VI - HYDROLOGIC FORECASTS

6-01 GENERAL

a. Role of LAD. The LAD does not make any formal hydrologic forecasts, published or unpublished, for Hansen Dam. Despite the lack of formal hydrologic forecasts, the LAD does carefully monitor the reservoir water surface elevation in Hansen Reservoir, and does notify other agencies of any significant changes or anticipated changes as described in section 5-06.

The LAD continues to improve its monitoring capabilities of conditions not only at Hansen Dam, but in adjacent watersheds. Improved and increased numbers of automatic telemetry rain and stream gauges help in this manner not only directly, but also in the development of computerized rainfall-runoff forecast models. The long-term goal of the LAD is to be able to provide relatively accurate predictions of inflows and reservoir water surface elevations as far in advance as possible. It is intended that these predictions will become accurate and reliable enough that they can be shared with the NWS, the LACDPW, city and county emergency officials, and others, to be used as basis for reservoir systems operations during the upcoming years.

The LAD Meteorologist prepares special quantitative precipitation forecasts (QPF's) for Los Angeles River drainages and other watersheds, including the hansen Dam watershed. These are used in determining the potential for significant runoff into Hansen and other reservoirs.

b. Role of Other Agencies. No agency has any specific forecast responsibility for water surface elevations in hansen Reservoir or for discharges in Tujunga Wash, either upstream or downstream of Hansen Dam. The NWS issues Flash Flood Warnings for rivers and other watercourses in the San Fernando Valley.

The LAD does receive real-time weather reports and forecasts, as well as historical weather data, from the NWS. This is accomplished by means of weather facsimile pictures and teletype data and forecasts transmitted by the NWS and received by a LAD facsimile recorder and teletype printer. Close coordination is maintained with the NWS forecast office located in Los Angeles.

Historical precipitation and streamflow data are available from the LACDPW. 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 CONDITIONS FORECASTS

Forecasts of flood hydrographs are currently not made. However, routine evaluation of precipitation, resulting inflow, and forecast precipitation provide valuable subjective predictions of flood situations. Using such information, the LAD Reservoir Operations Center (ROC) can predict if an on-going flood will increase of decrease over the next 24 hours.

6-03 CONSERVATION PURPOSE FORECASTS

Because Hansen Dam is strictly a flood control facility, forecasts for other purposes including water conservation are not made.

6-04 LONG-RANGE FORECASTS

Because the watershed above Hansen Dam is relatively small, and because water is impounded behind Hansen Dam for short time periods, there is little direct need for long-range forecasts in the operation of Hansen Dam. Only in the event of major impoundment at hansen Reservoir, as well as simultaneously at other reservoirs affecting the downstream channel and Los Angeles River, would a forecast of more than one day be of immediate significance to the regulation of Hansen Dam. In such a case, the forecast of another impending major storm or lack of such a storm might influence the release rate of water from Hansen Dam. The primary consideration of the release rates from all of the dams in the Los Angeles River system is to prevent or minimize downstream damages.