

SUPPLEMENT TO STANDARD  
OPERATION AND MAINTENANCE  
MANUAL

SACRAMENTO RIVER  
FLOOD CONTROL PROJECT

UNIT NO. 148  
WEST LEVEE OF THE FEATHER RIVER  
FROM  
NORTH BOUNDARY OF RECL. DISTRICT NO. 777  
TO  
NORTH BOUNDARY OF LEVEE DISTRICT NO. 1



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

CORPS OF ENGINEERS

U. S. ARMY

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SACRAMENTO RIVER FLOOD CONTROL PROJECT

UNIT NO. 148

WEST LEVEE OF THE FEATHER RIVER  
FROM  
NORTH BOUNDARY OF RECLAMATION DISTRICT NO. 777  
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NORTH BOUNDARY OF LEVEE DISTRICT NO. 1

Sacramento District  
Corps of Engineers  
U. S. ARMY  
1955  
AUGUST

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

UNIT NO. 148

WEST LEVEE OF THE FEATHER RIVER  
FROM  
NORTH BOUNDARY OF RECL. DISTRICT NO. 777  
TO  
NORTH BOUNDARY OF LEVEE DISTRICT NO. 1

LOCATION	ADDITION OR REVISION	DATE
1-04 d.	Add contract no. 60-73	Nov 1963
Exhibit B	Add drawing no. 4-4-508	Nov 1963
1-04 e.	Add contract no. 60-73	Oct 1964
Exhibit B	Add drawing no. 4-4-508	Oct 1964
Exhibit F	Add letter of acceptance dated 13 Sep 1960	Oct 1964
1-04 f.	Add contract no. DACW05-68-C-0014	Nov 1968
2-04 a. (4)	Add recreation area	Nov 1968
Exhibit B	Add drawing no. 50-4-4078	Nov 1968
Exhibit F	Add letter of acceptance dated 14 Nov 1968 (Unit No. 12)	Nov 1968
1-04	Add subparagraph g.	Dec 1975
2-01	Add subparagraph c.	Dec 1975
Exhibit B	Add drawing no. 4-4-599	Dec 1975
Exhibit F	Add copy of letter of acceptance dated 29 Nov 1974	Dec 1975
Exhibit F	Add copy of letter of transfer dated 13 Aug 1946	28 Dec 2010
Exhibit F	Add copy of letter of acceptance dated 21 Aug 1946	28 Dec 2010
Exhibit F	Add copy of letter of transfer dated 24 Aug 1960	28 Dec 2010
Exhibit F	Add copy of letter of transfer dated 22 Oct 1968	2 Feb 2011
Exhibit F	Add copy of letter of transfer dated 19 Nov 1974	8 Mar 2011
1-04	Removed subparagraph e – duplicate entry	24 Oct 2011

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B	"As Constructed" Drawings - - - - - Unattached
C	Plates of Suggested Flood Fighting Methods - - - Unattached (Contained in Standard Manual)
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F	Letter of Acceptance by State Reclamation Board - - Sheets 1 and 2
G	Semi-Annual Report Form - - - - - Sheets 1 and 2
H	<i>RULES &amp; REGULATIONS OF M RECREATION AREA</i>

SUPPLEMENT TO STANDARD  
OPERATION AND MAINTENANCE MANUAL  
SACRAMENTO RIVER FLOOD CONTROL PROJECT  
UNIT NO. 148  
WEST LEVEE OF THE FEATHER RIVER  
FROM  
NORTH BOUNDARY OF RECLAMATION DISTRICT NO. 777  
TO  
NORTH BOUNDARY OF LEVEE DISTRICT NO. 1

SECTION I

INTRODUCTION

1-01. Location. The improvement covered by this manual is that part of the Sacramento River Flood Control Project which includes the west levee of the Feather River from the north boundary of Reclamation District No. 777 (Also north line of Sutter County) to the north boundary of Levee District No. 1. In general, the west levee of this unit extends from a point opposite the mouth of Honcut Creek to the Southern Pacific Railroad crossing of the Feather River about two miles upstream from Yuba City. The levee of this unit is located in Reclamation District No. 777 and Levee District No. 9, in Sutter County, California and in the general vicinity between the towns of Live Oak and Yuba City. This manual supersedes Supplemental Manual No. 4 entitled, "West Levee of the Feather River in Sutter and Butte Counties, California, from two miles north of Yuba City northerly twelve miles". The location of the completed unit covered by this manual is shown on Exhibit A-1.

