Geology and History Erie Canal Outline & Definitions

Presentation 2020 04 30

1. Value and beauty of the canal
2. Why Teddy Roosevelt’s Erie Barge Canal is a different species of Erie Canal from Clinton’s Ditch
3. Five major sites East to West- covered in presentation (problems to be overcome) *
   - Lower Mohawk –east of Schenectady to the Hudson *
   - Schoharie Crossing at Fort Hunter – West of Amsterdam – best place in New York State
   - The Noses and Little Falls *
   - Syracuse
   - Port Byron
   - Montezuma *
   - The Great Embankment *(between Fairport and Pittsford east of Rochester)
   - Lockport and the Deep Cut *

4. DEFINITIONS and TERMS USED – (listed in order of the above outline)
   - **U-shaped Valley** – glacier carved valley – parallel to ice flow –(the Hudson)
   - **Post Glacial Gorge** – a canyon carved by water since the last glacier... +/- 12,000 yrs ago
   - **Fault (normal)** – fracture in the earth’s crust where one side has moved up relative to other side which has moved down
   - **Noses (water gap)** – a dramatic narrowing of valley compared to the valley width upstream or downstream from the feature
   - **Proglacial Lake** – a lake formed in front of a glacier – the glacier acts like a dam and uplands or higher ground form the other sides.
   - **Meltwater Channels** – escape routes of Proglacial Lakes – aligned in a general east-west direction – since the land slopes to the north and the 1000 Islands outlet is blocked – melt water finds an escape either to the west or to the east down the Mohawk. This route is the most common outlet. As the ice front melts back (N) lower elevation channels are uncovered and the Proglacial Lake drops to the lower elevation – like putting holes in the side of a bucket filled with water. Earlier, higher, melt water channels are then abandoned
   - **Escarpment** – a ridge held up by resistant rock – in upstate NY they are aligned E-W. The Niagara Escarpment over which Niagara River plunges is a fine example. The Genesee River (and its falls and gorge) at Rochester plunges over the same rock formations as at Niagara Falls. The Onondaga Escarpment from Buffalo to Syracuse and beyond is another example located south of the Niagara Escarpment.