

STATE OF UTAH
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HYDROLOGIC RECONNAISSANCE OF THE TULE VALLEY
DRAINAGE BASIN, JUAB AND MILLARD COUNTIES, UTAH

by

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WATER-RESOURCES APPRAISAL

Precipitation in the Tule Valley drainage basin is estimated to average about 400,000 acre-ft (490 hm³) annually (table 3), or about 8 in (203 mm) over the entire basin. Estimated annual ground-water recharge from precipitation in the basin is about 7,600 acre-ft (9.4 hm³), or slightly less than 2 percent of the total precipitation. There is no surface outflow from the basin; thus, more than 98 percent of the precipitation is consumed directly by evapotranspiration.

Table 3.--Estimated average annual volumes of precipitation and ground-water recharge

[Areas of precipitation zones calculated from pl. 1;
all estimates rounded]

Precipitation zone (in)	Area (acres)	Precipitation (acre-ft)	Recharge	
			Percentage of precipitation	Acre-ft
<u>Consolidated and unconsolidated rocks</u>				
Less than 8	380,000	220,000	Minor	0
<u>Unconsolidated rocks</u>				
8-10	50,000	38,000	1	380
10-12	<u>700</u>	<u>600</u>	3	<u>18</u>
Subtotal	<u>51,000</u>	<u>39,000</u>		<u>400</u>
<u>Consolidated rocks</u>				
8-10	120,000	90,000	3	2,700
10-12	27,000	25,000	8	2,000
12-16	18,000	21,000	10	2,100
More than 16	<u>1,100</u>	<u>1,600</u>	25	<u>400</u>
Subtotal	<u>166,000</u>	<u>138,000</u>		<u>7,200</u>
Total	600,000	400,000		7,600

Surface water

All streams in the basin are ephemeral. Springflow sustains small amounts of perennial flow in headwater reaches of a few streams but is consumed by evapotranspiration within a few feet to a few hundred feet of the source. Although networks of ephemeral stream channels lead