

d. Levee construction on the right bank of the Yolo Bypass in the vicinity of Old Willow Slough was accomplished under Contract No. DA-04-167-CIVENG-59-4 by James H. Clack, Contractor, during the period from 3 October 1958 to 14 November 1958.

e. Emergency repairs to project levees on the Yolo Bypass right bank levee in Reclamation District 2035 was accomplished under Contract No. DACW05-83-C-0148 by Holman Pettibone. Specification No. 6890, Drawing No. 50-4-5596.

f. Emergency repairs to project levees along the right bank of the Yolo Bypass and portions of the left bank of Willow Slough in Reclamation District 2035 was completed on 21 November 1985 under Contract No. DACW05-87-C-0020, Drawing No. 50-4-5767.

1-05. Flood Flows. For purposes of this manual, the term “flood” or “high water period” shall refer to flows when the water surface reaches or exceeds a reading of 35.0 on the State Department of Water Resources, U.S. Geological Survey and U.S. Corps of Engineers jointly operated continuous water stage recorder and staff gage located on the west levee of the Sacramento River about 500 feet upstream from the west end of Fremont Weir. The gage is set on U.S. Corps of Engineers datum. The State Department of Water Resources maintain an automatic short wave radio stage broadcaster at this station.

1-06. Assurances Provided by Local Interests. Assurance of cooperation by local interests is provided by State Legislation as contained in Chapter 3, Part 2, Division 5 of the State Water Code (see paragraph 2-02a of the Standard Manual).

1-07. Transfer to the State Reclamation Board. The levee together with the waterway bank contiguous thereto, was transferred to the State Reclamation Board for maintenance and operation by letters dated 8 December 1951 and 28 November 1958.

1-08. Superintendent. The name and address of the Superintendent appointed by local interests to be responsible for the continuous inspection, operation, and maintenance of the project works shall be furnished the District Engineer, and in case of any change of Superintendent, the District Engineer shall be so notified.

SECTION II

FEATURES OF THE PROJECT SUBJECT TO FLOOD CONTROL REGULATIONS

2-01. Levee.

a. Description. The levee along the right bank of Yolo Bypass is located as described in paragraphs 1-01 and 1-03 of this manual. A surfaced road for patrol purposes traverses the crown of the levee for the full distance of about 7.57 miles. For more complete detail in construction of the above-mentioned levee, refer to the "As Constructed" drawings listed in 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) 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.

a. Description. Drainage and irrigation structures which extend through the levee are located and described as follows:

Levee Mileage	Size of Pipe	Gate Location	Other Structure Description	Invert-Ft. below crown
<u>Miles downstream from Sacramento Northern R.R. Crossing</u>				
0.4	4' x 4'	L.S.	Concrete Culvert	22.0
1.8	48"	W.S.	-	16.0
2.3	2-6' x 6'	W.S.	Concrete Culvert-Old Willow Slough Drain	26.0
4.7	48"	W.S.	-	19.0
4.7	60"	W.S.	-	20.0
7.0	2-48"	W.S.	-	26.0
Y				

Notes on abbreviations: W.S. = Waterside L.S. = Landside

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

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

2-03. Channel.

a. Description. The floodway of the Yolo Bypass within this unit is confined between levees along both banks and is subject to periodic flooding when waters spill over Fremont Weir. The average distance between levees is about 10,000 feet and the project design capacity of the channel is as indicated in paragraph 1-02 of this manual.

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

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

It shall be the duty of the Superintendent to maintain a patrol of the project works during all periods of flood in excess of a reading of 35.0 on the gage on the west levee of the Sacramento River immediately upstream from the west end of Fremont Weir. The Superintendent shall dispatch a message by the most suitable means to the District Engineer whenever the water surface near the Sacramento Northern Railroad reaches the gage reading indicated above and record the time of observations. One copy of the readings shall be forwarded to the District Engineer following the flood, and a second copy transmitted as an inclosure to the semi-annual report in compliance with paragraph 3-05 of the Standard Manual.

2-04. Miscellaneous Facilities.

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

(1) Utility Relocations. Because of the nature of the construction of the levee by local interests, no records of any utility relocations are available.

