



# SUSTAINABLE FUTURES

## Goal for this Project :

Support local decision- making that protects the watershed.

- Create 1998 land use/cover database
- Assess land use cover change
- Forecast future land use
- Facilitate environmentally sound land use practices

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We're on the web!

[www.gvsu.edu/wri/isc/sustain](http://www.gvsu.edu/wri/isc/sustain)

## LAND USE/COVER INVENTORY

The Muskegon River Watershed covers approximately 2,725 square miles and is contained within twelve counties in northern Michigan: Clare, Crawford, Kal-kaska, Lake, Mecosta, Missau-kee, Montcalm, Muskegon, Ne-waygo, Osceola, Roscommon, and Wexford. There are 143 town-ships, cities, and villages that are partly or wholly within the water-shed boundary. Together these municipalities had a population of about 385,000 in the year 2000, compared to a population of 241,500 in 1960. In this 40-year period, the population for these 143 municipalities increased by approximately 60% (143,500 persons).

A major focus of this project was to inventory the current land use and cover conditions within the watershed, based on 1998 aerial photography. The inventory was started in 2002 and completed in 2003. A change assessment was done to understand how land use and cover conditions differ within the watershed from the previous inventory of 1978. The Map Atlases created for each town-ship in the watershed attempt to characterize the landscape by taking a close look at its surface geol-ogy, topography, presettlement landscape, and its 1978 and 1998 land use and cover conditions.

Land use and land cover changes have been identified as major factors in environmental problems both globally and locally. Replacing natural habitats with human development has many impacts on our natural environment. The Map Atlases are to be used as tools by local officials to help them understand the dynamic process of land use and cover change that is occurring within their respec-tive townships, and the implications associated with these changes.



Land use will continue to change as our population constantly increases.

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## NET CHANGE

