

Mount Laurel Township Municipal Utilities Authority

Quarterly Report



2nd Quarter 2011 (April to June)

Authority Members

Chairman	Irwin Edelson
Vice-Chairman	James Misselwitz
Secretary	Fred Braun
Member	Elwood Knight
Member	Geraldine Nardello
Executive Director	Pamela J. Carolan, P.E.

Total Number of Customer Accounts: 17,873

Mission Statement:

“Provide safe, dependable and affordable water and wastewater services to our customers in an environmentally conscious manner while remaining committed to our community’s needs.”

Sewer Department

System Summary:

The Mount Laurel MUA wastewater service area runs congruent with the Township boundary. Approximately 95% of residential properties and 98% of commercial properties are currently connected to the Mount Laurel Township MUA sanitary sewer system. The Mount Laurel Township MUA treats all sewage generated within the Township at the Hartford Road WPCF with the exception of the southwestern area (Laurelwood, Countryside, and Roland/Fellowship industrial area); in these areas, sewage is collected by the Mount Laurel Township MUA and pumped to the Camden County MUA for treatment.

Wastewater Treatment Plant:

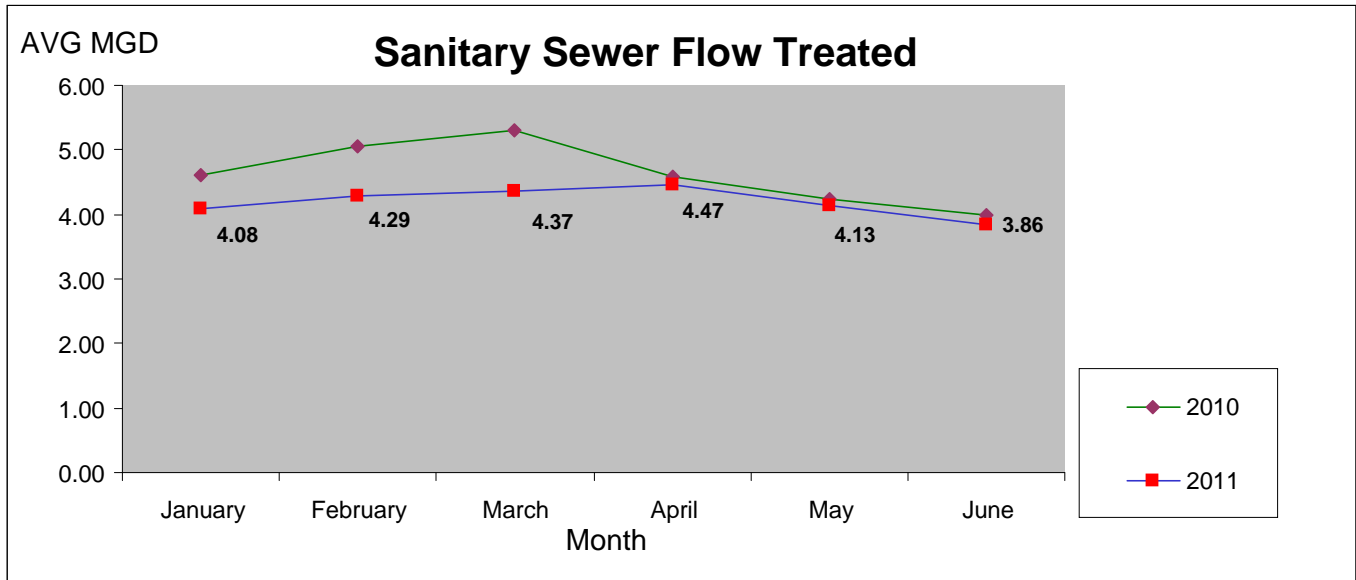
Hartford Road Water Pollution Control Facility
6.0 Million Gallons Per Day (MGD) capacity
Advanced secondary treatment using extended aeration and UV disinfection. Sludge dewatered on-site with bio-solid disposal at the Burlington County Composting Facility

Collection System:

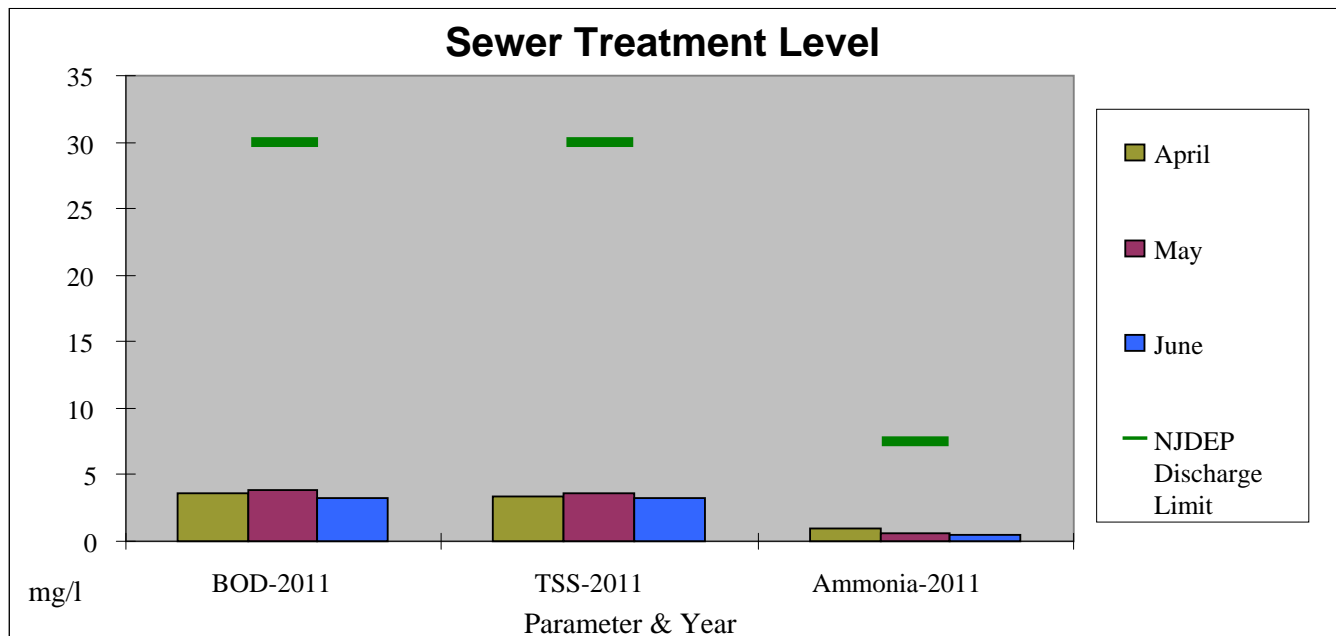
39 pump stations
3860 manholes
32 miles of force main
149 miles of gravity main

Sewer Operations

Treatment Plant:



Total Treated in Quarter = 377.93 Million Gallons (MG)
 = 4.15 Million Gallons per Day (MGD)



Our wastewater treatment facility consistently produces an effluent discharge, which is substantially better than required NJDEP limitations. Although we routinely sample for dozens of parameters (hundreds at certain times of year) the three chosen parameters of BOD₅, TSS, Ammonia Nitrogen are standards for the industry deemed representative of general treatment plant operations.

Reclaimed Water for Beneficial Reuse:

Due to the high quality effluent from our wastewater treatment plant operations, in 2003 the MUA obtained a permit from the NJDEP for reuse of wastewater effluent for various applications within Mount Laurel. The MUA currently uses the renewed water (treated wastewater treatment plant effluent) for the wastewater treatment plant site utility water system, pumping equipment seal water, process equipment wash down, sewer main cleaning, street sweeping, wastewater treatment plant irrigation, fire protection for the wastewater treatment plant, fire protection for the Mount Laurel Township leaf composting area, and vehicle washing. Use of renewed water reduces the quantity of potable (drinking) water required at the wastewater treatment plant and other MUA operations.

