

## IX - WATER CONTROL MANAGEMENT

### 9-01 Responsibilities and Organization.

a. **Corps of Engineers.** The role of the U.S. Army Corps of Engineers, Los Angeles District (SPL), in the regulation of Seven Oaks Dam is based on the Flood Control Act of 1944, which reads in part:

*“Hereinafter it shall be the duty of the Secretary of War to prescribe regulations for the use of allocated storage for flood control or navigation at all reservoirs constructed wholly or in part with Federal funds provided on the basis of such purposes, and the operation of any such project shall be in accordance with such regulations.”*

In practice, SPL’s role consists of developing the water control plan for the project; preparing and updating the water control manual; monitoring compliance with the water control plan; collecting data, editing and forwarding reports from the project owners; and processing requests for deviations from the approved water control plan.

Deviations from the water control plan contained in this manual require approval from the U.S. Army Corps of Engineers, South Pacific Division office. Deviations are discussed in Section 7-15.

Personnel from the SPL Reservoir Regulation Section are available for consultation on flood-related operations. During storm events, these personnel are working in SPL’s Reservoir Operations Center and are available 24 hours a day, 7 days a week. Otherwise they may be contacted using phone numbers provided in the annual publication “Instructions for Reservoir Operation Center Personnel” (Orange Book). Table 9-1 is an organizational chart depicting the chain of command for reservoir regulation decisions.

SPL is responsible for preparing the annual water control management reports concerning the regulation of Corps owned and Section 7 reservoirs, including Seven

Oaks Dam. Data for the Seven Oaks Dam portions of these reports will be furnished by the project sponsor as detailed in Section 5-07 of this water control manual. The reports prepared by SPL are described in Section 9-05.

**b. Other Federal Agencies.** There are no other Federal agencies with direct water control responsibilities at Seven Oaks Dam and reservoir. Indirectly, it is expected that the US Fish and Wildlife Service will participate in the Woolly Star Preserve Area Steering Committee which will use adaptive management techniques to annually determine and define for the water control managers, the environmental operation to be followed consistent with the project flood control operation, mitigation for project impacts to water users, and dam safety objectives.

**c. Project Owners.** The ownership, operation and maintenance, including the regulation of Seven Oaks Dam has been turned over to the local sponsors of the project which consist of the Orange County Public Facilities and Resource Department, the San Bernardino County Public Works and Flood Control District, and the Riverside County Flood Control and Water Conservation District. The project owners are required to operate the dam in accordance with the currently approved water control plan. The project owners are also required to dispatch channel observation teams to evaluate the performance of the downstream channel and report possible regulation problems. If a deviation from the plan is necessary, the project owners are required submit a request for the deviation to SPL and obtain approval before proceeding with the deviation as described in Section 7-15. Costs incurred by the Corps of Engineers associated with the processing of deviation requests are the responsibility of the project owners. In addition, the project owners are required to provide SPL any information related to the operation of the dam, upon request and on an annual basis. Information that is required on an annual basis shall be formally transmitted in a report to the SPL Reservoir Regulation Section office. The report shall include all information necessary for the preparation of the Corps reports outlined in Section 9-05. The water control responsibilities are documented in the

Sponsors' Operation and Maintenance Agreement. These responsibilities and additional Corps requirements are summarized as follows:

(1) **Orange County Public Facilities and Resource Department (OCPF&RD)**. The OCPF&RD is charged with water control management responsibilities for Seven Oaks Dam. The OCPF&RD Storm Operation Center is staffed with water control managers, who direct all water control operation at the dam in accordance with the water control plan. The OCPF&RD coordinates with all other government agencies and private individuals that are affected by each operation of the dam. The OCPF&RD is required to provide any information related to the operation of the dam, upon request by the Corps of Engineers.

(2) **San Bernardino County Public Works and Flood Control District (SBCPW&FCD)**. SBCPW&FCD is charged with the responsibility of performing the required physical operation of the dam, outlet gates, and other components. SBCPW&FCD will furnish the project operators/dam tenders whose duties and responsibilities are outlined in Exhibit A, "Standing Instructions to Project Operator for Water Control". During normal operation, including flood events, gate regulation instructions will be issued by the OCPF&RD water control managers to the SBCPW&FCD dam tenders. In the event that communications between the dam and the OCPF&RD Storm Operation Center are interrupted, a set of instructions is also available in Exhibit A, section 3-05, entitled "Communications Outage" for the project operators/dam tenders to follow.