(2) Hydrographic Facilities. A continuous water stage recorder and staff gage is located on the west levee of the Sacramento River immediately upstream from the west end of Fremont Weir. This gage is to be maintained by the State Department of Water Resources or the U.S.G.S.

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

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

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 Superintendent will contact a representative of the Department of Water Resources, State of California, who coordinates maintenance of project works of the Sacramento River Flood Control Project. The State representative will give assistance or advice, 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, revised May 1955, where the subject is fully covered.

EXHIBIT A
FLOOD CONTROL REGULATIONS
(See Standard Manual)

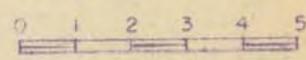
EXHIBIT A
Unattached



LEGEND

— Extent of Levee in this Unit.

SCALE IN MILES



LOCATION MAP

UNIT NO. 121
 RIGHT LEVEE OF YOLO BYPASS
 FROM WILLOW SLOUGH BYPASS
 TO WOODLAND ROAD
 RECLAMATION DISTRICT NO. 2035

EXHIBIT A-1

EXHIBIT B

"AS CONSTRUCTED"
DRAWINGS

See separate folder for the following drawings:

<u>File No.</u>	<u>Title</u>
50-4-1821	Repair of Levee Breaks on Yolo Bypass approx. 5 miles South of S.N.R.R., Woodland Branch, in 1 sheet.
50-4-2214	Enlargement of West Levee of Yolo Bypass from S.N.R.R. South 1.6 miles and from Willow Slough southerly 2.0 miles, in 3 sheets.
50-4-2281	Levee construction along West Levee Yolo Bypass, sheets 5, 6, and 15.
50-4-3362	Levee construction, right bank Yolo Bypass in vicinity of Old Willow Slough, in 7 sheets.

For further details, additional drawings are available from the office of the District Engineer.

50-4-5596	Sutter and Yolo Counties, California, Emergency Levee Repairs, Right Bank Yolo Bypass - RD 2035, Left Bank Natomas Cross Canal - RD 1000, PL 84/99, in 2 sheets.
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EXHIBIT B
Unattached

EXHIBIT C
PLATES OF SUGGESTED FLOOD FIGHTING METHODS
(See Standard Manual)

EXHIBIT C
Unattached

EXHIBIT D
CHECK LIST NO. 1
LEVEE INSPECTION REPORT
(See Standard Manual)

EXHIBIT E
CHECK LISTS OF LEVEES,
CHANNEL AND STRUCTURES

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

CHECK LIST NO. 2

UNIT NO. 121

R. D. NO. 2035

Inspector's Report Sheet No. _____ Inspector _____

Date _____ Superintendent _____

Item	Remarks
(a) Location by Station	
(b) Settlement, sloughing or loss of grade	
(c) Erosion of back slope of levee	
(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	

Instructions 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 gulying of the section has occurred.
- Item (c) If sufficient erosion or gulying 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.

Instructions 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 gulying of the section has occurred.
- Item (c) If sufficient erosion or gulying 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.

CHECK LIST NO. 3

CHANNEL AND RIGHT-OF-WAY

UNIT NO. 121

RECLAMATION DISTRICT NO. 2035

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 of 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, fouling 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.

CHECK LIST NO. 4

DRAINAGE AND IRRIGATION STRUCTURES

UNIT NO. 121

Inspector _____

Superintendent _____

Inspector's Report Sheet No. _____

Date _____

(a) Location by Station	0.4 1.8 2.3 4.7 4.7 7.0
(b) Bank	Rt. Rt. Rt. Rt. Rt. Rt.
(c) Debris or other obstruction to flow	
(d) Damage or settlement of pipe or conduit	
(e) Condition of concrete headwall or invert paving	
(f) Condition of right-of-way adjacent to structure	
(g) Repair Measures Taken Since last Inspection	
(h) Comments	Miles downstream from Sacramento Northern R.R. Crossing

Instructions 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 over flow 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
LETTER OF TRANSFER TO
THE STATE RECLAMATION BOARD

EXHIBIT F

C
O
P
Y

C
O
P
Y

SPKKA 824.3(Sac.Riv.F.C.P.)