Sanitary Sewer Collection System:

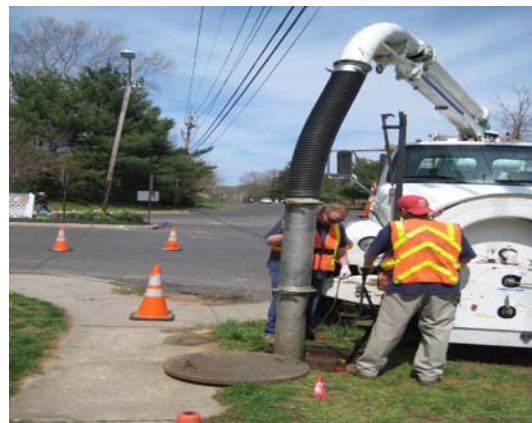
Pumping Stations:

- 2240 operation and maintenance checks were performed
- 171 in-house repairs performed
- 674 preventative maintenance repairs
- 17 of 39 wetwells cleaned (From the Period of January 1, 2011 to May 22, 2011)

Televising & Cleaning of Sewer Mains:

The MUA owns and operates a sewer camera truck for internally televising sewer mains. This equipment enables us to detect and monitor corrosion, leaks, roots, and grease buildup, so that corrective action can occur before emergencies arise. All video documentation is cataloged and is also used in evaluating the timing for repairs and capital replacement projects of mains. The MUA can then use its sewer jetting equipment to clean sewer mains of grease buildup and silt.

- 58,614 feet of mains cleaned (From the Period of January 1, 2011 to May 22, 2011)
- 5,606 feet of mains televised (From the Period of January 1, 2011 to May 22, 2011)



MUA Personnel Cleaning Sewer Mains

Other Sewer Related Items:

Responded to and resolved sewer service calls from 57 customers during the quarter

11 Vent Cap Broken/Missing

2 Noisy/Broken Manhole Lid

3 Bad Odor in Home/Building/Area

- MUA personnel cleaned and televised lines, added deodorant blocks at manholes

36 Sewer Laterals Backed Up/"Leaking"/Vent Overflowing

- MUA personnel checked our facilities to confirm proper operation of our system. In all cases, backups were determined to be within the property owner's lateral. We performed courtesy plunging of vents where applicable. The most common causes of clogged laterals are root formation and grease buildup. 2 laterals were also televised. Owners advised of findings and advised to contact plumbers to ameliorate.

1 Blockage In Sewer Main

- Hooten Road-MUA jetting crew responded and the blockage was broken.

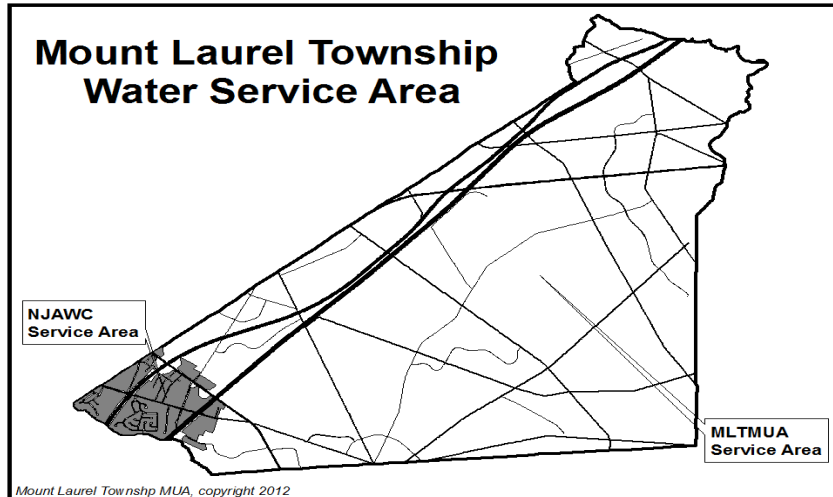
2 Private Sewer Force Main Ejector Line Leaks

- Mount Laurel Road-MUA personnel went to property and located the shut off valve. (Plumber was on site). The valve was shut off and the plumber made the repairs.
- Mount Laurel Road-Burlington County reported issues with a storm drain. Upon investigation by MUA personnel, it was discovered that the ejector line from a neighboring residential property was leaking and sanitary sewage was discharging to the storm sewer system. The MUA initiated repairs via an outside contractor in the name of public health and safety. The homeowner is responsible for all repair costs.

Water Department

System Summary:

The Mount Laurel Township MUA services the majority of Mount Laurel for water service with the exception of the southwest corner, NJ American Water Company (NJAWC) franchise area. Water supply within the Mount Laurel service area comes from several sources: The Potomac-Raritan-Magothy aquifer system, the Kirkwood-Cohansey aquifer, and the Delaware River. Previous annual water demand ranged between 1400 millions gallons per year (MGY) and 1900 MGY; our actual usage for 2010 was 1597 MG. The MUA supplied this water from its own wells (allocation limited to 717 MGY by Critical Water Supply Area # 2 regulations) and via water purchase agreements with the NJAWC and Willingboro MUA (WMUA). The MUA fully utilized its ground water allocation, to satisfy 45% of total customer demand. The remaining 55%, $\frac{3}{4}$ of a billion gallons of water, was purchased from NJAWC & WMUA to make up the allocation shortfall. The MUA continues to pursue alternative supplies of water in order to meet the current and increasing needs of the community.



Water Treatment Plants

Elbo Lane Groundwater Treatment Plant (Wells 3, 4 & 6, with capability of well 7 ASR)

- This facility treats our native groundwater (from the lower Potomac-Raritan-Magothy aquifer) by removing naturally occurring minerals such as iron and manganese. In addition, we adjust pH, water hardness, disinfect and add fluoride. Many area water providers do not provide treatment other than required disinfection, which affects operating expenses and water rates.
- Peak treatment capacity of 5.3 Million Gallons per Day (MGD) for summer months. Due to NJDEP allocation withdrawal limitations, actual operational level of 0 – 2.0 MGD during remainder of year.
- The MUA has been waiting for NJDEP to issue an amended water allocation permit 4 years. However, NJAWC has requested that NJDEP hold a public hearing regarding our request, which has stalled the permit process within NJDEP; the public hearing is scheduled for July 12, 2011. The amended permit will allow some increased pumping during the high use summer months, thereby reducing summer purchases at NJAWC peak billing rates.

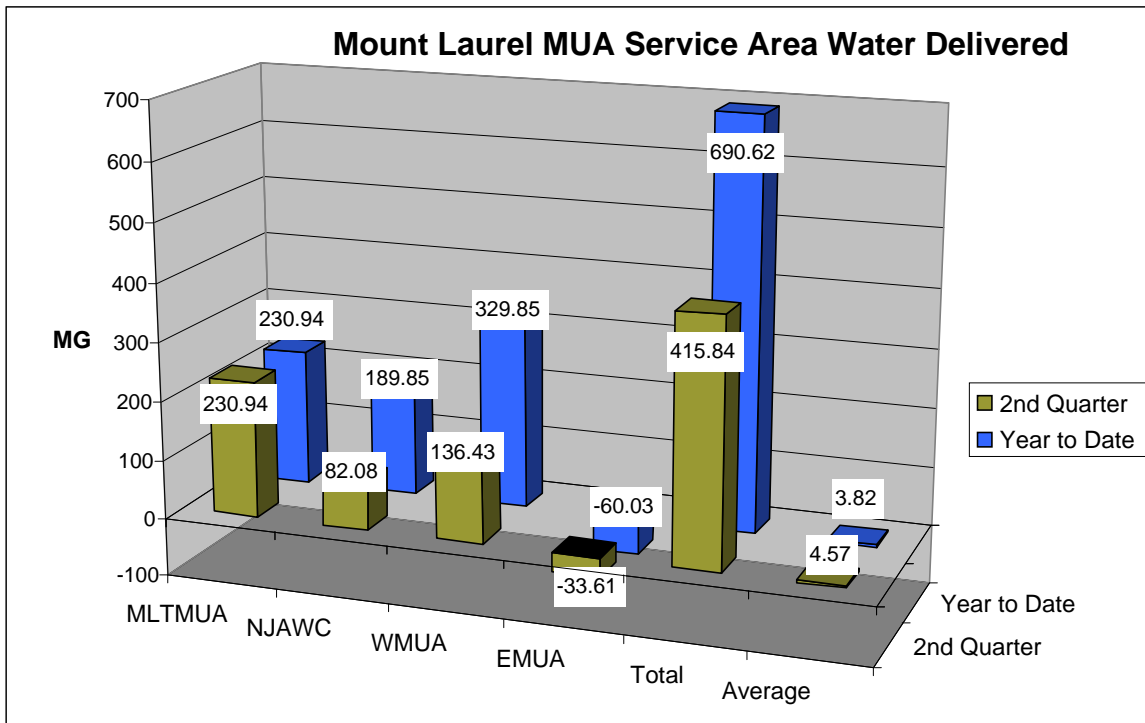
Aquifer Storage and Recovery Well (Well # 7)

