



EXPLANATION

- Weather Station
- Precipitation Storage Gage
- Weather Station and Town
- Crest Stage Gage
- 1. Dead Cedar Wash near Wendover, Utah
- 2. Millick Canyon Tributary, near Currie, Nevada
- Stream-Gaging Station (Trout Creek near Callao, Utah)
- Basin Boundary

Scale: 10 5 0 10 20 miles

Area covered by this report

MAP NUMBER	STATION NAME	APPROXIMATE ALTITUDE (Feet)	MEASURED AVERAGE ANNUAL PRECIPITATION (Inches)
1	Currie Highway Station	5820	7.06
2	Ibapah	5400	10.74
3	Montello	4877	6.09
4	Pequop	6000	10.33
5	Wendover W.B.A.P.	4234	4.74
6	Schellbourne Pass	8150	12.57
7	White Horse Pass	6590	8.36

SUMMARY

The Pilot Creek Valley area covers about 1,780 square miles. It consists of five sparsely populated valleys in eastern Nevada. The valleys are bordered by mountains composed in part of sequences of carbonate sedimentary rocks which may transmit significant interbasin flow where hydraulic gradients are present. Runoff is generally low which suggests that much of the estimated ground-water recharge occurs in the mountains.

Ranching and mining are the principal industries. Irrigation is limited to about 160 acres of hay in Pilot Creek Valley, about 800 acres of meadow along Spring Creek in Deep Creek Valley, and about 40 acres of hay and pasture in Tippet Valley. Samples of well, stream, and spring waters from Antelope Valley, Tippet Valley, Deep Creek Valley, and the northern part of Pilot Creek Valley were generally suitable for irrigation and domestic use, but samples from the southern part of Pilot Creek Valley and from Great Salt Lake Desert were highly mineralized.

The tabulation below summarizes most of the estimated hydrologic quantities for the area.

[All water quantities are average annual volumes, in acre-feet per year, except where noted]

Item	Pilot Creek Valley		Great Salt Lake Desert		Antelope Valley		Deep Creek Valley	Tippet Valley
	Area	Altitude	Area	Altitude	Area	Altitude	Area	Altitude
Area (square miles)	326	507	270	125	208	345		
Minimum altitude of valley floor (feet)	4,300	4,250	5,600	5,750	5,450	5,700		
Surficial drainage	To Great Salt Lake Desert	To Utah part	To Goshute Salt Lake Desert	To Goshute northern part	To Goshute northern part	To Utah part	None	
Subsurface drainage	do.	do.	To Great Salt Lake Desert	To Great Salt Lake Desert	do.	To Great Salt Lake Desert		
Inflow from outside the area	From Goshute Valley	From Goshute Valley	From Goshute Valley	From None	From None	From None		
HYDROLOGIC ESTIMATES								
Precipitation	130,000	200,000	120,000	58,000	86,000	160,000		
Runoff	740	1,300	200	40	3,000	360		
Recharge from precipitation	2,400	4,800	3,200	1,500	2,200	6,900		
Inter-valley leakage								
Inflow from Goshute Valley	1,000	1,000	300					
Outflow to the Great Salt Lake Desert	300		3,400	1,500		5,000		
Outflow to Spring Valley						2,000		
Evapotranspiration of ground water	4,600	4,700	100		1,500			
Underflow to Utah		b 11,300			700			
Reconnaissance value of ground-water inflow and outflow	4,500	5,000	3,500	1,500	2,000	7,000		
Perennial yield	4,500	5,000	1,700	800	2,000	3,500		
Anticipated storage reserve	580,000	370,000	560,000	120,000	125,000	450,000		

a. Nevada part only.
b. Includes about 10,000 acre-feet of inter-valley leakage which may flow beneath the Nevada part Great Salt Lake Desert to Utah.

White Pine County geology adapted from Hoge and Blake (1970), remaining geology and hydrology by J. R. Harrill (1969)
Cartography by C. Bosch

PLATE 1.—HYDROLOGIC MAP OF THE PILOT CREEK VALLEY AREA, ELKO AND WHITE PINE COUNTIES, NEVADA