

REPORT OF THE BOARD OF PUBLIC WORKS

The Board of Public Works oversees the Department of Public Works (DPW), which consists of the following programs: Engineering, Park & Highway, Recycling and Disposal, Management Services, Water and Sewer. All of these programs are funded from general tax revenues except for the Water Program and the Sewer Program which, as enterprise funds, are funded exclusively by users fees.

In March 2009, Michael D. Humphrys was elected to a three-year term on the Board of Public Works. In June 2009, Mr. Humphrys announced his resignation from the Board of Public Works. He was replaced by Paul Criswell, effective July 1, 2009. Mr. Criswell's appointment will expire at the next election at which time there will be an election to fill the balance of the three year term. In June 2009, David A. T. Donohue was elected Chairman, Paul Criswell, Vice Chair, and William E. Charlton, Secretary of the Board of Public Works, effective July 1, 2009.

Engineering Division

The Engineering Division provides the Town of Wellesley with the highest level of professional engineering services. It is involved with almost every engineering-related task in the Town: preparation of engineering related reports and technical memoranda, preparation of detailed design plans and cost estimates, deed information, computer-aided design and drafting, Geographic Information System (GIS) implementation and maintenance, surveying, complete contract administration and project representation services for construction projects, and many other services. The Engineering Division uses state of the art technologies to perform these tasks and to adjust to the ever-changing needs and priorities of the Department of Public Works and the Town of Wellesley. The following are highlights of the Division's work during fiscal year 2009.

Reconstruction of Weston Road

During FY09 final design plans were developed for the reconstruction of Weston Road. The plans were prepared by BETA Group based on a field survey performed by the Engineering Division. To address the traffic congestion and improve safety at the Hardy School, a new pick up and drop off area along and at the end of Hardy Road was designed and incorporated into the Weston Road project. A right hand turning lane, at the Weston Road/Linden Street intersection, was also incorporated into the Weston Road contract documents. It was determined to phase construction so that all work near the Hardy School would be completed before school began on September 2, 2009. During the latter part of FY09, the plans were finalized and advertised for public bidding on April 15, 2009. Bids were opened on May 14, 2009. On May 19, 2009, the Board of Public Works awarded a contract to Paolini Corp. of Newton, MA in the amount of \$1,847,955. Construction is scheduled to begin in July 09. The Engineering Division is performing construction management and daily supervision of the project.

The project was the subject of an extensive public review process that consisted of six (6) separate and individual presentations of the project. This provided multiple opportunities for abutters and Town residents to provide their input into the project.

Municipal Facilities Building Project

During FY09, the Department of Public Works, along with the Municipal Light Plant, continued construction of the Municipal Facilities Building Project. The project consists of the construction of a new MLP garage and warehouse, and a new Water and Sewer Division garage building to house Water and Sewer Division vehicles, personnel and equipment. The garage buildings are two (2) individual structures.

The project included demolition of the existing MLP garage and warehouse that had been shared by the MLP and DPW, construction of a new garage/warehouse for the MLP and a new garage and office building for the DPW Water and Sewer Division. These facilities are required to provide adequate space for MLP, Water and Sewer equipment, inventory and personnel, create operational efficiencies for the departments, and provide buildings that are ADA compliant and meet all other building codes.

The bid opening for the construction of the new municipal buildings was held in September 2007 and awarded to PJ Stella Construction at a bid price of \$8,942,000. Work on the buildings is substantially complete. It is anticipated the buildings will be occupied in the summer season of 2009. The project construction is the responsibility of the Permanent Building Committee. The Engineering Division provided project management and construction management of site related project items that were completed by Town of Wellesley DPW forces. These work items included installation and construction of on-site stormwater drainage system, water quality devices, various utilities, paving and granite curbing installation.

Glen Road Reconstruction-Phase III

During FY09, the Engineering Division completed the planning and design for the reconstruction of Glen Road, Phase III. The project is located between the intersection of Glen Road and Ridgeway Road and the intersection of Glen Road and Glen Brook Road at the Wellesley/Weston town line. The project consists of the full depth excavation of the roadway, modular concrete retaining wall (Redi-Rock), temporary brook diversion, stormwater drainage, guardrail, paving, Cape Cod berm and other incidental work. The project will be constructed in the summer of 2009.

Permitting for the project consisted of preparing a Notice of Intent (NOI) per the Town of Wellesley Wetlands Protection Bylaw, which protects wetlands and related water resources and adjoining land areas from activities deemed to adversely affect wetland interests and value. The Engineering Division submitted the NOI to the Wetlands Protection Committee and the Massachusetts Department of Environmental Protection (DEP). Prior to the submission of the NOI, the Town hired the services of Baystate Environmental Consultants, Inc. (BEC) to perform a peer review of the NOI documents. After submission of the NOI and subsequent hearings, the DPW was issued an Order of Conditions for the project by the Wetlands Protection Committee. In June of 2009, the DEP appealed the Order of Conditions and assumed jurisdiction over the project. The Engineering Division plans on meeting with a representative of DEP to discuss the matter. The DEP may issue a Superseding Order of Conditions.