- This facility augments water supply sources in the high summer months. Water is pumped into the well in the winter when demand is low and supply is plentiful, and then withdrawn during times of peak demand.
- Approximately 200 MGY total storage capacity, 1.3 MGD recharge, 3 MGD recovery capacity. The storage goal for 2010-2011 cycle year is 200 MG.

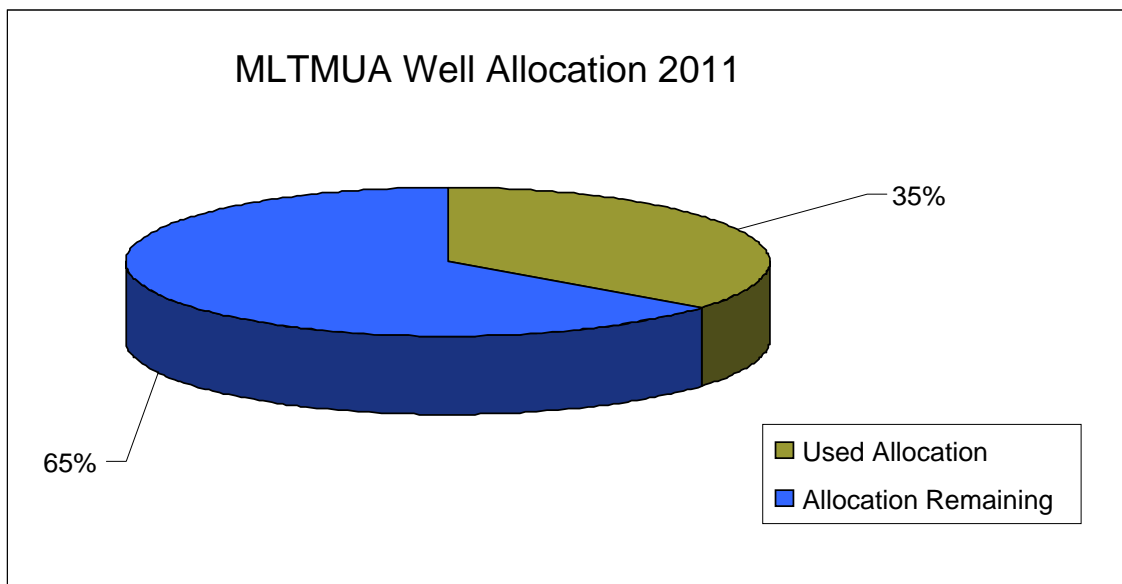
Distribution System

- 2 elevated water storage tanks; capacity of 500,000 gallons and 1 million gallons
- 2 ground level water storage tanks; each with a capacity of 1 million gallons
- 200 miles of water main
- 1548 fire hydrants
- 2899 water valves
- 5 bulk interconnections; Willingboro MUA, Evesham MUA, NJ American Water (3)
- 8 stand-by interconnections; Evesham MUA (4), Moorestown Township (2), Maple Shade Township (1), NJ American Water (1)

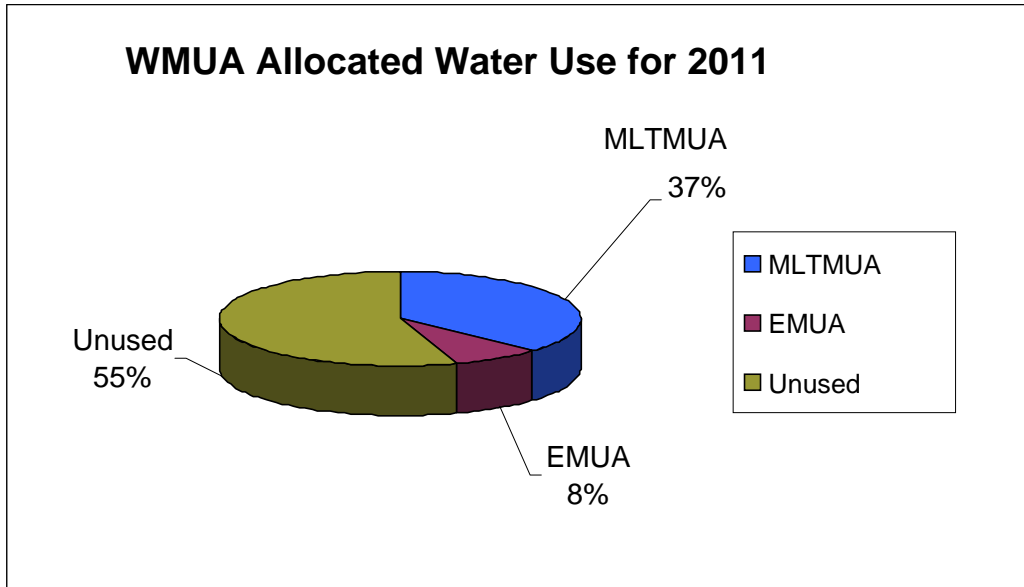
Water Operations



The total water supplied to MLTMUA customers during the quarter was 415.84 **MG**. The average daily use for the quarter was 4.57 **MGD**. Historical Daily Peak water usage by Mount Laurel MUA customers occurred this quarter on June 8, 2011 when a total of 9.55 MGD was utilized. The peak monthly use for Mount Laurel customers was 212.57 **MGM**, which occurred in July 2010. Mount Laurel MUA total system demand (which includes water passed to EMUA) was 10.07 MGD and occurred on both July 17, 1999 and July 23, 2001.



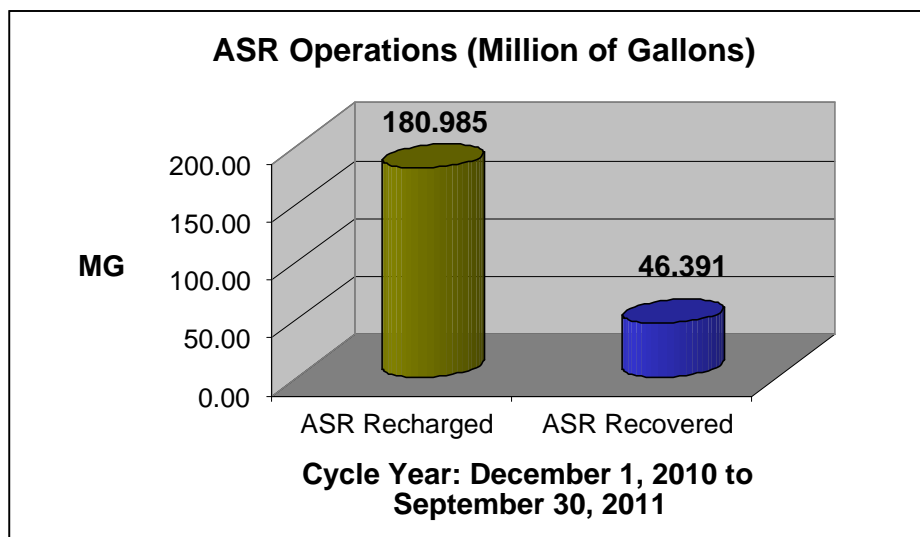
The MUA reserves its own well allocation for peak months and utilizes NJAWC during non-peak months when the purchase expense is least costly. This is done to meet operational demands as well as for cost considerations.