(3) **Riverside County Flood Control & Water Conservation District (RCFC&WCD)**. RCFC&WCD is not directly charged with any specific task necessary for the operation or regulation of Seven Oaks Dam.

d. **Private Organizations**. There are no private agencies charged with water control responsibilities at Seven Oaks Dam.

**9-02 Interagency Coordination.** The U.S. Army corps of Engineers coordinates with other Federal, State, County, and local organizations concerning water control operations of its projects and Section 7 dams. With regard to Seven Oaks Dam, the OCPF&RD coordinates with the SPL ROC, and has primary responsibility for coordination with other government and private agencies, the Woolly Star Preserve Area Steering Committee, and individuals affected by the operation of the dam. This coordination is done once every year through pre-storm season meetings, to identify all points of contacts for emergencies or non-emergencies, to discuss the status of all water control projects, and any changes to regulation/operation plans for following flood year.

**a. Local Press and Corps of Engineers Bulletins.** The Public Affairs Office of the Corps of Engineers, SPL, (after coordination with OCPF&RD) coordinates with the local press regarding floods and other aspects of project operations. This is accomplished through both telephone and in-person interviews and occasional issuance of press releases. It should be noted that the Corps of Engineers does not publicly issue flood watches or warnings, or other status reports or forecasts to the general public.

**b. National Weather Service (NWS).** The NWS has the responsibility for issuing flood watches and warnings to the public. The project water control managers can utilize NWS data to aid in making real-time operation decisions. Conversely, the real-time and post-event data regarding the operation of the dam can be shared to the NWS.

**c. U.S. Geological Survey (USGS).** The USGS cooperates with several agencies along the Santa Ana River, including the Corps, the SBCPW&FCD, RCFC&WCD, and OCPF&RD, in the operation of stream gaging stations. The USGS maintains and services many of the stations under contract with other agencies. Data from many of these gages are published annually by the USGS in its Water Supply Papers.

d. **U.S. Fish and Wildlife Service.** In accordance with the Endangered Species Act of 1973 (PL 93-205) and the Fish and Wildlife Coordination Act (PL 85-624), the project owners are required to coordinate with the U.S. Fish and Wildlife Service if project operations may jeopardize the continued existence of any endangered species listed by the Service.

**9-03 Interagency Agreements.** The Local Cooperation Agreement (LCA) is the Corps official agreement with the sponsors for project responsibilities and cost sharing. A signed copy of the LCA is included in this manual as Exhibit D. It can also be found in Appendix B of the Operation & Maintenance Manual for Seven Oaks Dam, dated August 2002, between the Local Sponsors. The Operation and Maintenance Agreement between the Local Sponsors for Seven Oaks Dam is also included in Exhibit D, however, this agreement has not yet been finalized. This agreement outlines the understandings and responsibilities the project owners. San Bernardino County Flood Control District performs operation and maintenance on behalf of the project owners. Orange County Flood Control District is the lead agency for preparing the project annual Operation and Maintenance budget. Operation, maintenance, repair, replacement, rehabilitation (OMRRR) and inspections of the dam and appurtenances, reservoir and related facilities will be the responsibility of the project owners, but in overall accordance with regulations and directions prescribed by the Secretary of the Army. Operation of Seven Oaks Dam shall be in accordance with the current water control plan approved by the U.S. Army Corps of Engineers, South Pacific Division.

As documented in the Phase II GDM, Volume 1, Seven Oaks Dam, the Corps of Engineers and the project owners agreed with the downstream water users groups to keep the required discharge from the outlet works of Seven Oaks Dam at a minimum of 3 cfs while holding or building the debris pool behind the dam. This discharge is the estimated amount of base flow forced to the surface by the construction of the dam. By releasing this flow through the outlet works and percolating it in the plunge

pool, the downstream aquifer is maintained in its pre-project condition. In addition, outside the flood season when there is no active pool in the reservoir the MDL extension line can be used to bypass the plunge pool at the request of downstream water users so that there will not be any interruptions to the flow of water back into the Santa Ana River downstream of the dam.

