

EXHIBIT H
CHAIN OF CORRESPONDENCE
FOR APPROVAL OF
WATER CONTROL MANUAL

CESPD-ED-W (CESPL-ED-HR/13 OCT 88) (1110-2-240b) 3d End
Krhoun/dh/556-2033
SUBJECT: Sepulveda Dam Water Control Manual

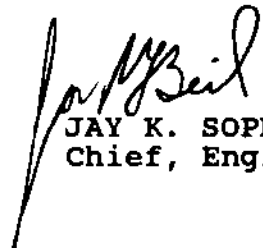
DA, South Pacific Division, Corps of Engineers, 630 Sansome
Street, Room 720, San Francisco CA 94111-2206 JUN 1989

FOR Commander, Los Angeles District, ATTN: CESPL-ED-HR

1. Subject report is approved.
2. Please furnish this office four copies of the final printing of the report.

FOR THE COMMANDER:

Encl
wd


JAY K. SOPER
Chief, Engineering Division

1 - JUN 1989

CESPL-ED-HR (CESPD-ED-W/12 Jan 89) (1110-2-240b) 2nd End
Reid/ep/894-3003
SUBJECT: Sepulveda Dam Water Control Manual

DA, Los Angeles District, Corps of Engineers, 300 N. Los Angeles Street, Room
6042, Los Angeles, CA 90053-2325 30 May 1989

FOR Commander, South Pacific Division, Attn: CESPD-ED-W

1. Enclosed are four copies of the final Sepulveda Dam Water Control Manual prepared in accordance with ETL 1110-2-251. Responses to CESPD comments provided by 1st endorsement have been incorporated into the enclosed manuals. Report quality reproduction of this final version of the manual will begin upon receipt of your final approval.

2. If there are any questions, please contact Boni Bigornia of the Reservoir Regulation Unit at (213)894-6916.

FOR THE COMMANDER:

Enclosure
1. as



h Carl F. Ensor, PE
Chief, Engineering Division

05 April 1989

LAD RESPONSES TO SPD COMMENTS ON THE SEPULVEDA DAM WATER CONTROL MANUAL:

1. Concur. The title page has been changed accordingly.
2. Concur. Table 4-07 on page 4-19 has been updated to the present, and the footnotes clarified.
3. Concur. A description of the unit hydrograph procedure was expanded and included on page 4-7, para. 4-07.
4. Concur. The rubber dam and Verdugo Wash have been located on Plate 2-02. The channel capacity of 16,900 cfs downstream of the dam and other points of constraints have also been included on Plate 2-02. With the rubber dam fully inflated to 6.9 feet, the flow in the channel will reach 800 cfs, when the depth of flow in the channel is 8.3 feet. At that time, the dam begins to deflate automatically. The channel capacity of the Los Angeles River with the dam lowered is 55,000 cfs. With the dam in the raised position, the maximum channel capacity is about 20,000 cfs. This information has been noted on page 7-1, para. 7-02.
5. Concur. The Section on Flood Control on page 7-2, para. 7-05 was modified to describe only the flood control plan regardless of the forecast. Deviations from the plan in the event of a forecast of no spillway flow was moved to page 7-5, paragraph 7-13d.
6. Concur. A small paragraph on drought contingency plans has been added to Section 7-09, entitled "Drought Contingency Plan".
7. Additions to the text resulting from the SPD comments are attached.

CESPD-ED-W (CESPL-ED-HR/13 OCT 1988) (1110-2,240b) 1st End\Krhoun\dh\6-2033
SUBJECT: Sepulveda Dam Water Control Manual

13 JAN 1989

DA, South Pacific Division, Corps of Engineers, 630 Sansome street, Room
720, San Francisco CA. 94111-2206

FOR: Commander, Los Angeles District, ATTN: CESPL-ED-HR

1. Subject final draft manual has been reviewed and comments are attached. These comments are submitted to assist the District in finalizing the manual. Approval will be given after review by this office of the final manual.