8 December 1951

The Reclamation Board
State of California
1100 O Street
Sacramento 14, California

Gentlemen:

Reference is made to your letter of 22 June 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are located as follows:

- a. - - - - -
- b. Westerly levee of the Yolo Bypass.
 - (1) - - - - -
 - (2) - - - - -
 - (3) S.N.R.R. Woodland Branch to a point 1.6 miles southerly from said railroad.
 - (4) From a point 1.6 miles southerly from the S.N.R.R. Woodland Branch to the Willow Slough Pipes.
 - (5) From a point 1.48 miles southerly from the Willow Slough Pipes to a point 1.9 miles southerly from said pipes.
 - (6) From a point 1.9 miles southerly from the Willow Slough Pipes to the Willow Slough Interceptor.

- - - - -

The records of this office show that your Board has accepted the levees and/or works covered by Items b.(1), b.(2), b.(3), c.(2), c.(4), c.(8), c.(11), c.(12), c.(14), d.(1), d.(3), d.(4), f.(3), f.(5), g., h., l., m., n.(1), N.(2), n.(3), n.(6), n.(7), n.(8), o., p., q., r. and s.(1) above, as complete. Accordingly the waterway bank contiguous to said Items is hereby transferred to the State of California for maintenance and operation.

C
O
P
Y

C
O
P
Y

SPKKA 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

The levee covered by Items a., b.(4), c.(1), c.(3), c.(5), c.(6), c.(7), c.(9), c.(10), c.(13), c.(15), d.(2), e., f.(1), f.(2), f.(4), f.(6), j., k., n.(4), n.(5), s.(2), s.(3), t., u. and v., above, although complete has not been formally transferred as contemplated by the Project documents. Accordingly, the levee covered by said Items, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations which 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. As provided under paragraph 208.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

FOR THE DISTRICT ENGINEER:

Sincerely yours,

/s/ H. R. Reifsnnyder
H. R. REIFSNYDER
Lt. Colonel, Corps of Engineers
Executive Officer

Note: Only items pertaining to
Unit No. 121 contained in
this copy.

EXHIBIT F
Sheet 3 of 4

C
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P
Y
SPKKO-P

C
O
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Y
28 November 1958

The Reclamation Board
State of California
1215 O Street
Sacramento, California

Gentlemen:

Reference is made to the joint inspection made on 13 November 1958, of a certain levee unit pertaining to the Sacramento River Flood Control Project for the purpose of transferring it to the jurisdiction of the State of California for operation and maintenance.

The required work, consisting of construction of the levee unit referred to above, was completed on 14 November 1958, in accordance with Specification No. 2438, Contract No. DA-04-167-CIVENG-59-4 and Drawing No. 50-4-3362.

The levee unit No. 627, referred to above, which extends along the right bank of Yolo Bypass in the vicinity of Willow Slough from Station 0+00 to Station 79+00, now meets the requirement of the Sacramento River Flood Control Project; therefore said levee unit, together with the waterway bank contiguous thereto, is hereby transferred to the State of California for operation and maintenance.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing Flood Control Regulations, inclosed herewith, which 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 the current issue of the Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project. As provided under paragraph 208.10(10) of these regulations, a supplement to the Standard Operation and Maintenance Manual covering these units of work is in process of preparation and will be furnished to you upon completion.

EXHIBIT F
Sheet 3 of 4

C
O
P
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SPKKO-P
The Reclamation Board

A copy of this letter is being transmitted to the Department
of Water Resources.

Sincerely yours,

/s/ Bruce W. Reagan
BRUCE W. REAGAN
Lt. Col., CE
Acting District Engineer

EXHIBIT F
Sheet 4 of 4

PAKKJ

24 January 1946

The Reclamation Board
1100 "O" Street
Sacramento, California

Gentlemen:

Enlargement has been completed of the West Levee of Yolo By-Pass from the Sacramento Northern Railroad southerly 1.6 miles and from 1.9 miles south of Willow Slough southerly 2.0 miles. Therefore, in accordance with established procedure, this portion of completed levee is hereby transferred to the State of California for maintenance.

This construction forms an integral part of the Sacramento River Flood Control Project. The details and extent of the work are shown on inclosed drawing No. 50-4-2214 in three sheets, entitled "Proposed Levee Enlargement, West Levee Yolo By-Pass - Plan, Profile and Typical Sections."