- Assumed Total Gross Available from WMUA = 730 MGY
- Mount Laurel MUA allotment from WMUA = 547.5 MGY
- Evesham MUA allotment from WMUA = 182.5 MGY

ASR Operations

In 2004, production Well # 7 was converted to an Aquifer Storage and Recovery Well (ASR). Approximately 200 Million Gallons (MG) of system potable water can be pumped into the well during the winter season (October-April), when the purchase of water from New Jersey American Water Company (NJAWC) is the least expensive. Between May and September, the entire recharge quantity is withdrawn, conditioned and supplied to the water distribution system to supplement supplies during peak use time.



The plan for 2010-2011 cycle was to recharge 200 MG of water; however due to repairs to the well in the fall 2010, only 181 MG was recharged this cycle year. Recharging for this cycle began on December 1, 2010. Recovery began earlier than planned due to increased system demands and a major water main break in early June.

Distribution System: (This Quarter)

Work Performed:

- 10 System breaks / Service Leaks Repaired / Valve Repairs
- 87 Curb Boxes Located / Repaired (Part of FY2011 Meter Change Out Program)
- 66 Meter Change Outs (FY2011 Meter Change Out Program)
- 6 New Meter Connections
- 83 Meters/ Touch Pads/ Registers Repaired / Replaced
- 293 Door Hangers Delivered
- 6 New Meter Connections
- 108 Shut-offs (For Non-Payment)
- 149 Hydrants Painted, Repaired or Replaced (Preventive Maintenance)
- 90 Blow Off 's Flushed (Preventive Maintenance)
- 5 Blow Off's Repaired (Preventive Maintenance)
- 246 Main Line Valves Exercised (Preventive Maintenance)

Water System Breaks / Repairs Occurred:

Repaired by MUA Crew

Valve Repair

Charleston Road & Browning Place
(2) Knotty Oak Drive & Shadow Oak Court
Oswego Court

Pipes (Hole)

1100 Wharton Road

Hydrants & Blow Offs Repaired & Replaced: (non-emergency)

Repaired Blow Off on Fellowship Road & Pleasant Valley Avenue
Repaired Blow Off (2) Farnwood Road
Repaired Blow Off Victoria Court
Repaired Hydrant No. H17-12 Stoney Hill Lane
Repaired Hydrant No. H7-11 Saint David Drive

The MUA saved approximately **\$5,916.00** on repairs for the 2nd Quarter 2011 by performing work previously contracted.

Repaired by Outside Contractor:

Hydrants & Blow Offs Repaired & Replaced: (non-emergency)

Shadow Oak Court (Blow Off)

Watermain Replacement:

Pipes (Hole)

Fellowship Road

Indigo Court

Service Leaks on Private Lines:

All of the following repairs were initiated by the MUA either as potential main breaks or in the name of public safety. All costs were borne by the owners of these facilities:

- 102 Woolmans Lane
- Shop Rite – Union Mill Road & Elbo Lane
- 284 Saint David Drive

Customers are reminded that ownership and maintenance of the service lateral from the main to the premise is the responsibility of the property owner.

Upgrading Our Water Meters:

The Mount Laurel MUA continues the process of upgrading water meters in homes (over a 10-year period) to a metering unit that offers many benefits to the customers and the MUA. The new units are read by our personnel utilizing radio communication. This allows our reader to gather the meter reading without entering the property as most reads can be obtained from the sidewalk area. The upgraded meters provide all of the capabilities of the current meter with the addition of advanced leak detection capabilities. These meters continuously record usage, however in order to conserve electronic life, the visible readout goes into “rest” mode when not needed. To view the meter reading at any time, the customer must wake up the readout by simply shining a flashlight on the meter face.

Other Water Related Items:

- The MUA’s 2010 Consumer Confidence Report (water quality data) was mailed to all Residential & Commercial Properties in Mount Laurel

The MUA responded to 127 water service calls of the following types:

12 emergency shut off for repairs	9 meter leaking/broken	9 irrigation line leaking
4 service leaks	3 ground water	6 low/high water pressure
3 cloudy / rusty water	5 cap missing/loose/broken	5 bad odor / taste in water
2 Street Valve Leaking	1 locate CSB for customer	3 no water
4 hydrant broken/leaking/misc	51 turn on water (off for non payment)	

2 Particles In Water

- East Peachtree Court
 - Customer called to complain of particles in her water, our employee found pieces of the dip tube from the hot water heater.
- Saxony Drive
 - Customer called to report she had paper coming out of her faucet; our employee found paper located in her teapot which the customer had just purchased was the instructions she had not removed before filling.

1 Sink Hole

- Union Mill Road
 - Received call of sink hole in back yard; our employee found a hole in the yard from the customer removing an old tree root. This was not an MUA issue.

4 Field Service (miscellaneous water complaints)

- Charleston Road & Browning Place
 - Customer called to report water bubbling up out of street; our employees found a street valve was leaking. Tried to shut it down with no luck, Water Distribution crew sent out to dig up and repair.
- Corner of Cobblestone Drive and Holiday Court
 - Received call of water coming up from the street; our employee found the water was from a neighbors sump pump running into a pothole.
- Haines Road
 - Customer called to request water meter head be moved; when arriving at the home our employee was told by the customer he had bought a new dryer which was larger than his old dryer and the transmitter on the meter head was in the way. Arrangements were made to send out our Water Distribution repair employee the next day to reposition the transmitter.
- Hooten Road & Michaelson Court
 - Received call from police dispatcher report a water cap sticking out of the road which caused a motorist to get a flat tire; our employee found a valve lid had flipped out and placed it back into place.

❖ **Several major incidents occurred in the water system this quarter.**

Elbo Water Treatment Plant Chlorine Contact Chamber leak:

Last quarter (on February 28th) we determined that the chlorine contact chamber was leaking. Fortunately, the plant was off-line for the winter, which afforded us the ability to isolate the leak. During the following 2 months, the chamber was repaired at the leak location and modifications were made to all the additional joints as a preventative measure. Total cost of the repair eclipsed \$300,000. Spring start up of the plant was delayed until April 24th; however, we were able to maintain water supply via continued purchase from our bulk interconnections without disruption to our customers. The forensic investigation regarding this situation continues.

Fostertown Road Water Main Break:



“The Break”



Locating the damaged main

Just after midnight on June 6th, a 12” diameter water main located on Fostertown Road cracked, almost emptying the adjacent 500,000 gallon elevated water storage tank in less than 10 minutes. Force from the water main break and high water volume blew out the roadway and deposited soil and water across the adjacent rail tracks. Alarms were triggered via the MUA’s control system, and on-call and additional personnel were in route to the break site within minutes. We requested make up supply of water from NJAWC and Willingboro MUA. By 4am, the break was isolated but we had already hemorrhaged over 2 million gallons of water. Repairs to the water main were completed by noon, and road restoration occurred the following week.



Installation of the replacement main



Cracked main, trucking for forensic analysis

There were immediate and delayed residual effects to the water system in the 48 hours following this large break. Several other smaller water main breaks occurred in various locations throughout Mount Laurel, which emergency crews (MUA employees and emergency contractors) worked to repair. The total cost of these repairs were in excess of \$30,000. In addition, emergency supply water was needed during break isolation and in order to refill standby tanks. Cost of this water exceeded \$12,000. The majority of water was obtained from NJAWC with Willingboro MUA water used to a much lesser degree. Use of the off-peak (winter) interconnections with NJAWC for water transfers were key to making our emergency operation invisible to our customers. By the late afternoon of June 7th, our water system operation was back to normal.