1-02. Protection Provided. The levee of this unit provides direct protection to the towns of Gridley, Live Oak and Yuba City, adjacent agricultural lands and against flood waters of the Feather River. The grade of the adopted flood plane profile along the main channel of the Feather River varies from elevation 92.0 at the north boundary of Reclamation District 777 to elevation 82.38 at the north boundary of Levee District No. 1 (Elevations are referred to U. S. Corps of Engineers datum). This reach of the Feather River has a project design capacity of 210,000 cubic feet per Second and the levee provides for a freeboard of at least three feet above the adopted flood plane profile within the 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 west levee of the Feather River from the north boundary of Reclamation District No. 777 to the north boundary of Levee District No. 1. As shown on Drawing 50-4-2193 of Exhibit B, the location of the west levee of the Feather River within this unit extends from station 683+25 on the northerly and to station 138+50 on the southerly end.

1-04. Construction Data and Contractor. Unit No. 148 of the flood control works described in this manual forms an integral part of the Sacramento River Flood Control Project. Construction necessary to bring locally built levees of this unit to project standards was accomplished under the following contracts:

- a. Enlargement of the west levee along the Feather River in Reclamation District No. 777 and Levee District NO. 9 from station 952+00 to station 1380+00 as shown on Drawing NO. 4-4-135, sheets 1 and 2 of Exhibit B, was constructed under Contract No. W-1105-eng-1341 by Haas, Doughty & Jones, contractors, and completed on 23 August 1934.
- b. Enlargement of the west levee of the Feather River from S.P.R.R. two miles north of Yuba City northerly 12 miles was constructed under Contract No. W-04-167-eng-605 by H. Earl Parker, contractor. Work on this contract was started on 16 August 1944 and completed on 25 September 1945 (see Exhibit B, Drawing No. 50-4-2193, sheets 1 to 6 incl. and Drawing No. 4-4-267 for details).
- c. Berm fill, drainage ditch and road approaches on the west levee of the Feather River 8 miles north of Yuba City were constructed under Contract No. W-04-167-eng-1345, by H. Earl Parker, contractor and completed on 9 January 1948. (See Exhibit B Drawing No. 4-4-292, Part "C" for details).
- d. Levee stabilization, right bank Feather River, Levee Districts 1 and 9 was accomplished under contract No. DA-04-167-CIVENG-60-73 by H. Earl Parker, Inc. during the period from 11 May 1960 to 28 July 1960, Specification No. 2655, Drawing No. 4-4-508.
- e. Paragraph e removed 24 October 2011 – duplicate entry.
- f. Bank protection (Unit No. 12) right bank of Feather River at miles 39.5 and 41.5 was accomplished under Contract No. DACW05-68-C-0014 by A. Teichert & Son, Inc. and completed in October 1968. Specification No. 3288. Drawing No. 50-4-4078. Includes Boat Ramp.
- g. Bank protection and selective clearing on the right bank of the Feather River at Site Mile 34.0, was accomplished under Contract No. DACW05-75-C-0032 by H. Earl Parker during the period from 17 October to 8 November 1974. Specification No. 4815, Drawing No. 4-4-599.

1-05. Flood Flows. For purposes of this manual, the term "flood" or "high water period" shall refer to flows when the water surface in the Feather River reaches or exceeds the reading of 95.0 on the Division of Water Resources continuous water stage recorder and staff gage located on the east side (left bank) of the Feather River on the downstream side of the abutment of bridge on Gridley-Oroville Road two and one-half miles east of Gridley, and/or when the water surface reaches or exceeds a reading of

65.0 on the Division of Water Resources continuous water stage recorder and staff gage located near the right bank of the Feather River on downstream side of the Sacramento Northern Railroad Bridge at Yuba City. Gages are set on U.S. Corps of Engineers datum.

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. Acceptance by State Reclamation Board. Responsibility for operating and maintaining the completed works was officially accepted by the Reclamation Board for the State of California on 18 December 1951, as shown on the attached letter of acceptance, Exhibit F.