There is also inclosed copy of Flood Control Regulations prescribed by the Secretary of War pursuant to the provisions of Section 3 of the Act of Congress approved 22 June 1936, as amended and supplemented, to govern the maintenance and operation of flood control works, of which the levee referred to is a part. In accordance with paragraph 208.10 (10) of said regulations, at a later date this office will furnish your Board and local interests with an Operation and Maintenance Manual to assist in carrying out their obligation established by these regulations.

For the records of this office, acknowledgment of receipt of this letter is requested on or before 28 February 1946.

Copy of this letter, with inclosures, is being transmitted to the State Engineer.

*Accepted by
The Reclamation Board
6 Feb. 1946.*

Manual No 3

- 2 Incls.
- Incl. # 1 - Dwg. No. 50-4-2214 in 3 sheets
- Incl. # 2 - Flood Control Regulations

Unit 121

cc: CdeA(w/d.)

Copy furnished: Mr. Edward Hyatt,
State Engineer.

R E S O L U T I O N

ADOPTED BY THE RECLAMATION BOARD

FEBRUARY 6, 1946

WHEREAS The Reclamation Board on February 6, 1946, did approve a certain item of "new construction", said work consisting of the construction of the west levee of the Yolo By-pass from the Sacramento Northern Railroad southerly 1.6 miles and from 1.9 miles south of Willow Slough southerly 2.0 miles; and

WHEREAS the War Department, U. S. Engineers Office, District Engineer, under date of January 24, 1946, has notified The Reclamation Board of the completion of such work of "new construction" and its desire to turn over to The Reclamation Board such work as completed, for maintenance by the proper local interests; and

WHEREAS the Chief Engineer of The Reclamation Board has caused to be made inspection on the ground of such work of "new construction", and has found and determined that such work, as completed, has been prosecuted and carried out in conformance with the plans and specifications therefor; now, therefore, be it

RESOLVED AND ORDERED, That The Reclamation Board does hereby accept, for the State of California, the said item of "new construction" as aforesaid, which has, on the date hereinabove set forth, been turned over to said Board by the War Department, U. S. Engineer Office; and be it further

RESOLVED AND ORDERED, That said work be turned over to Reclamation District No. 2035 for maintenance and operation, as the legally authorized function of said District.

M. I. N. 3

STATE OF CALIFORNIA)
COUNTY OF SACRAMENTO) SS
Office of The Reclamation Board)

I, GEORGE H. HOLMES, Secretary of The Reclamation Board, do hereby certify that the attached and foregoing is a true and correct copy of a resolution duly passed and adopted by said Board at its meeting held February 6, 1946.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of The Reclamation Board this 15th day of February, 1946.

George H. Holmes
GEORGE H. HOLMES
Secretary
The Reclamation Board

M 1 N 3

REGISTERED MAIL
Return Receipt
Requested

Letter No. 3

3

SPKHA 824.5(Sac.Riv. F.C.P.)

4 DEC 1951

Refer. Recl. Board letter dated 2 April 1952.

The Board accepted Item No. 9 on 18 Dec. 1951 with the condition that the Federal Gov. complete the enlargement of the levee with no obligation for the State to maintain the banks along the Sacramento Deep Water Channel.

The Board also accepted Items No. 10 and 11 on 18 Dec. 1951, without reservations other than an statement indicating that flatter slopes on this levees are not required.

The Reclamation Board
State of California
1100 "O" Street
Sacramento 14, California

Item No. 9 was previously accepted on 6 June 1951,

Gentlemen:

Reference is made to your letter of 18 May 1951 acknowledging that certain reaches of the levees of the Sacramento River Flood Control Project and the waterway bank contiguous to said levee reaches meet the requirements of the project as authorized prior to the Flood Control Act of 1944.

The levee reaches in question are located as follows:

- Reach No. 32 9 a. Westerly levee of the Yolo Bypass from Fremont Weir to Miner Slough. 127, 126, 121, 120, 119, 109, 107, 105 accepted 6-6-51
- Reach No. 32 10 b. Northerly levee of Sacramento Bypass. 122
- Reach No. 33 11 c. Southerly levee of Sacramento Bypass. 116

The records of this office show that on 6 June 1951 your Board accepted the levee covered by Item a, above as complete. Accordingly, the waterway bank contiguous to said Item a, is hereby transferred to the State of California for maintenance and operation.

