

The pages in this document were taken from the "Millers Creek Watershed Improvement Plan" published in April 2004. The entire document can be found at <http://www.aamillerscreek.org/Findings.htm>.

Millers Creek Watershed Improvement Plan

Excerpt Showing an Example of Documentation Regarding Watershed Physical and Natural Features

April 2004

2.1 Watershed History

The surface geology that determines the shape of the Millers watershed was predominantly formed during the last major deglaciation of the Great Lakes, between 16,000 and 10,000 years ago (**See Figure 2.3**). Over this period the Lake Huron-Erie and Saginaw lobes of the ice sheet retreated and then advanced, pushing up the Ft. Wayne and Defiance end moraines that underlie the western extent of Ann Arbor and some of Ypsilanti while the meltwater from the lobes formed the Huron River. As the glacier went through a series of advances and retreats, the direction and flow of the outlet changed many times (Russell and Leverett, 1915). The river's present course was set by the end of this period, and the modern topography and soils are the result of postglacial erosion and soil formation processes acting on the glacial deposits (Albert, et al., 1986).

According to Russell and Leverett (1915), the ancestral Huron River was formed during the build-up of the Ft. Wayne moraine, but successively occupied a larger portion of its basin as the ice retreated to the east. The Huron River was a glacier meltwater drainageway that entered ancient Lake Erie near what is now Ford Lake (**See Figure 2.3**). The Millers Creek watershed to the north is part of the Defiance end moraine. Post-glacial alluvium suggests that the Huron River bed may have been located further north and once occupied what is now the southern half of Millers Creek watershed.

The European pre-settlement vegetation within the Millers Creek watershed was primarily oak-hickory and mixed oak forest (**Figure 2.4**). Oak-hickory forest covered the watershed east of the creek while mixed oak forest occupied the western half of the watershed. A large area of wet prairie once existed in the area that is now Thurston Pond and Nature Area. Another linear area of wet prairie once extended along Millers Creek from the mouth to Glazier Way (Cormer, et al., 1995).