Willingboro MUA Emergency Shutdown:

At 11pm on June 7th, Willingboro MUA notified us of electrical problems at their main water plant which necessitated a complete shutdown of Mount Laurel MUA purchase for an unknown duration. As this was during the peak use time of year, and when NJAWC water supply is contractually off, emergency actions were necessary. We began emergency start up procedures of the ASR well, which not scheduled for service for two more weeks. We again had to call upon NJAWC for interim makeup supply until the ASR was producing. 1.65 million gallons was purchased at a cost of over \$10,000. Ultimately, the Willingboro MUA shut down only lasted for about 14 hours, and we returned to normal summer operation during the afternoon of June 8th.

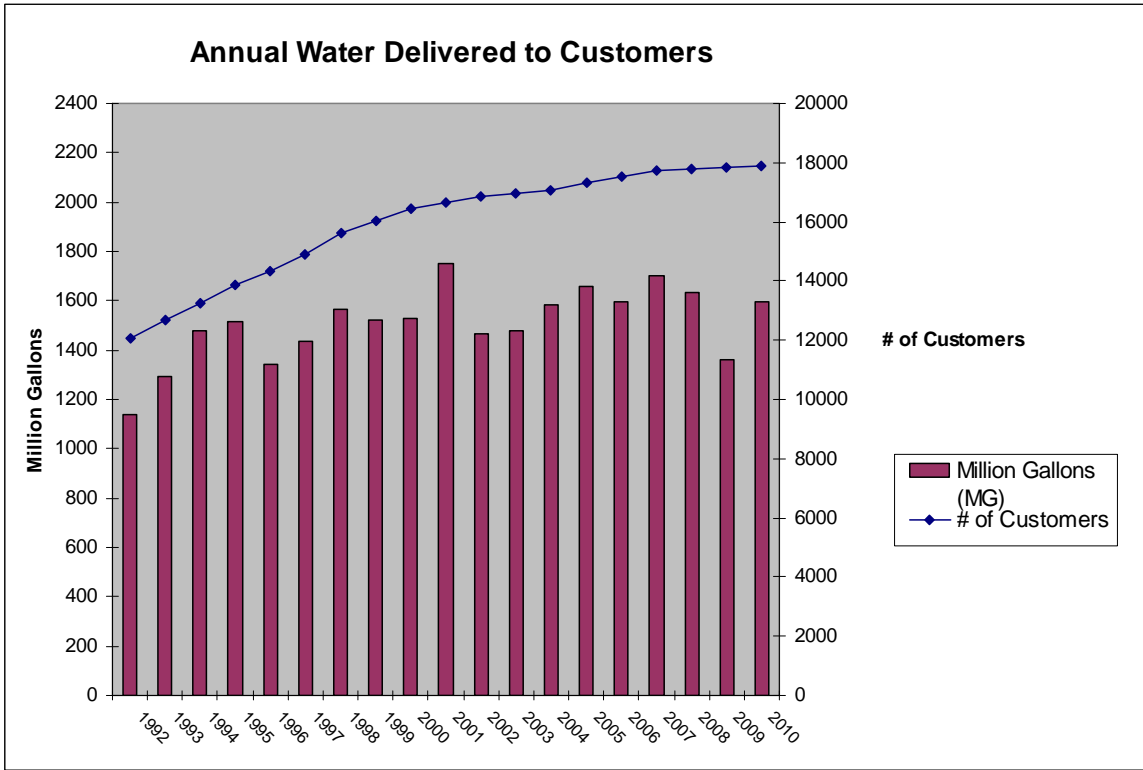
Water Quality in the Mount Laurel MUA Water System:

The three distinct categories of water quality that our customers bring to our attention are taste and odor, discoloration, staining, and particles in the water. We find most problems occur locally and the causes accredited to a handful of factors, which include water main breaks, hydrant use (legal and illegal), system maintenance work, and occasionally changes in water use. The remainder of the calls are further identified within the customer's premise such as: hot water tanks (need flushing or have disintegrating dip tubes-a manufacturing defect from 1993-1996), and undersized/mis-installed point of use filtration systems.

We test the water in Mount Laurel year round, which includes daily operational sampling through compliance monitoring dictated by both state and federal regulations. In all cases, the water is consistently within or exceeds regulated parameters. This confirms that the water delivered to our customers is safe for use as potable water. We will continue to be sensitive to changes in water quality and regulatory compliance in order to protect all who use our water.

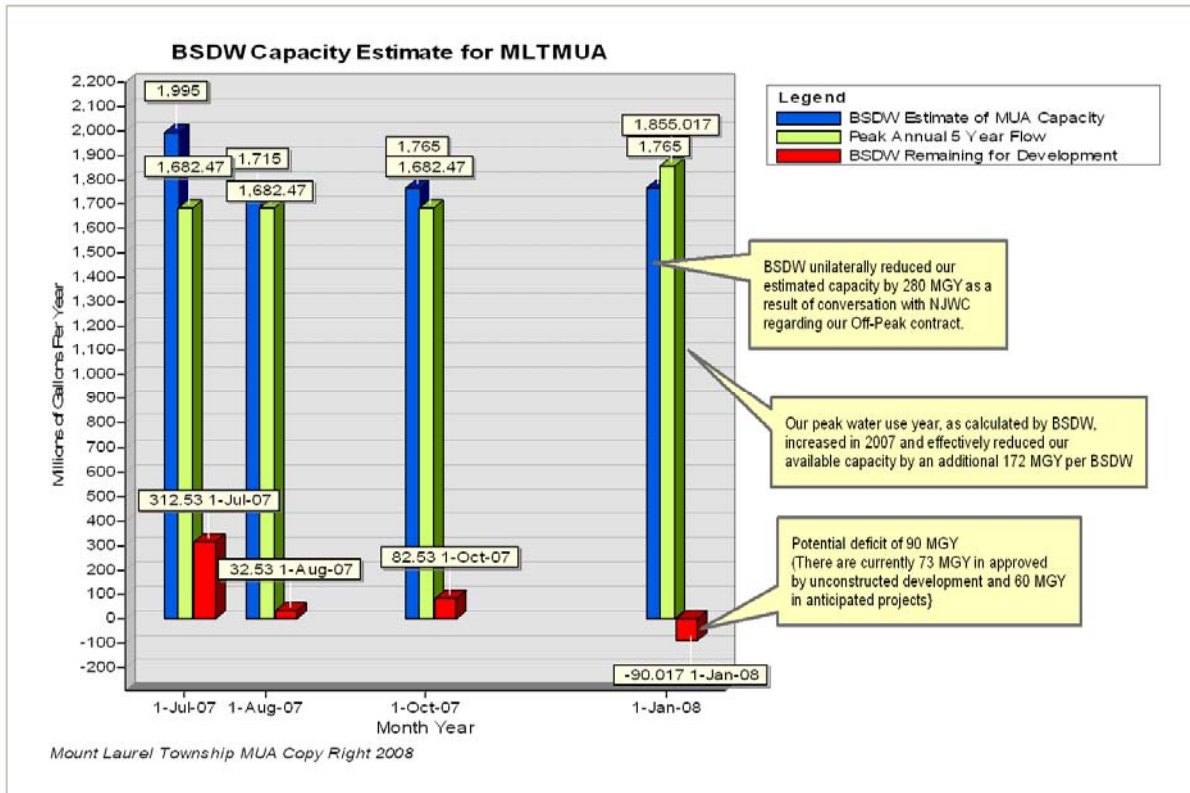
Water Supply Availability Summary:

The MUA continually monitors available water supply for the community by way of MUA customer historical use records and by using New Jersey Department of Environmental Protection (NJDEP) Bureau of Safe Drinking Water (BSDW) standards. Over time, actual water used by our customers is increasing proportionally to the increase in total number of customers. Large annual variations are primarily due to changes in weather (temperature/rainfall) as indicated with 2001 and 2009 use.



The NJDEP BSDW also tracks and calculates available water supply and demand by each water supplier. Although the BSDW calculations relate to actual use and supply availability, the customer demand figures used by BSDW are not the same as the actual historical use records. In addition, in August 2007, the BSDW unilaterally reduced our estimated available supply capacity by 280 million gallons per year (MGY) as a result of conversations with NJAWC regarding our off-peak purchase contract. The MUA began the NJDEP appeals process regarding these issues in September 2007; these issues have not yet been resolved.

