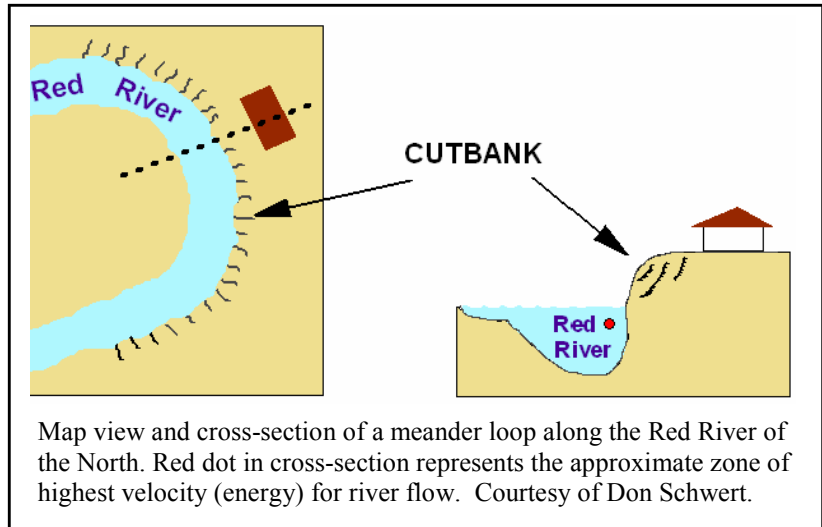


What is a streamtable?

A streamtable demonstrates the dynamic nature of a river within a watershed. It shows how rivers behave when water flows change. A stream table slopes from one end to the other, like the land a stream flows through. The flow can be increased or decreased to show the effects of rain, dam discharges, stormwater runoff, feeds from tributaries, etc.

Streams always want to flow in S-shaped paths, or meanders. Water flows faster around the outside of a bend as compared to the inside of the bend. This faster moving water has the ability to carry sediment and cut into the bank. Slower moving water deposits sediment on the inside of the bend. So rivers are always meandering towards the outside bend as they erode and produce cutbanks.



The streamtable also demonstrates how trees or deep rooted vegetation help slow down the natural movement of the river. Where there is not vegetation, the water keeps eating away the outside bank.

An understanding of how sediment, vegetation and flowing water interact to form stream channels is essential in knowing how to restore and manage them.



Rotational slump along Red River of the North in Fargo, North Dakota. Note the relationship of this activity to the cutbank and the outside of the river meander (left). (Photo by D.P. Schwert).

These two websites provide more details about river movements, slumping, and erosion:

http://www.ndsu.nodak.edu/fargo_geology/documents/geologists_perspective_2003.pdf

<http://www.casscountynd.gov/departments/planning/Slumping.htm>