2. District is requested to submit its responses to the comments along with the final manual.

THE COMMANDER:

2 Encls
wd encl 1
Added 1 encl
2. SPD Comments


WALTER C. DRY
Acting Chief, Engineering Division

SOUTH PACIFIC DIVISION
COMMENTS
FINAL DRAFT
SEPULVEDA WATER CONTROL MANUAL

1. Page i- Title of project should be identical to the name on the cover of the manual.
2. Page 4-19, Table 4-07- This table should be updated to include years from 1980 to present. Note 2 is unclear. It should be modified or eliminated when the table is updated.
3. Page 6-2, paragraph 6-02- A description of the unit hydrograph procedures should be included in this paragraph or on Plate 4-08. This will permit the reader to understand the method used.
4. Page 7-1, paragraph 7-02- Locate Verdugo Wash and the rubber dam on Plate 2-02. Another constraint appears to be the channel capacity of 16,900 cfs immediately downstream of the dam (see paragraph 7-05b). Indicate the channel capacity corresponding to the 8.3 feet depth at the rubber dam. In addition the correlation of the flows at the points of constraints should be noted.
5. Page 7-2, paragraph 7-05- This paragraph should describe the flood control plan regardless of the forecast. The manual infers that the plan shown on plate 7-02 will only be followed if there is no forecast or if large spillway flow is anticipated. The operating criteria should be developed for all storms regardless of their magnitude. Deviations for emergencies are handled as shown in paragraph 7-13. Paragraph 7-05 should be revised accordingly.
6. A small paragraph on drought contingency plans should be included in Chapter 7. This paragraph would explain in general terms water control actions that would occur during drought conditions.



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS

REPLY TO
ATTENTION OF

13 OCT 1988

CESPL-ED-HR (1110-2-240b)

MEMORANDUM FOR: Commander, South Pacific Division, Attn: CESPED-ED-W

SUBJECT: Sepulveda Dam Water Control Manual

1. Enclosed for your review and approval are three copies of the updated Sepulveda Dam Water Control Manual (final draft) dated September 1988 (enclosure 1). The previous version of this manual was approved by SPDED-W by endorsement dated 23 October 1986.
2. Before final reproduction of the previously approved water control manual could be initiated, a final Environmental Assessment (EA) had to be approved by SPD. The final EA, dated May 1987, determined a Finding of No Significant Impact (FONSI) and was subsequently approved by SPD. However, because of the time difference between approval of the water control manual and approval of the May 1987 EA, new developments had occurred in the Sepulveda Basin that needed to be included in the water control manual.
3. The enclosed September 1988 version of the manual updates the October 1986 approved version to include the changes to the basin. None of the basin changes affect the conclusions stated in the existing EA. In addition, the changes included in the September 1988 water control manual do not significantly impact the reservoir regulation schedule used to operate the outlet works. Enclosure 2 is a list of the revisions to the previously approved water control manual furnished to expedite the your review process. You may refer to the May 1987 EA as necessary, as it still applies in all respects.
4. We request an expedited review and approval of the enclosed manual in keeping with the Division's goal of having all water control manuals brought up to date by the end of FY 91.

FOR THE COMMANDER:

CARL F. ENSON
Chief, Engineering Division

Encls

SPDED-W (SPLED-HE/28 May 85) 3rd End Bhamidipaty/6-6210
SUBJECT: Sepulveda Reservoir Water Control Manual

DA, South Pacific Division, Corps of Engineers, 630 Sansome
Street, Room 720, San Francisco, CA 94111-2206 25 OCT 86

TO: Commander, Los Angeles District, ATTN: SPLED-HE

The subject reservoir regulation manual is approved.

FOR THE COMMANDER:

3 Encls
wd encl 2
l&3. nc

A. E. WANKET
Chief, Engineering Division

CF: SPDED-W/Bhamidipaty
SPDED-W
SPD RF

SB
BB/dh
SPDED-W
6-6210
16 Oct 86

JM
~~SPDED-W~~
WED
WCD

WED
AEW
SPDED
63 OCT 86

8 - OCT 1986

SPLED-EE (29 May 1985) 2nd Ed
SUBJECT: Sepulveda Reservoir Water Control Manual

DA, Los Angeles District, Corps of Engineers, P.O. Box 2711, Los Angeles,
California 90053

TO: Commander, South Pacific Division, ATTN: SPDED-W

1. Enclosed for your review and approval are two copies of the updated
Sepulveda Dam Water Control Manual (final draft) dated May 1986. The draft
water control manual was transmitted to SPD in May 1985 and comments were
returned to LAD by the 1st Endorsement dated 11 Feb 1986. Response to all SPD
comments received with the 1st endorsement have been incorporated in the final
draft with the exception of comments addressed in enclosure 3.

2. A draft Environmental Assessment was forwarded to SPLPD-W for review in
the summer of 1985. The final Environmental Assessment for Sepulveda
Reservoir is being prepared at this time by Planning Division, LAD, and will
be forwarded separately.

