Table 3 Parameters related to the streambed and river

Location	the depth of low permeability material, *M* (feet)	The average width of river, *W* (feet)	The hydraulic conductivity of streambed, *K*(feet/s)	the length of river reach, *L* (feet)	The conductance of streambed, C_{riv} (feet^2/d)
Lower Virgin River	6.562	82.0	1.64×10^{-6}	1640.4	2906.2
Beaver Dam Wash	6.562	9.84	1.64×10^{-6}	1640.4	348.7

Table 4 Parameter values of fault zones

Name	Location	Properties	The average width of fault zones (feet)	Hydraulic conductivity (feet/d)
Piedmont fault zone	Virgin river valley basin	Water conducted	6.562	328.1
Tule desert fault	Tule desert basin	Water conducted	6.562	328.1

Table 5 Parameter values of aquifers from pumping test

Layer	1	2		3	
Hydraulic conductivity or transmissivity[a]	78.7	2296.6	262.5	1640.4	164.0
Source of data	Pompeo et al. 2007	Burbey et al. 2006	VVWD(Tule Desert)	Burbey et al. 2006	VVWD(Tule Desert)

Table 6 Parameter values of aquifers from calibration

Layer	4	5	6	7	8
Hydraulic conductivity or transmissivity[a]	262.5	1312.3	984.2	328.1	656.2
Vertical conductance[b]	53.8	107.6	215.3	48.4	N/A
Horizontal anisotropy factor	0.202	0.202	0.202	0.202	0.202

a Parameter value of layer 1 is the hydraulic conductivity (feet/d), while other layers are the transmissivity (feet^2/d).

b It means the vertical conductance of adjacent two aquifers (d^{-1}).

Table 8 Specific yield and specific storage of aquifer

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8
Specific yield or specific storage	0.25	1×10^{-4}	3.0×10^{-6}	1×10^{-6}	0.3×10^{-4}	1×10^{-4}	1×10^{-6}	2×10^{-6}