

NATURAL FEATURES AND RESOURCES

A thorough community plan requires that the condition of the environment be considered in decisions regarding future land uses and stewardship of the land and water within the Township. Federal environmental legislation enacted in the 1970's raised public awareness of the importance of environmental protection. Although many states, including Michigan, strengthened federal environmental laws with state laws and programs designed to correct environmental problems and prevent future contamination of air, land, and water, trends during the 1980's reduced enforcement of these laws to a low priority. During the 1990's and early 2000's, environmental protection has resurfaced as a serious concern.

The natural features of Ovid Township, such as the lakes, wetlands, groundwater, and soils are important resources to the community. Although Ovid Township is predominately rural in character, concern for the environment is as critical as in urban communities that must deal with brownfields and air pollution. Most Ovid Township residents use water wells and septic systems which are reliant on clean and suitable environments for their continued use. In dense developments with many systems, this further adds to the stress on the natural environment and the concern for its protection.

Several natural features in Ovid Township are examined below within the following categories: surface water, groundwater, wetlands, and soils.

Surface Waters

The surface waters within Ovid Township represent an abundant natural, recreational and economic resource. The primary lakes are Coldwater Lake, East Long Lake, and Rose Lake (Lake of the Woods). Smaller lakes include Wright Lake, Bingham Lake, and Little Rose Lake. In sum, the lakes cover over 1,920 acres (8.45%) of the Township's surface area. Coldwater River and other small streams and creeks run throughout the Township as well connecting, feeding, and/or flowing from the various lakes.

Coldwater Lake, East Long Lake, and Wright Lake are all a part of the Marble-Coldwater Lake Chain, a series of six lakes connected by man-made channels. The length of the chain, the size of the lakes, and the water quality make the properties around these lakes more valuable than around the other lakes in the Township. Coldwater and East Long Lakes are also serviced by public sewer systems.

The lakes are the foremost natural feature and a tremendous resource in Ovid Township. The lakes bestow the community with a number of amenities, including scenic views, fish and wildlife habitat, and recreational opportunities. In addition to the aesthetics of the Lake and the lake-side character it lends to the Township, the lakes are important economically. Many of the residences located around the lakes are used for weekend, seasonal, vacation, rental, and/or recreational purposes. Visitors from areas as far as Toledo, Chicago, Fort Wayne, and Detroit

come to Ovid Township because of the lakes. These individuals spend money at the stores and restaurants in the Township, and the properties around the lakes provide tax revenue for the Township. Now, it appears that many of these individuals are renovating and/or tearing down and rebuilding their homes to have bigger and newer residences on the lakes. As a result, more and more individuals who used to be part-time residents of the Township are now retiring here and becoming full-time residents. While this may raise some planning concerns that should be addressed, the positive economic returns cannot be ignored.

In light of all the benefits generated by the lakes, the Township cannot ignore their protection. It is natural for as many people as possible to want to live on the water, so housing is naturally going to be dense around the lakes. But the result can be significant environmental damage to the water quality and destruction of the habitat for the plants and animals that reside there. In order to continue to enjoy the many benefits of the lakes, we must continue to protect the quality of the lakes as well.

Wetlands and Woodlands

Located throughout the Township are wetlands which also add to the natural character of Ovid Township. In addition to being a natural habitat for fish and wildlife, wetlands control flood and stormwater, remove pollutants from water, control erosion, and act as water recharge areas. Wetlands greater than five acres in area or wetlands contiguous to a water body are protected by state law. They are shown in the Natural Features map (Map 3) on page 18.

Where there are wetlands, woodlands often flourish as well. Large stretches of forested areas can still be found scattered throughout the County despite the fact that a majority of the land is used for agriculture. The woods are a mixture of age and species but add to the scenic quality and rural feel of the Township. Steps should be taken - e.g. zoning ordinance, tree protection ordinance, open space ordinance, natural vista or habitat preserves - to ensure the continued protection of these woodlands. Significant woodlands are also shown on the Natural Features map.