This chart remains accurate in the fact that 2007 remains our peak use year in the previous 5-year NJDEP review window. However, because of the MUA increasing the annual NJAWC purchased nomination to 550 MGY in July 2008, the deficit was reduced by 50 MGY. NJDEP has not yet accounted for this change. Our water supply system remains in paper deficit, therefore NJDEP permits for new connections are on hold. Through our combination of water supply sources: our Elbo plant and purchased water contracts, the MUA continues to have adequate capacity to supply our customers.



Water Allocation Permit #5193:

Term – 2/1/2007 to 1/31/2017

Diversion –

Ground Water = 5800 gpm, 120 MGM, 717.452 MGY via wells 3, 4, 6 and ASR 7

Surface Water = 186 MGM, 1237.548 MGY via proposed Rancocas intake

The MUA is continuously compliant with allocation limitations.

The MUA is currently seeking an increase in annual allocation from NJDEP related to the proposed Rancocas surface water intake; MUA requested an adjudicatory hearing on February 14, 2007. The NJDEP February hearing date was adjourned in order to participate in the Alternative Dispute Resolution (ADR) process with NJDEP.

The MUA is currently seeking an increase in monthly allocation (from 120 MGM to 165 MGM) related to the existing groundwater allocation from NJDEP. A draft permit was issued by NJDEP on April 15, 2008; final permit has not yet been issued, but was expected in May 2008. The MUA has requested the NJDEP hold the public hearing and issue the final permit. Resolution of this issue is included in out ADR with NJDEP.

We continue to work with NJDEP on a global settlement of our water supply appeals.

The second step in our three-part plan for the water supply system is nearly complete and is functioning as expected.

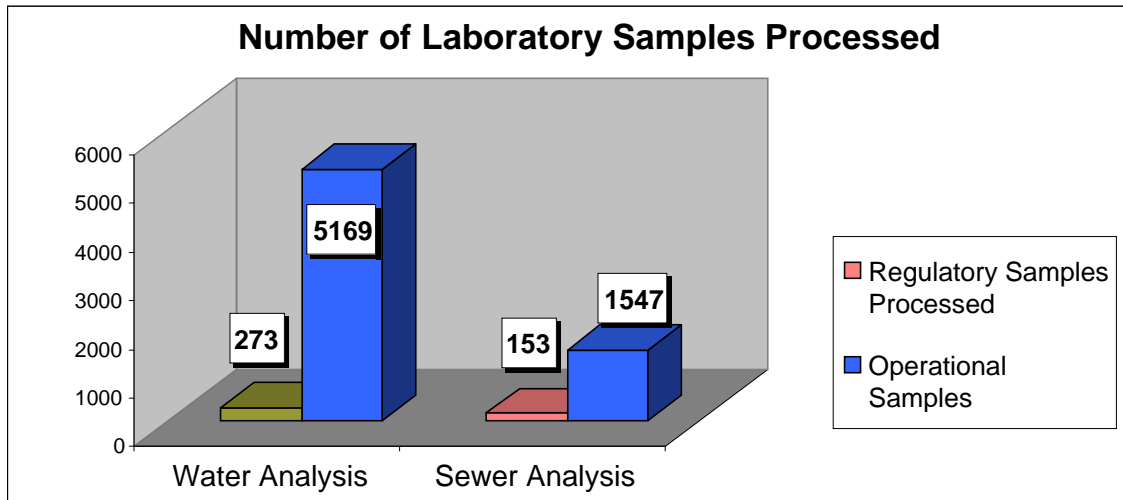
Water Supply Plan:

1. Implement ASR to augment summer requirement while reducing summer dependency on purchased water – complete
2. Replace out of date water treatment plants with one facility and controls for source management – almost complete (still waiting for NJDEP increased monthly allocation permit, for summer use.)

- Construct a new alternative water supply source within Mount Laurel to reduce water purchases from other suppliers – in progress (still mediating terms of the NJDEP allocation for the Rancocas permit).

Other MUA Departments

Certified Laboratory:



The number of regulatory samples processed conforms to the requirements set forth by regulation or permit requirement. Additional operational samples (not required) are performed in order to refine treatment capability and to detect and react to changes in quality.

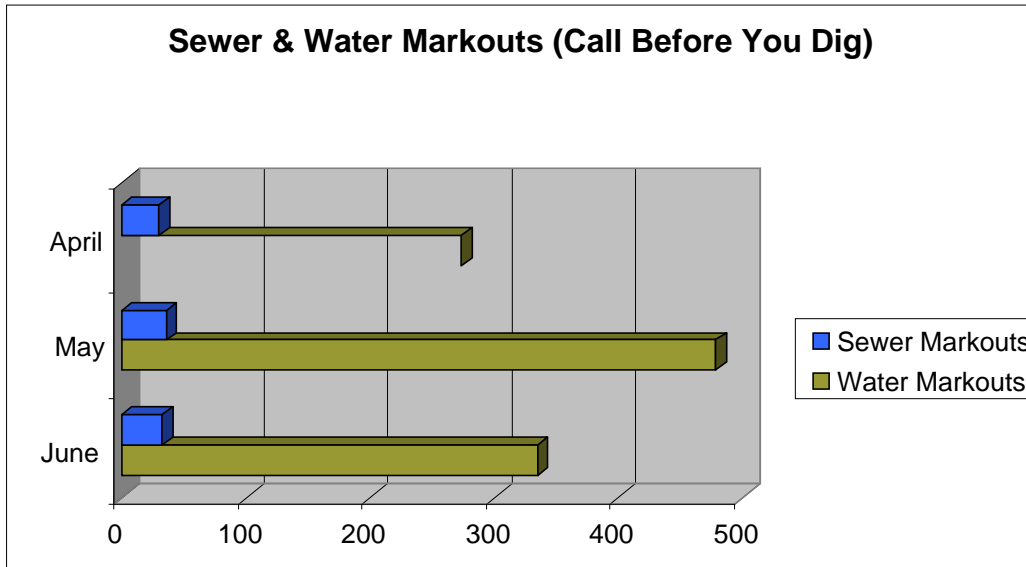
- Due to the large number of water main breaks in areas where the mains are considered new (less than 20 years of age), several years ago the Authority began performing soil analysis at water main breaks. We have found a direct correlation with acidic soils and fluctuating ground water conditions with the occurrence of main breaks. Our lab continues to analyze this data so that our engineering department can utilize the data in conjunction with planned water main replacements and rehabilitations. Performed Soil Analysis this Quarter at the following locations:

Charleston Road Indigo Court Saint David Drive

- Our Lab Supervisor determined how to make ammonia probe filling solution in-house instead of purchasing – this will save the Authority approximately \$200.00 per year.

Water & Sewer Mark Outs

The MUA receives all requests for Mark Outs when digging is involved anywhere in Mount Laurel Township. The MUA pays for participation with the 1-800-272-1000 call before you dig service for verification management. Each request is reviewed by MUA field personnel to determine if a mark out is required. When a mark out is required, MUA field personnel are dispatched to each request location to identify MUA underground facilities.



1125 Mark Out Requests Received for the Quarter

1088 Mark Outs Performed by the Water Department

99 Mark Outs Performed by the Sewer Department

1087 Total Mark Outs Performed by the Water & Sewer Departments

Vehicle Maintenance & Power Equipment:

The MUA maintains 39 Vehicles in its fleet, 17 pieces of equipment and 57 generators for emergency standby power. The MUA facilities are supplied with 100% backup emergency power via diesel powered standby generators. This enables the MUA to operate all facilities at full capacity during power failures or during periods of low voltage (brown outs). This is particularly important during storm events, when wastewater-pumping volume increases due to infiltration and inflow into the sanitary system.

Each generator operates under load once per week. During Philadelphia area poor air quality days, exercising of generators must be postponed until air quality is within normal range. In addition, all standby generators are load-banked once per year.

