

INTRODUCTION

Adequate public facilities and physical services are essential to meeting the needs of Montcalm County residents. As a county matures and grows, public facilities must be maintained, upgraded, and expanded to meet changing needs and to respond to the problems of an aging system. This chapter discusses existing public facilities and physical services available to Montcalm County residents, and planned improvements where they are known.

SEWER AND WATER

Sewer and water systems are regulated by the Montcalm County Health Department and the Michigan Department of Environmental Quality. Their regulations serve as a means to safeguard the environment and protect the health, safety, and welfare of visitors and residents of Montcalm County.

Wastewater

Cities, townships, and other local units of government, or sewage disposal districts can all provide waste disposal within Montcalm County. Effluent standards are regulated and must be met before a facility discharges effluent to surface waters. Although individual treatment plant methods may vary, wastewater may receive up to three levels of treatment. Solids are removed in primary treatment. Bacteria digest and degrade organic material in secondary treatment. If the particulate and dissolved organic matter are not removed prior to discharge, bacterial breakdown of this material causes oxygen depletion in the receiving water which can adversely affect aquatic life.

Some wastewater requires tertiary treatment to meet effluent standards, especially for phosphorus and pathogens. Presently, most tertiary wastewater treatment processes are not capable of removing heavy metals and toxic organic compounds. Discharging these substances into waterways can have significant adverse effects on plants and animals. If an industry produces wastewater containing flammable, explosive or hazardous substances, poisons, or toxics, it is required to pretreat the water before discharge to a public treatment system.

Water Supply Control Regulations

Water supply regulations within Montcalm County apply to all premises, both residential and commercial. Where a public water supply system is not available, an adequate and safe water supply system must be constructed and maintained for human occupancy. The potability and safety of water must be of suitable bacteriologic and chemical quality. The Drinking Water Standards of the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ) are used as guidelines in Montcalm County when determining suitable bacteriological and chemical quality.

Public Water and Sewer

The reliability of the water system depends on a water supply sufficient to meet peak demands, storage capacity to provide flow for sufficient duration of fire fighting, and adequate water pressure. Public water systems in Montcalm County are located in Greenville, Carson City, Stanton, the Village of Lakeview, Village of Edmore, Village of

Howard City and the Village of Sheridan. Water pressure is maintained through the use of at-ground surge tanks or water towers in all of these systems. Within Carson City the water system contains 2 wells, a pump house and a 100,000 gallon water tower.

The largest capacity of the seven systems is in Greenville where it pumps 7.2 million gallons per day. The second largest is the Carson City Water System where it pumps 1.5 million gallons per day. The third largest is in the Village of Sheridan pumping 1.2 million gallons per day, followed by the Village of Lakeview's pumping 0.6 million gallons per day. The last three of the systems have plans for future expansion. Carson City plans to replace water mains and add a new 500,000 gallon water tower in the next few years.

Public sewer systems in Montcalm County are located in Greenville, Crystal Township, Carson City, City of Stanton, the Village of Lakeview, the Village of Howard City, Village of Edmore, Village of Pierson and the Village of Sheridan. The Greenville sewer system processes 1.3 million gallons per day. The Crystal Sewer Distribution system contains the second largest capacity among the four with 1.75 million gallons per day. Carson City is the third largest with 0.5 million gallons per day, followed by the Village of Lakeview with 210,000 gallons per day, and the Village of Sheridan with 119,000 gallon per day. The Greenville system has an unknown amount of used capacity. Crystal Township has 50% total system capacity remaining, the Village of Sheridan has 40% capacity remaining, the Village of Lakeview has 30%, and Carson City only has 20% of total system capacity remaining.

ELECTRIC AND GAS

Electric utilities within Montcalm County are provided by Consumers Energy, Tri-County Electric Cooperative, and Great Lakes Energy Cooperative. Tri-County services all townships except for Eureka, Fairplain, Montcalm, Pierson, Reynolds, and Sidney Townships and has nearby offices in the City of Blanchard (Isabella County) and the City of Portland (Ionia County). Great Lakes Energy's nearest office is in the City of Newaygo and provides electricity to Maple Valley, Pierson, and Reynolds Townships. Consumers Energy has an office in the City of Greenville and services the rest of the County.

Gas utilities in Montcalm County are provided by Consumers Energy and Michigan Consolidated Gas Company, a company within DTE Energy. The majority of the eastern half of Montcalm County is serviced by Consumers Energy. These townships include Belvidere, Bushnell, Crystal, Day, Douglass, Evergreen, Fairplain, Ferris, Home, Richland, and Sidney Townships. The majority of the western half of Montcalm County is serviced by Michigan Consolidated Gas Company. These townships include Belvidere, Bloomer, Cato, Eureka, Home, Maple Valley, Montcalm, Pierson, Pine, Reynolds, and Winfield Townships. Only Belvidere and Home Townships are serviced by both providers.

SOLID WASTE AND RECYCLING

It is estimated that Montcalm County residents generate 27,242 tons of solid waste per year, with an additional 24,354 tons per year generated from foundry sand, commercial, industrial, and construction waste. In an effort to reduce the total quantity of solid waste

generated, Montcalm County prepares a Solid Waste Management Plan approximately every five years. The Plan was last updated in 1997. Goals and objectives have been developed for solid waste management within Montcalm County to comply with the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Currently Montcalm County has one landfill, Central Sanitary Landfill located in Pierson Township. The landfill has 10 acres dedicated for operating, but is 315 acres in size. Montcalm County also has a Recycling and Solid Waste Transfer Station located in the City of Greenville and is 6 acres in size. Waste from this station is transferred to Autumn Hills landfill in Ottawa County for final disposal and the recyclables are transferred to the Recycle America facility in Grand Rapids. The County also has a Recycling Coordinator who oversees the expansion of recycling activities in the County.

To provide assurance of long term solid waste capacity, the 1997 Solid Waste Management Plan Update has identified existing disposal areas in adjoining counties which can be utilized to meet Montcalm County's needs for the solid waste generated for the next 10 years. These landfills are as follows:

Type II Landfill

- Hastings Sanitary Landfill, Barry County
- Pitsch Landfill, Ionia County
- Ottawa County Farms Landfill, Ottawa County
- Autumn Hills Landfill, Ottawa County
- South Kent Landfill, Kent County
- Muskegon County Solid Waste Facility, Muskegon County
- Taymouth Landfill, Saginaw County
- Saginaw Valley Landfill, Saginaw County
- People's Landfill, Saginaw County
- Granger Wood Street Landfill, Clinton/Ingham County
- Granger Grand River Avenue Landfill, Clinton County
- Northern Oaks Recycling and Disposal, Shiawassee County
- Venice Park Landfill, Shiawassee County

Type A Transfer Facility

- North Kent County Transfer Station, Kent County

Waste-to-Energy Incinerator

- Kent County

The goals and objectives of the plan desire to prevent adverse effects on public health and the environment which may result from improper solid waste collection, transportation, processing, or disposal. The County also wants to reduce waste volumes through source reduction, recycling and composting so smaller proportions of solid waste requires landfill disposal.

The County expects that the targeted waste management goals will be attained by increasing public awareness and understanding of the issues and concerns related to controlling solid waste, and by promoting regional coordination on solid waste issues.