FIGURES

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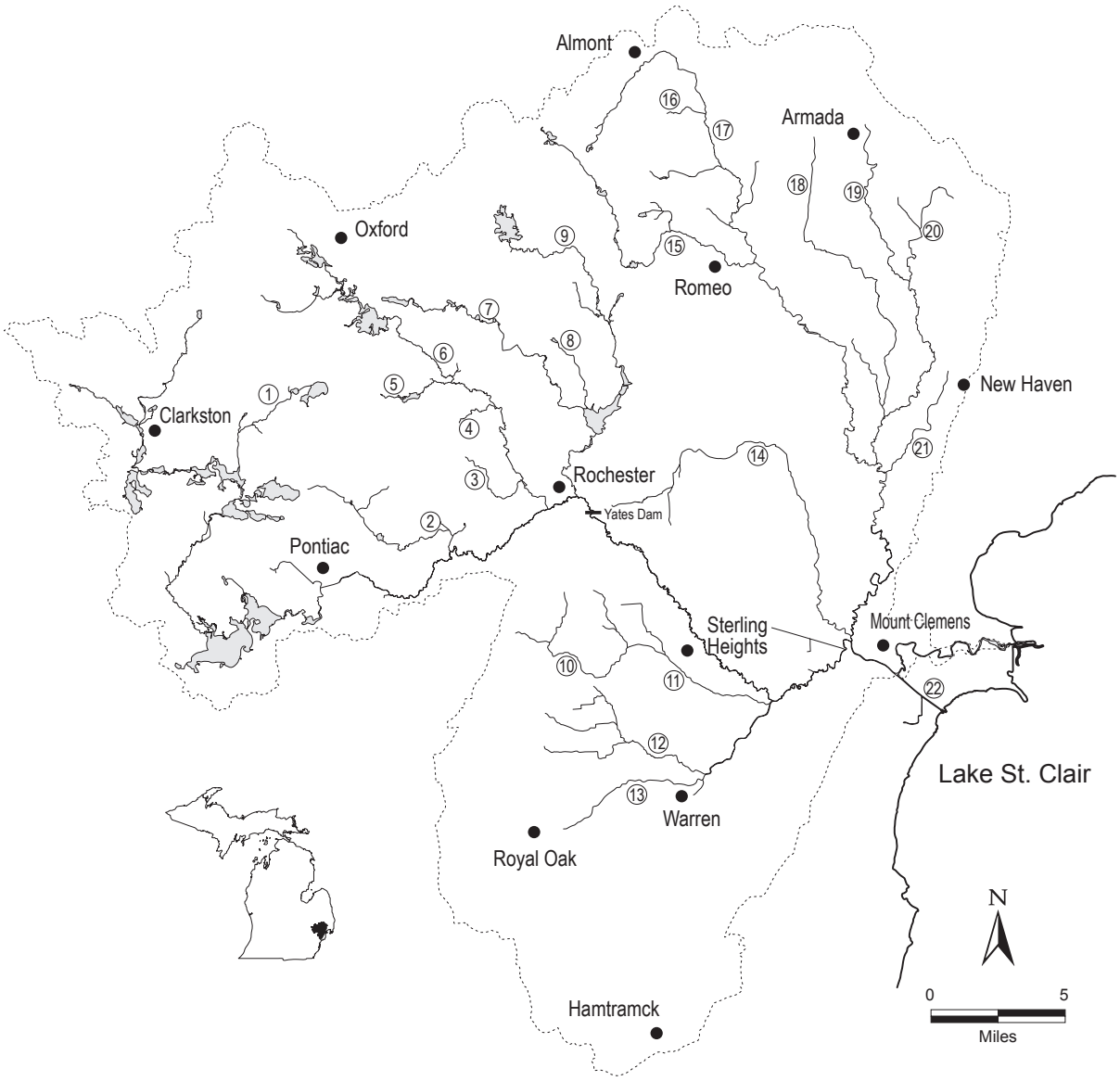


1 – Sashabaw Creek
2 – Galloway Creek
3 – Sargent Creek
4 – Gallagher Creek
5 – Trout Creek
6 – Paint Creek
7 – West Branch Stony Creek
8 – McClure Drain
9 – Stony Creek
10 – Gibson Drain
11 – Plum Brook
12 – Big Beaver Creek
13 – Red Run
14 – Middle Branch Clinton River
15 – East Pond Creek
16 – Kidder Creek
17 – North Branch Clinton River
18 – Coon Creek
19 – East Branch Coon Creek
20 – Highbank Creek
21 – Deer Creek
22 – Clinton River Cutoff Channel

Figure 1.–Major tributaries to the Clinton River.

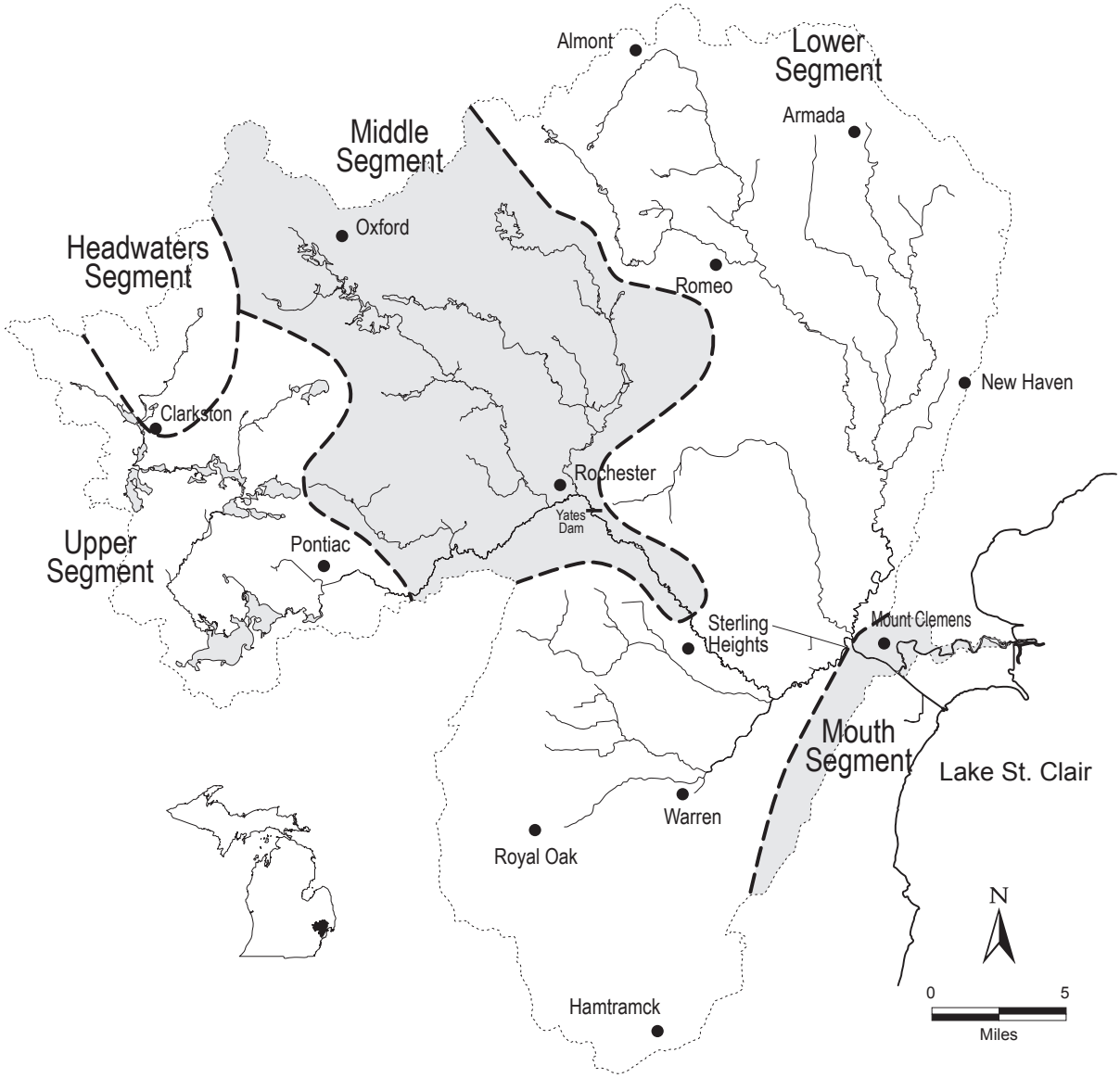


Figure 2.–Valley segments of the Clinton River mainstem.

