Observations in the Clam River
at Cadillac, Wexford County
on September 21, 1980

INTRODUCTION. As a follow-up to previous studies completed by the Biology Section, Dr. Elwin Evans and I made observations on the Clam River at four stations in the vicinity of Cadillac, Wexford County between 11:00 a.m. and 12:00 noon, September 21, 1980. A thunderstorm had occurred earlier that morning.

RESULTS AND DISCUSSION. Station 1, located at Haynes Road, was just below the dam (Figure 1). The water was approximately 0.3 meters higher than normal and was clear with no filamentous algae present. Macrophyte growth was sparse. Station 2 located on 13th Avenue, was just downstream of the WWTP discharge. The water was slightly turbid with abundant to profuse filamentous algae growth present. Macrophyte growth was also abundant. There was no apparent odor but flow appeared to be significantly greater than at station 1.

Station 3 was located at Boon Road approximately 2 km downstream of the WWTP discharge. The water was extremely turbid to opaque making it impossible to see the bottom. The presence or absence of algal growth could not be determined but it was evident that macrophyte growth was abundant. Flow was heavy and it appeared to be well above its normal high water level.

At station 4 located at County Line Road approximately 4.5 to 5.0 river km downstream of station 3 the water was clear with moderate algal growth on available substrates. The bottom was primarily sand with sparse macrophyte growth. Some duck weed (Lemna) was present in the back-water areas even though flow was above normal.

It appeared that a slug of wastewater had been released to the Clam River from the Cadillac WWTP that morning. This slug had apparently passed 13th Street and left some residual but had not yet reached the County Line Road when we were there at approximately 11:40. There are no known dischargers to the Clam River below the wastewater treatment plant and soils in the surrounding watershed are primarily sand in the area downstream of the WWTP.

It is evident that the Cadillac WWTP is still degrading several km of the Clam river on a continuing basis in addition to periodic slug discharges like the one observed on September 21, 1980. Wastewater treatment practices at this facility apparently need to be reviewed and improved in order to minimize the detrimental effects this facility continues to have upon the Clam River.

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Figure 1. Observation stations on the Clam River, Cadillac on September 21, 1980.