# Methodology for Determining EDU Rate Structure

# Purpose:

The purpose of developing a sewer use rate structure based on Equivalent Dwelling Units (EDU) became necessary when the Village of Owego could no longer obtain accurate and timely water consumption data from United Water Owego/Nichols.

#### Scope:

Develop an equitable rate structure that would provide adequate funding for the Wastewater Treatment Facility. These funds are used for Operation and Maintenance (O&M) of the treatment plant and the collection system, to pay any outstanding debt incurred by the treatment plant and/or the collection system and to fund its reserves.

Billing based on water consumption is commonly used and likely the most equitable method for billing each property. This option is no longer possible as United Water Owego/Nichols has decided not to provide the data necessary to bill sewer based on water consumption. United Water Owego/Nichols is not under any legal obligation to provide the village with such data as they are a privately owned corporation.

The village realized that it must develop a rate structure that was not dependent upon water consumption data and decided to pursue the use of EDU's as a method for sewer billing.

#### **Action Taken:**

The Village hired Thoma Development of Cortland, NY to conduct a survey of the properties within the village and assigned an EDU value for the property. Thoma Development conducted the survey and provided the village with a comprehensive list of properties within the village and what the EDU should be based on the number of dwelling units in each building.

Thoma Development did not conduct a survey of the non-residential commercial properties within the village. The village conducted that portion of the survey in-house and used historical water consumption data as a basis for assigning EDU's for each of those properties.

Based on the number of EDU's assigned to each property, a rate was developed and a multiplier based on the number of EDU's assigned to that property will determine the annual sewer bill for each property.

Each property currently pays a Capital Improvement Fee of \$30.00 annually. It was decided to reduce that fee to \$17.52 annually and multiple it by the number of EDU's assigned to a property.

# Determining the Value of an EDU:

An Equivalent Dwelling Unit (EDU) was determined to have a value of 1200 cubic feet of water usage (12 ccf) per quarter for a single family residence. The decision to use 12 ccf was based on that amount having been used for minimum billing by the village for a number of years.

# **Definitions:**

#### **Residential Units:**

- 1) A building that is primarily used as a resident for 1 or more person(s).
- 2) Multiple units were defined as a building where there were multiple residences involved. These also included buildings with ground floor businesses and apartment(s) directly above the business.

# **Commercial Units:**

- 1) A building or complex used for commercial enterprise, business or service.
- 2) A building or complex used for any social, charitable, religious and/or educational purpose.
- 3) A building or complex used for governmental purposes. These would include, federal, state and local governments.
- 4) A building or complex used for industrial purposes. This would include manufacturing or processing facilities.
- 5) A building or complex in which there were more than 5 residential units.

#### **Conclusions:**

A number of variations were calculated and simulated to provide a reasonable estimate of the impact to both residential and commercial properties within the village. Under each scenario the outside revenues generated by the Sewer Department were removed from the budgeted amounts to accurately reflect the cost to the village property owners.

It became apparent that under each scenario that was run that it was difficult to provide relief to one group of properties without there being a negative impact on the remaining properties.