

OPERATIONS – WATER/SEWER

The Operations – Water/Sewer Division is responsible for the operation and maintenance of the Village water and sewer systems, and the storm water conveyance system. The Village has 8,053 residential and 664 commercial services, for a total of 8,717 utility billing addresses, of which approximately 150 are for properties outside of the Village limits. Duties include: monitoring of distribution and storage of potable water and associated regulatory reporting requirements, repair of water mains, valves, hydrants, customer water service lines and valve boxes located in the public right-of-way, hydrant flow testing, water valve exercising, water meter installation, repair and testing, water quality testing, water and sewer utility structure repairs, sanitary sewer lift station maintenance, sanitary and storm sewer system cleaning and televising. Additional duties include responding to resident requests for service and assistance.

Water Production, Pumping, Storage, and Distribution System

- Two pressure adjusting stations located where Glen Ellyn receives Lake Michigan water from the DuPage Water Commission.
- Two 1,000,000 gallon ground storage reservoirs and two elevated storage tanks of 500,000 and 750,000 gallon capacity.
- Two stand-by ground water wells and two water pumping stations.
- 147.31 miles of water mains; 1,265 fire hydrants; 1,368 water main line valves; and 8,717 water meters.
- Supervisory Control and Data Acquisition (SCADA) monitoring and control system.

Sanitary Sewer System

- 85 miles of sanitary sewer mains.
- 4 sanitary sewer lift stations.
- Approximately 2,000 manholes.

Storm Sewer System

- 70 miles of storm sewer mains.
- 3,165 storm sewer inlets and catch basins.
- 1,200 storm sewer manholes.

Division Accomplishments for FY09/10

1. Performed a complete rehabilitation of Well #6. Problems were identified in this back-up well during yearly inspections and repairs were made in order to keep the well as a viable and approved option for emergency situations.
2. Let contract for SCADA upgrades. This includes all new software as well as converting from traditional phone line communication control to radio communication control. Design phase

is substantially complete and manufacturing has begun. Completion is expected by late summer to early fall of 2010.

3. Drained, cleaned and inspected the interior of Newton Avenue Water Tower.
4. Installed baffling devices to air vents on Newton Reservoir and Wilson Reservoir to reduce the chance of tampering with our reservoir water supply through the vent system.
5. Rehabbed the automated reservoir supply valve and the booster pump magnetos at Wilson Pumping Station.
6. Performed a village wide leak detection survey.
7. In 2008 OPERATIONS – WATER/SEWER closed 288 out of 300 work orders, equating to a completion rate of 96%. In 2009 we closed 368 out of 372 work orders, equating to a completion rate of 99%. Statistically this means that OPERATIONS – WATER/SEWER processed 24% more work orders while increasing our completion rate by 3%.
8. Met all state and federal drinking water regulatory requirements.
9. Contracted the video taping of approximately seven miles of sanitary sewer main and prioritized the maintenance and reconstruction needs of these mains.
10. Pressure cleaned 11.56 miles of sanitary main. This exceeds our goal by 1.56 miles.
11. Vacuumed 439 of the Village's 3,165 catch basins and cleaned 1 mile of storm sewer.
12. Repaired 26 water main breaks, 8 fire hydrant replacements, 7 hydrant repairs, 1 water main valve replacement, 6 water service line repairs, 4 sanitary sewer repairs, 2 storm sewer repairs, and 52 manhole and structure repairs.
13. Updated the Village's Water Atlas.
14. Marked sanitary sewer and water main locations for 4,276 JULIE requests.
15. Restored 91 utility excavation sites.
16. Replaced 6,175 feet of old 6 inch and 4 inch water main with 6,211 feet of new 8 inch, and abandoned an additional 1,920 feet of 4 inch water main and transferred the water services to an existing 12 inch water main during FY 2009/2010 construction projects to improve fire protection and reduce water main breaks.
17. Fulfilled our goal to train with MABAS Division 12 fire departments on trench rescue techniques using our Vactor to assist fire departments with trench rescues. Additional division training included classes in wastewater collection systems, water production plant operations, deicing techniques and management classes at Michigan Professional Service Institute.

18. Tested and calibrated 85 water meters that are 2 inch and larger in diameter. Bench tested 75 retired meters and found them to be within the allowable range of 98.5% to 101.5% accurate.

Division Goals for FY10/11

1. Bring to fruition the upgrade of the Public Water Supply Production and Distribution computer automated SCADA system.
2. Recoat the exterior and interior of the Newton Avenue Elevated Tower water storage tank. Install new egress ladder to interior of tank to improve safety. Fit interior of tank with mixer to stop ice build up in the winter and prevent water stratification and bio film build up during the summer. Put Newton Avenue Elevated Tower on a long term maintenance program to ensure quality maintenance for the life of the tower. **(deferred)**
3. Sand blast and paint 20% Of the 1,265 fire hydrants within the water distribution system. This would be year one of a five year program.
4. Continue the ongoing research to identify the sources of clear water inflow in to the sanitary sewer collection system and develop viable plans to mitigate this inflow.
5. Drain, clean and inspect Newton and Wilson reservoirs.
6. Provide Public Works coordination of work with the engineering consultants and engineering staff to assure that FY10/FY11 projects are built on time and with minimal disruption to the Village of Glen Ellyn residents.
7. Pressure clean 11 miles of sanitary sewer main.
8. Pressure clean 1 miles of storm sewer main, and vacuum 450 storm sewer catch basins.
9. Televis 7 miles of sanitary sewer main and prioritize the maintenance and reconstruction needs of these mains.
10. Select and begin to train two members of Public Works staff to be competent operators of the computerized SCADA system; the water production plants, and the sanitary sewer lift station systems.
11. Continue cross training Operations Division staff on water distribution and sanitary collection system operations and maintenance.
12. Continue training to meet FEMA / NIMS requirements, and to train with DuPage Department of Homeland Security as scheduled.