



Hydrologic Region 1

Hydrologic region 1 (fig. 1) extends north and south along the bluffs that border the Missouri River valley with limits approximating those of the physiographic area known as the Western Loess Hills (Prior, 1976). The landscape has a corrugated appearance of alternating waves and troughs. Hills are sharp-featured, with narrow broken ridge-crests, intersecting spurs, and steep-sided slopes; the landscape is conducive to rapid runoff. The western border of the region is well defined and easily distinguished on topographic maps and in the field. The eastern border is more difficult to define and merges gradually with the landscape of hydrologic region 2.

Hydrologic Region 2

The bluff area that borders the Mississippi River valley is typical of the landscape in hydrologic region 2 (fig. 1). The landscape can vary from rugged to rolling topography, where runoff may be rapid, commonly causing flash flooding. Bluff-like areas are not only located in the vicinity of the Mississippi River, they also are present along the divide between the Mississippi River and Missouri River basins; in parts of the Iowa and Cedar River basins, in areas that border the Western Loess Hills, and in the headwater part of basins of streams in south-central Iowa.

Hydrologic Region 3

Hydrologic region 3 is the largest hydrologic region (fig. 1). Most of the area in this region is typical of the landscape in Iowa. The topography of this region can be described as steeply to gently rolling hills interspersed with areas of more subdued topography. The area has an Iowan Surface, a larger part of the Southern Iowa Drift Plain, and the Northwest Iowa Plains (Prior, 1976).

Hydrologic Region 4

This hydrologic region, which is located in west-central Iowa (fig. 1), is characterized by level terrain and a poorly developed drainage system. The region coincides approximately with the southern two-thirds of the Des Moines Lobe (Prior, 1976). Many clusters of ponds and marshes in the level areas are shallow and sluggish.

Hydrologic Region 5

This hydrologic region in north-central Iowa (fig. 1) coincides approximately with the northern part of the Des Moines Lobe (Prior, 1976). The magnitude of floods in this region, are the smallest per unit area in the State. This is due to the flat topography and flood-attenuating effect of abundant bogs, swales and circular depressions.