#### **9-04 Commissions, River Authorities, Compacts, and Committees.**

a. **Santa Ana River Watermaster.** On April 17, 1969, the Orange County Superior Court entered a Stipulated Judgment in Case No. 117628 involving the Orange County Water District vs. City of Chino et al. The judgment, which became effective on October 1, 1970, contained a declaration of rights of the entities in the Lower Area of the Santa Ana River basin (i.e., the Orange County Water District) as against those in the Upper Area (i.e., the San Bernardino Valley Municipal Water District, the Western Municipal Water District, and the Chino Basin Municipal Water District). The arrangement leaves to each of the major hydrologic units in the watershed the determination of its own basin management plans. A court appointed Watermaster documents and accounts for flows within the Santa Ana River.

#### **b. Multi-Species Habitat Management Plan Steering Committee.**

A multi-agency steering committee such as the Woolly Star Preserve Area (WSPA) Steering Committee (AKA Advisory Committee) will use adaptive management techniques to annually determine and define for the project operator an environmental operation to be followed should sufficient flood runoff occur. Decisions will be made by consensus among the various participating agencies, which will include at a minimum the Corps, the three Local Sponsors, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game. It is envisioned that the existing WSPA Steering Committee will serve the function of the MSHMP Steering Committee by expanding their responsibilities to include multi-species management, and possibly expanding their membership to include additional technical experts. The MSHMP Steering Committee will inform interested parties and agencies as necessary regarding

MSHMP development and implementation. It is envisioned that the Steering Committee will encourage the participation of non-members of the MSHMP process, including but not limited to agencies interested in water conservation at Seven Oaks Dam. The Sponsors will continue to have lead responsibility for administering the implementation of the management plan. On behalf of the Sponsors, the SBCPW&FCD will be the designated Administrator for all management activities, contracts and other administrative matters. The Corps will have lead responsibility to monitor and ensure that the Local Sponsors implement the management plan in a satisfactory manner, and advise the Local Sponsors if changes to the implementation program are necessary. The Corps, as Lead Agency responsible for the SARP and management of mitigation lands, will have final decision-making responsibility on recommendations of the Steering Committee regarding plan implementation.

The Corps and Local Sponsors may opt to fund the management plan implementation in one of two ways: (1) deposit their respective shares of the estimated net present value of the total expenditure commitment into an interest-bearing account established by San Bernardino County's Treasurer or other entity (such as The Nature Conservancy); or (2) elect to fund their respective share of costs annually, based on an approved annual implementation program. The Corps and resource agencies prefer the first option.

**9-05 Reports.** As required by Engineering Regulation (ER) 1110-2-240 entitled, "Water Control Management," the SPL prepares reports for transmittal to the South Pacific Division Office concerning the regulation of SPL owned and Section 7 projects. The project owners are required to provide SPL the Seven Oaks Dam data and information necessary to complete these reports.

**a. Daily Reservoir Report.** SPL prepares this report each morning. The report covers the status of Section 7 dams and SPL operated projects. This report is made available to the public on SPL's Reservoir Regulation Section Web Site. The status of Seven Oaks Dam must be made available to SPL for inclusion in this report.

**b. Annual Water Control Management Report.** This report is prepared by SPL on an annual basis and submitted to the Corps South Pacific Division Office. The report includes a summary of the operation of SPL owned and Section 7 Projects, and other issues that affected reservoir regulation during the previous water year. This report is usually submitted to the Corps' Division office during the month of January. The project owners are required to provide necessary Seven Oaks Dam information to SPL for inclusion in this report during its preparation.

**c. Current Flood Situation.** This report is prepared by SPL upon request from the Corps South Pacific Division. Such requests are generally made during or in anticipation of significant flood events. The project owners are required to provide necessary Seven Oaks Dam information when requested by SPL.

**d. Annual Flood Damages Report.** This report is prepared annually and in conjunction with the preparation of the Annual Water Control Management Report. This report provides an estimate of the damages prevented by the flood control operations of Corps owned and Section 7 dams. The project owners are required to provide necessary Seven Oaks Dam information to SPL for inclusion in this report. Details and information useful for the preparation of this report are contained in Section 4-12.

**e. Notes on Sedimentation Activities.** This report outlines sedimentation activities, such as sediment removal or surveys and recent estimates of sediment deposited in Corps reservoirs during the previous calendar year. This report is prepared on an annual basis and submitted to the Corps South Pacific Division office in January of each year. If any activity occurred at Seven Oaks Dam, the project owners are required to submit Seven Oaks Dam information for inclusion in this report.

