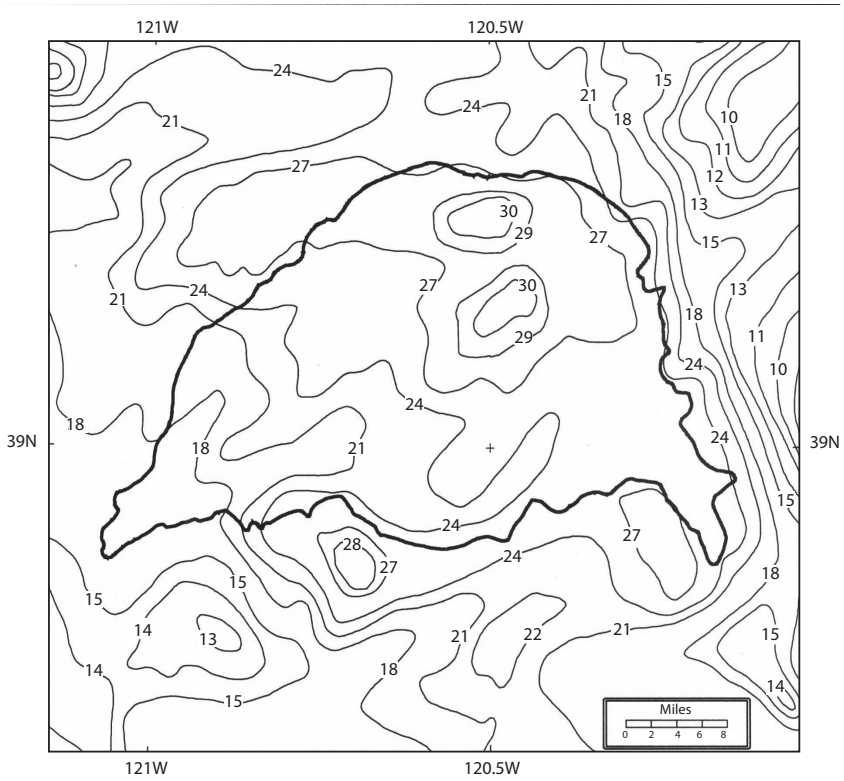

Figure 5.47. Twenty-four-hour PMP isoline map for Auburn watershed (inches)

Sierra region (region 5). The 24-hour PMP is multiplied by the coefficient of precipitation depth conversion for region 5 from Table 5.13 to obtain the PMP for each duration, as shown in Table 5.14.

5.3.8.2.4 ***Coefficient of area reduction***

A table is available for the coefficient of area reduction for each duration for each sub-region (the coefficient for any area size can be obtained by simple linear interpolation). Table 5.15 lists only the coefficients of area reduction for the Sierra Nevada region. The coefficient of area reduction for each duration is multiplied by the PMP for the corresponding duration obtained in section 5.3.8.2.3 above. If the watershed is in more than one DAD region, then coefficient of area reduction for each DAD region is found the area weighting method is employed to obtain the coefficient of area reduction for the entire watershed.

Table 5.13. Coefficients of duration – precipitation depth conversion for each DAD region in California

	Duration (hours)					
	1	*6*	*12*	*24*	*48*	*72*
North-west (1)	0.10	0.40	0.73	1.0	1.49	1.77
North-east (2)	0.16	0.52	0.69	1.0	1.40	1.55
Central Coast (3)	0.13	045	0.74	1.0	1.45	1.70
Central Valley (4)	0.13	0.42	0.65	1.0	1.48	1.75
Sierra (5)	0.14	0.42	0.65	1.0	1.56	1.76
South-west (6)	0.14	0.48	0.76	1.0	1.41	1.59
South-east (7)	0.30	0.60	0.86	1.0	1.17	1.28

Table 5.15 is interpolated to get the coefficient of area reduction for the 2 520 km^2 Auburn watershed, with the results listed in Table 5.16. Then PMP for each duration in section 5.3.8.2.3 is multiplied by its corresponding coefficient of area reduction to get the areal mean PMP for the watershed, again with the results listed in Table 5.16.

The duration is placed on the horizontal axis and the areal mean PMP on the vertical axis and the curve of the relationship between the areal mean PMP and the duration for the Auburn watershed is drawn (see Figure 5.49).

5.3.8.2.5. ***PMP growth curve***

The PMP growth curve is drawn for a particular duration using the following method: the duration is taken as the horizontal axis and the precipitation depth as the vertical axis and a smooth duration–precipitation depth curve is drawn with PMP for