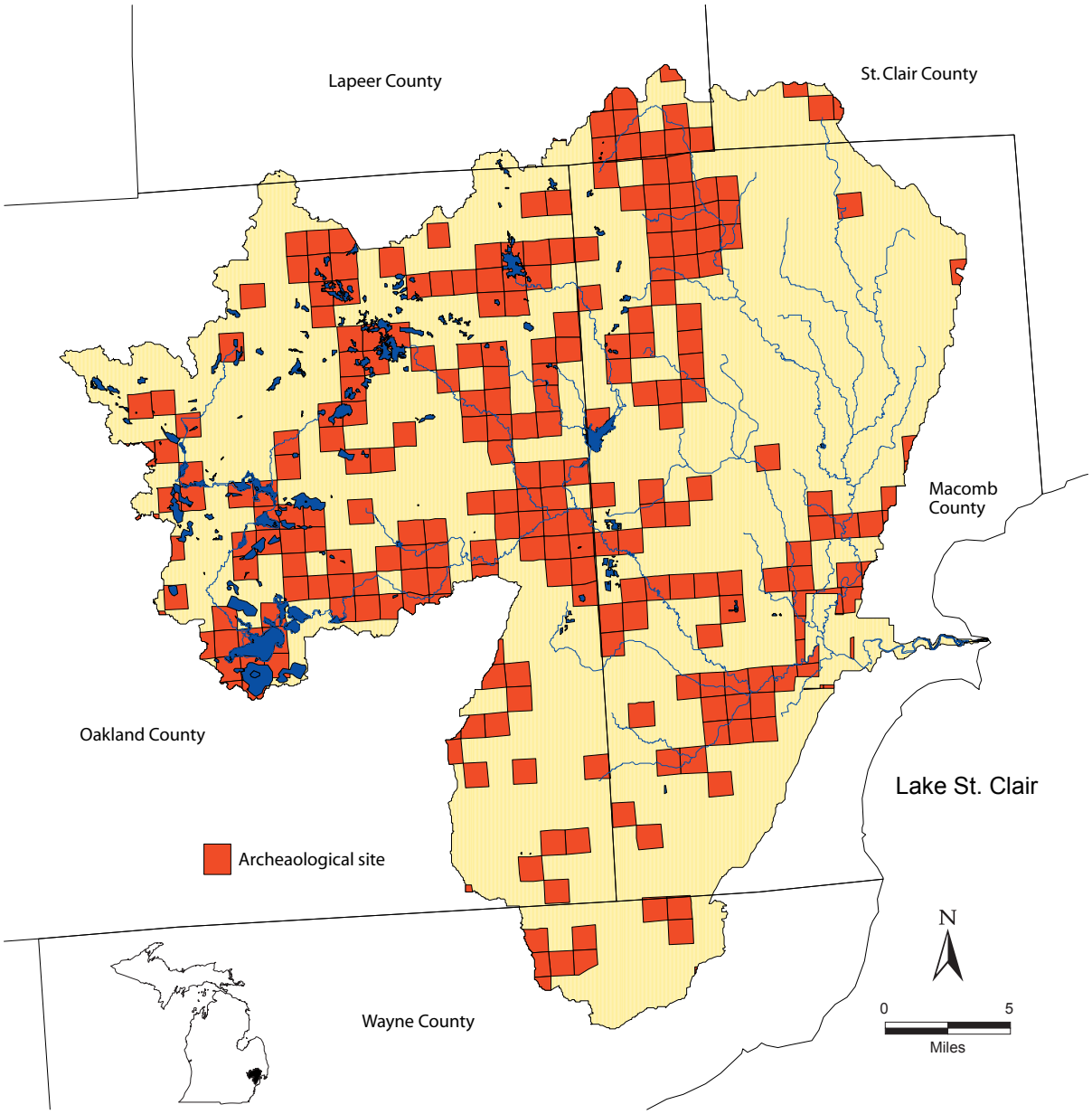


Figure 3.–Spatial distribution of archaeological sites within the Clinton River watershed indicating extensive occupation by prehistoric Native Americans.

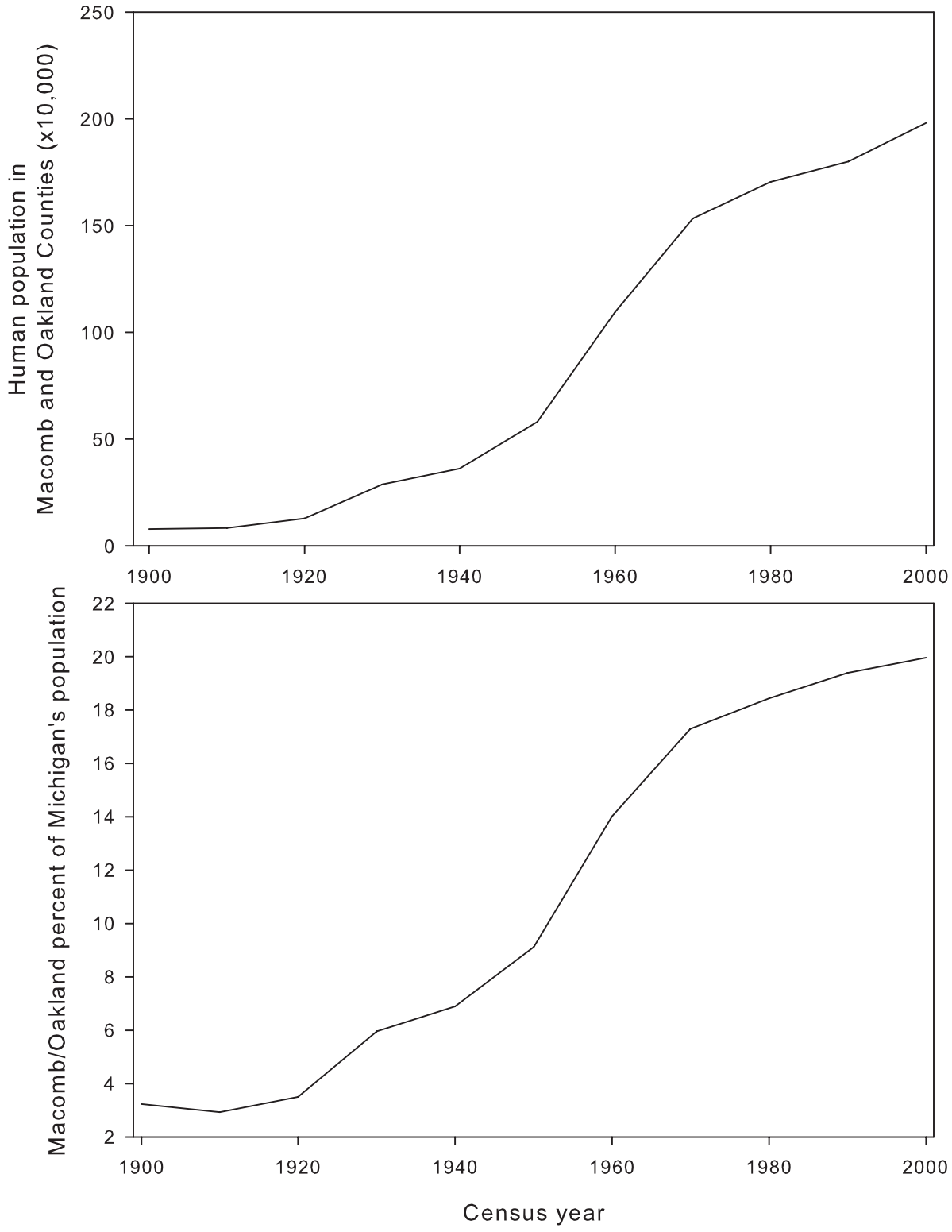


Figure 4.–Graphs of human population growth combined in Macomb and Oakland counties. The top graph shows combined population number during 11 census years from 1900 through 2000. The bottom graph shows the Oakland and Macomb population as a percentage of the total inhabitants of Michigan.

