

IX - WATER CONTROL MANAGEMENT

9-01. Responsibilities and Organization

a. **Corps of Engineers**. Alamo Dam is owned, operated, and maintained by the U.S. Army Corps of Engineers, Los Angeles District, which has complete regulatory responsibility for the dam and the reservoir area.

The Reservoir Regulation Section of the U.S. Army Corps of Engineers, Los Angeles District, conducts reservoir regulation of Alamo Dam and Lake. Table 9-01 is an organizational chart depicting the chain of command for the Reservoir Regulation decisions.

Gate operation instructions to the dam tender are issued by the Reservoir Regulation Section's Reservoir Operations Center (ROC), as mentioned in sections 5-05 and 5-06. In the event that communication between the ROC and Alamo Dam are interrupted, reference to the “Standing Operating Instructions to Project Operator for Water Control” should be made, which are included in this manual as Exhibit A. Dam tenders are part of the Operations Branch, under the Construction-Operations Division of the U.S. Army Corps of Engineers, Los Angeles District.

b. **Other Federal Agencies**. The U.S. Geological Survey (USGS) operates and maintains four stream gages within the Bill Williams River basin. The USGS also collects water quality samples at a site known as Bill Williams River near Planet. This site (there is no gaging station) is located at the confluence of Mineral Wash and the Bill Williams River. The U.S. Bureau of Land Management (BLM) is responsible for maintenance of the six- mile riparian corridor segment immediately downstream from the dam. The U.S. Fish and Wildlife Service (USFWS) is responsible for maintenance of the Bill Williams River National Wildlife Refuge along the last eight-mile segment of the Bill Williams river before the Colorado River confluence.

c. State and County Agencies. The Arizona Water Resources Department is responsible for issuance of all water rights claimed for water in the Bill Williams River basin. The Arizona Game and Fish Department (AGF) manages U.S. Army Corps of Engineers' withdrawn and acquired lands at Alamo Lake (Plate 2-11) for fish and wildlife purposes under Department of the Army license DACA09-3-97-31. The AGF also has a role as trustee for all wildlife in the State of Arizona, including both in the reservoir area and downstream from Alamo Dam.

d. Private Organizations. There is no involvement of private organizations in the operation or maintenance Alamo Dam.

9-02. Interagency Coordination

The U.S. Army Corps of Engineers coordinates with other Federal, State, County, and local organizations, as well as with the press, concerning the water control for Alamo Lake. These organizations, along with a brief explanation of their relationship to the operation of Alamo Lake, is given in the following subparagraphs.

a. Local Press and Corps of Engineers Bulletins. The Public Affairs Office of the U.S. Army Corps of Engineers, Los Angeles District, is responsible for interfacing with the press regarding operations at Alamo Dam and flows on the Bill Williams River downstream of the dam. This is accomplished through both interviews and the occasional issuance of press releases. The Corps of Engineers does not publicly issue flood watches or warnings or other status reports or forecasts. These are the responsibility of the National Weather Service.

b. National Weather Service (NWS). The National Weather Service (NWS) Colorado Basin River Forecast Center, in Salt Lake City, Utah, is the River Forecast office for the Colorado River and its tributaries. Flood conditions, weather forecasts, and precipitation reports for the Bill Williams River are routinely obtained by the Los

Angeles District, via a leased telephone line. The NWS also provides SPL with extended streamflow prediction forecasts for the Bill Williams basin.

c. **U.S. Geological Survey (USGS)**. The USGS's Arizona District operates stream gaging stations both upstream and downstream of Alamo Dam. The two upstream stations, which are maintained by the USGS's Tempe office, are the Big Sandy River near Wikieup and the Santa Maria River near Bagdad. The two downstream stations, which are maintained by the USGS' Yuma office, are the Bill Williams River below Alamo Dam and the Bill Williams River near Parker. These gages are operated under a cooperative agreement between the Corps and the USGS. Streamflow records from these gages are published in the annual "Streamflow Data for Arizona."

