Department Backgrounds

I. Water Treatment and Distribution:

- The duties and responsibilities of the Hudson Water Resources Division are to provide the City of Hudson water customers with clean, safe and readily available treated potable water within the framework of federal, state and local laws, regulations and requirements and in a fiscally sound manner.
- The long term objectives are to recognize the potential possibilities of increasing both capacity and customer base.
- Staffing includes one (1) Superintendent, One (1) Assistant Superintendent, two (2) Plant Operators, One (1) Facilities Specialist, and one (1) Maintenance Technician. (All positions are shared with Waste Water Plant operations).
- The water plant's maximum production is two (2) million gallons of treated water per day. Treated water is held in two (2) water towers and one (1) clear well. The ten (10) year daily average is 1.08 million gallons (See diagram 1 for water treatment process).

Water Consumption Averages

10 Year Average in MGD	2002 thru 2012	5 Year Average in MGD	2008 thru 2012
High	1.358225	High	1.334967
Low	0.875925	Low	0.897483
Average	1.083033	Average	1.07505
Total Production	395.7879	Total Production	393.0632

- The Water Distribution division is responsible for the upkeep and maintenance of the water distribution infrastructure including system fire hydrants. The distribution system consists of 66.5 miles of various size and type of pipe, valves and connections and 688 fire hydrants. There is an average of between ten (10) and fifteen (15) system repairs a year. Computer generated trending of repair types and locations assist in determining and prioritizing capital replacement projects for the Engineering Department.
- Objectives within the area of water distribution are to continue efficient and effective system maintenance and repair response time as well as developing a comprehensive water distribution system model as a guide for future maintenance and system service expansions, complete the AMR program, and establish a comprehensive valve exercising program.

- Staff consists of one (1) Superintendent (shared), One (1) Assistant Superintendent, two (2) Distribution Operators, and one (1) Backflow Operator.

II. Waste Water and Collections:

- The duties and responsibilities of waste water plant operations are to ensure that the City owned sanitary sewage system and its various components are operating efficiently and effectively through the pumping of sewage to the NEORSD facilities. As the City no longer treats waste water sewage, expenses for treatment services are based on the volume of waste water sent to the NEORSD. The system consists of fourteen (14) lift stations including the main Cuyahoga Valley Interceptor (CVI) plant located off Hines Hill Road. Preventative maintenance and operational monitoring of fourteen (14) lift stations as well as all CVI pumping operations are carried out by this division. Staffing is shared with the Water Resources Plant as described above.
- Objective priority is to develop innovative programs to reduce operational costs including a comprehensive inflow and infiltration (I&I) program.
- The Sanitary Sewer Collections operation involves the physical inspection, maintenance and smaller repairs/replacements of the sanitary sewer system infrastructure which includes addressing the reduction and elimination of inflows and infiltration (I&I). Inspections include the televising of the infrastructure to rate pipe and system component conditions thereby assisting the Engineering Department in determining priorities in the planning of larger sanitary sewer capital projects including system replacement, grouting and lining.
- Objective priority is to establish an enforceable well managed I&I policy and work towards closing all system overflows.

CVI Metered Flow Averages:

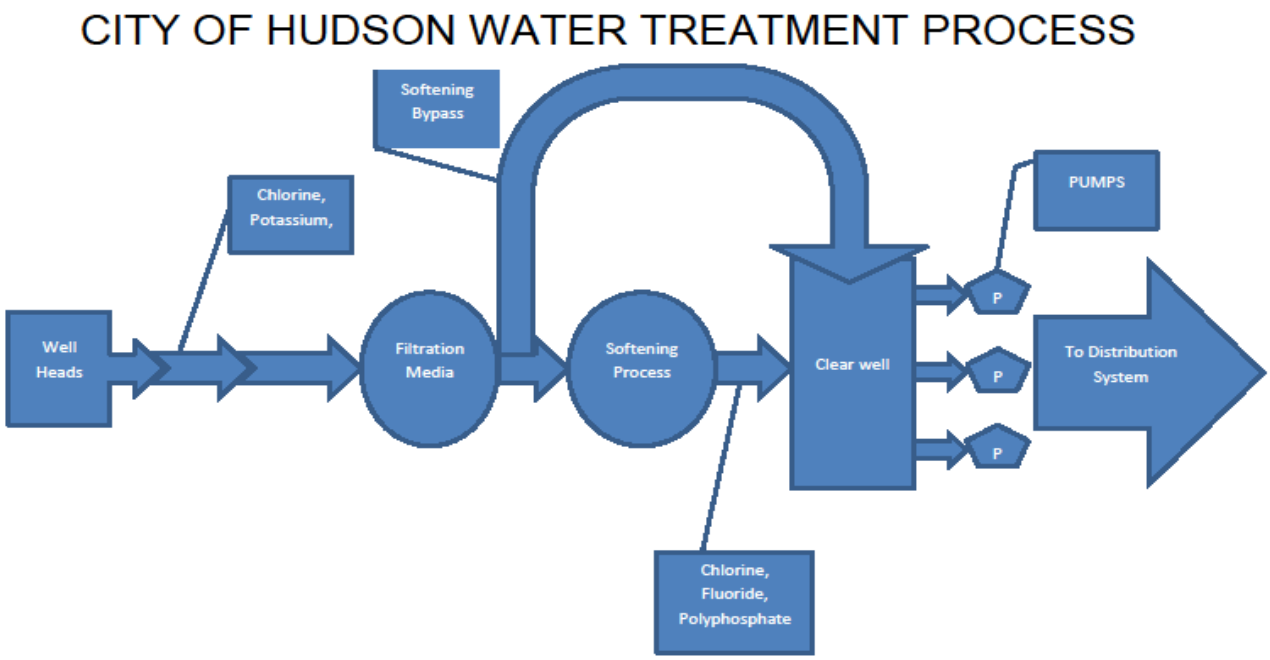
10 Year Average in 1,000/CF	2002 thru 2012	5 Year Average in 1,000/CF	2008 thru 2012
High	8,621.00	High	8,621.00
Low	2,629.60	Low	3,021.00
Average	4,286.86	Average	4,476.75
Total	611,264.00	Total	268,605.00

Note: There are 7,480 gallons in 1,000/CF. Example: the ten yr. high of 8,621.00/thousand cubic feet is 64,485,080 gallons (CF X 7480).

III. Storm Water Sewer Operations

- The duties and responsibilities of the storm water work group within the service division is to maintain the proper operation and performance of the City owned/ROW storm water sewer and waterway system through best management practices in compliance with the EPA (Environmental Protection Agency) and NPDES (National Pollutant Discharge Elimination System) phase II permitting requirements and following the standards of the MS4 (municipal separate storm sewer system) in the management of storm water on roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.
- The storm water program consists of the cleaning, upkeep and maintenance, including televising and rating the components of the storm water sewer system infrastructure. Staff also cleans open drainage ditches to assure the proper flow of storm water throughout the system. In addition to public education activities, the storm water staff works closely with residents in advising on storm water issues that may be affecting residential and business properties.
- Staffing consists of one Superintendent (shared), one (1) Assistant Superintendent (shared) and seven (7) equipment operators to perform system inspections and carry out component maintenance, repairs, replacements and installations.
- Currently the storm water area of operation has 253 open work orders. Since the 2003 floods as part of the long term system maintenance plan, the storm water work group has completed approximately 2734 work requests associated with both pre-planned in-house projects and demand work request projects/repairs driven in part by customer requests. Although there is still consistent work being performed on the SW system, many improvements have been made since 2003 and the system performs in a highly efficient manner during heavy precipitation and snow melting events.
- Objectives include the complete televising of the SW infrastructure and continued development of pipe condition ratings to develop maintenance and replacement project planning and to keep up with ever-changing storm water management requirements.

Diagram 1


CITY OF HUDSON WATER TREATMENT PROCESS
Softening Bypass
Chlorine, Potassium,
PUMPS
Well Heads
Filtration Media
Softening Process
Clear well
P
P
P
To Distribution System
Chlorine, Fluoride, Polyphosphate