

When it was decided that the maximum pool elevation of Lake Sakakawea, behind the Garrison Dam, should be raised to an elevation that would best enhance the development of the entire Missouri Basin, proponents of the proposal in North Dakota, without aid from outside States or Federal agencies, won a long and bitter fight to achieve this objective. Scars from this bitter battle still remain.

Federal agencies did make plans and proposals whereby a dam would be constructed at the so-called Mandan site on the Missouri River as a part of the Missouri Basin project. A reservoir at this site would have caused the removal of 68,000 additional acres of valuable, agricultural land from our economy. It was objected to by State representation and this objection was honored. The land adjacent to this reach of the river, incidentally, is probably the only nonfederally owned land from the Nebraska border to almost the Montana border, which approximates 780 river miles.

It is possible that the fact that this proposed dam was once in the plan may have resulted in an oversight in not protecting the banks of that portion of the Missouri River, extending from Garrison Dam to the Oahe Reservoir. If not, the Corps of Engineers may have taken a calculated risk in not installing bank rectification works concurrently with the construction of the Garrison Dam. Being an engineer, I am well aware of the necessity of taking calculated risks. Sometimes you win and sometimes you lose. This brings us to our present problems resulting from the changes in the river brought about by the construction and regulation of the Garrison Dam which are becoming devastating in nature. The existing condition is ably described in the Senate report on Public Law 88-253, 88th Congress, H.R. 8667:

Prior to the construction of the Garrison Dam, the water of the Missouri River was heavily laden with silt and sediment to the point that while bank erosion did occur, it was very minimal, and usually for each loss of land there was a corresponding accretion or gain in the area.

With the construction of the Garrison Dam, the sediment is deposited in Lake Sakakawea and the releases from the reservoir are virtually silt free and they degrade the channel and erode the banks downstream from the dam at a considerable rate. It is estimated that about 640 acres of good, river bottom land in North Dakota are lost annually along the Missouri River below Garrison Dam through bank erosion.

North Dakota was hopeful that as a result of the power being generated at Garrison Dam and the subsequent thermal powerplants to be built in the area, that it would be in a position to attract industry to the banks of the river, as low-cost fuel and water would be readily available to industry. As of this date, three thermal electric producing plants and an oil refinery have been so located. However, in all cases, the sites of these plants are under attack by the Missouri River. At least three of these plants face major threats to some of their most expensive facilities.

Industry has become apprehensive over this condition and one proposer of a thermal power-generating plant vacated its river site and moved to the coal fields some distance from the river where water will be in a rather limited supply. Now, little or no interest is being indicated by industry in locating on the river in view of the instability of the banks. Consequently, the availability of water does not offset the hazards of bank erosion.