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 described in this manual is located along the westerly side of the Feather River from the north boundary of Reclamation District No. 777 to the north boundary of Levee District No. 1. This levee, measured along the crown, extends from station 683 + 25 at the upper end, to station 138 + 50 at the lower end, a distance of about 10.32 miles (see Dwg. No. 50-4-2193, sheets 2 to 4 of Exhibit B). The levee has been constructed with slopes of 1 on 3 on the riverside and 1 on 2 on the landside with a crown width of 20 feet. Construction also included a gravel road surfacing 12 feet wide on top of the levee with turnouts, at 1,000 foot intervals, each of which are approximately 50 feet long and 18 feet wide. The necessary drainage structures, road approaches and appurtenances were also included in the work. For more complete detail in construction of above mentioned levee, refer to the "As Constructed" drawings of Exhibit B. Structures affecting maintenance are listed in Exhibit E.

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 listed as follows:

Location Station	Size and Kind of Pipe	Gate Model No.	Other Structure Description	Elev. of invert at Pipe
189 + 13	8" steel			76.6
237 + 00	16" steel		10" gate valve in the line	67.5
272 + 97	18" steel		18" butterfly valve	70.0
437 + 80	(2-60" steel (1-36" steel		Gate valves are located in pumping plant	76.0

c. Environmental values. Vegetation preserved as a part of selective clearing on the waterside berm or slope above the bank protection during prosecution of bank protection contracts shall not be removed as a part of normal maintenance as long as it remains alive and in a healthy state.

Location Station	Size and Kind of Pipe	Gate Model No.	Other Structure Description	Elev. of invert at pipe
437 + 30	36" C.M.P.	100		
532 + 37	6" steel		With gate valve	80.1
540 + 39	6" steel		With gate valve	82.2
543 + 74	36" steel	100		73.2
557 + 11	12" C.M.P.	100		78.5
564 + 31	8" C.M.P.	100		81.0
593 + 16	12" C.M.P.	100		86.4
618 + 84	18" concrete	100		76.9
646 + 96	2-24" steel		With automatic slanting gates	78.9
683 + 25	72" X 60" concrete culvert	173	(see Dwg. No. 4-4-267 of Exhibit B)	74.8

Notes on gates and abbreviations:

(a) Calco gate Model No. 100 is placed on the outlet end of pipes. It closes against face pressures, and opens automatically to permit outflow whenever the pressure is reversed by a change of water levels.

Gate Model No. 173 is a Calco rectangular slide gate which operates by handscrew on a steel frame.

(b) C.M.P. = Corrugated Metal Pipe.

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) 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. Channel.

a. Description. The low water channel of the Feather River within this unit meanders along a comparatively wide overflow area which is confined between the east and west levees of the Feather River from the north boundary of Reclamation District No. 777 (near the mouth

of Honcut Creek) to the north boundary of Levee District No. 1 (about two miles north of Yuba City). The channel within this reach has a project design capacity of about 210,000 cubic feet per second. The overflow channel within this area contains considerable tree growth and open agricultural areas adopted for seasonal crops.

The maintenance and operation of the channel of the Feather River, within this unit, shall be limited to flood control and the requirements which follow, shall be observed only to that extent.

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) 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 Superintendent to maintain a patrol of the project works during all periods of flood flow in excess of a reading of 95.0 on the gage at Gridley Bridge or a reading of 65.0 on the gage at Yuba City as indicated in paragraph 1-05 of this manual. The Superintendent shall dispatch a message by the most suitable means to the District Engineer whenever the water surface at Gridley Bridge or at Yuba City reaches the gage readings indicated above. The Superintendent shall cause readings to be taken at said gages at intervals of two to four hours during the period when the water surface is above the flood-flow stages indicated above and record the time of the observations. One copy of the readings shall be forwarded to the District Engineer immediately following the flood, and a second copy transmitted as an inclosure to the semi-annual report in compliance with paragraph 3-06 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) Bridge.
  - (a) Southern Pacific Railroad crossing at station 138 + 50.

(2) Utility Relocations. None.

(3) Hydrographic Facilities. Provisions have been made at several locations in the vicinity of this unit for hydrographic facilities. These facilities are to be maintained by the following agencies:

- (a) U. S. Weather Bureau station of the Feather River Bridge on Oroville - Chico Highway.
- (b) Division of Water Resources station on left bank of Feather River on abutment of bridge on Gridley-Oroville Road.
- (c) Division of Water Resources station on Feather River on downstream side of Sacramento Northern Railroad Bridge at Yuba City.

\*  
↙ (4)

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) Check Lists - paragraph 7-03 of the Standard Manual.
- (3) Operation - paragraph 7-04 of the Standard Manual.