d. **U.S. International Boundary and Water Commission (IBWC)**. The IBWC, in El Paso, Texas, is interested in the operation of Alamo Dam because of the Commission's responsibilities relating to the 1944 Water Treaty with Mexico.

e. **U.S. Bureau of Reclamation (USBR)**. The U.S. Bureau of Reclamation's Lower Colorado Regional Office in Boulder City, Nevada operates Parker Dam, and controls the elevation of Lake Havasu at the confluence of the Bill Williams and Colorado Rivers. The Bureau is responsible for operation of the lower Colorado River system and for flood protective work on the main stem of the river. Hydrologic and hydraulic data are exchanged between the Bureau's Boulder City office and the Reservoir Regulation Section of the U.S. Army Corps of Engineers, Los Angeles District. This information includes reservoir data and precipitation reports, as well as discharges along the lower Colorado River and outflow from Alamo Dam.

f. **U.S. Fish and Wildlife Service (USFWS)**. The USFWS monitors the activities of all endangered wildlife within the vicinity of Alamo Dam and Lake, and also manages the Bill Williams River National Wildlife Refuge.

g. U.S. Bureau of Land Management (BLM). The BLM is responsible for maintenance of the riparian corridor immediately downstream from Alamo Dam.

h. Arizona State Parks Board. The Arizona State Parks Board, in Phoenix, Arizona is the recreational licensee for Alamo Lake.

i. Arizona Game and Fish Department. The Arizona Game and Fish Department (AGF) manages U.S. Army Corps of Engineers' withdrawn and acquired lands at Alamo Lake (Plate 2-11) for fish and wildlife purposes under Department of the Army license DACA09-3-97-31. The AGF also has a role as trustee for all wildlife in the State of Arizona, including both in the reservoir area and downstream from Alamo Dam.

9-03. Interagency Agreements

The Corps annually contracts for water quality monitoring at Alamo Lake through the U.S. Fish and Wildlife Service (USFWS), as discussed in Section 5-02a. The Corps also has a cooperative stream gaging agreement with the USGS to calibrate, maintain, and publish data from the stream gage immediately downstream from Alamo Dam. Details about the cooperative stream gaging program can be found in Section 5-01d.

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

Alamo Dam is on a tributary to the Colorado River main stem, however, the facility is not part of any river authority, compact or committee.

9-05. Non-Federal Hydropower

There is no non-Federal hydropower facility at Alamo Dam.

9-06. Reports

The U.S. Army Corps of Engineers, Los Angeles District, prepares and files several types of reports.

If requested, during the runoff season, November through April, a flood situation and runoff potential report is prepared and sent to the South Pacific Division of the Corps of Engineers.

Six specific forms are also prepared in conjunction with the District's reservoir operations. A copy of each of these forms, as listed in the following, is shown as Figures 9-01 through 9-06: Flood Control Basin Operation Report (prepared by each dam tender), Rainfall Record (from manual readings of glass tube rain gages), Reservoir Operation Report, Record of Data from Digital Recorders, Reservoir Computations, and Record of Calls (both radio and telephone).

The Corps of Engineers also collects and files charts from recording instruments at Alamo Dam, including precipitation, evaporation, and reservoir water surface elevation. Daily precipitation and evaporation totals and, as needed, other data (such as unusually high precipitation intensities) are manually extracted from the precipitation charts, and the charts are sent to the National Climatic Data Center of NOAA and published in the annual "Precipitation Records for Arizona." The other charts are maintained on file at the Corps of Engineers, Los Angeles District.

Table 9-02 lists the general documents that the Corps of Engineers, Los Angeles District prepares annually. Information pertaining to Alamo Dam and Lake is contained in each of these reports.

