VI - HYDROLOGIC FORECASTS

6-01. General

a. Role of Corps of Engineers. The U.S. Army Corps of Engineers does not make any formal hydrologic forecasts for Sepulveda Dam. Los Angeles River water quality is also not predicted by the Corps of Engineers or any other agency.

Despite the lack of formal hydrologic forecasts, the Corps of Engineers does carefully monitor the reservoir water surface elevation in Sepulveda Reservoir, and does notify other agencies of any significant changes or anticipated changes.

The Corps of Engineers continues to improve its monitoring capabilities, not only at Sepulveda Dam, but in upstream and downstream water-sheds. Many stream and precipitation gauges have been upgraded with event-reporting telemetry technology. Future plans include placement of additional even-reporting gauges to increase drainage area coverage to enable improved representation of watershed characteristics for roe-casting and modeling purposes. The improved data collection status will eventually be used in a real-time rainfall-runoff model to forecast inflow into the Los Angeles County Drainage Area reservoirs and downstream control points. It is intended that these predictions will become accurate and reliable enough that they can be shared with the National Weather Service, Los Angeles County Department of Public Works and other County Flood Control Districts, city and county emergency officials, and other, and used as a basis of reservoir systems operations during the upcoming years.

The Corps of Engineers, Los Angeles District, Meteorologist prepares special quantitative precipitation forecasts for the Los Angeles River drainages and other watersheds. These are used in determining the potential for significant runoff into Sepulveda and other reservoirs. Research is progressing into the direct incorporation of these quantitative precpiptati8on forecasts into the rain-fall-runoff forecast models being developed.

b. Role of Other Agencies. No Agency has any specific forecast responsibility for water surface elevation in Sepulveda Reservoir or for discharges on the Los Angeles River, either upstream or downstream of Sepulveda Dam. About the closest that any forecast or warning would come to this might be a Flash Flood Watch or Flash Flood Warning issued by the National Weather Service for rivers and other watercourses in the San Fernando Valley.

The U.S. Army Corps of Engineers does receive real-time weather reports and forecasts, as well as historical weather data, from the National Weather Service, NOAA. This is a accomplished by means of weather facsimile pictures and teletype data and forecasts transmitted by the National Weather Service, and also by means of telephone communication with, and visits by the District Meteorologist to, the National weather Service Forecast Office, Los Angeles.

Historical precipitation data are available from Los Angeles County Department of Public Works and Ventura County Flood Control District. Historical streamflow data are also available from these agencies and from the U.S. Geological Survey. These data, while not of use in real time, are important to studies of historical storms and floods, which aid in the development and refinement of computerized rainfall-runoff forecast models.

6-02. Flood Condition Forecasts

Forecasts of flood hydrographs are not currently made. However, routine evaluation of inflow, observed precipitation, and forecast precipitation provides for valuable subjective predictions of flood situations (see p. 4-08 and tables 4-08 and 4-09). Using such information, the Reservoir Operation Center of the Corps can evaluate if an ongoing flood will increase or decrease over the next 24 hours. See table 5-01 and plate 5-01 for control points in and near the watershed above Sepulveda Dam.

6-03. Conservation Purpose Forecasts

Since Sepulveda Dam is strictly a flood control facility, no forecasts for the purpose of water conservation, hydropower, fish spawning, or other such objectives are made.

Only in the event of major impoundment at Sepulveda Reservoir, as well as simultaneously at other reservoirs affecting the downstream Los Angeles River (see Section 4-11), would a forecast of more than one day be of immediate significance to the operation of Sepulveda Dam. In such a case, the forecast of another impending major storm or lack of such storm might influence the release rate of water from Sepulveda Dam in consideration of the release rates from all of the other dams in the system or order to prevent or minimize downstream damages.