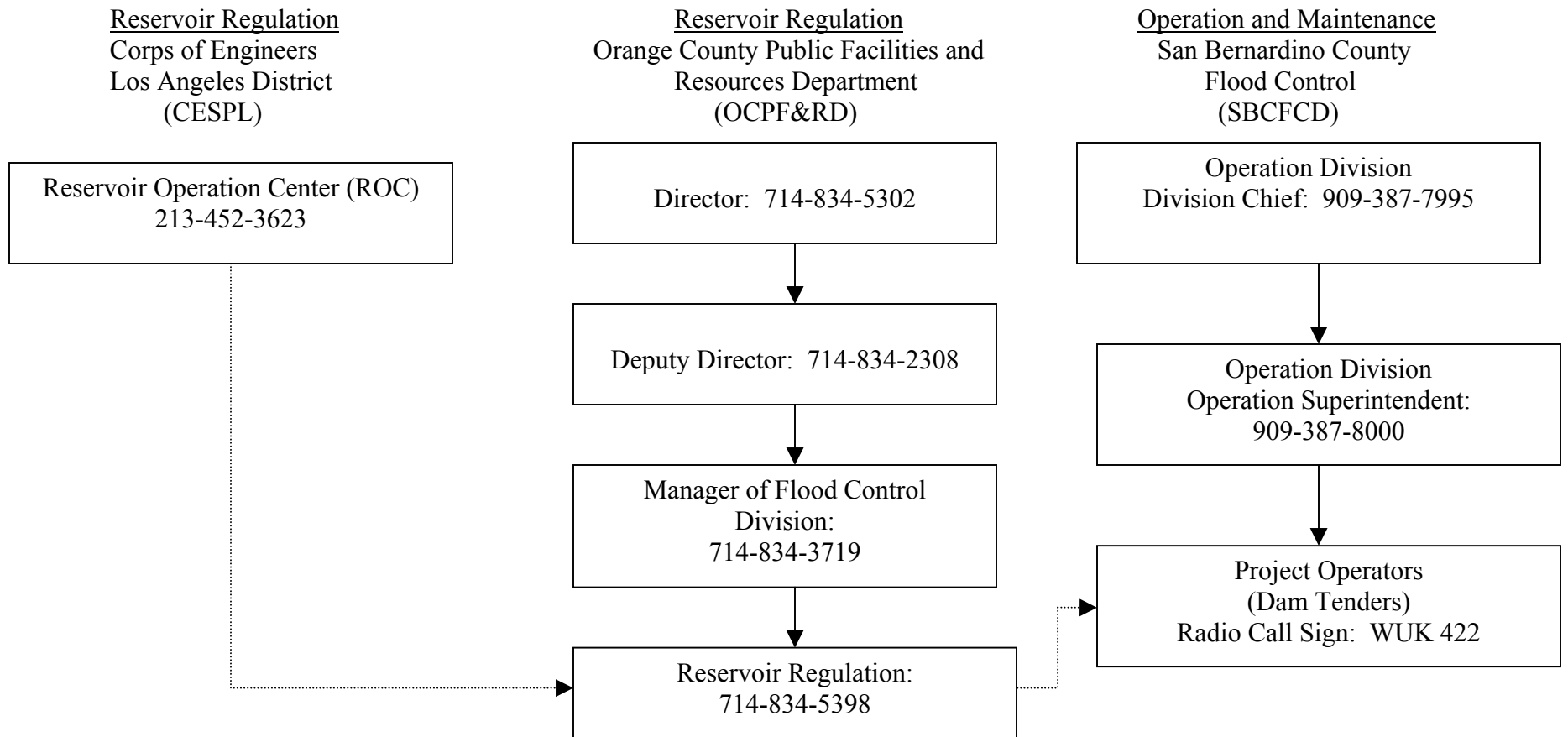
**f. Annual Water Quality Management Report.** This report outlines the water quality management activities performed by the Corps and other Federal and



local agencies in the watersheds affected or controlled by the SPL owned and operated projects and Section 7 dams. The project owners are required to provide necessary information to SPL regarding activities and water quality issues that occurred during the previous calendar year for inclusion in this report. This report is submitted to the Corps South Pacific Division in January of each year.



**Figure 9-01. Chain of Command for Reservoir Operations of Local Sponsors**



.....▶ Communication Line between Corps Water Control Managers, OCPF&RD Water Control Managers, and the SBCFCD Dam Tenders