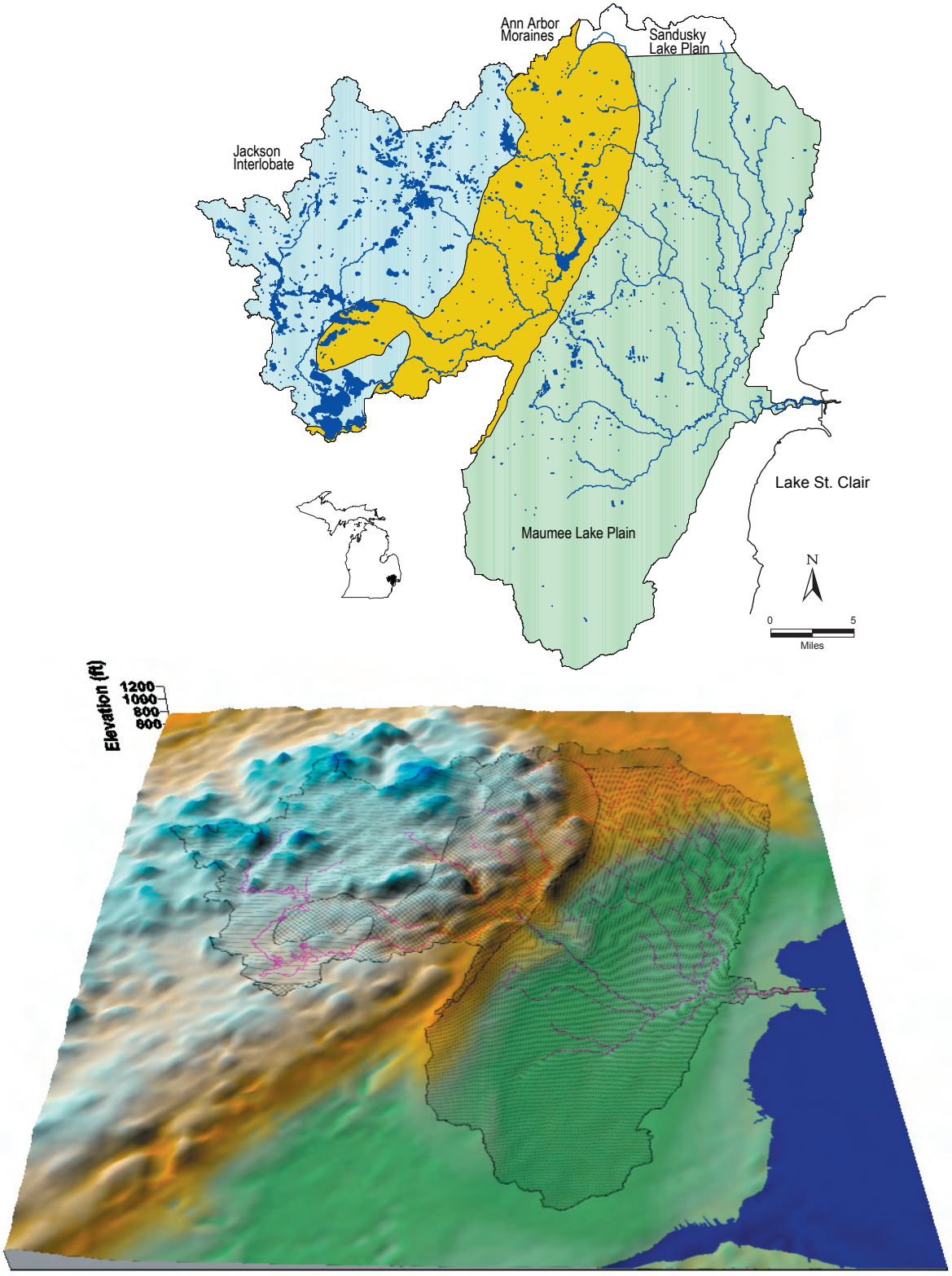
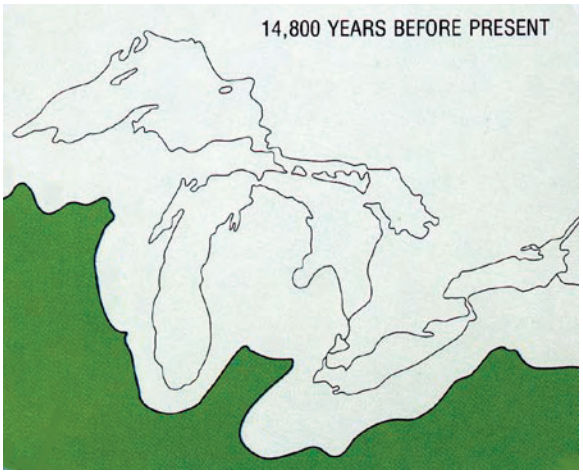


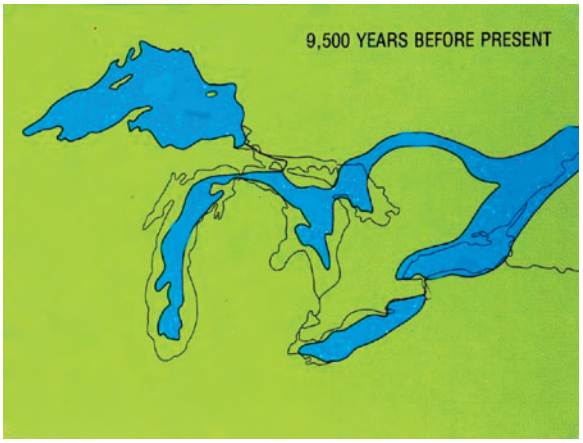
Figure 5.–Extent and classification of four landscape ecosystems (Maumee Lake Plain, Sandusky Lake Plain, Ann Arbor Moraines, and Jackson Interlobate) of the Clinton River watershed. The upper map shows lakes as well as major river segments, while the lower map shows general shape of the terrain. Ecosystem data were taken from Albert (1995).

Map 1



Map 2

Map 3



Map 4

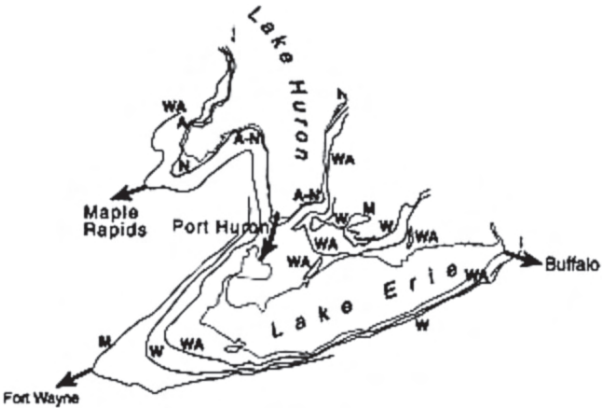


Figure 6.–Three glacial stages representing major geological forces that formed the Clinton River watershed landscape during the prehistoric (Quaternary) time period. The dark gray (or blue) areas were water, light gray (or green) land surface, and white were glaciers. The shoreline of the current Great Lakes are outlined and the watershed denoted with a black star to show geographic orientation. The fourth map shows shorelines for representative glacial lake stages. These maps were modified from images on the Michigan State University Geology Department website.

