## "RAGS TO RICHES"

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At the height of the last Ice Age around 18,000 years ago, all of Manitoba was covered by an ice cap some 1,200 metres thick. The weight of this massive burden pushed the underlying land surface downward, in much the same way that the surface of a cushion will sink when someone sits on it. Eventually, the ice sheet began to melt, and by about 7,500 years ago, it had all but disappeared from Manitoba. At first, the melting was especially rapid around the southern margins of the glacier; the last area to become ice-free was the North country around Hudson Bay. In other words, the southern portions of the province became ice-free first, and more and more of the land was released from the pressure of the ice as its edge melted ever northward and the glacier got smaller and smaller over time.

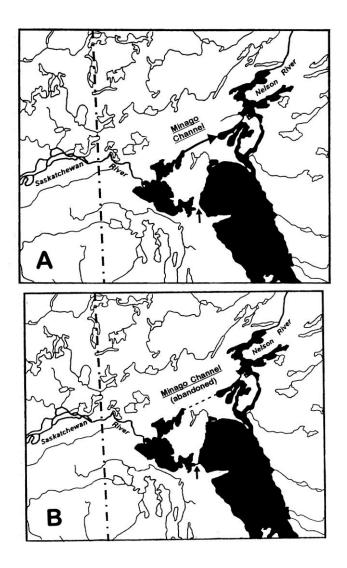
The disappearance of the ice sheet gave rise to a process that scientists refer to as "crustal rebound." Ever since it became free of its glacial burden, the surface of the earth's crust in the North has been "rebounding" upward toward its original, pre-glacial elevation – just as the cushion will rise upward to its original height after the person gets up off it.

Crustal rebound had a strong influence on the natural and human history of the major lakes and rivers that inherited the region from the now-extinct Lake Agassiz. For example, after that great lake disappeared, the Saskatchewan River flowed into Cedar Lake, just as it does now. But from Cedar Lake it flowed into Kiskitto Lake via the ancient Minago channel, bypassing Lake Winnipeg altogether (see Map A). However, with the land surface now rising at an increasing rate farther north and the downward slope in that direction decreasing as a result, the outflow from Cedar Lake was forced to abandon its original lower course through the Minago channel in favour of a more southerly route around 4,700 years ago. And that's why it flows into Lake Winnipeg at Grand Rapids today (see Map B).

That takes care of the geological history. Now let's examine the human history. Northwestern Manitoba in general was available for habitation as far back as 8,000 years ago following the local disappearance of Lake Agassiz. But actual evidence of people in the Grand Rapids vicinity only goes back some 4,500 years. This time slot coincides with

that of the McKean complex, and in fact McKean is the earliest culture recognized at the locality to date. Where was everybody in the intervening 3,500 years? The Grand Rapids area has long been known as an excellent fishing spot, so why wasn't it occupied right from the beginning, starting around 8,000 years ago?

Well, the answer lies in what the Grand Rapids district had to offer people before and after it became the outlet of the Saskatchewan River. Before the river switched its channel from the Minago route, the Grand



Rapids environment had no rapids and was just another tract of bush of the sort that could be found everywhere else along the backshore of Lake Winnipeg – nothing special. So there really wasn't anything in particular there to attract people. But when the river mouth shifted from its earlier location at Kiskitto Lake to where it is now around 4,700 years ago, it was a whole new ball game — the great rapids formed and quickly became a superb fishing spot. So you might say that the area went from rags to riches when the mouth of the Saskatchewan River set up shop in the neighbourhood almost five millennia ago.

Map A. Until around 4,700 years ago, the Saskatchewan River bypassed Lake Winnipeg via the Minago channel (top arrow), and the Grand Rapids did not exist (bottom arrow).

Map B. Over the past 4,700 years, the Saskatchewan River had flowed into Lake Winnipeg near Grand Rapids (arrow).