

Appendix D

Hydrology Calibration Coefficients

GLOBAL COEFFICIENTS													
	Original Values	Warm Springs Gage	Rainbow Creek	Murrieta Creek at Teneja Road	De Luz Creek near De Luz	Pechanga Creek	Sandia Creek	Santa Gertrudis Creek	Murrieta Creek at Temecula	Temecula Creek Upstream	SMR Downstream	Fallbrook	Ysidora
Evaporation Scaling Multiplier	1.000	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
Evaporation Seasonal Skewness	1.000	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972
Snow Formation Temperature	0.000	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
Open Area Snow Melt Rate	0.080	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082
Forested Area Snow Melt Rate	0.080	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089
Snow Melting Temperature	0.000	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058

CATCHMENTS COEFFICIENTS													
	Original Values	Warm Springs Gage	Rainbow Creek	Murrieta Creek at Teneja Road	De Luz Creek near De Luz	Pechanga Creek	Sandia Creek	Santa Gertrudis Creek	Murrieta Creek at Temecula	Temecula Creek Upstream	SMR Downstream	Fallbrook	Ysidora
Precipitation Weighting Multiplier	1.000	0.700	1.000	0.800	1.300	0.650	1.193	0.503	0.875	0.854	1.100	0.500	0.563
Average Temperature Lapse	0.000	-0.213	0.078	-0.411	0.289	-0.320	0.860	-0.100	0.037	-0.600	0.100	-0.400	0.000
Detention Storage	0.000	7.000	0.000	0.007	0.501	0.000	0.002	1.000	6.000	0.003	0.003	1.000	1.000
Layer 1													
Thickness	25.000	24.750	26.516	32.999	20.990	31.032	21.358	27.000	22.750	23.125	27.000	33.000	27.000
Initial Soil Moisture	0.300	0.306	0.313	0.300	0.295	0.300	0.305	0.295	0.306	0.339	0.310	0.310	0.310
Field Capacity	0.400	0.392	0.400	0.400	0.360	0.400	0.318	0.393	0.371	0.400	0.395	0.398	0.395
Saturation Moisture	0.500	0.527	0.489	0.460	0.443	0.495	0.515	0.501	0.511	0.513	0.410	0.413	0.412
Horizontal Hydraulic Conductivity	6000.000	5950.000	6337.500	5913.570	5997.320	5933.090	5895.000	5990.000	5975.000	6120.000	6020.000	6010.000	6010.000
Layer 2													
Thickness	35.000	35.125	35.088	41.094	29.094	41.058	32.973	37.000	37.125	32.187	37.000	43.000	37.000
Initial Soil Moisture	0.200	0.243	0.260	0.200	0.210	0.175	0.094	0.195	0.243	0.267	0.220	0.218	0.218
Field Capacity	0.300	0.265	0.139	0.274	0.260	0.317	0.101	0.295	0.275	0.326	0.295	0.298	0.296
Saturation Moisture	0.350	0.346	0.380	0.353	0.348	0.348	0.383	0.351	0.346	0.333	0.300	0.303	0.303
Horizontal Hydraulic Conductivity	1200.000	1150.000	1005.000	720.625	790.625	1140.950	866.250	1190.000	1180.000	1340.000	1206.000	1200.000	1210.000
Layer 3													
Thickness	40.000	42.000	40.240	47.600	37.600	45.978	48.771	42.000	42.000	35.230	44.000	38.000	34.000
Initial Soil Moisture	0.220	0.234	0.341	0.220	0.239	0.255	0.277	0.210	0.234	0.297	0.250	0.247	0.247
Field Capacity	0.220	0.193	0.195	0.203	0.229	0.187	0.044	0.210	0.198	0.297	0.190	0.193	0.191
Saturation Moisture	0.350	0.351	0.349	0.353	0.347	0.355	0.325	0.352	0.351	0.348	0.250	0.253	0.253
Horizontal Hydraulic Conductivity	200.000	205.000	207.500	212.500	272.500	167.000	336.858	190.000	215.000	125.000	200.000	170.000	170.000