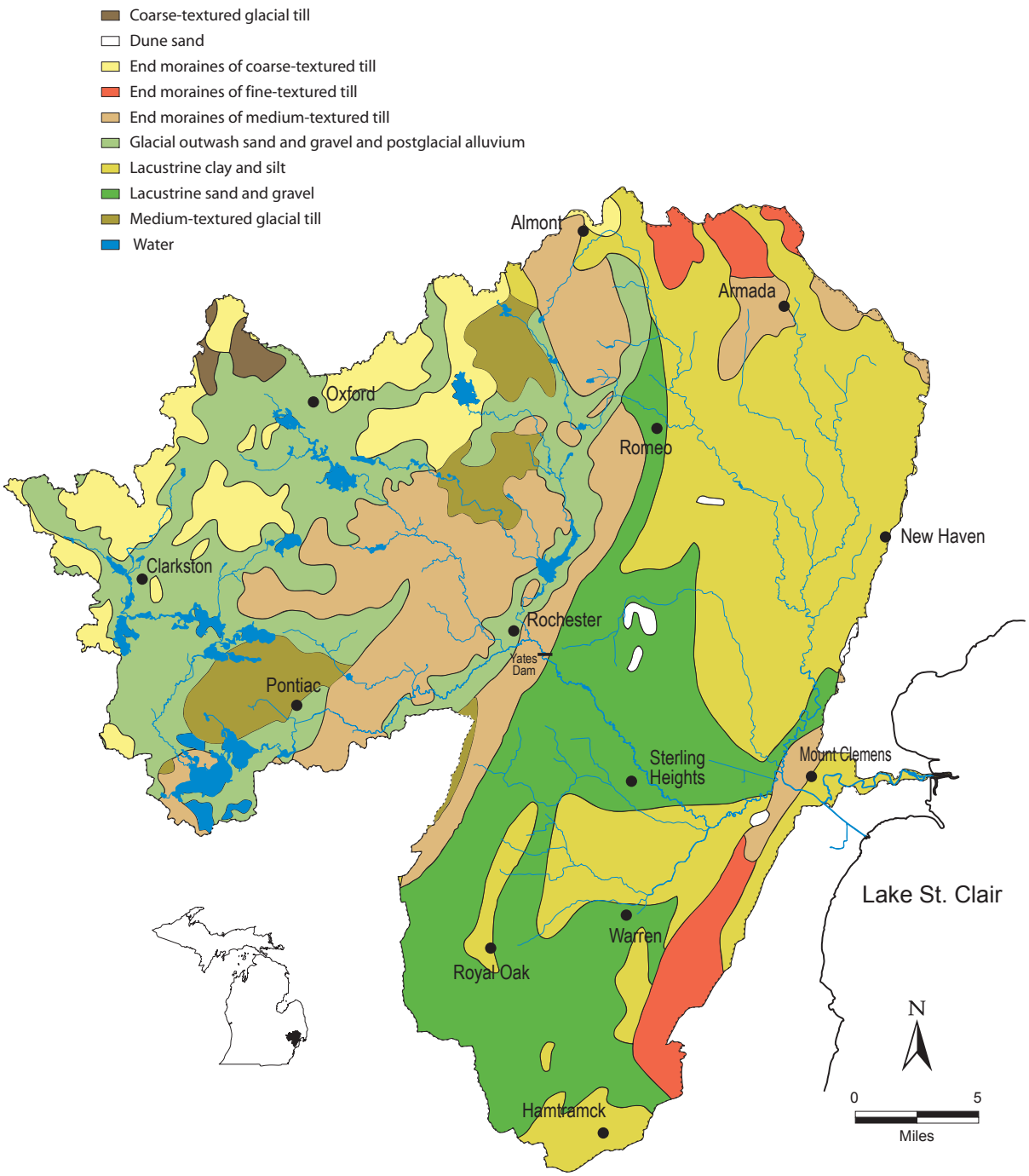


Figure 7.–Surface geology of the Clinton River watershed.

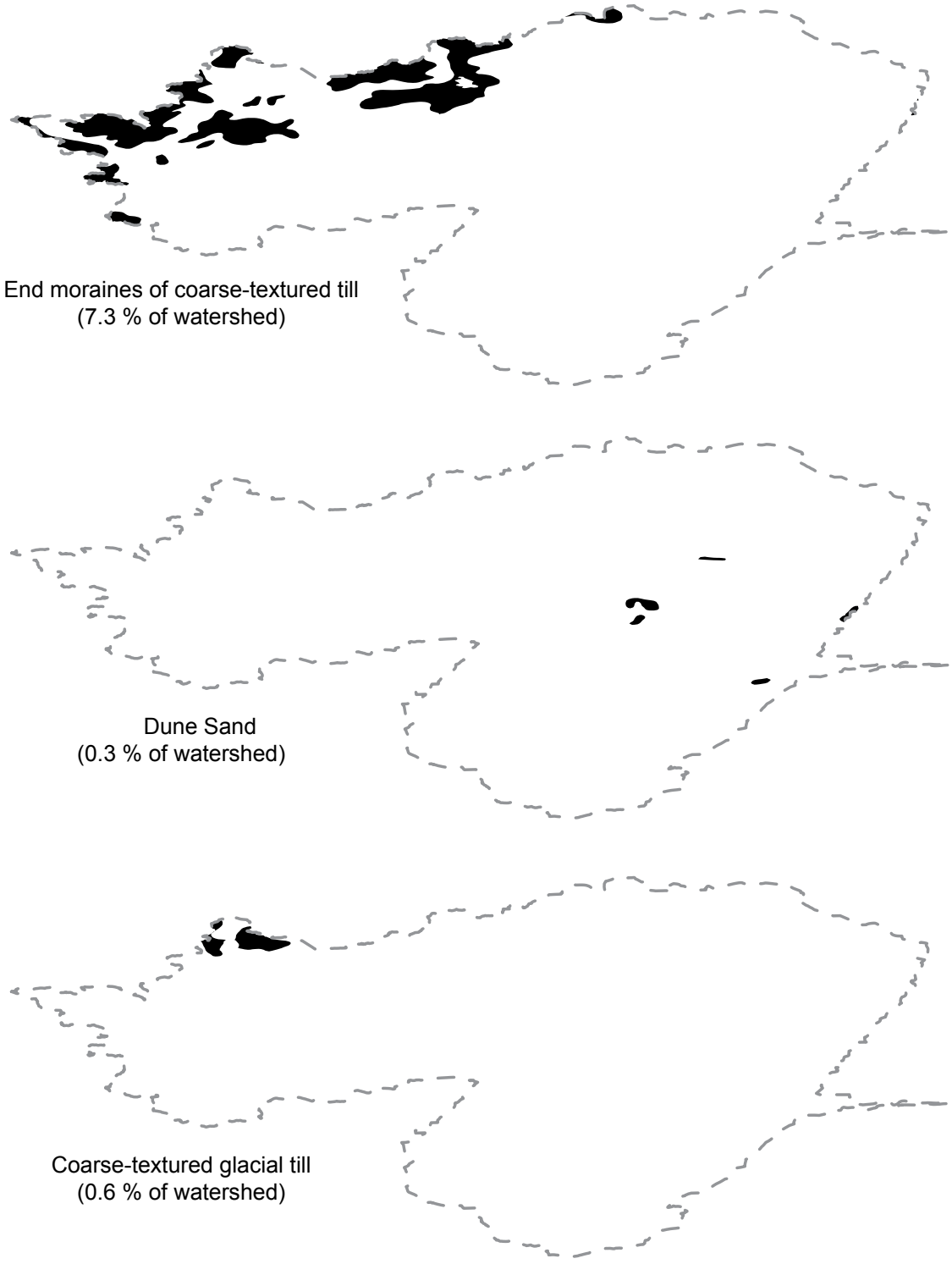


Figure 8.–Spatially aligned maps show distribution of three glacial deposits (coarse-textured glacial till, dune sand, and end moraines with coarse-textured till) within the Clinton River watershed. Numbers in parentheses show areal coverage as percent of entire watershed.