\* (4) Recreation Area. The recreation area on the <sup>right</sup> bank that includes selective clearing, landscaping, a boat launching ramp and parking area shall be administered and maintained in a manner consistent with good public park practices. Inspection of the premises shall be conducted at least annually by members of the Corps of Engineers and the State Reclamation Board on a mutually agreed schedule, to determine the adequacy of the operation and maintenance program.

SECTION III

REPAIR OF DAMAGE TO PROJECT WORKS AND

METHODS OF COMBATING FLOOD CONDITIONS

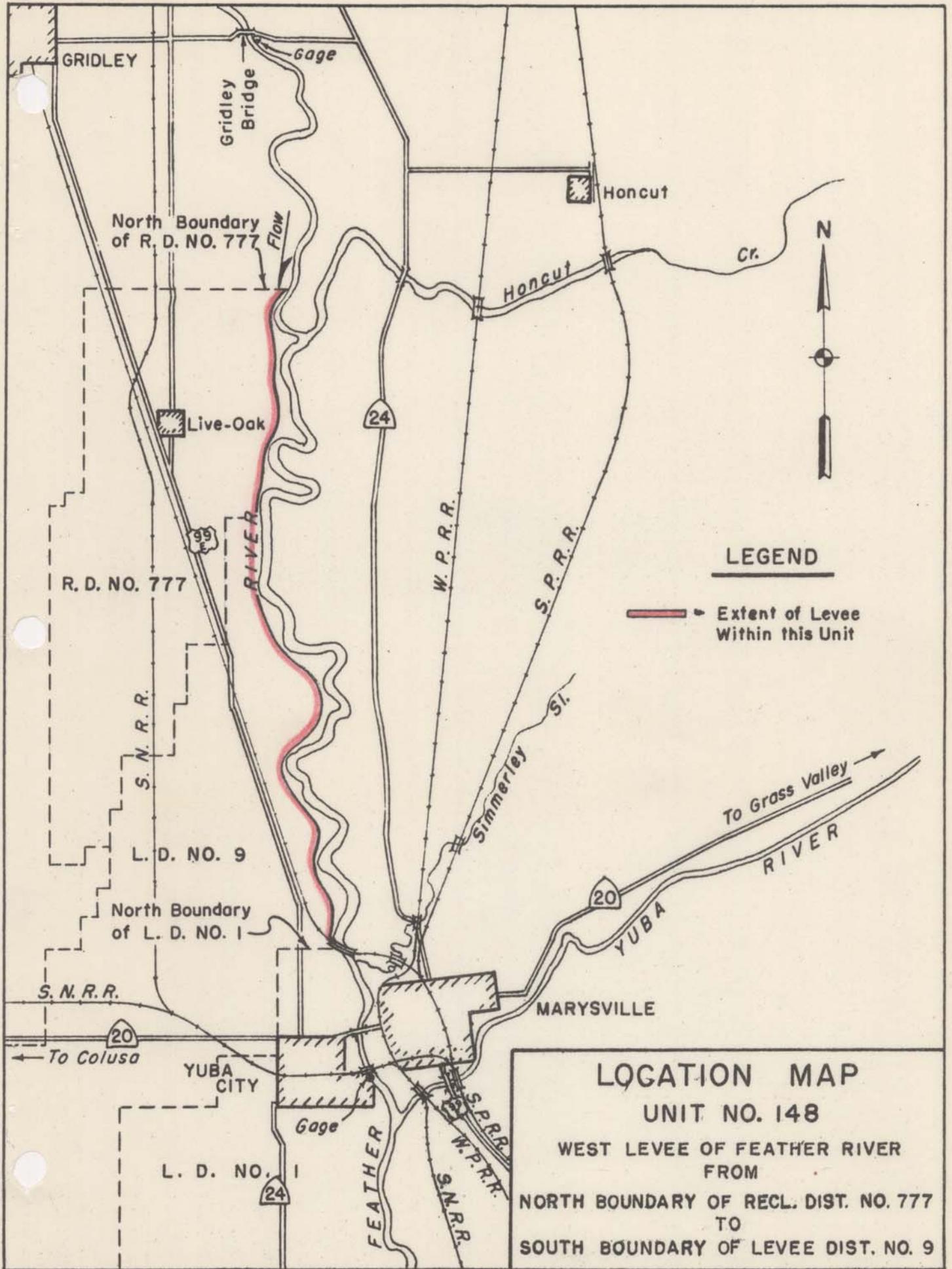
3-01. Repair of Damage. In the event of serious damage to the project works, whether due to flood conditions or other causes, and which may be beyond the capability of local interests to repair, the Superintendent will contact a representative of the Division of Water Resources, State of California, 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 Revised Standard Manual, where the subject is fully covered.