During the existing land use study, it was noted that one land owner was participating in a program to protect such resources. A property owner off of Angola Road has established a habitat protection area along the Coldwater River. Signs advertising this protection were posted alongside the road. Programs such as this are an important step toward saving valuable lands from development or agricultural pressures.

Groundwater

Ovid Township depends heavily on groundwater as its source of water for residential and agricultural use. Therefore, in Ovid Township, it is vital to plan appropriately for development in order to protect the natural resource from possible contamination. Contamination of this

resource can happen 1.) through non-point sources of pollution from chemicals and efforts associated with commerce, industry and farming; 2.) through chemicals filtering into groundwater from septic fields, oil tanks and waste disposal sites; and 3.) through everyday residential activities. In many instances, these pollutants reach lakes and streams through groundwater supplies. Pollutants may also affect well water located near septic fields.

Groundwater protection must also address the operational features of land uses. Groundwater contamination is most frequently the result of leaking septic systems, improper floor drains, improper storage of hazardous substances, leaking underground storage tanks, above ground spills, overfilling of tanks, condensation from air emissions, and improper waste disposal. Many of these avenues of contamination can be addressed in a groundwater protection plan.

Soils

Due to the importance of farming in Ovid Township, the soil composition is an important natural feature to consider when planning for future development and growth. If there are areas with better soils for farming than others, then we should work to protect those areas from the pressures of development. Similarly, some soils are not well suited for septic systems. In that light, development should be steered away from those areas as well.

Soils in Ovid Township are a blend of five different soil associations. They are summarized here:

Hatmaker-Locke-Barry Association: Level to undulating, somewhat poorly drained and poorly drained, loamy soils on till plains and moraines. Permeability is moderately rapid towards the surface, and moderately slow beneath.

Fox-Oshemo-Ormas Association: Nearly level to moderately steep, well drained loamy and sandy soils on outwash plains and moraines.

Fox-Houghton-Edwards Association: Nearly level to moderately sloping, well drained, loamy soils on outwash plains and moraines and level, very poorly drained, mucky soils in swamps, depressions, and drainageways.

Matherton-Sebewa-Branch Association: Level to gently sloping, moderately well drained to poorly drained, loamy and sandy soils on outwash plains and moraines.

Locke-Barry-Hillsdale Association: Level to moderately sloping, somewhat poorly drained, poorly drained, and well drained loamy soils on till plains and moraines.

Soil Suitability for Septic Systems:

Like many rural Townships, Ovid Township does not provide sewer service to all its residents. Currently, Coldwater Lake and East Long Lake residents are the only residents to be served by public systems. The Township's sanitary waste disposal is therefore handled primarily by septic systems on private land. The safe provision of water and disposal of sanitary wastes are important considerations for Township officials, particularly in higher density areas along the lakes not served by public systems. Faulty or ill-placed septic systems could cause pollution to private water wells, ground water, and Ovid Township lakes and streams. Poorly performing systems can be faced with unanticipated costs. Provision for new systems and maintenance of existing systems is and will be an issue for the Township in the future.

The soil survey indicates that there are several areas of the Township that are relatively less suitable for septic systems. The Branch County Public Health Department tests the suitability of soils for septic systems on properties that propose installing septic systems. A determination is made by the Public Health Department on a case-by-case basis whether a septic system is suitable for a proposed site.

Prime Farm Land:

Agricultural production has a key role in the landscape of Ovid Township and contributes to the economy, character, and identity of the community. The preservation of agricultural land can provide environmental, aesthetic, recreational and historic benefits to the community. Open farmland also assists in the replenishment and maintenance of groundwater supplies.

Soils are the important element in determining the suitability of land for farming. In order to produce crops, soils must be well drained, without steep slope and able to support vegetation. Based upon the U.S. Soil Conservation Service ratings, the Township is overwhelmingly suitable for farming and agriculture, with very few areas considered less than prime for farming.

MAP 3 - Natural Features (Most recent dated 12/18/2003)