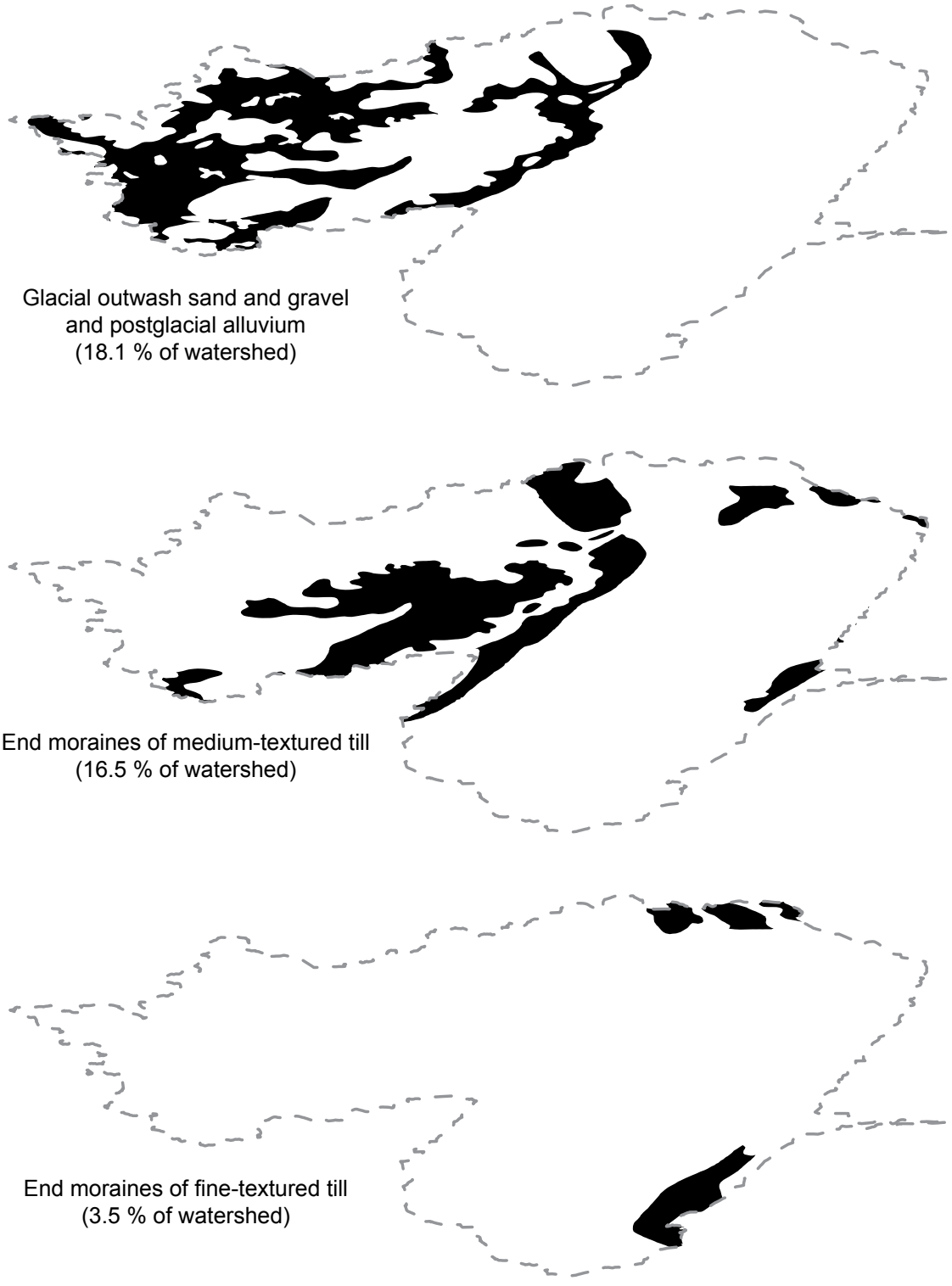


Figure 9.–Spatially aligned maps show distribution of three glacial till types (end moraines of fine-textured till, end moraines of medium-textured till, and outwash of sand and gravel) within the Clinton River watershed. Numbers in parentheses show areal coverage as percent of entire watershed.

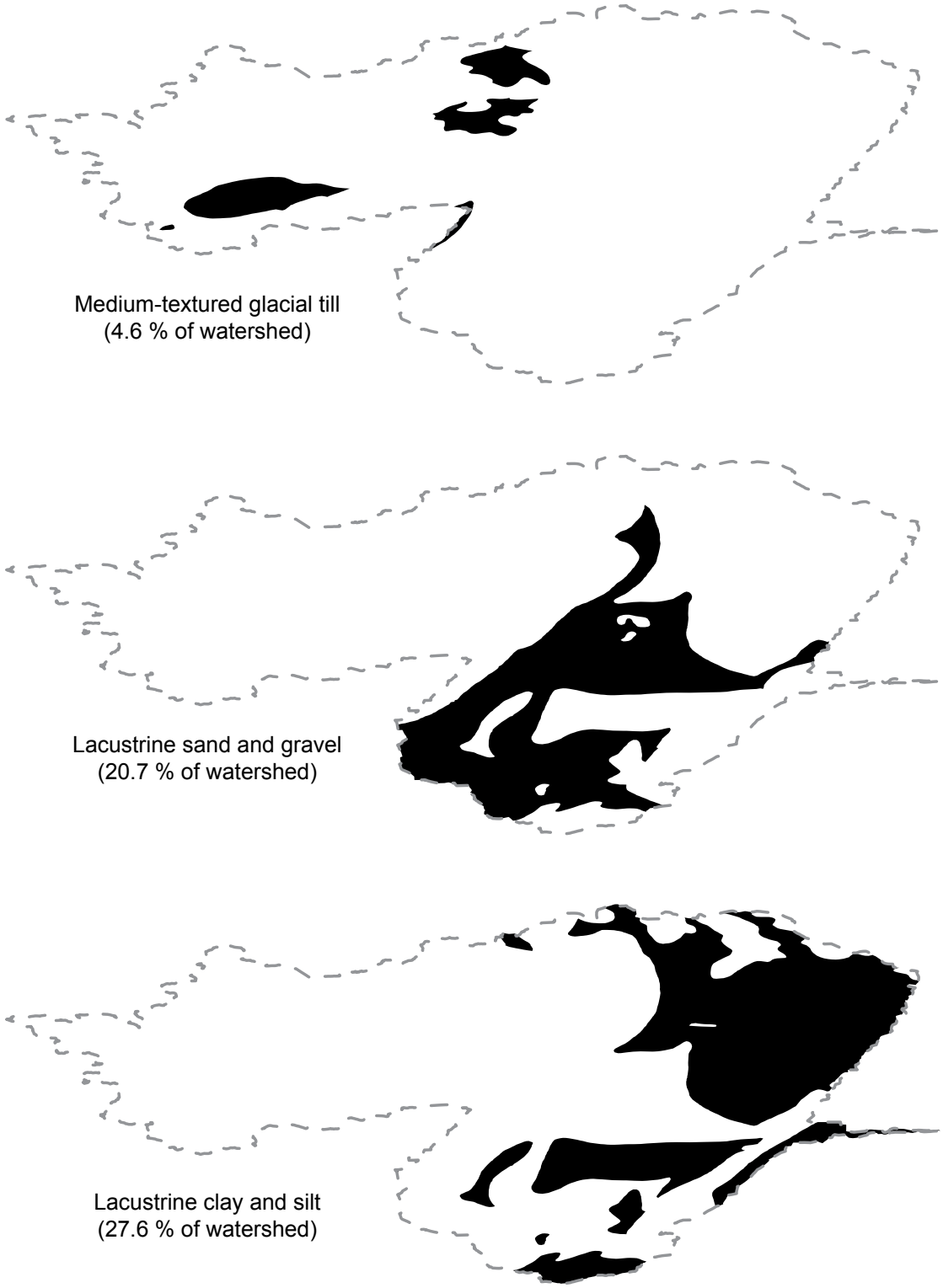


Figure 10.–Spatially aligned maps show distribution of three glacial till types (medium-textured till, lacustrine sand and gravel, and lacustrine clay and silt) within the Clinton River watershed. Numbers in parentheses show areal coverage as percent of entire watershed.