FOR THE COMMANDER:

3 Encls
added 1 encl
3. Response to Comments

BURNAS ARNO
Chief, Engineering Division

CF (wo/encls):

M&R
CDE
ED
E&R Br.
LMS (3)
Op Br.
PD
EEB
RP (KONIGS)

ARNO
SPLED

KOFLIN
SPLED

EVELYN
SPLED-G

MARVICE
SPLED-HE

MARIOS
SPLED-RE
x4756/rg
HXV

SEPULVEDA DAM AND RESERVOIR
DRAFT WATER CONTROL MANUAL (MAY 1986)
RESPONSE TO SPDED-W COMMENTS

All SPDED-W comments have been incorporated in this update of the water control manual except as follows:

Comment # 9. Section 4-96. Information on historic flood damages is included in Section 4-12 (d) under economic data and it is not duplicated in Section 4-96 under Storms and Floods.

Comment # 10. Plate 4-33. This plate was kept because it helps to establish plate 4-95.

Comment # 13. Section 4-99. The water surface profiles for control points on the Los Angeles River are not available at this time. The old ones are obsolete since more side drains and new construction changed the original channel design. However, these water surface profiles will be incorporated in the next update of the water control manual which is scheduled for FY 88.

Comment # 23. Table 4-96. The values of this table are correct. Backup material can be sent if requested.

Comment # 24. Plates. The plates are kept at the end of the report rather than with each section, because this way the water control manual is more easily used.

Comment # 25. Exhibit F. This exhibit is incorporated in this update of the water control manual but Plates and Tables that are used in the main body of the water control manual are not duplicated in the exhibit. This avoids duplication of work and the possibility of two versions of one table in the same water control manual. The dam tender is required to have available at the dam other pertinent books that complement this exhibit. These books are: the current Orange Book - "Instructions for Reservoir Operations Center Personnel" the "Sepulveda Dam Flood Emergency Plan" and the "Operation and Maintenance Manual for Sepulveda Dam". Names and telephone numbers are included in the "Orange Book", not in the water control manual, otherwise an annual update and distribution of the water control manual would be required.

SPDED-W (SPLED-HE/Undated Ltr Received on 28 May 1985) 1st End
SUBJECT: Sepulveda Reservoir Water Control Manual

DA, South Pacific Division, Corps of Engineers, 630 Sansome
Street, Room 720, San Francisco, CA 94111-2206 11 FEB 1986

TO: Commander, Los Angeles District, ATTN: SPLED-HE

The referenced draft manual (July 85 Draft) has been reviewed.
Our comments are attached, together with a marked-up copy of
the draft for incorporation in the final.

FOR THE COMMANDER:

2 Encl

Walter D. Day
A. E. WANKET
Chief, Engineering Division

SEPULVEDA DAM AND RESERVOIR
DRAFT WATER CONTROL MANUAL (JULY 1985)
SPDED-W COMMENTS

1. Make title on the front cover and page i consistent.
2. Table 1. Make the date at the beginning of the table consistent with the date of the manual. Provide real estate taking lines by fee and easements. Change MSL to NGVD through out the table and through out the report. Under Elevation, items 4 and 5 are not clear and appears something is missing. Either provide allowance for sediment or delete-50-year.
3. Paragraph Titles: Use lower case letters and underscore the title.
4. Para 1-01: Add EM 1110-2-3600.
5. Add Para 1-05 with necessary information as required by ETL 1110-2-251.
6. Chapter II: Too descriptive and can be condensed.
7. Section 4-03: Provide brief description of the geology of the area.
8. Section 4-04: Identify various debris basins on plate 2-01 or plate 2-02.
9. Section 4-06: Provide information on historic flood damages.
10. Plate 4-03: This plate shows the 10-year moving mean of peak flows. There is no significance to this plate and should be removed.
11. Table 4-07: There are some errors in this table. For example for the month of March, the mean is 3,124 and not 2,035, and the median is 2,200 and not 1,111. Correct these and check other values.
12. Section 4-07: Provide time of concentration value at the dam site.
13. Section 4-09: Provide water surface profiles for floods such as 10-year and 100-year. Indicate control points and damage centers, and provide rating curves.
14. Section 4-10: Provide drainage area at Chatsworth Reservoir and Encino Reservoir.
15. Section 4-11 d: Provide drainage areas.
16. Section 5-08: Does LAD inform local and state Emergency Management agencies instead of LA Police Department in case of

flood emergencies? Check into this and if necessary correct it. Also provide phone numbers and addresses of these agencies.