The levee covered by Items b, and c, above although complete has not been formally transferred as contemplated by the Project documents. Accordingly, the levee covered by said Items b, and c., together with the waterway bank contiguous thereto, is hereby transferred to the State of California for maintenance and operation.

The maintenance work required under the provisions of the Sacramento River Flood Control Project shall be performed in accordance with existing

Reaches 32 and 33
Items 9 to 11

3

C. de ARRIETA

Mile 0 to 50
" 50 to 106

SPEEA 824.3(Sac.Riv.F.C.P.)
The Reclamation Board

Letter No. 3

3

Flood Control Regulations which 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. As provided under paragraph 206.10(10) of these regulations, a maintenance manual covering these works is in process of preparation and will be furnished your Board upon completion.

A copy of this letter is being transmitted to the State Engineer.

Sincerely yours,

Copy Furnished:
Office, Chief of Engrs.
So. Pac. Div. Engr.
State Engineer
Engr. Div. (2)
D. de Arrieta

C. C. Haug
Colonel, Corps of Engineers
District Engineer

This copy was furnished on 24 Feb. 1953 B. de A.

Accepted Items

December 18, 1951

The Board accepted the transfer from the Corps of Engineers, in letters of dates listed below, the following reaches of levees and their contiguous waterway banks where applicable for flood control operation and maintenance, as complete and meeting the requirements of the Sacramento River Flood Control Project.

No.	Date of Letter	Levee Location	Remarks
①-②	1 Dec.1951	N. and S. Training* Levees Moulton Weir*	Maintained by State
③-④	Do	N. and S. Training* Levees Colusa Weir*	Maintained by State
⑥	3 Dec.1951	W. Levee Sacramento River, Mile 177.5 Mile 174.1	Maintained as Maintenance Area No. 2
⑨	4 Dec.1951	E. Levee Yolo By-pass Fremont* Weir to Miner Slough*	N. 2 mi. maintained by State. Remainder by local districts. Conditioned upon completion of levee section and no acceptance of banks of Sacramento Deep Water Channel.
⑩ ⑪	Do	N.&S. Levees Sacra- mento By-pass*	Maintained by State. Waterward slopes on 4 to 1 not required.
21a	6 Dec.1951	Back levee Egbert District*	Maintained by R. D. No. 536
22	6 Dec.1951	W. Levee Yolo By-pass Lindsey* Slough to Watson Hollow Drain*	Maintained by R. D. No. 536
24	Do	N. Levee Watson Hollow Drain*	Do
16	6 Dec.1951	W. Levee Sacramento River Mile 59.0 to Lake Wash- ington Barge Canal	Maintained by R. D. No. 900
18	Do	W. Levee Sacramento Riv. Mile 50.8 to 50.5	Bank protection contract. Maintained by R. D. No. 765

Copy to USED.

①

Accepted Items

No. Date of Letter

Levee Location

Remarks

6 6 Dec. 1951

Levees of Wadsworth Canal*
South levees of E. and W.
Intercepting Canals.

Maintained by State. Water-
ward slopes on 4 to 1 not
required.

(12) (13) (14) (15)

7 7 Dec. 1951

Site 2 Part A. W. Levee
Sacramento River-Mile
28.5 -Grand Island.

Maintained by R.D. No. 3.
Completed contract.

= 329 (87-A)

Site 1, Part B. E. levee
Sacramento River-Mile 15.0
Brannan Island.

Maintained by R.D.No. 2067
Completed contract.

= 331 (89-A)

8 8 Dec. 1951

W. levee Sacramento River
Mile 163.8 to Mile 143.5
except 320 ft. at Colusa
Warehouse & Mile 146.1
to Mile 146.4.

Maintained as Maintenance
Area No. 1.

(51) (52) (53) (54) (55) (56) (57)

8 Do

E. levee Sacramento River,
Mile 153.3 to Mile 152.7;
Mile 149.9 to Mile 149.7;
Mile 149.4 to Mile 149.0;
at Colusa Weir; Mile 143.3
to Mile 140.2; Mile 139.3
to Mile 138.2.