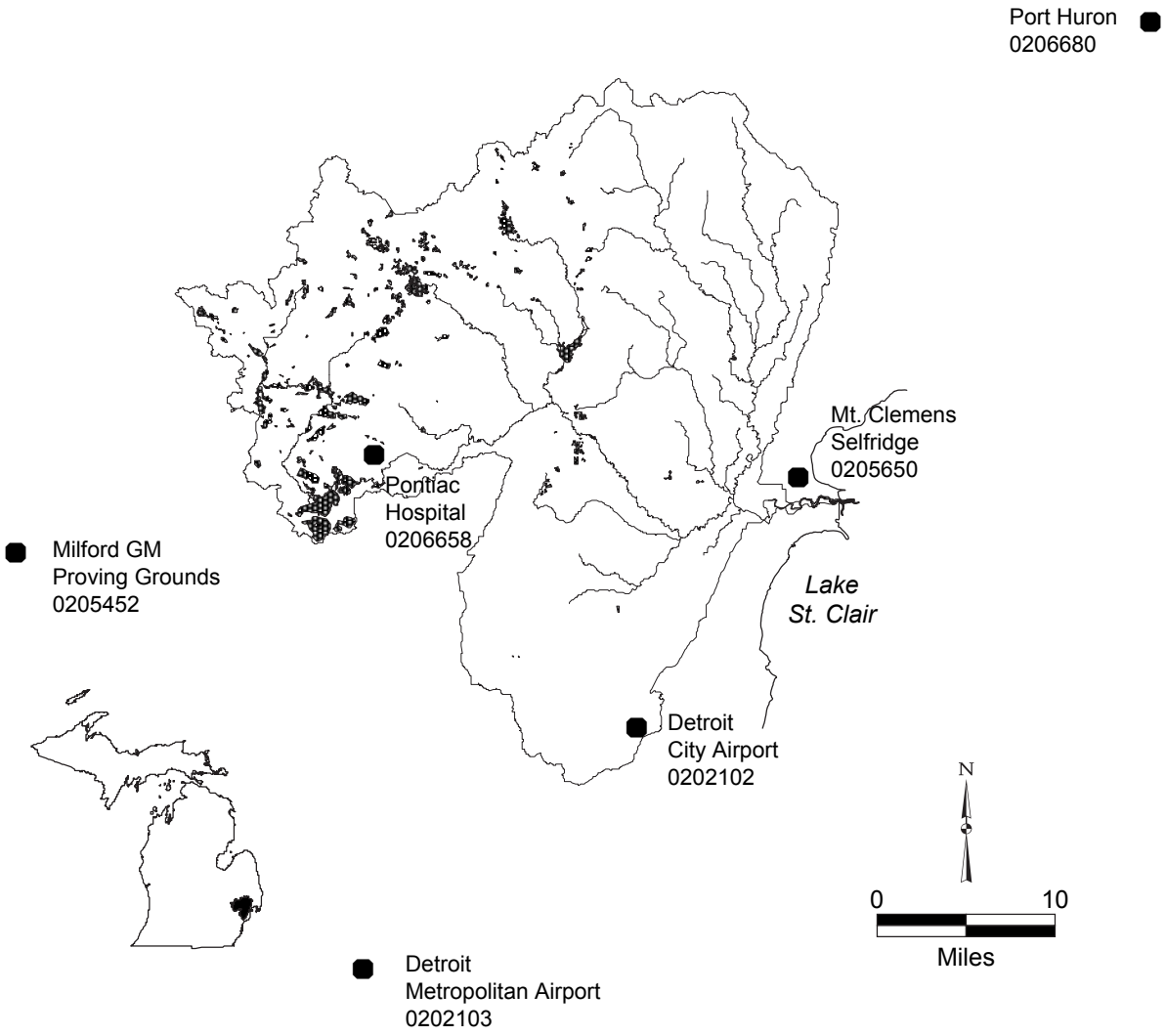


Figure 11.–Locations and National Oceanic and Atmospheric Administration identification numbers of weather stations from which data on daily precipitation, minimum, and maximum temperature were obtained for period of record (1948–2000). Data were obtained from the National Climatic Data Center which is part of the Department of Commerce, National Oceanic and Atmospheric Administration.

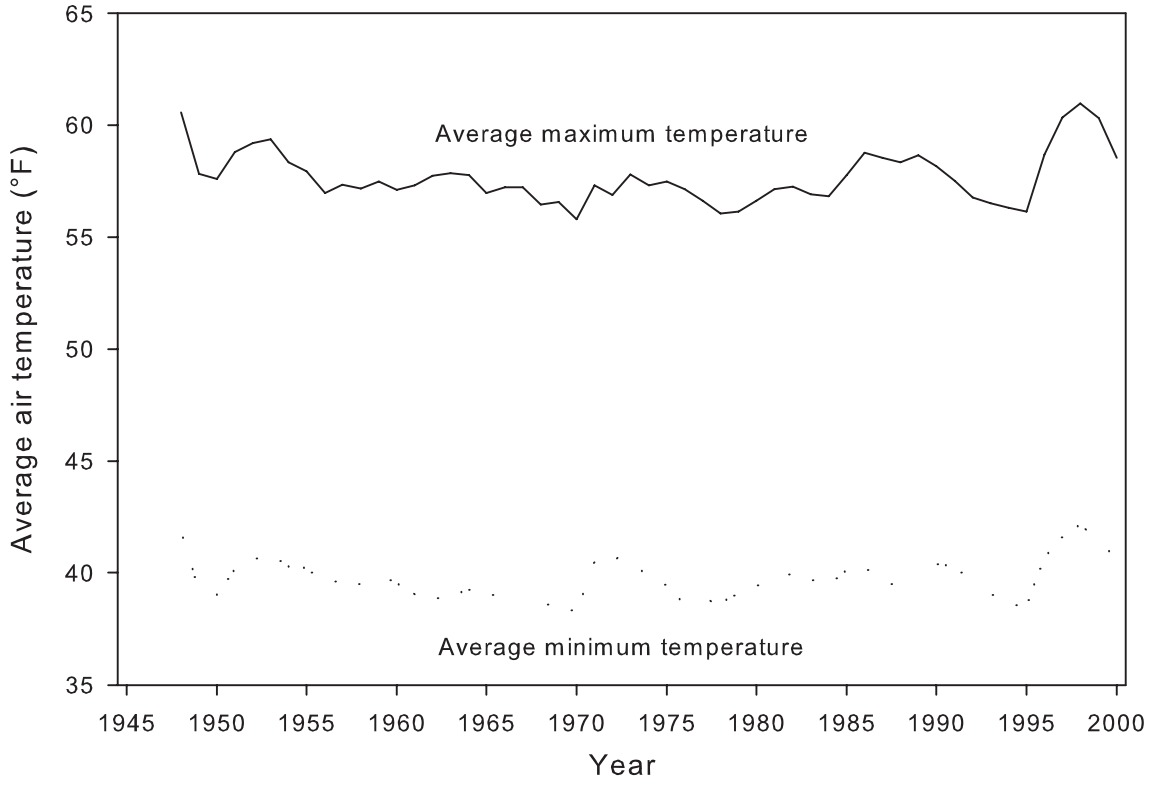


Figure 12.–Average yearly maximum and minimum air temperature in the Clinton River watershed for period of record (1948–2000). Data from the National Oceanic and Atmospheric Administration's, National Climatic Data Center.

