


Geology Map, N.B. Department of Natural Resources



STONE HAMMER

HAMPTON LIGHTHOUSE RIVER CENTRE

Location: Hampton, NB.
GPS: 45°32.48' N; 65°50.22' W

Access: accessible dawn until dusk, free 

Geological Age: Carboniferous 350 million years old;
Neogene, modern

Features: Visitor Information, interpretation,
boat launch, canoe, kayak rental, boat tour

ROCKS

The rocks near the Hampton Lighthouse River Centre are rarely seen. This part of the Kennebecasis River follows softer rocks of the Carboniferous Mabou Group (CMA). The valley is bounded on the south by sandstone and conglomerate of the Kennebecasis Formation (CK) and on the north by Silurian volcanic rocks (SRM and SB). The river here meanders along the flat valley and the land is quite marshy. The looping meanders of a mature river can be seen on the geological map. In this case the bedrock you do not see is controlling the landscape. To the southwest the river turns west along a fault line until it becomes trapped between the Devonian Kennebecasis Formation (CK) and the Silurian Bayswater Formation (SB).



MODERN ANALOGUES

An interesting geological lesson learned here is that of modern analogues. We can examine the modern environment to help us understand paleoenvironments. To the east of Hampton, Highway 1 passes through impressive outcrops of the Albert Formation. These sedimentary rocks were formed 350 million years ago. Small ripple marks and large scale ripples can be seen along the highway. Fossil logs, fish and trace fossils have been found in the Albert Formation. What kind of environment was this?

If you take a boat ride along the Kennebecasis River at Hampton, look down into the river. It is often shallow enough to see ripples on the bottom, waterlogged logs rolling downriver, fish, and winding trails left by clams and other animals. It looks remarkably like the Albert Formation that geologists believe represents shallow rivers, lakes and swamps from the Early Carboniferous Period.

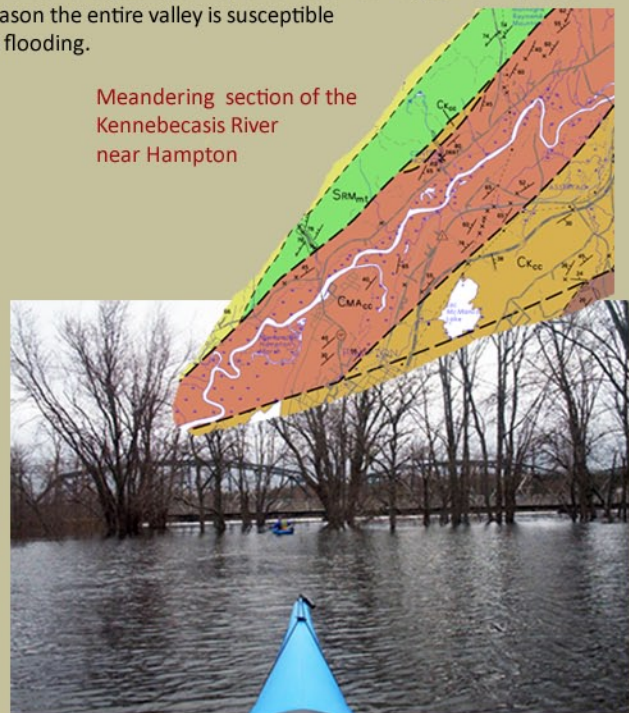


Ripples in the Albert Formation

FLOODPLAINS

Low-lying areas along rivers are called floodplains for a reason. Try coming here in April or May. Boating along the narrow stretches of the Kennebecasis River valley is a different experience during flood season. In a kayak or canoe you can paddle through the trees. The geologic map identifies the flat-lying Carboniferous Mabou Group (CMA). The river meanders from one side of the valley to the other. Old meander scars are visible on the geologic map or on satellite images. During flood season the entire valley is susceptible to flooding.

Meandering section of the Kennebecasis River near Hampton



Photographs and text, R.F. Miller, New Brunswick Museum