

## I - INTRODUCTION

**1-01 Authorization.** This water control manual was prepared in compliance with the following authorities and directives:

Engineering Regulation (ER) 1110-2-240: Engineering and Design, Water Control Management, dated 8 October 1982.

Engineering Regulation (ER) 1110-2-241: Engineering and Design, Use of Storage For Flood Control and Navigation at Non-Corps Projects, dated May 1990.

Engineering Manual (EM) 1110-2-3600: Engineering and Design, Management of Water Control Systems, dated 30 November 1987.

Engineering Regulation (ER) 1110-2-8156: Engineering and Design, Preparation of Water Control Manuals, dated 31 August 1995.

Code of Federal Regulations, Title 33, Part 208.11, subparagraph d-4, entitled, "Water Control Plan and Manual".

The District Certification leading to approval of this manual is included in Exhibit K.

**1-02 Purpose and Scope.** The purpose of this manual is to provide the regulating policy for Seven Oaks Dam. This document also furnishes current information about the dam and reservoir and a description of the organizations responsible for collecting data and regulating the reservoir. This manual contains: (1) a brief description of the project and its history, (2) a description of the watershed characteristics, (3) a description of the data collection and communications network, (4) details of the reservoir regulation schedule, (5) a description of the U.S. Army Corps of Engineers, Los Angeles District's (SPL) organization, and (6) a description of the project owners'

organizations, namely, the San Bernardino County Public Works and Flood Control District (SBCPW&FCD), the Orange County Public Facilities & Resource Department (OCPF&RD), and the Riverside County Flood Control District (RCFC&WCD). The project owners have joint ownership, regulation, and operation, and maintenance responsibilities for the project.

Issues that are directly or indirectly affected by the operation of Seven Oaks Dam are discussed in this water control manual. They include: (1) flood control, (2) dam safety, (3) mitigation of impacts to downstream water users, (4) environmental concerns and (5) the prototype testing program. Topics that are relevant to the operation of the dam under the plan contained in this manual are also discussed. They include (1) operational constraints, and (2) deviations from the approved water control plan.

The foregoing paragraphs set forth only the purposes and issues that are addressed in this Water Control Manual, in accordance with the regulations cited in paragraph 1-01 above. The U.S. Army Corps of Engineers does not intend the Water Control Manual to be used for any other purpose. As stated in paragraph 8-06 of this manual, “The Water Control Plan does not include regulation for water supply purposes.” Any references in the manual to water supply, water conservation, or water rights should not be construed or used to imply any particular understanding or interpretation of water rights issues. This manual makes no determination of any water rights. This manual does not imply or intend to imply any rights by any agency or other party to water released through Seven Oaks Dam and the manual should not be applied for such purpose. This manual should not be construed or interpreted in any determination of prior or future water rights by any agency or other party and should not be applied in any adjudication of such water rights by any agency or other party. The U.S. Army Corps of Engineers does not endorse any use of the manual for any purpose beyond the purposes authorized in accordance with ER 1110-2-240, as stated in this section.

**1-03 Related Manuals and Reports.** Manuals and reports relevant to Seven Oaks Dam, Seven Oaks Reservoir, the drainage areas above and below Seven Oaks Dam, and significant hydraulic structures within these drainage areas are listed in Table 1-1. Copies of these reports are available in the Corps of Engineers, Los Angeles District (SPL) office in downtown Los Angeles.

**1-04 Project Owner.** Seven Oaks Dam was built by the Corps of Engineers for the purpose of flood control. Its ownership has been turned over to the local sponsors of the project, namely, San Bernardino, Riverside, and Orange Counties. These three counties are represented by their flood control agencies, as follows:

**a. San Bernardino County Public Works and Flood Control District (SBCPWFC).** SBCPWFC is responsible for providing public works including flood control and related services throughout San Bernardino County, California and its incorporated areas.

**b. Riverside County Flood Control and Water Conservation District (RCFC&WCD).** RCFC&WCD is responsible for the protection of people and property from flooding throughout Riverside County, California.

**c. Orange County Public Facilities and Resource Department (OCPFRD).** OCPFRD is responsible in providing, operating, and maintaining public facilities, and regional resources for the enjoyment, mobility, and protection of the people of Orange County, California.

**1-05 Operating Agencies.** The counties of San Bernardino, Orange, and Riverside are responsible for the operation and maintenance of the project. The operation, maintenance, repair, replacement, rehabilitation (OMRRR) and inspections of the dam and appurtenances, reservoir, and related facilities are to be performed in accordance with regulations and directions prescribed by the Secretary of the Army.

