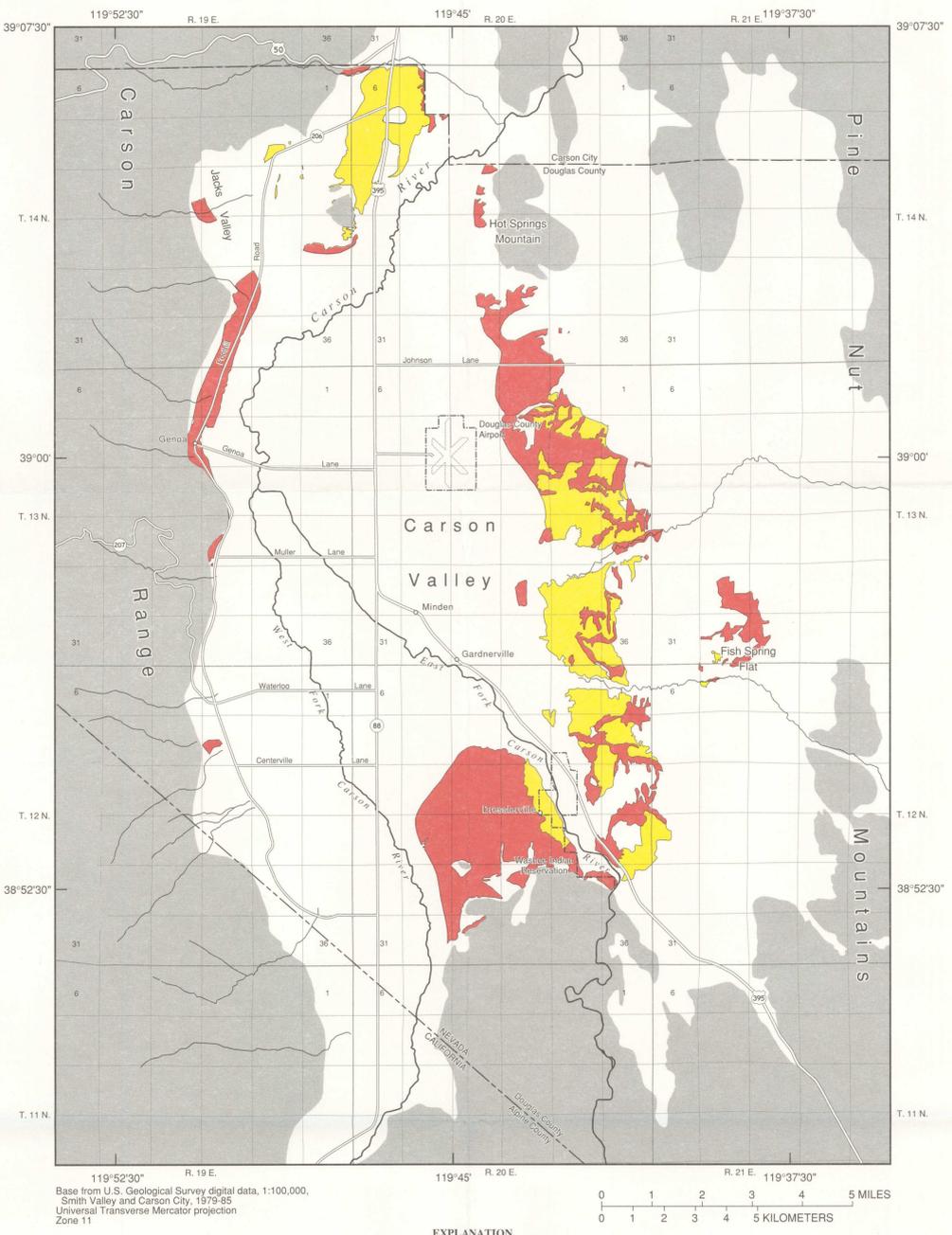
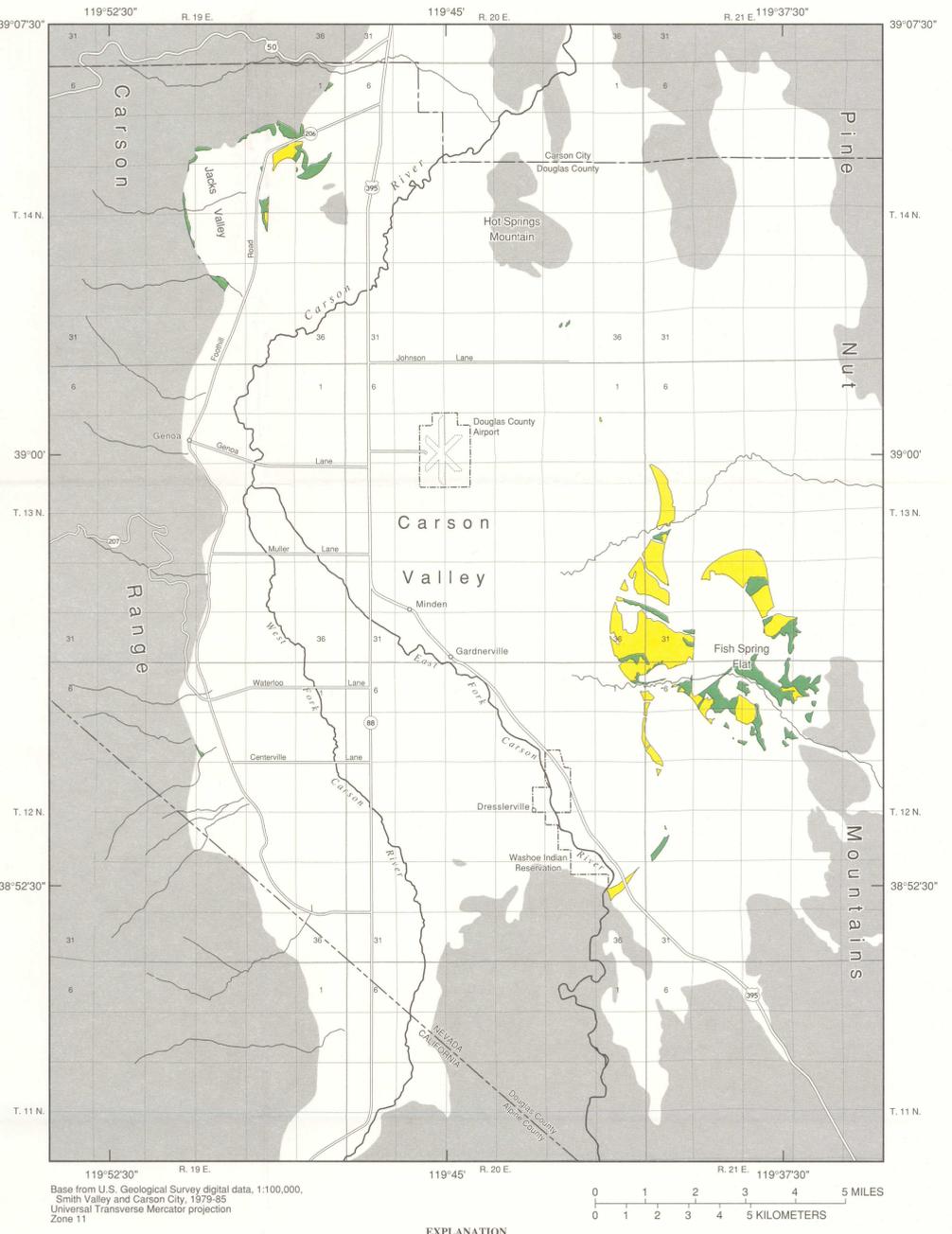


