PR156 NARRATIVE

Updated 17 May 2014

Cross section PR156 was established in 1977 across a large gravel-bed riffle, which had been used in previous years as a fording place across Powder River. The site was chosen for its attractive amenities, such as easy access by way of old roadways to the ford, and a large cottonwood tree to shade the level and tripod. The riffle crosses Powder River at an angle, with its upriver end at the right bank. Surveys were conducted every year from 1977 through 1998, with the exceptions of 1981 and 1983.

During the flood of 1978, the river channel was widened substantially by the lateral removal of approximately 10 m width of flood plain from the left bank, and approximately 20 m width of a 2-m-high Lightning terrace (including the shade tree) from the right bank (Meade and Moody, 2013, *their* Figure 5).

During the years 1979-1998, most of section PR156 remained essentially stable (which was to be expected of a large riffle), alternately gaining or losing a few decimeters of sand in the above-the-riffle waters near the left bank. Under the right bank, meanwhile, there gradually developed, between stations 97 and 111, a new flood plain which had reached a thickness of about a meter by the time of our last survey in 1998.

Meade, R.H., and Moody, J.A., 2013, Erosional and depositional changes wrought by the flood of May 1978 in the channels of Powder River, southeastern Montana: U.S. Geological Survey Scientific Investigations Report 2013-5035, 28 p., 1 plate.

PR156.
14 July 1977.
View upriver. E. Meade (~1.6 m tall) is standing on line of section.

PR156.
14 July 1977.
View downriver. Red line is approximately on line of section.

PR156. 11 March 1995.
View upriver from 30-40 m below section PR156. Ice breakup moving onto floodplain. J. Moody (~1.9 m tall inside red circle) is about 10m upriver of section PR156A.