

# Lake Metigoshe Recreation Service District

LMRSD formed July, 1976.

## BACKGROUND

July 21, 1966: Norman J. Peterson, Director of the Division of Water Supply and Pollution Control, reported that bacteriological and chemical test performed on Lake Metigoshe samples revealed that the lake is not polluted yet.

September 22, 1971: Dr. Mary Bromel, of the North Dakota Water Resources Institute at North Dakota State University, reported that Lake Metigoshe is now considered polluted. This is due to two major causes:

1. Extensive development of the shoreline has accelerated the aging of the lake.
2. Inadequate or overloaded waste disposal facilities at cottages, business and public buildings have both contributed excessive nutrients, resulting in massive algae growths, and potentially dangerous bacterial populations.

As can be seen above, in the early 1970's, Lake Metigoshe had a significant water quality and aquatic weed problem, which appeared to worsen with each passing year. Some property owners tried to promote a sewer project in 1972;

Several years later, the North Dakota legislature passed a law that permitted property owners to form a "RECREATION SERVICE DISTRICT" in order to finance improvements in a manner similar to cities. Shortly after that law was enacted, the LAKE METIGOSHE RECREATION SERVICE DISTRICT (LMRSD) was formed, and a study made to determine the need for a sewer collection system.

Prior to 1980, the Environmental Protection Agency (EPA) had insisted that Lake Metigoshe did not qualify for a federal grant to help pay for sewer improvements because most of the sewer improvements would just "increase future development" instead of serving existing homes. EPA officials were given tours of the area to show them that the majority of the area suitable for development in and around the Lake had already been developed. After the tour, the EPA officials changed their positions, and the project move ahead through the rest of the many EPA steps. Eventually, the EPA approved funding for the proposed sewer project, but required that a combined innovative/alternative (pressure) and conventional (gravity) system be installed. The grant was to provide 75% of the funding for the conventional (gravity) portion of the system and 85% funding for the innovative/alternative (pressure) features of the project. EPA also limited the excess design capacity for future development to 10%.

Engineering for the project was undertaken by Wold Engineering, in Bottineau. The chief engineer for the project, Mr. Richard Foster, did a remarkable job – especially considering

that there was no other similar system in operation at that time from which to draw information.

Construction was completed on the majority of the system in 1983. The under-water sewer main to MacKay Island and the addition of the Lake Metigoshe State Park sewer lines were tied into the system in 1985. The total cost of all improvements amounted to \$ 2,902,223.72. EPA funded \$ 2,397,123.00 of the total cost. Property owners were assessed the remainder of the cost \$ 505,100.72, which amounted to 17.4% of \$ 730.18 per parcel. Each parcel of land within a quarter mile of the lake shore was to be included into the LMRSD, and was assessed its share of the cost; it was also required to connect into the collection system.

Since the initial waste water collection system was installed, there have been several upgrades. These improvements were necessary to keep up with the ever increasing demand being placed on the system as more and more cottages have been either converted to year around structures, or removed and replaced by newer and larger ones as well as additional development around the lake.

In spite of the increased demands placed upon it, the system has worked out exceedingly well; thanks in large part to the dedicated, professional and innovative maintenance department and its superintendent, Mr. Clay Pettys. So well, in fact, has the system performed that despite the dire report by Dr. Mary Bromel in September, 1971, that by the late 1990's, an official of the Division of Water Quality -North Dakota State Department of Health (after a joint 5 year water quality program between the LMRSD and the State) stated that; *"Lake Metigoshe has the best water quality of any natural lake in the state."*

Continued development and expansion of the area in and around Lake Metigoshe will likely bring ever-increasing demands not only upon the sewer collection system itself, but also challenge the dedication, ability, ingenuity, and professionalism of the LMRSD maintenance staff, Board of Directors, and design Engineers.