- **Annual load banking of all standby generators was completed this quarter:**
 - Why we perform this service on all of our Emergency Standby Generators:

- **Standby Generator Load Bank Testing**

A comprehensive preventative maintenance program is critical to the reliability of a standby generator, and load bank testing is an essential part of good maintenance practices. Performing yearly load bank testing helps to extend the generator's engine life, and helps to ensure reliable operation during a utility power failure.

- **What is load bank testing?**

Load bank testing allows a standby generator to be tested and exercised to verify its overall reliability, and its ability to run at its full rated KW output. Typically, our generators run at a level far less than the units rated output capability. Load bank checks the engines ability to perform and provide the required horsepower when called upon in an emergency. When a load bank is used, the artificial load it provides brings the engine up to an acceptable operating temperature.

- **What can happen when Load Banking does not occur?**

Our generators are exercised weekly with just their normal load and for some no load. For diesel engine driven generators this can cause ‘wet stacking’. Wet stacking occurs when unburned fuel accumulates in the engine exhaust. This is caused by under loading a generator. When exercising a generator, or running it for short duration outages while under loaded, the engine may not reach its optimum operating temperature. When this is allowed to continue for long periods the unburned fuel accumulates, and can become harmful to the engine’s efficiency and life span.

- **What are the benefits?**

Load bank testing allows the engine to reach this full operating temperature and ‘burns out’ this accumulation of un-burnt fuel. The result is a unit that runs cleaner and more efficiently. It also offers peace of mind that our standby generators are operating were they were designed too.

- **Our load banking service**

During the load bank test, we monitor critical engine parameters such as, oil pressure, engine temperature, fuel pressure, etc. We record these readings to show that once the unit reaches full rated load it runs at normal operating temperatures and pressures. With this service, we provide a report of the readings including generator output readings such as voltages, amperages, KW amounts, etc.

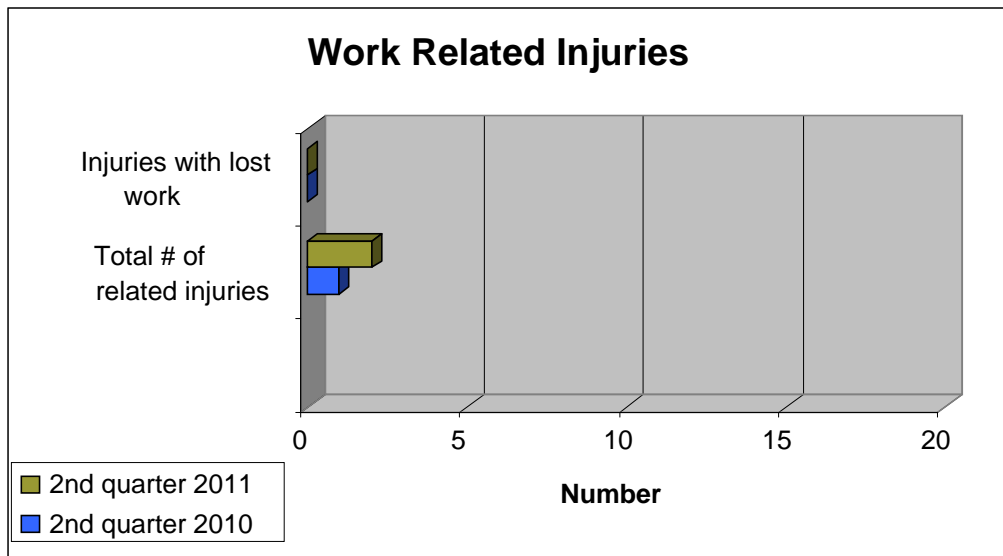
- Our Vehicle Maintenance Department custom fabricated a special tool for disassembling and assembling a roller on a press at HRWPCF. This is just another example of cost savings this department offers the MUA.



Safety:

There were two minor injuries this quarter with no lost time:

- ❖ Lower back strain, while pulling up a tool bucked from a dry well
- ❖ Lower back strain, while climbing up a fixed ladder in a dry well



Safety Training/Inspections:

- ❖ Blood Borne Pathogen and Infectious Disease Training was offered to our employees
- ❖ Respiratory Protection and Fit Testing Training was offered to our employees
- ❖ Confined Space Training was offered for field employees this quarter
- ❖ Ethics Training was provided for all MUA employees this quarter
- ❖ Annual Right to Know surveys were completed and sent to NJ Department of Health, Fire Department, Police Department and Burlington County Health Department.
- ❖ Mount Laurel Fire Department performed fire safety inspections of all MUA facilities.

Human Resources:

- Reviewed pension and health benefits change information as it was released from the State and issued employees updates to try to keep them informed.

Our employees are licensed Water & Wastewater professionals. We have 29 MUA employees holding a total of 62 NJDEP licenses for operation of water and/or wastewater systems. The MUA must employ and designate a licensed operator for each of our four areas of service: Water Distribution (level W-3), Water Treatment (level T-4), Wastewater Collection (C-3), Wastewater Treatment (S-3). Employment of additional licensed operators in all operational areas adds value to the service we provide to the community.

- 15 operators with level 1 licenses, for operating systems with 101 to 1,500 people
- 26 operators with level 2 licenses, for operating systems with 1,501 to 15,000 people
- 11 operators with level 3 licenses, for operating systems with 15,001 to 50,000 people
- 10 operators with level 4 licenses, for operating systems with 50,001 or more people

In addition, we have (2) two ASE Certified (Automotive Services Education) Mechanics

- Members of our staff have formal post secondary education in the following disciplines:
 - Finance/Accounting
 - Biology
 - Business
 - Safety
 - Chemistry
 - Computer Science
 - Management
 - Civil & Environmental Engineering

Public Education:

- Our Executive Director gave a 30-minute presentation to Hartford School 5th Grade class about the MUA’s operations and our solar project. Also explained to the students how their school’s solar works. She spoke about her job as an Engineer from someone who always loved science.
- Riverside Middle School Science Class toured our Water & Wastewater Facilities this quarter.



Riverside Middle School Science Class Tour April 1, 2011

Finance Department:

User Fees billed: \$ 3,758,244.69

User Fees budgeted: \$ 4,039,317.00

User Fees collected: \$ 3,738,693.81

Expenditures for the quarter:

Accounts Payable \$ 1,976,182.02

Payroll (including tax liabilities) \$ 942,490.26

Debt service \$ 0.00

Capital Projects \$ 555,917.26

Total Expenditures: \$ 3,474,589.54

- Adopted upcoming fiscal year 2012 operating and five-year capital plan budget
- Amended fiscal year 2011 operating budget
- Auctioned off (2) Folding Machines and a Graphite Furnace (laboratory instrument) at Govdeals.com. We received a total of \$926.50 for the three items
- Received reimbursement from FEMA in the amount of \$4,089.49 for expenses incurred during the December 26 & 27th 2010 snow storms

Shared Services:

Mount Laurel Township

- As part of a shared services agreement, Mount Laurel Township paved Carlisle Court. This work was the final part of the large water main repair performed last quarter.

Public Works

The MUA responded to 7 public works service calls:

3 Sink Hole/Crack

- Timberline Drive
 - MUA personnel found a large crack in the road and advised homeowner to contact the County Highway Department
- Devonshire Court
 - MUA personnel found sinkhole and left message for homeowner to contact Public Works
- Boothby Drive
 - MUA personnel found a sink hole at the storm drain and advised the homeowner to contact Public Works

1 Storm Grate down in Culvert

- MUA personnel removed the storm grate from the culvert and put it back in place

1 Odor Coming from Storm Drain

- Carlton Lane
 - MUA personnel also detected an odor coming from the storm drain and advised the homeowner to contact Public Works

1 Water coming from under the road

- Mount Laurel Road
 - MUA personnel verified no problem with the sewer & water mains. Found ground water from the storm sewer: Pipes were not draining. Met with the homeowner and a Township employee and arrangements were made for the Township to address this problem. This was not an MUA issue.

1 Keys in storm culvert

- Centerton Road
 - MUA personnel retrieved the keys from the storm culvert using a bar screen rake then replaced the culvert cover.