**Figure 5.** Distribution of areas with high potential for recharge through infiltration beds in Douglas County. In these areas, depth to water is 20 to 200 feet below land surface, specific yield is greater than 10 percent, and soils have fast infiltration rates (6 to greater than 20 inches per hour).



**Figure 6.** Distribution of areas with moderate potential for recharge through infiltration beds in Douglas County. In these areas, depth to water is 20 to 200 feet below land surface, specific yield is greater than 10 percent, and soils have moderate infiltration rates (2 to 6 inches per hour).



**Figure 7.** Distribution of areas with low potential for recharge through infiltration beds in Douglas County. In these areas, depth to water is 20 to 200 feet below land surface, specific yield is less than 10 percent, and soils have slow to very slow infiltration rates (0.2 to 6 inches per hour).

**POTENTIAL FOR ARTIFICIAL RECHARGE**

Using the criteria in table 1, areas with the required attributes are delineated in figures 5-8. Upper and lower values for the criteria are based on the arbitrary limits discussed and provide only a preliminary indication of recharge potential. Again, site-specific investigations would allow a more precise assessment of recharge potential before construction of an operational site.

**Recharge by Infiltration**

Areas totaling 5,100 acres have high potential for recharge through infiltration (fig. 5). Criteria used to delineate these areas are depth to water of 20 to 200 ft below land surface, specific yield greater than 10 percent, and soil infiltration rate of 6 to more than 20 in/h. Areas with high potential are generally on alluvial-fan sediments near the northern and southwestern sides of the valley and at isolated locations on the eastern side of the valley.

Areas totaling 17,000 acres have moderate potential for recharge through infiltration (fig. 6). Criteria used to delineate these areas are depth to water of 20 to 200 ft below land surface, specific yield greater than 10 percent, and soil infiltration rate of 2 to 6 in/h. Areas with moderate potential are on alluvial-fan deposits along the western side of the valley, over the broad bench near Dresslerville at the southern end of the valley, and along the eastern side of the valley.

Areas totaling 3,700 acres have low potential for recharge through infiltration (fig. 7) because of slow infiltration rates and low specific yields. Criteria used to delineate these areas are depth to water from 20 to 200 ft below land surface, specific yields less than 10 percent, and soil infiltration rates from 0.2 to 6 in/h. Areas with low potential are located near Jacks Valley and near Fish Spring Flat.

**POTENTIAL FOR, AND POSSIBLE EFFECTS OF, ARTIFICIAL RECHARGE IN CARSON VALLEY, DOUGLAS COUNTY, NEVADA**

By  
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