Maintained by State
Separate completed contracts.

(58) (59) (60) (61) (62) (63)

8 Do

E. levee Sacramento River
Mile 138.2 to Mile 137.9;
Mile 136.9 to Mile 133.8;
Mile 133.2 to Mile 132.3;
Mile 131.8 to Mile 125.9;
Mile 125.8 to Mile 123.1;
Mile 122.6 to Mile 122.0.

Maintained by R.D.No. 70,
Completed contracts.

(64) (65) (66) (67) (68) (69) (70)

8 Do

West levee, Sutter By-pass*

Maintained by R.D.Nos. 70,
1660, 1500. Condition upon
completion of remaining
part to standard section.

(71) (72) (73)

8 Do

North levee Tisdale
By-pass†

Maintained by R.D.No. 1660.
Waterward slope of 4 to 1
not required.

(74)

8 Do

South levee Tisdale
By-pass†

Maintained by R.D.No. 1500.
Waterward slope of 4 to 1
not required.

(75)

8 Do

East levee Sutter
By-pass*.

Maintained by State.

(76)

9 Do

W. levee Sacramento River
Mile 35.15 to 35.86.

Maintained by R.D.No. 150
(Merritt Island). Completed
contract bank protection.

(81)

21
2

Accepted Items

No.	Date of Letter	Levee Location	Remarks
(91) 10	8 Dec. 1951	Cross levee Steamboat Slough to Sacramento River.*	Maintained by R.D. No. 3 (along U.S.spoil bank).
(140) 11	Do	N. levee American River from Jibboom St. Bridge to Sacramento River.	Maintained by R.D. No. 1000.
(141) 11	Do	E. levee Sacramento River American River to Natomas Cut.	Maintained by R.D.No. 1000.
(142) 11	Do	E. bank Sacramento River At Moulton Weir.	Maintained by State.
(143) 11	Do	E. Levee Sacramento River Mile 158.5 to Mile 164.4.	Maintained partly by State; remainder by Levee District.No. 3, Glenn County, Completed Contract.
(146) 11	Do	W. levee Sacramento River Mile 61.8 to Mile 62.65.	Maintained by Maintenance Area No. 4. Completed contract.
(147) 11	Do	W. Levee Sacramento River Mile 62.65 to Mile 63.1.	Maintained by R.D. No. 537 Completed contract.
(148) 11	Do	Sacramento Weir.	Maintained by State.
(152) 11	Do	Fremont Weir.	Maintained by State.
11	Do	W. Levee Sacramento River Mile 87.6 to Mile 88.4; Mile 89.2 to Sycamore Slough	Maintained by R.D. No. 730 Completed contracts.
(153) (156) (157) 11	Do	W. Levee Sacramento River Mile 100.6 to Mile 101.4	Maintained by Sacramento River West Side Levee District. Completed contract.
11	Do	W. Levee Feather River except: 3.31 Mi. North from Nicolaus Bridge; 1400 ft. in Yuba City; from Sta.774+80 to Sta. 1188+00 of "Y.C.H.B" Traverse.	Maintained by Maintenance Area No. 3, Levee Dist. Nos. 1 & 9 of Sutter Co. Recl. Dist.No. 777 and State.
(160) (161) (162) (163) 11	Do	E. Levee Sacramento River, Natomas Cut to Feather River	Maintained by Recl.Dist.No.1001.
(164) 11	Do	E. Levee Feather River from mouth to Mile 26.5, except from 2.37 miles of Nicolaus Bridge to Bear River	Maintained by R.D. Nos. 1001 and 784.
(165) (166) (167) (168) (169) (170) 11	Do		