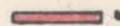
EXHIBIT A

FLOOD CONTROL REGULATIONS

(See Standard Manual)



**LEGEND**

 Extent of Levee Within this Unit

**LOCATION MAP**  
**UNIT NO. 148**  
 WEST LEVEE OF FEATHER RIVER  
 FROM  
 NORTH BOUNDARY OF RECL. DIST. NO. 777  
 TO  
 SOUTH BOUNDARY OF LEVEE DIST. NO. 9

EXHIBIT B

"AS CONSTRUCTED"

DRAWINGS

See separate folder for the following drawings:

<u>File No.</u>	<u>Title</u>
4-4-135	Enlargement of West Levee along Feather River R.D. No. 777 and L.D. No. 9, sheets 1 & 2.
50-4-2193	Enlargement of West Levee Feather River from S.P.R.R., 2 Miles North of Yuba City, Northerly 12 Miles. Sheet 1 to 6 incl.
4-4-292	Berm Fill, Drainage Ditch and Road Approaches, West Levee Feather River 8 Miles North of Yuba City - Part "C". 1 sheet.

Additional drawings of cross-sections, structures, and miscellaneous facilities are available in the Office of the District Engineer.

4-4-508	Levee stabilization, right bank of Feather River in Levee Districts No. 1 and 9, in 6 sheets
4-4-508	Levee Stabilization, Right Bank Feather River, Levee Districts 1 and 9, in 6 sheets.
50-4-4078	Bank Protection, Various Locations Right and Left Banks Sacramento River and Feather River, in 30 sheets.
4-4-599	Bank Protection, Right Bank, Feather River Mile 34.0, PL 84-99, in one sheet.

Exhibit B  
Unattached

1  
2  
3  
4  
5

EXHIBIT C

PLATES OF SUGGESTED FLOOD FIGHTING METHODS

(See Standard Manual.)

6  
7  
8  
9  
10

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. 148  
WEST LEVEE FEATHER 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 back slope	
(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.

CHECK LIST NO. 3

CHANNEL AND RIGHT-OF-WAY  
UNIT NO. 148  
WEST LEVEE OF FEATHER 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 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. 148  
WEST LEVEE OF FEATHER RIVER

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

Inspector \_\_\_\_\_

Date \_\_\_\_\_

Superintendent \_\_\_\_\_

(a) Location by Station	(b) Bank	(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
189/13	Right						
237/00	"						
272/97	"						
437/80	"						
473/30	"						
532/37	"						
540/39	"						
543/74	"						
557/11	"						
564/31	"						
593/16	"						
618/84	"						
646/96	"						
683/25	"						

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 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

LETTER OF ACCEPTANCE  
BY STATE RECLAMATION BOARD

C  
O  
P  
Y

THE RECLAMATION BOARD  
STATE OF CALIFORNIA

C  
O  
P  
Y

November 29, 1974

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

Refer to: 4130.20.400

Dear Sir:

Pursuant to the authority invested in me by The Reclamation Board, I hereby accept from the District Engineer the completed emergency flood control work in Levee District No. 9, Sutter County. The emergency flood control work was transferred to the State of California by your letter of November 19, 1974.

The flood control work consisted of selective clearing, levee bank sloping, placement of stone bank protection, and such miscellaneous work as necessary to complete the construction at Site Mile 34.0 Right Bank, Feather River.

The work was constructed in a workmanlike manner and in conformance with Drawing No. 4-4-599, Specification No. 4815, and Contract No. DACW05-75-C-0032, insofar as could be determined visually.

Sincerely yours,

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

SPKCC-0

19 November 1974

*Qml* *Work*  
*File*

The Reclamation Board  
State of California  
1416 - 9th Street, Room 335  
Sacramento, California 95814

*Jone*

Gentlemen:

Reference is made to the joint inspection of 19 November 1974, to review the completed emergency bank protection work in Levee District No. 9, in Sutter County, authorized by Section 2304(a)(1), Title 10, U.S.C., and Section 5 of the Flood Control Act of 18 August 1941, as amended (Public Law 99, 84th Congress, 1st Session).

This emergency work, as listed on the inclosure was completed on 19 November 1974, in accordance with Specification No. 4815, Contract No. DACW05-75-C-0032 and Drawing No. 4-4-599.

