general result is, however, the consideration. The table land should revert to its former condition. It is difficult to imagine so comparatively small an area elsewhere the reforestation of which would have such far reaching results. The area in question comprises the greater part of Artemesia, Egremont, Proton, Melancthon, Arthur, West and East Luther, and East Garafraxa Townships.

Besides the prevention of disastrous floods the questions of pure water supply for cities and towns, and of power generation along the various rivers with their very considerable fall emphasize the importance of regulation of flow.

The Grand River rises in Melancthon Township, within the 1,700 ft. contour and empties into Lake Erie near its outlet. Its total fall is about 1,100 ft. Its tributaries in their order from upstream are the Conestogo, the Speed, Eramosa, and the Nith. It has a total drainage area of about 2,600 square miles, about 1,325 square miles above Galt, below the outlet of the Speed, and about 450 square miles above Elora. After leaving the plateau the greater part of the fall is in the upper third of the river's length. Its spring floods have very greatly increased, especially during the last thirty to thirty-five years coincident with the clearing and drainage of the head water swamp areas, while its minimum flow which formerly sustained large water powers at many places along its course is now of little or no power value.

The flow in the dry season is now only about 80 cubic feet per second, a small fraction of former low water, while at flood the river overflows the well-marked old channel and covers the wooded banks on which are some trees of only 35 to 40 years' growth, indicating the period of beginning of excessive floods. Were the precipitation from one-quarter or even one-fifth the drainage area husbanded the minimum flow could be increased four-fold or more and flood crests obviated. The discharge of the Grand River at a point above the outlet of the Speed is now only 80 to 100 feet per second at low water, and 10,000 to 20,000 cubic feet per second at flood. Considering a minimum of 30 inches of precipitation per annum on 400 square miles of surface, say at the head drainage area, and a minimum run-off of 40 per cent., the annual stream discharge would be 11,151,360,000 cubic feet, sufficient to give a flow of nearly 400 cubic feet per second throughout the year. But the precipitation from a much larger area than 400 square miles could be husbanded. Above the 1,000 feet contour there are several good sites for storage basins on a large scale. A storage capacity of 10 square miles 10 feet deep seems to be readily practicable. This would mean 2,787,840,000 cubic feet, ample provision for regulation, and for generation of power to the