or stores water according to the specified priorities and satisfies all system constraints. The sequence of solved linear programming problems represents the simulation of the system over the period of analysis.

Figure A-3: Major Reservoirs, Streams and Facilities (both CVP and SWP) Included in the CALSIM II Model

CALSIM II includes an 82-year modified historical hydrology (water years 1922-2003) developed jointly by DWR and USBR. Water diversion requirements (demands), stream accretions and depletions, rim basin inflows, irrigation efficiencies, return flows, non-recoverable losses, and groundwater operations are components that make up the hydrology used in CALSIM II. Sacramento Valley and tributary rim basin hydrologies are developed using
a process designed to adjust the historical observed sequence of monthly stream flows to represent a sequence of flows at a future level of development. Adjustments to historic water supplies are determined by imposing future level land use on historical meteorological and hydrologic conditions. The resulting hydrology represents the water supply available from Central Valley streams to the system at a future level of development. Figure A-4 shows the valley floor depletion regions, which represent the spatial resolution at which the hydrologic analysis is performed in the model.

Figure A-4: CALSIM II Depletion Analysis Regions