The work consisted of bank sloping and placement of stone bank protection along the Feather River right bank at Site Mile 34.0. Therefore, said work together with the waterway bank contiguous thereto, is transferred as of 19 November 1974, to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Supplement No. 148 Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

*Rompala*  
ROMPALA/kh

*Coleman*  
COLEMAN

*Henson*  
HENSON

F. G. ROCKWELL, JR.  
Colonel, CE  
District Engineer

*McKinsey*  
MCKINSEY

1 Incl  
As stated

Copy furnished:  
DWR, ATTN: John Wright & Carl King

OCE  
SPD

*Units 148*

POTAMOS

cc:  
Engr (Lev & Chan)  
(Prog Dev)

Valley Res ofc  
F & A (Grantham)

*Rockwell*  
ROCKWELL

SUMMARY OF EMERGENCY BANK PROTECTION  
FEATHER RIVER RIGHT BANK

SITE MILE

34.0

STONE PROTECTION

1+50 to 7+40

L.F.

590

*Unit 148*

C  
O  
P  
Y

THE RECLAMATION BOARD  
STATE OF CALIFORNIA

C  
O  
P  
Y

November 14, 1968

Refer to: 4130.60.203

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

Dear Sir:

Reference is made to your letter of October 22, 1968 concerning transfer to the State of California of a portion of the Sacramento River Bank Protection Project, Unit No. 12, consisting of Sites Mile 39.5 and 41.5, right bank, Feather River, in accordance with Specification No. 3288.

The Reclamation Board, at its meeting of November 1, 1968, formally accepted the above-referred to work for operation and maintenance.

Sincerely yours,

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

EXHIBIT F

22 October 1968

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

Gentlemen:

Reference is made to the joint inspection of 16 October 1968, made for the purpose of transferring a portion of the Sacramento River Bank Protection work (Unit #12), to the State of California for operation and maintenance.

The flood control work consists of placement of 1040 feet and 1610 feet of stone bank protection on the right bank of the Feather River at Site Miles 39.5 & 41.5 respectively. A Recreation Area, which includes selective clearing, landscaping, boat launching ramp and parking, is incorporated with Site Mile 41.5. The work was completed on 16 October 1968, in accordance with Specification #3288, Contract No. IACW05-68-C-0014, Drawing #50-4-4078.

The work was performed under the general authority of the Flood Control Act of 1960, 86th Congress, 2nd Session; and Section 2304(a), Title 10, and now meets the requirements of the Sacramento River Bank Protection Project. Therefore, said work together with the waterway banks contiguous thereto, is transferred to the State of California for operation and maintenance.

This portion of the project work will be added by amendment to the Operation and Maintenance Manual, Supplement No. 148, Sacramento River Flood Control Project. Copies will be furnished your office at a later date.

Sincerely yours,

CRAWFORD YOUNG  
Colonel, CE  
District Engineer

Copy furnished:

DWR

OCE & SPD

cc: Engr-Lev&Chan; Prog Dev; Valley; F&A(Cordano)

*Unit 148*

*copy to Jim and Alice # 12 Nov 68*

*R*  
ROMPAIA/P

*J*  
JOLEMAN

*McB*  
HENSON

*[Signature]*

~~YONG~~

YOUNG

*[Signature]*  
23

THE RECLAMATION BOARD  
of the  
STATE OF CALIFORNIA

September 13, 1960

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

Dear Sir:

Reference is made to your letter of August 24, 1960, concerning transfer to the State of a levee rehabilitation on the Feather River at the following locations:

- Item 1c - Correct seepage endangering levee in Yuba City (Site "A" on Drawing No. 4-4-508)
- Item 4a - Complete repairs at two "near failure" locations in Levee District No. 9 (Sites "B-1" and "B-2" on Drawing No. 4-4-508)
- Item 4e - Correct seepage endangering levee in Levee District No. 9 (Site "C" on Drawing No. 4-4-508)

The Reclamation Board at its meeting of September 7, 1960, formally accepted these reconstructed levee sections for operation and maintenance.

Sincerely yours,

A. N. MURRAY /s/  
A. N. MURRAY  
General Manager and Chief Engineer

24 AUG 1960

The Reclamation Board  
 State of California  
 1215 "O" Street  
 Sacramento 14, California

Supplement #1

Gentlemen:

Reference is made to supplement dated 29 November 1957 to the Memorandum of Understanding entered into with the State of California under date of 30 November 1953, covering added items of work required to complete the Sacramento River Flood Control Project.