**Table 9-01
Chain of Command for Reservoir Operations Decisions**

**Corps of Engineers
Los Angeles District**

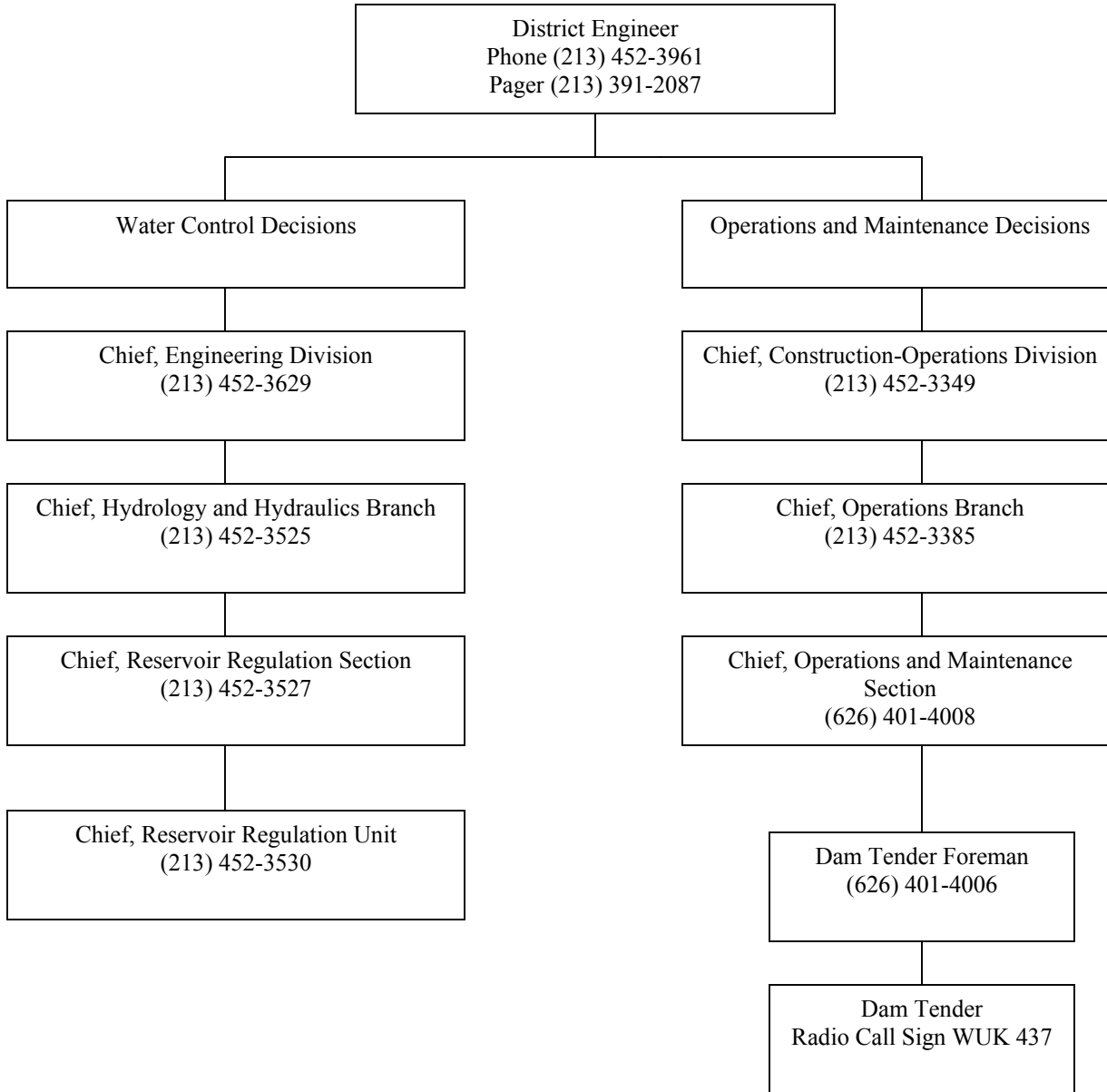


Table 9-02
Reports Prepared Annually by Corps of Engineers,
Los Angeles District

Report Name	Description of Report Contents
Annual Report on Water Quality Management	Summary of District water quality program and significant water quality issues.
Annual Report on Water Control Management	Summary of operation and maintenance activities; significant operational issues; planning studies; personnel training.
Annual Instructions for Reservoir Operations Personnel (the "Orange Book")	Instructions for District reservoir operations personnel, lists of individuals and agencies to notify in conjunction with reservoir operations.