

From the above table it will be seen that the minimum flow of the Assiniboine is only about 600 cubic feet per second, or .016 cubic feet per square mile of drainage area and about half that of the Red River. This is due in part to the comparatively small rainfall, but chiefly to the very great evaporation which takes place over the vast extent of exposed prairie watershed.

LEVELS.

For its first 15 miles from its junction with the Red to Headingly, the river consists of a number of almost level stretches separated by small rapids, the total fall in this distance being 26 ft. At Baie St. Paul, 35 miles from Winnipeg, the elevation is about 70 feet, and at Portage la Prairie, 60 miles from Winnipeg, about 80 feet higher than at Winnipeg.

The above distances are those by road. The sinuosities of the river make the distance by water above Headingly nearly three times as great. Between Headingly and its junction with the Red, the River is comparatively straight.

THE EFFECT OF THE POPULATION ON THE CONTAMINATION BY SEWAGE OF THE RIVER.

It has been found by the Massachusetts State Board of Health after careful and extended investigation, that during extreme low water in the eastern rivers, a population on the watershed of seven persons per square mile caused an increase of chlorine of .01 parts in 100,000. On account of the flow of the Assiniboine being much less than that of the eastern rivers, a smaller number of persons on the watershed would cause the same amount of sewage contamination.

On the settled portions of the river, on account of the higher land of the banks affording dryer building sites, the woods affording shelter, and the convenience to water in the river for stock in winter, all the dwellings, barns and stock yards are placed upon the immediate banks, and it is the almost universal practice of the residents to use the river as a dumping place for all kinds of refuse and offal. Manure is got rid of by throwing it into the river. Surface washings from barnyards, stockyards and hogpens during every rainfall find their way into it directly