17. Section 6-01.a: Reference to Sec. 5-06.b does not make any sense. Check this and correct it, if necessary.

18. Section 6-02. The information provided is inadequate. Provide details as required by ETL 1110-2-251.

19. Section 7-02: This section is incomplete. Provide maximum discharge that can be released without exceeding downstream channel capacity, maximum changes in releases from time to time and the release that can be made in case of gate failure. Discuss the impact of flows from downstream uncontrolled area on the releases from Sepulveda Dam.

20. Section 7.05 c(1): Provide the maximum release that can be made the rough the four ungated outlets when the water level is at spillway crest.

21. Section 7.05: Paragraph e is missing and paragraph f appears to be out of place.

22. Plates: Provide the following plates.
Location and Vicinity Maps.
Sediment Ranges or Sediment Survey Info.
Embankment Section.
Unit hydrograph.
Tailwater Rating curve.
Profile of the downstream reach of the river.

23. Table 4-06: The values in this table appear to be not correct. How could the ratio of the flows in columns (2) and (3) be the same for peak flow and 5-day duration flow.

24. Plates: Provide the plates with each section rather than at the end of the report.

25. Exhibit A: a. Provide Exhibit A on a colored paper.

b. Provide time required to raise and lower the gates of spillway outlets.

c. Type of energy dissipator for spillway and outlets.

d. Discharge through the outlets at pertinent elevations.

e. Control points downstream and pertinent information.

26. Exhibit F: This exhibit is incomplete and inadequate for dam tender's use during flood emergency. This exhibit should be self contained with all the necessary backup information.

Provide as a minimum the following:

a. A table containing the names, offices, and office and home telephone numbers of all concerned people with the regulation of floods of Sepulveda Dam and Reservoir.

b. A narrative covering

- (I) General
- (II) Flood Control Operational Requirements
- (III) Limitations on Storage and Releases
- (IV) Standing Instruction During Flood Emergency
- (V) Operational Responsibilities
- (VI) Gate Operation
- (VII) Normal and Emergency Operation Procedures
- (VIII) Reports (Number, extent and frequency)
- (IX) Emergency Notification
- (X) Modification of Regulations
- (XI) Spillway and Outlet Rating Curves
- (XII) Tailwater Rating Curve
- (XIII) Rating Curves for Downstream Control Points
- (XIV) Flood Control Diagram

SPDPD COMMENTS

1. Water Control Manual, Page 2-1, Paragraph 2-01. There is no Table 1 in Exhibit A. Also, Plate 2-01 is sufficient reference for the location discussed.

2. Para 8.02(b), Page 8-3. Contains an incorrect statement regarding status of SPF flood design for reservoirs which ignores all guidance that is current. Change it.



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2711
LOS ANGELES, CALIFORNIA 90063-2325

REPLY TO
ATTENTION OF

SPLED-HE

SUBJECT: Sepulveda Reservoir Water Control Manual

Commander, South Pacific Division
ATTN: SPDED-W

1. Enclosed are two draft copies of the Water Control Manual for Sepulveda Reservoir for your review and comments.
2. Copies of this draft report are also being circulated simultaneously for review by local water resources and flood control agencies.
3. An Environmental Assessment for Sepulveda Reservoir is also being prepared at this time by Planning Division, LAD, and will be forwarded separately.

FOR THE COMMANDER:

Encl (2 cys)

Robert C. Koplin
NORMAN ARNO
for Chief, Engineering Division



DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
630 Sansome Street, Room 720
San Francisco, California 94111-2206

REPLY TO
ATTENTION OF:

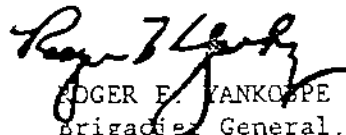
CESPD-ED-W (1110-2-240b)

MAR 20 1951

MEMORANDUM FOR ~~Commander~~, Los Angeles District
Commander, Sacramento District

SUBJECT: Planned Deviations from Approved Water Control Plans

1. All planned deviations from approved water control plans for reservoir projects within the South Pacific Division must be coordinated with the Coastal Engineering and Water Management Division at CESPD. Approval must be given prior to implementation of the deviation.
2. Emergency deviations do not require prior approval but coordination must still be made as soon as is practical.


EDGER E. YANKOSPE
Brigadier General, U.S. Army
Commanding