Underdrains:

The MUA and Mount Laurel Township have a maintenance and operational agreement for the lower level underdrain systems located in the Ramblewood developments. The agreement stipulates that the MUA will check operation of the Township's six underdrain pump stations and respond to all service calls from residents. In addition, the MUA checks the discharge inverts and outfalls from the Ramblewood underdrain system. Improvements to the underdrain system remain the responsibility of the Township. Underdrain related service calls are handled by the MUA. Service calls from areas not covered by the agreement have increased recently; the MUA continues to respond to these calls. The shared service agreement requires the Township to reimburse the MUA for these services.

The MUA is working with Mount Laurel Township to improve the underdrain plans. This project will continue until the MUA is confident that all known upper level and lower level underdrains are adequately mapped.

Underdrain stations and system:

- Annual UD pump station maintenance occurred during the 1st and 2nd week in April, in preparation for traditional April rainy period. Crews must clean out iron discharge lines so that the pipes do not clog.

This quarter our Pumping Station crews checked the 6 Underdrain Pump Stations twice per week and responded to 5 underdrain service calls from residents.

April 14, 2011 Saint David Drive - Homeowner reported water coming into sump pump hole – This homeowner continually has a problem with water coming into their sump pump when the UD is blocked. We jetted the line from the culvert all the way out 510’ then jetted from the manhole all the way out and broke the blockage.

June 17, 2011 Colony Place - Homeowner reported water in basement and the sump pump is running – MUA personnel checked the UD station and it was running properly. Left hanger explaining our findings

June 24, 2011 Saint David Drive - Homeowner reported sump pump running - MUA personnel jetted the UD and broke the blockage

June 25, 2011 Saratoga Drive - Homeowner reported sump pit in basement is backing up – MUA personnel plugged vent at curb which leads to the upper level UD with no success but we could see roots in the vent. We checked the culvert down the street and no flow was coming in. Contacted MUA supervisor who will contact Public Works on Monday. The pipe may need to be jetted or possibly replaced. Homeowner was advised to leave a drain hose in their sump pit over the weekend. The MUA contacted Bruce B. at the township and advised him of the problem. He stated he would send an employee out the next day. They were short handed.

June 29, 2011 Saratoga Drive - MUA personnel jetted 35’ in upper level UD system. Our hose was stuck and we had to dig up the area and remove a section of pipe to retrieve our hose.

Mount Laurel Township:

- As a courtesy for Mount Laurel Township, the MUA Sewer Collections Department cleans out the Pond at PAWS Farm and tanks out the septic tank at Laurel Acres Park the 2nd Tuesday of each month.

Mount Laurel Fire Department:

- MUA Electrical Department employees met with Fire Department Chief on Gas Detector Calibration Training (Shared Services)

Capital Improvement Projects

Water

Proposed Surface Water Treatment Facility - Rancocas Creek

- The purpose of this facility is to supplement water supply while reducing purchased water.
- The pilot facility operated and produced drinking water in 2004 and 2005.
- The final NJDEP water allocation permit was received in January 2007; however, it only allows a maximum diversion from all sources of 1,955 MGY, which is less than the 10 year projected demand of 2,201 MGY.
- We appealed these permit conditions in February 2007. NJDEP Office of Administrative Law scheduled a hearing for May 20, 2008 which was postponed due to the NJAWC's appeal.
- An initial mediation session was held on July 25, 2008. The administrative hearing for February 7, 2011 was adjourned in favor of entry into the Alternative Dispute Resolution (ADR) process with NJDEP.

2009 Water Main Replacement

- This project includes replacement of water mains on Sumac Court in Birchfield, and Malvern Court & Ashby Court in Larchmont.
- These sections of main were chosen because of the number of breaks that occurred, and the condition of the existing pipe encountered during the repairs.
- The contract was awarded to B&B Construction on March 18, 2010 in the amount of \$310,329 with a completion date of August 19, 2010.
- All water main work was recently completed. We anticipate closing out this contract in July 2011.
- Total amount paid to the contractor, including change orders, is \$349,671.



Well No. 3 Building Replacement

- This project includes a complete rehabilitation of controls, installation of permanent standby power and equipment building for the last of the MUA's three production wells.
- The project was originally scheduled for FY 2010 but was delayed until FY 2012 due to budget constraints.
- Bids were opened on June 23, 2011. Award will be recommended in July.
- On-site construction work will not be permitted until the fall when the well can be taken out of service.

Hartford Rd Parker's Creek Crossing Water Main Replacement

- In 2009 we determined that the 12" DIP water main was in substandard condition due to exterior deterioration. The main must be replaced as it is a major transmission main and secondary feed in the distribution system and cannot be out of service for extended periods.
- Due to a fatal flaw with the low bid, On March 17, 2011, the contact was awarded to the second low bidder, Kmetz Incorporated in the amount of \$82,640.
- Notice to proceed was issued on April 6th, and the contract completion date was June 5, 2011.
- The contractor completed the installation and placed the main back in service on June 17, 2011. Site restoration work remains.

ASR Well #7

- This well was redeveloped and pump inspected in the fall 2010 by A.C. Schultes, contract amount, \$128,800.
- A pump test still must be completed to close out this contract, but timing must be deferred until September 2011 for operational reasons.

Buckingham Way Water Main Replacement

- Due to the frequency and concentration of water main breaks in this area, this project was accelerated for construction.
- Approximately 650' of 15-year old 8" water main will be replaced.
- Plans and specifications are almost complete and bidding/award is scheduled for July 2011.



Sanitary Sewer

New Grit Removal Equipment

- This project included installation of new headworks equipment at the Hartford Road Wastewater Treatment Plant. The \$1,703,000 contract was closed out in August of 2009. However, operational problems with the grinders continued.
- In March 2010, prior to expiration of the maintenance bond, we notified the contractor of additional repair work required. Since then only one grinder was repaired.
- As a result of declaring the contractor in forfeiture, another grinder was removed for repair.
- We recently rescinded the forfeiture for 60 days to allow for the repair.

Sanitary Sewer Rehabilitation



- This project includes slip lining of 7,700 feet of sanitary sewer mains and rehabilitating 43 manholes in the Ramblewood and Devonshire neighborhoods.
- On March 18, 2010 a contract was awarded to EN-Tech in the amount of \$592,768.45.
- This project was fast-tracked and moved to FY2009/2010 due to the potential for federal stimulus funding. The project qualified for principal forgiveness funding but was beyond the fundable range of projects. The project also qualified for the stimulus loan funding; it is being financed with a 0% interest rate for 75% of the project cost; the remaining 25% of the cost was at market rate at the time of closing in March 2010.
- The majority of work associated with this contract is complete with the exception of some specialized manhole inserts.



MH # 1147 before grouting



After repair

Parker's Creek Outfall Main Crossing

- All bids were rejected at the October 2010 meeting.
- We are investigating options to reduce the project cost, which includes closing the road and the relocation of electric lines by PSEG.
- The project will be rebid in the fall.



Painting Sanitary Sewer Pumping Stations

- A number of our can pump stations were showing signs of internal corrosion in the dry wells. Our plan is to rehabilitate 5 of these pump stations this year with additional following in the coming years.
- A contract was awarded to Scaturro Brothers in the amount of \$41,300 for corrosion/paint rehabilitation of 5 pumping stations.
- All work has been completed. We are waiting for the contractor to submit the required closeout documentation and to reimburse us for electrical work that was necessary due to the contract's operations.

Sewer Main Video Servicing

- This project consists of internal televising of 57,600 linear feet of various size sanitary sewer mains in the Innisfree and Ramblewood Farms sections of the Township.
- Work will be completed between 10pm and 6am during minimal customer use so that infiltration/inflow can be readily detected.
- We awarded this contract in March 2011 to Video Pipe Services in the amount of \$44, 320.
- So far, the contractor has completed videotaping of 51,378 feet of main (223 sections).
- MUA operational staff is in the process of reviewing the videos and identifying section of main that will require repairs in the future.