Accepted
Items

5

No.	Date of Letter	Levee Location	Remarks
(171) (172)	11 8 Dec.1951	Marysville levees from W.P.R.R. at Simmerly Slough E. to Yuba River and from D St. Bridge on Yuba River upstream to Valley Meat Co.	Maintained by Marysville Levee Commission.
(173) (174)	11 Do	N. Levee Simmerly Slough from W.P.R.R. to S.P.R.R. and E. Levee Feather River from Simmerly Slough upstream 4.8 miles	Maintained by R.D. No. 10 Completed contract.
(175)	11 Do	N. Levee Yuba River from back levee of Marysville upstream 1.8 miles	Maintained by Marysville Levee Commission.
(176)	11 Do	S. Levee Yuba River from S.N.R.R. to S.P.R.R.	Maintained by R.D. No. 784.
(177)	11 Do	N. Levee Bear River from Feather River to W.P.R.R. Interceptor	Maintained by R.D. No. 784.
(178)	11 Do	E. Levee R.D. 784 (W. Levee W.P.R.R. Interceptor) Bear River to intersection with W.P.R.R. in S $\frac{1}{2}$ Sec. 17, T. 14 N., R. 4 E.	Maintained by R.D. No. 784.
(179) (180)	11 Do	S. Levee American River from 16th St. Bridge to Mayhew except from S.N.R.R. to a point 800 ft. E. of W.P.R.R.	Maintained by American River Flood Control District.
(181) (182) (183) (184) (185) (186) (187) (188)	11 Do	W. Levee Yolo By-pass from Sacramento* River to Putah Creek except from N. line Cache Cr. Settling Basin to S.N.R.R. & from old Willow Slough pipes south 1.48 mi.*	Maintained by State and R. D. #2035.
(190)	11 Do	N.&S. levees Willow Slough Interceptor*	Maintained by State and R. D. No. 2035.
(191) (192)	11 Do	N.&S. levees of Putah Creek	Maintained by State.
(197) (198)	11 Do	N.&S. levees Sycamore Slough from Sacramento River to Knights Landing Outfall Gates	Maintained by R.D. 730 and Sacramento River West Side Levee District.

(21)

4

Accepted
Items

No. Date of Letter Levee Location Remarks

12 8 Dec. 1951

Five reaches of Ryer Island levee along Miner Slough as follows:

a. Junction Miner and Sutter Sloughs westerly 5000 feet.
b. From State Highway Bridge West. 3035 ft.

c. Spec. 1473, Sta. 53+00 to 64+00 about one mi. No. of Ryde Road. *Mile 29.4 to 29.6*

d. Spec. 1473, Sta. 0+00 to 12+00 being 600 ft. each side of Ryde Road. *Mile 30.4 to 30.6*

e. Ryer Island cut-off levee beginning at east bank of Cache Slough and extending upstream 3,300 feet at junction of Cache and Miner Sloughs.

Maintained by R.D. No. 501. All are completed separate contracts.

Covered by letter dated 16 Nov. 1951

321

32

79A

303

Covered

53A

by letter dated

304

17 Nov. 1951

54A

23

50

*No waterway banks contiguous to these levees.

GOODWIN J. KNIGHT
GOVERNOR

A. R. GALLAWAY, JR., SACRAMENTO
PRESIDENT
GROVER SHANNON, YUBA CITY
VICE PRESIDENT
GEO. H. HOLMES, CLARKSBURG
SECRETARY
W. P. HARKEY, GRIDLEY
GEO. R. WILSON, WALNUT GROVE
GEO. E. LODI, ARBUCKLE
DOUGLAS B. COHEN, BANTA

THE RECLAMATION BOARD
OF THE
STATE OF CALIFORNIA
1215 O STREET
SACRAMENTO 14, CALIFORNIA
TELEPHONE: HI 5-4711

A. M. BARTON
CHIEF ENGINEER AND GENERAL MANAGER
EDMUND G. BROWN, ATTORNEY GENERAL
LEGAL ADVISER
HOWARD S. HITCHCOCK
ASSISTANT CHIEF ENGINEER
WILLIAM A. CARVER
ASSISTANT SECRETARY
ROBERT W. JAMES
ASSOCIATE COUNSEL

December 16, 1958

District Engineer
Sacramento District
U. S. Corps of Engineers
P. O. Box 1739
Sacramento 8, California

Gentlemen:

Reference is made to your letter of November 2⁹, 1958, file number SPKKO-P 824.3 (Sac Riv FCP), regarding the responsibility for operation and maintenance of the levee unit No. 627, which extends along the right bank of Yolo Bypass in the vicinity of Willow Slough from Station 0+00 to Station 79+00, together with the waterway bank contiguous thereto.

