on the forest-covered catchment areas absorbed 95 per cent of the unusually large precipitation. On the non-forested area only 60 per cent of the precipitation was absorbed, although the rainfall was much less.

RAIN-FALL AND RUN-OFF DURING JANUARY, FEBRUARY AND MARCH, 1900.

Area of Catchment basin.	Condition as to Cover.	Precipitation.	Run-off per square mile.	Run-off percentage of precipitation.
Sq. miles.		Inches.	Acre-ft.*	Per cent.
0.70	Forested....	24	452	35
1.05	do	24	428	33
1.47	do	24	557	43
0.53	Non-forested	16	828	95

The most striking feature of this table as compared with the previous one is uniformly the large run-off as compared with the rainfall. This clearly shows the enormous amount of water taken up by a dry soil, either forested or non-forested, as compared with one already filled to saturation. During the three months here noted, on the forested basins about *three-eighths* of the rain-fall appeared in the run-off, while on the non-forested areas *nineteen-twentieths* appeared in the run-off.

RAPIDITY OF DECREASE IN RUN-OFF AFTER THE CLOSE OF THE RAINY SEASON.

Area of Catchment basin.	Condition as to Cover.	Precipitation.	April run-off per sq. mile.	May run-off per sq. mile.	June run-off per sq. mile.
Sq. miles.		Inches.	Acre-ft.	Acre-ft.	Acre-ft.
0.70	Forested....	1.6	153—	66—	25—
1.05	do	1.6	146—	70—	30—
1.47	do	1.6	166	74	30
.53	Non-forested	1.	56	2—	0

The above table clearly shows the importance of forests in sustaining the flow of mountain streams. The three forested catchment areas, which, during December, experienced a run-off of but 5 per cent of the heavy precipitation for that month, and which during January, February and March of the following year had a run-off of approximately 37 per cent of the total precipitation, experienced a well-sustained stream flow three months after the close of the rainy season. The non-forested catchment area, which, during December, experienced a run-off of 40 per cent of the rainfall, and which during the three following months

*640 acre-feet equal 12 inches of precipitation over a square mile.