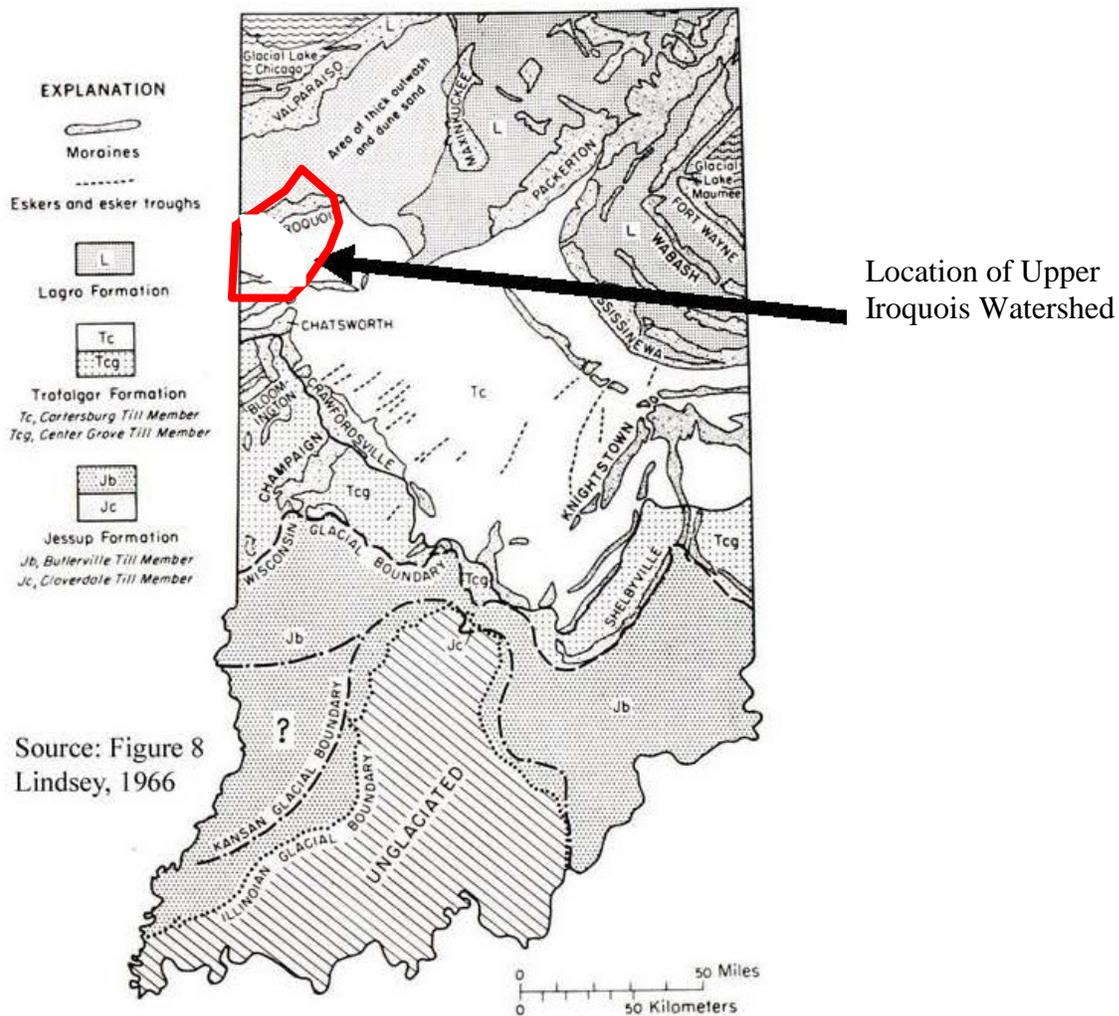


2.0 WATERSHED INVENTORY I

2.1 Geology/Topography

The Wisconsinan Age is the most recent glacial period to impact this area. The first two retreats of the Lake Michigan and Lake Erie Lobes of the Wisconsinan Age glaciers deposited the Iroquois, Shelbyville and Crawfordville/Chatsworth Moraines and established the current topography of the watershed about 20,000 years ago. A glaciated plain was created where a variety of unconsolidated deposits are present including dune sand in the northern part of the watershed, lacustrine sediments, outwash plain sediments (sand and gravel) in the central area, and till in the southern portion (Homoya, 1985).

Figure 6 Moraine Deposits in Northern Indiana from Wisconsin Glacial Period.



(Lindsey, 1996)

The Iroquois River basin lies within the Interior Plains, in the Eastern Lake section of the Central Lowland province. The Iroquois lacustrine plain is oriented in a northeast – southwest direction (Schneider, 1966). The topography is generally undulating to nearly level, but there are narrow steep slopes adjacent to the Iroquois River and its small tributary streams and occasional low sand ridges that rise a few feet above the general ground level. Bedrock is at or near the surface in many areas on this plain. Of note, is a 1-2 mile stretch of the Iroquois River running through Rensselaer that has a very high bedrock level. It appears the bedrock elevation is 2' or less below the ground surface of the floodplain, and the rock itself forms the sides and bottom of the river. The Hydrogeological Atlas of Aquifers in Indiana shows the bedrock in Rensselaer.

Except for a narrow wooded belt adjacent to the Iroquois River and small isolated wooded areas, the area is in the prairie grassland region (EcoIndiana).

The topography throughout the watershed is relatively flat to gently rolling. Elevations in the upper reaches of Jasper County are 710 feet. The lower reaches in Newton County are near 625 feet. Approximately 55 miles are between the upper reaches and the Indiana/Illinois border, the average slope is approximately 1.5 feet per mile (Banning Engineering, P.C., 2010).