**1-06 Regulating Agencies.** The counties of San Bernardino, Orange, and Riverside will be jointly responsible for the regulation of Seven Oaks Dam. These counties are represented by their flood control agencies as listed in Section 1-04. As project regulators, the local sponsors are required to regulate the project in accordance with the Water Control Plan, which is contained in this manual. This regulation includes coordinating water control management efforts with the Corps of Engineers, and other federal, state and local agencies that are affected by impoundments within the reservoir or releases from Seven Oaks Dam. These agencies include, but are not limited to the following:

**a. Corps of Engineers (COE).** The COE was responsible for the design and construction of Seven Oaks Dam. Seven Oaks Dam falls under the jurisdiction of Section 7 of the Flood Control Act of 1944. Under Section 7 the COE is charged with the responsibility of prescribing regulations for the use of storage allocated for flood control at all reservoirs constructed wholly or in part with Federal funds. The COE is responsible for providing the flood control regulations and has the authority for final approval. During real-time operations, any deviation from the approved plan must be authorized by the COE.

**b. U.S. Fish and Wildlife Service (USFWS).** USFWS is responsible for the conservation, protection and enhancement of fish, wildlife, and their habitats within the Santa Ana River Basin.

**c. California State Department of Fish and Game (CSDFG).** CSDFG has regulatory responsibility for fishing and hunting activities as well as for protecting habitat and fauna within the Santa Ana River Basin.

**d. Southern California Edison (SCE).** SCE is one of the largest electric utilities in the United States and the largest subsidiary of Edison International. SCE provides electrical power to private homes, communities, cities, and businesses in Central and Southern California. SCE's power distribution network includes the Santa

Ana River Hydroelectric System, the operation of which affects small inflows into Seven Oaks Dam.

e. **California State Department of Water Resources Division of Safety of Dams (DSOD)**. DSOD was created by the California State Legislature in 1929 to provide supervision over non-federal dams in the State. DSOD has jurisdiction over all matters related to dam safety after the project is turned over and accepted by the local sponsors.

f. **Local Water Conservation Agencies and Water Users Groups**. The Bear Valley Mutual Water Company, San Bernardino Valley Water Conservation District, and the Northfork Water Company, along with other agencies, have immediate surface diversion water use downstream of the dam. The other agencies include the following: 1) Lugonia Water Company, 2) East Valley Water District, 3) Edwards Canal Company, 4) Redlands Water Company, 5) Crafton Water Company, 6) San Bernardino Valley Municipal Water District, 7) City of Redlands, 8) City of Highlands, 9) City of San Bernardino, 10) Arnott Citrus & Poultry, 11) Western Municipal Water District of Riverside County, and 12) numerous citrus growers and shareholders within the San Bernardino Valley.

**Table 1-1. Seven Oaks Dam Water Control Manual Related Manuals,  
Reports and References**

No.	Title	Date
1	Review Report on the Santa Ana River Mainstem, including Santiago Creek and Oak Street Drain	February 1976
2	Phase I General Design Memorandum on the Santa Ana River Mainstem, including Santiago Creek	January 1982
3	Upper Santa Ana River Flood Storage Alternative study, Supplement to Phase I GDM on the Santa Ana River Mainstem, including Santiago Creek	April 1989
4	Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek, Volume 4, Mill Creek Levee	August 1988
5	Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek, Volume 5, Oak Street Drain	August 1988
6	Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek, Volume 7, Hydrology	August 1988
7	Phase II GDM on the Santa Ana River Mainstem, including Santiago Creek, Volume 9, Economics & Public Comment & Response	August 1988
8	Water Control Manual for Carbon Canyon Dam & Reservoir, Santa Ana River, California	December 1990
9	Water Control Manual for San Antonio Dam & Reservoir, Santa Ana River, California	May 1991
10	Feature Design - Seven Oaks Dam, Floodway Delineation	August 1991
11	Feature Design - Lower Santa Ana River, Interior Flood Control	December 1991
12	Feature Design - Seven Oaks Dam Outlet Works	July 1991
13	Feature Design - Lower Santa Ana River, Construction Materials	June 1991
14	Basis for Design – San Timoteo Creek	May 1994
15	Feature Design - Seven Oaks Dam, Embankment and Spillway	February 1993
16	Feature Design Memorandum No.2 Seven Oaks Dam Floodway Delineation (Including 500 Year and Seven Oaks Dam Failure Floodplains)	August 1991
17	Water Control Manual for Prado Dam & Reservoir Santa Ana River, California	September 1994
18	Santa Ana River, Seven Oaks and Prado Dams Probable Maximum Flood Update	August 2001
19	Final Biological Assessment Seven Oaks Dam, Santa Ana River Mainstem Project, San Bernardino County, California	August 2000