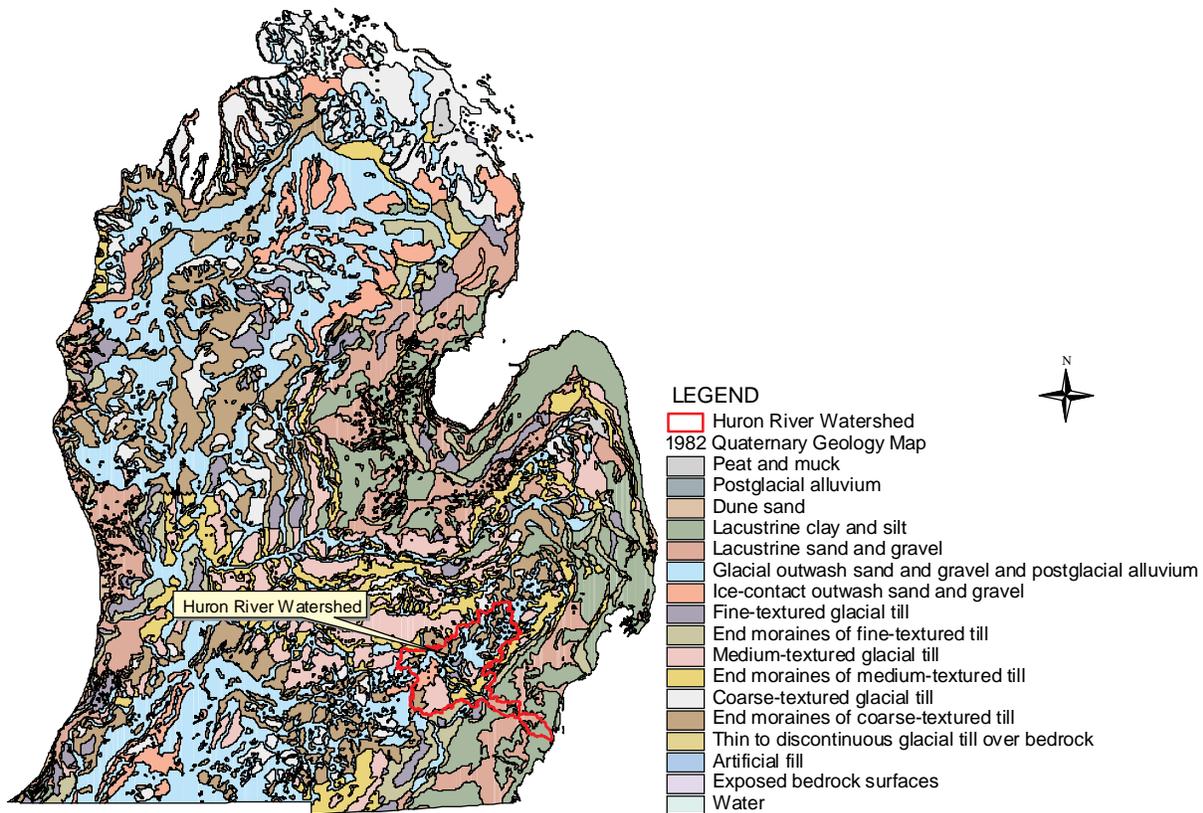


Figure 2.3 Surficial Geology of the Huron River Watershed

Beginning in the late nineteenth century, the watershed was logged and farmed. In the early 1950's, the University of Michigan purchased 800 acres of land to establish North Campus, and the Michigan Department of Transportation began acquiring land for the construction of US-23 (See **Figure 2.5**). During the late 1950's and early 1960's, research firms began locating along Plymouth Road due in part, to the proximity of University of Michigan's North Campus and US-23. The 1960's and 1970's saw a tremendous amount of growth in the Northeast Area, including single-family subdivisions, apartment communities, new employment centers, Plymouth-Green shopping center and numerous North Campus student housing projects. M-14 was constructed in the 1960's. Between 1964 and 1967, Huron Parkway, a broad four-lane boulevard, was constructed through much of the middle and lower valley of the creek.



Figure 2.4. Presettlement Vegetation (pink area represents oak-hickory forest)

During the 1990's, strong growth pressures in Ann Arbor resulted in the development of additional hotels, commercial centers, office buildings and

residential projects in the Northeast Area of the city. A significant amount of City parkland also was acquired in the 1980's and 1990's (NAP, 2002). At the same time, concern for the creek coalesced into a working group led by representatives from ERIM, the HRWC and the WCDC. Some of the original members of this group are now MCAT members.

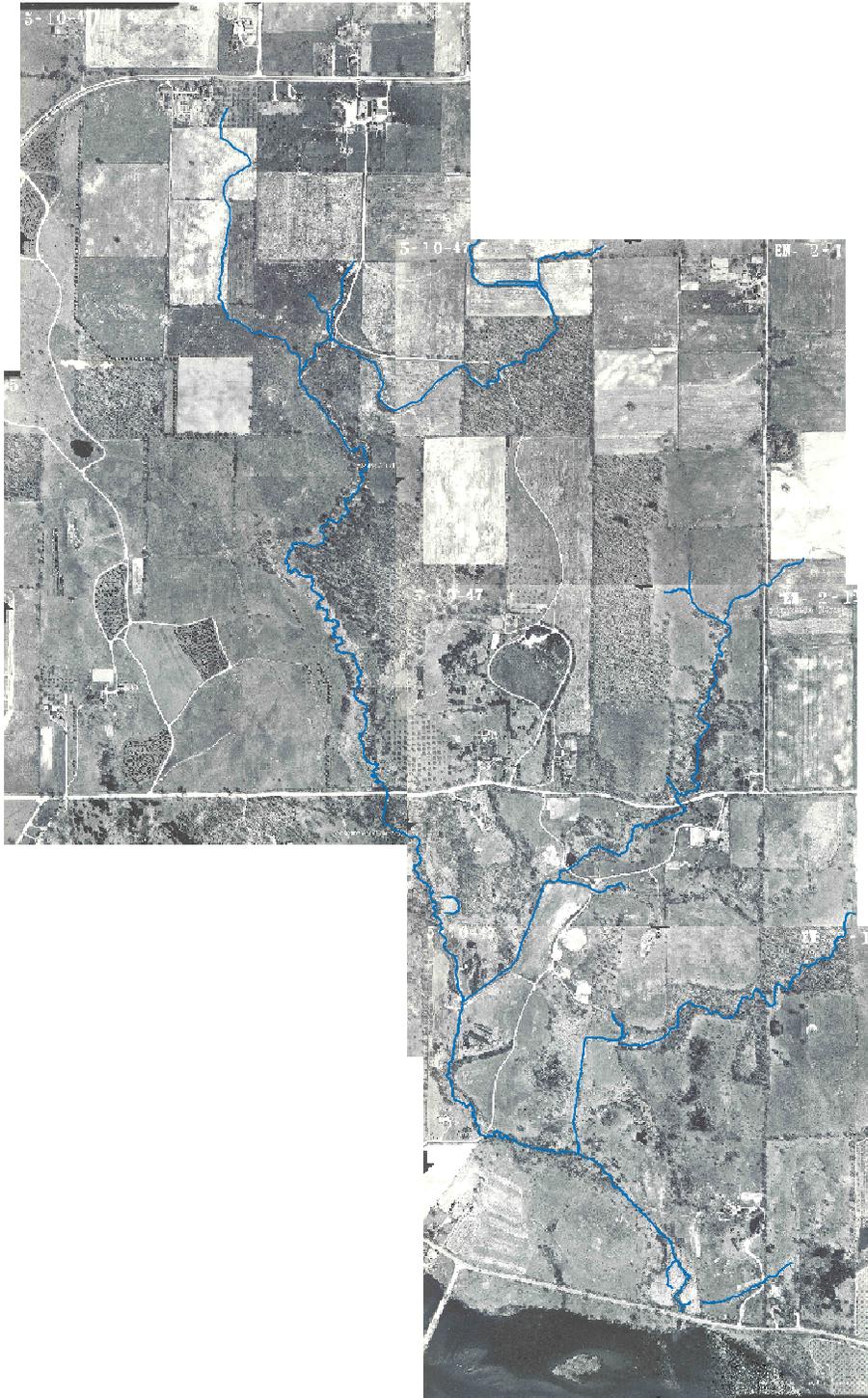


Figure 2.5. 1947 Aerial Photograph of the Millers Creek Channel