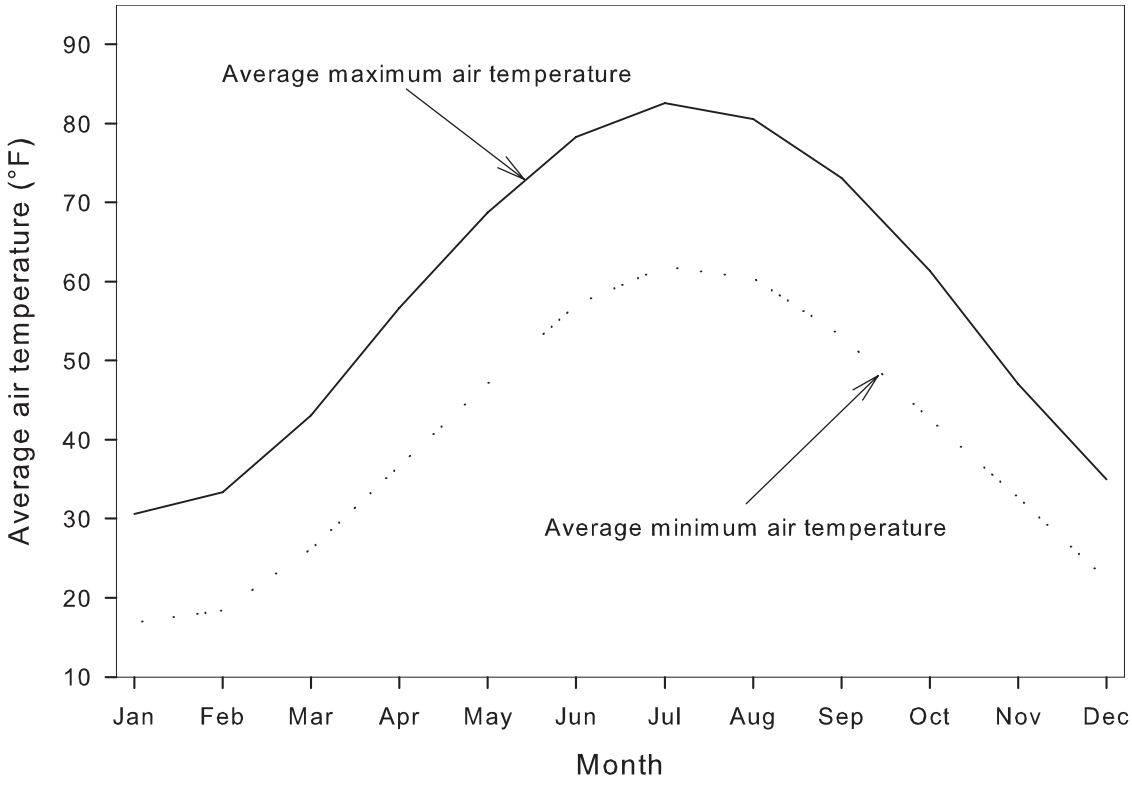


Figure 13—Average monthly maximum and minimum air temperature in the Clinton River watershed for period of record (1948–2000). Data from the National Oceanic and Atmospheric Administration's, National Climatic Data Center.

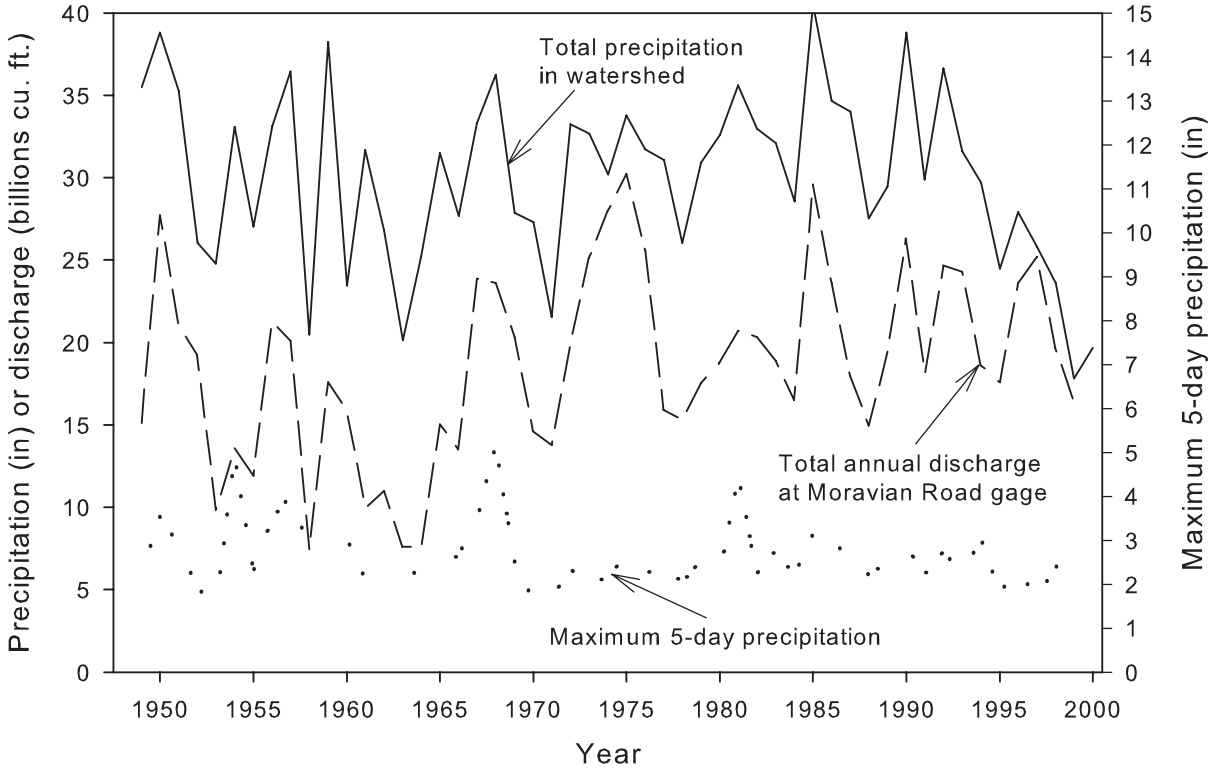


Figure 14.—Annual total precipitation (inches) and 5-day maximum (inches) in the Clinton River watershed and total annual discharge (billions of cubic feet) at the Moravian Drive gauge. Data source United States Geological Survey gauges for period of record (Table 2) and from the National Oceanic and Atmospheric Administration's, National Climatic Data Center.

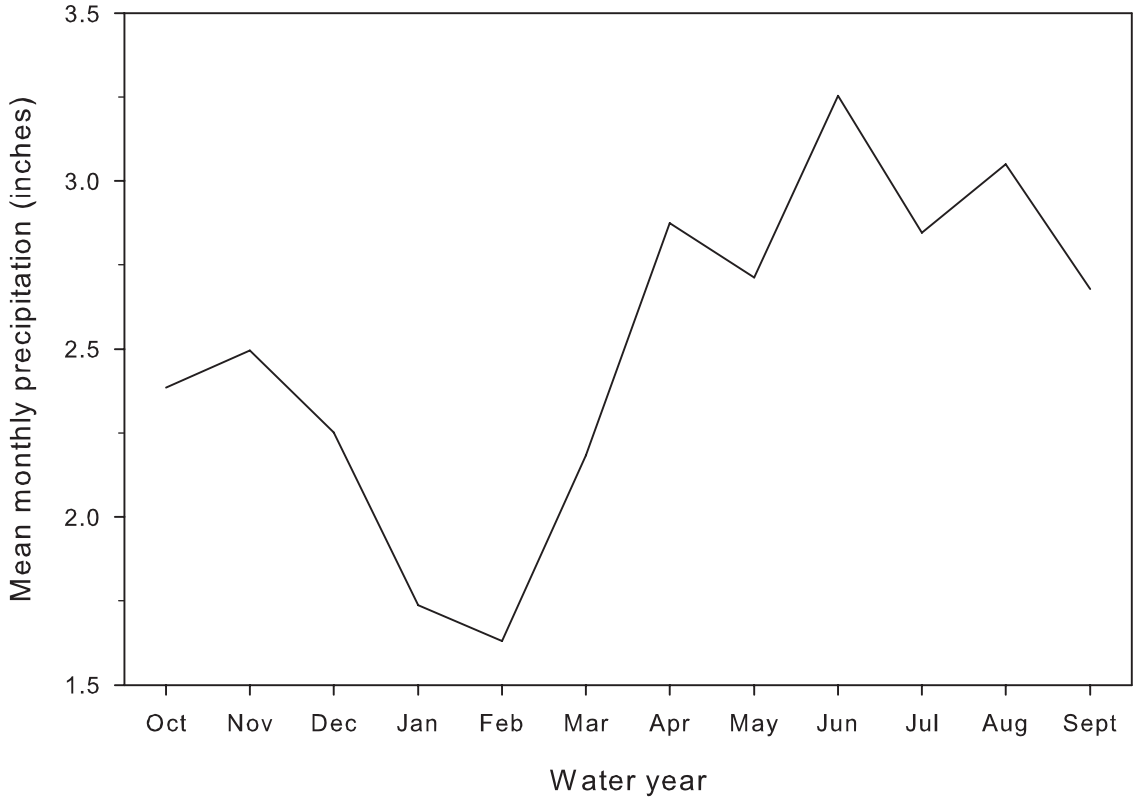


Figure 15.─Mean monthly precipitation (inches) across the Clinton River watershed for period of record (1948–2000). Values were estimated from data obtained from the National Climatic Data Center.