The flood control work consisting of levee stabilization at four locations on the right bank of the Feather River, listed below, in Sutter County, California, was completed 28 July 1960 in accordance with Specification No. 2655, Contract No. DA-04-167-CIVENG-60-73 and Drawing No. 4-4-508.

- Item 1c -- Correct seepage endangering levee in Yuba City (Site "A" <sup>RT Bank</sup> ← .25 mi on Drawing No. 4-4-508) 144
- Item 4a -- Complete repairs at two "near failure" locations in Levee District No. 9 (Sites "B-1" and "B-2" on Drawing No. 4-4-508) ← .10 mi 148
- Item 4e -- Correct seepage endangering levee in Levee District No. 9 (Site "C" on Drawing No. 4-4-508) ← .30 mi 148

The foregoing supplemental work having been completed to current standards for the Sacramento River Flood Control Project is hereby transferred to the State of California for operation and maintenance. A maintenance manual for this section of project levee has already been furnished which adequately covers maintenance and operation of requirements for the above items.

Total .91 mi

24 AUG 1960

SPRKO-C  
The Reclamation Board

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

Sincerely yours,

✓ Copy furnished:  
Dept Water Resources  
23rd & "R" sts  
Sacto, Calif

H. N. TURNER  
Colonel, CE  
District Engineer

✓ O.C.S.  
So. Pac. Div. Engr.

cc: Engr Div (Levees & Channels Sec)  
Program Develop Br  
Northern Area Ofc

*[Handwritten initials]*

Concurrences	
Originator:	<i>[Signature]</i>
Date:	8/23/60
Dist. Engr.	<i>[Signature]</i>
Asst. D.E. (A)	
Asst. D.E. (O)	
Exec. Asst.	<i>[Signature]</i>
Cmpfr.	
Budget Fin. & Acctg.	
Mgmt.	
Property Office Service Constn- Opns.	<i>[Signature]</i>
Eng'g	
R. E.	
Prsnl.	
Legal	
Supply	

*[Handwritten signature]*

THE RECLAMATION BOARD  
OF THE  
STATE OF CALIFORNIA

March 11, 1953

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

Dear Sir:

Reference your letters File No. SPKKO-P 824.3 (Sac. R.F.C.P.) dated 1 December 1951, 3 December 1951, 4 December 1951, three letters dated 6 December 1951, 7 December 1951 and six letters dated 8 December 1951. Subject letters transferred to the Reclamation Board for operation and maintenance, various levee units of the Sacramento River Flood Control Project.

The Reclamation Board at its 18 December 1951 meeting, on behalf of the State of California, accepted certain of the transferred units together with their contiguous waterway banks for operation and maintenance, and rejected others. A tabulation of the units so accepted or rejected is attached hereto.

Yours very truly,

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

/s/ By \_\_\_\_\_  
D. M. CARR

Exhibit F  
Sheet 1 of 2

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.

<u>No.</u>	<u>Date of Letter</u>	<u>Levee Location</u>	<u>Remarks</u>
1.	1 Dec. 1951	-----	-----
11.	8 Dec. 1951	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.
11.	Do	-----	-----

Note: Only item pertaining to Operation and Maintenance Manual No. 148 is included in the above copy.

RESOLUTION

PASSED AND ADOPTED BY THE RECLAMATION BOARD

AUGUST 21, 1946

- - - -

WHEREAS The Reclamation Board has heretofore approved certain items of "new construction"; consisting of (1) the enlargement and construction of the West levee of the Sacramento River from Colusa to Packers, in Reclamation District No. 2047; (2) the enlargement and construction of the West levee of the Sacramento River and the South levee of Sycamore Slough located near Knights Landing in Reclamation District No. 730; and (3) the enlargement and construction of the West levee of the Feather River, two miles north of Yuba City, northerly twelve miles, a portion of which lies in Reclamation District No. 777, and a portion lying in Levee District No. 9 of Sutter County; and

WHEREAS the War Department, Corps of Engineers, District Engineer, Sacramento District, under dates of 12 August, 1946, and 13 August, 1946, has notified The Reclamation Board of the completion of the three items of levee enlargement and construction, and has transferred said portions of levee to the State of California for maintenance and operation by the proper local interests; and

WHEREAS the Chief Engineer of The Reclamation Board has caused to be made an inspection on the ground of the three items of new construction as specified above, and has found and determined that such work, as completed, has been prosecuted and carried out in conformance with 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 three items of "new construction" as aforesaid, which have on the dates above set forth been transferred to said Board by the War Department, U. S. District Engineer; and be it further