The Reclamation Board at its meeting of December 4, 1958, formally accepted the maintenance responsibility of the above described section in the area described in the first, second and third paragraphs of your letter under the conditions outlined in your letter.

Yours very truly,

THE RECLAMATION BOARD
A. M. BARTON
Chief Engineer and General Manager

By William A. Carver
WILLIAM A. CARVER
Assistant Secretary

WAC:lb

11/12/58



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

REPLY TO
ATTENTION OF

February 13, 1964

Navigation and Flood Control Unit

The Reclamation Board
State of California
1416 - 9th Street, Room 455
Sacramento, California

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 February 6, 1964 and consisted of repairing the Yolo Bypass right bank levee in Reclamation District 2035 and the Natomas Cross Canal left bank levee in Reclamation District 1070 in accordance with Contract Number DACW05-83-C-0148 and Drawing Number 50-4-5596. This work shall be maintained in accordance with the assurances which your Board provided for the Sacramento River Flood Control Project. This portion of the work will be added by amendment to the Operation and Maintenance Manual, supplement Numbers 121 and 125, Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely,

Arthur E. Williams
Colonel, Corps of Engineers
District Engineer

EXHIBIT F

CERTIFIED
No. *785702*
RETURN RECEIPT REQUESTED

February 4, 1987

Navigation and Flood Control Unit

The Reclamation Board
State of California
1416 - 9th 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 21, 1986, and consisted of restoring portions of the Yolo Bypass right bank levee and portions of Willow Slough left bank levee in Reclamation District 2033, in accordance with Contract Number DACW05-87-C-0020 and Drawing Number 50-4-3767. This work shall be maintained in accordance with the assurances which your Board provided for the Sacramento River Flood Control Project. This portion of the work will be added by amendment to the Operation and Maintenance Manual, Supplement Numbers 120 and 121, Sacramento River Flood Control Project. Copies will be furnished to your office at a later date.

Sincerely,

WJS

Wayne J. Scholl
Colonel, Corps of Engineers
District Engineer

cc:
E.M. (Garrett)
> Ops Br
Engr Div (Civ Des Sec D - Pahl)
Valley Res Ofc (Cameron)

Copies furnished:

DWR, ATTN: J. ANGLE
DWR, ATTN: G. SNOW
Commander, South Pacific Division, ATTN: SPDCO-0



KB-3
KOMPALA/th

JK
KELLY

AS
A. SMITH

HDSM

FAST

D
DENNIS

WJL
WILLIAM

WJS
SCHOLL

WANG #6373a

Units 1801/21

WJS

EXHIBIT G
SUGGESTED SEMI-ANNUAL REPORT FORM

EXHIBIT G

TO: The District Engineer
Sacramento District
Corps of Engineers
1209 - 8th Street
Sacramento, California

(1 May 19__)
(1 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. 121 of the Sacramento River Flood Control Project (Right Levee of Yolo Bypass) 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 summarized 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 operations for the following 6 months.)

b. During this report period, major high water periods (water level at 35.0 on the State Department of Water Resources gage located upstream from the west end of Fremont Weir on the west levee of the Sacramento River) occurred on the following dates:

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

Comments on the behavior of the protective works during such high water periods are as follows:

(Superintendent's log of flood observations)

During the high water stages when the water level reached a height of _____, on the gage or excess thereof (dates) _____, it was necessary to organize and carry out flood operations as follows:

(See Maintenance Manual _____.)

c. The inspections have indicated (no) or (the following) encroachments or trespasses upon the project right-of-way.

d. (No) (_____) permits have been issued for (the following) improvements or construction within the project right-of-way.

Executed copies of the permit documents issued are transmitted for your files.

e. The status of maintenance measures, indicated in the previous semi-annual report as being required or as suggested by the representatives of the District Engineer, is as follows:

(Statement of maintenance operations, item by item with percent completion.)

f. The fiscal statement of the Superintendent's operations for the current report period is as follows:

	<u>Labor</u>	<u>Material</u>	<u>Equipment</u>	<u>Overhead</u>	<u>Total</u>
1. Inspection					
2. Maintenance					
3. Flood fighting operations					

TOTAL

Respectfully submitted,

Superintendent of Works