Table 2. Characteristics and purpose of ground-water flow models developed for the Owens Valley, California

Model	Characteristics	Purpose	Reference
Half-valley models of Bishop and Independence areas.	Finite-element code; 5 layers; includes Round Valley and Owens Lake.	Identify computer codes, appropriate discretization, and boundaries of ground-water flow system.	Danskin (1988).
Half-valley model of Independence area.	Finite-element code; 2 layers.	Identify the effect of parameter uncertainty on model results.	Yen (1985).
Valleywide (preliminary).	Finite-difference code; 2 layers; includes Round Valley and Owens Lake.	Confirm initial hydrogeologic concepts and ground-water budget. Identify necessary data and concepts.	Danskin (1988); figure 2.
Dewatering.	Variable grid spacing with minimum 10-foot by 10-foot cell; 3 layers.	Determine vertical hydraulic conductivity and leakance.	Figure 2.
Cross-sectional (vertical slice).	Vertical section along parallel ground-water flowlines.	Determine ground-water flow characteristics from alluvial fans to valley floor and effect of depositional facies.	Figure 2.
Valleywide (final).	Finite-difference code; 2 layers; detailed hydro-geology, recharge, and discharge.	Verify regional hydrologic concepts and ground-water budget. Evaluate historical conditions. Predict valleywide effects of possible changes in water management. Provide boundary conditions for well-field models.	Figure 2.
Well field.....	Fine spatial discretization; each model uses 2 or 3 layers and covers from 1/4 to 1/2 of Owens Valley.	Testing and prediction of localized effects.	Hutchison (1988); Hutchison and Radell (1988a); Radell (1989); Los Angeles Department of Water and Power (1988).
Regression.....	Statistical regression equations.	Prediction of effects at specific wells; no testing of concepts.	Hutchison (1986d, 1991).