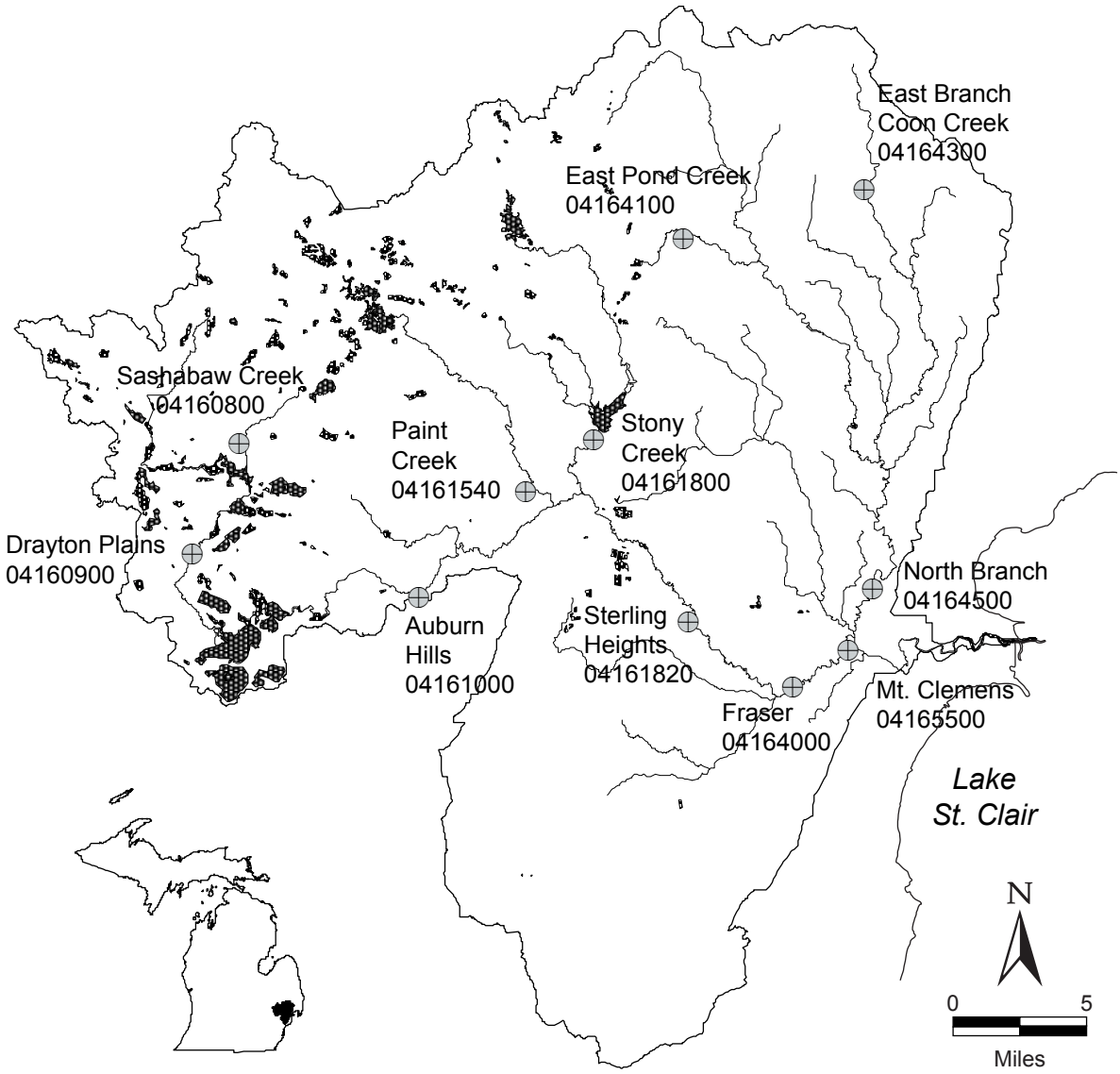


Figure 16.─Locations of selected Clinton River basin United States Geological Survey gauging stations with their name and identification number.

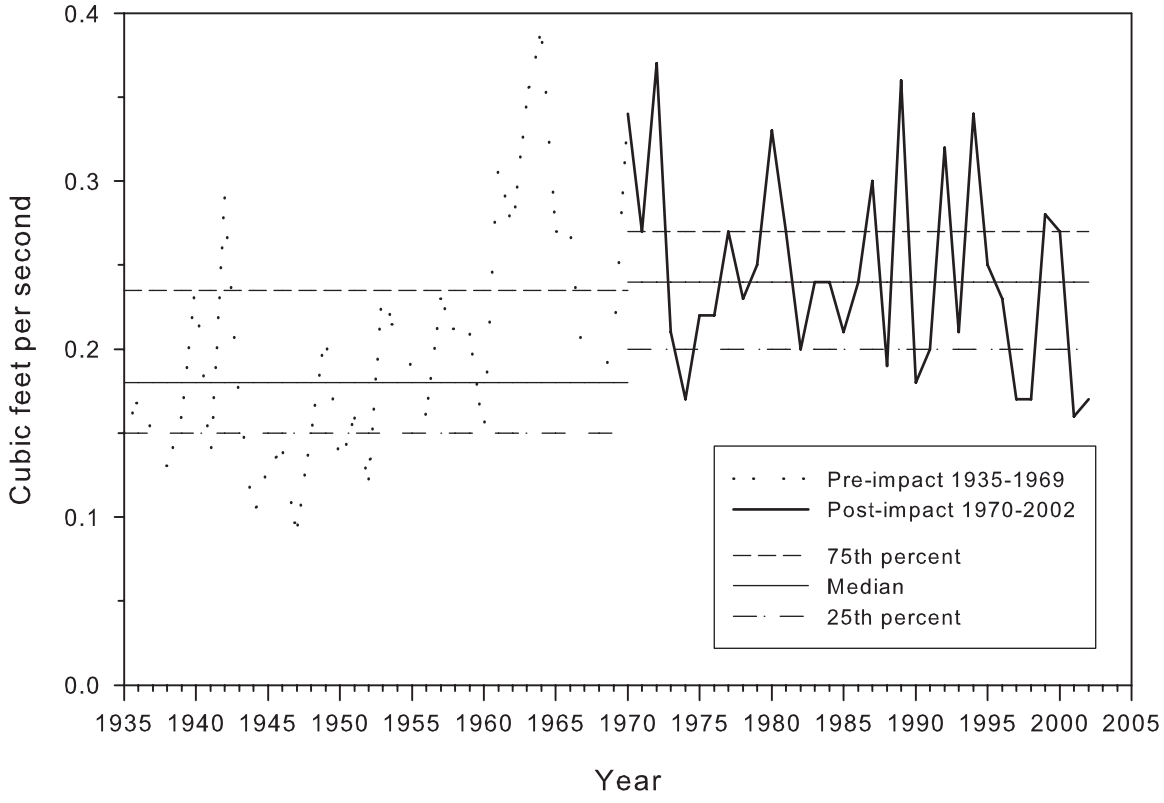


Figure 17.–Change in base flow at the Clinton River, Moravian Drive gauge, based on the Indicators of Hydrologic Alteration model.