Manual No. 4

Exhibit F  
127, 128, 131, 148

RESOLVED AND ORDERED that the West levee of the Sacramento River from Colusa to Packers, together with the berms and appurtenant structures thereof, be turned over to Reclamation District No. 2047 for maintenance and operation, as the legally authorized function of said District; and be it further

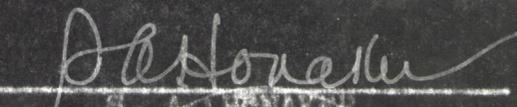
RESOLVED AND ORDERED that the West levee of the Sacramento River and the South levee of Sycamore Slough located and being near Knights Landing, lying in Reclamation District No. 730, be, and the same is hereby transferred to said Reclamation District No. 730 for maintenance and operation as the legally authorized function of said District; and be it further

RESOLVED AND ORDERED that such portion of the West levee of the Feather River from two miles north of Yuba City northerly twelve miles, as lies in Levee District No. 9 of Sutter County, be, and the same is hereby transferred to said Levee District No. 9 of Sutter County for maintenance and operation, as the legally authorized function of said District, and that the remaining portion of said section of levee, so much thereof as lies within Reclamation District No. 777, be, and the same is hereby transferred to said Reclamation District No. 777 for maintenance and operation as the legally authorized function of said District.

STATE OF CALIFORNIA )  
COUNTY OF SACRAMENTO ) ss.  
Office of The Reclamation Board )

I, S. A. HONAKER, Assistant Secretary of The Reclamation Board, do hereby certify that the above and foregoing is a true and correct copy of a Resolution made by said Board at its meeting held August 21, 1946.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of The Reclamation Board this 22 day of August, 1946.

  
S. A. HONAKER  
Assistant Secretary  
The Reclamation Board



Manual No. 4

*4 Copies*

824.3(Feather River)PSEKCO-AA

13 August 1946

Maintenance of West Levee, Feather River  
from S.P.R.R. two miles north of Yuba City,  
northerly 12 miles.

The Reclamation Board  
1100 "O" Street  
Sacramento, California

Gentlemen:

Enlargement has been completed of the West Levee of the Feather River, two miles north of Yuba City, northerly 12 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. 50-4-2193 in eight sheets, entitled "Proposed Levee Enlargement, West Levee, Feather River, from S.P.R.R. 2 miles north of Yuba City, Northerly 12 miles," and drawing No. 4-4-267 entitled "West Levee Feather River, Drainage Structure Station 683/25."

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 obligations established by these regulations.

For the records of this office, acknowledgment of receipt of this letter is requested on or before 15 September 1946.

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

FOR THE DISTRICT ENGINEER:

Sincerely Yours,

*Manual No. 4*

CHARLES H. McNUTT  
Colonel, Corps of Engineers  
Assistant District Engineer

3 Incls.  
Dwg. No. 50-4-2193  
(in 8 sheets)  
Dwg. No. 4-4-267  
Flood Control Regulations

Copy furnished: State Engineer

*J* cc: CdeA(w/d.)

*Unit 148*

EXHIBIT G

SUGGESTED SEMI-ANNUAL REPORT FORM

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\_\_ ) on the west levee of the Feather River from north boundary of Reclamation District No. 777 to north boundary of Levee District No. 1 (Unit No. 148 of the Sacramento River Flood Control 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 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 surface at Gridley Bridge gage reached or exceeded a reading of 95.0 on gage at Yuba City reached or exceeded a reading of 65.0) 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 (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

SACRAMENTO RIVER BANK PROTECTION PROJECT, CALIFORNIA  
UNIT NO. 12

Rules and Regulations for Operation and Maintenance of the Live Oak  
Recreation Area at Site Mile 41.5, Feather River

February 1969

1. The Live Oak Recreation Area shall be available for use by all persons on equal terms. No person shall be denied entrance to the area because of race, color, or national origin.
2. The area shall be administered and maintained in a manner consistent with good public park practices.
3. Inspections of the premises shall be conducted at least annually by members of the Corps of Engineers and the Reclamation Board, on a mutually agreed schedule, to determine the adequacy of the operation and maintenance program.

SACRAMENTO DISTRICT  
U. S. ARMY CORPS OF ENGINEERS

Incl 1

Transmitted to State Reclamation Board  
by letter SPKED-P dtd 19 Feb 69

EXHIBIT "H"