Woodside Avenue Street Acceptance Construction

During FY09, the Town contracted with Greener Excavating LLC of Lowell, MA to perform the reconstruction of Woodside Avenue. The work consisted of unclassified excavation, full depth reconstruction and bituminous concrete paving of Woodside Avenue, (total length of the roadway of 1,287 feet), drainage structures, reconstruction (extension) of Bogle Brook culvert, replacement of 30" RCP (reinforced concrete pipe) culvert, concrete unit retaining walls along Reeds Pond and in the area of Bogle Brook, sidewalks, wheelchair ramps, driveway aprons, bituminous concrete berm, wooden guardrail, steel pipe rail fence on top of retaining walls, signs, pavement markings and other related work.

The reconstruction of Woodside Avenue was nearing completion during the last quarter of FY 2009. Punch list work will be completed in the summer of 2009. The project cost is approximately \$353,130.

Stormwater Management Program

During FY09, the Engineering Division continued managing the Town's stormwater management program. In September 2003, the Town was issued its General Permit for the discharge of stormwater to the waterways of the US. The initial General Permit expired on April 30, 2008. The Town is expecting the issue of the second 5-year General Permit in the fall of 2009. In the meantime the Town continues to function under the terms of the original General Permit.

During FY09, the Engineering Division investigated two complaints of illegal dumping and supervised the cleanup. The Engineering Division maintains and responds to calls received on the stormwater hot line.

The Engineering Division continues to work with Mass DEP to locate the source of high levels of e-coli bacteria reported in Fuller Brook in 2007. In November 2008, the MDEP requested the Town to conduct dry weather testing of several culverts that discharge stormwater runoff from Grove Street and Dana Hall school property. These outfalls were tested for e-coli, ammonia and surfactants. Testing was conducted on April 28, 2009. At that time greatly reduced levels of e-coli were detected and no ammonia or surfactants. At MDEP's request, television inspection of these outfalls was further inspected by T.V. Dye testing of the sanitary sewer lines of several buildings performed. It did not reveal any leaking sewer lines. Although this round of testing has proven inconclusive as to the source of the previously reported pollution, the threat seems greatly reduced. At this time the DEP is reviewing the results of the requested investigations and the Town looks forward to resolution of this matter.

Stormwater Management Program RDF – Multi-Sector General Permit

As an industrial facility, the Recycling and Disposal Facility (RDF) is required to have an NPDES permit to allow stormwater runoff to adjacent wetlands. As the current permit was due to expire, the Engineering Division prepared a Notice of Intent to obtain coverage under the EPA Multi-sector General Permit. The Town is required to provide inspections and quarterly sampling of the outfalls at the facility which are conducted by the Engineering Division.

Under the Town's Multi-Sector General Permit, the RDF is required to monitor the stormwater runoff outfalls at the facility. Visual monitoring is completed once a quarter over the 5 year permit period. Analytical monitoring (laboratory testing) must be completed quarterly during the first year of the permit period. Additional monitoring may be needed if the benchmark monitoring concentrations have been exceeded. Engineering Division personnel conducted all monitoring required by this permit. Collection of samples was conducted during a measurable storm event. Engineering Division personnel collected samples from the stormwater runoff outfalls at the RDF and had them analyzed by a DEP certified laboratory. This sampling period was for the spring of 2009. The samples were taken at a rainstorm event (depth 0.8") on June 12, 2009. With the exception of COD (chemical oxygen demand), all monitoring concentrations were in line with or below the EPA benchmark monitoring cut-off concentrations. The analytical monitoring results were submitted to the EPA. No further action was required.

GIS Implementation

The Engineering Division completed a multi-year project to accurately depict lines of streets, easements and private property parcels on the Town's GIS maps. The Engineering Division also assists the GIS Department in development and updating of infrastructure mapping.

Utility Permit Program

The Engineering Division manages the Town's Street Occupancy Permit Program. This program regulates all utility and excavation work within the public way in accordance with the Rules and Specifications Regulating Street Excavations, Obstructions and Driveway Aprons, promulgated by the Board of Public Works. The comparative program statistics for FY07, FY08 and FY09 are:

	<u>FY 07</u>	<u>FY08</u>	<u>FY09</u>
Number of permits issued:	783	836	943
Number of permits completed as of June 30 th	352	478	337
Number of outstanding permits	429	358	606

The majority of outstanding permits are typically telephone or water line repairs that have not yet been permanently patched. Verizon routinely waits a year after excavation to permanently patch the street openings it makes. The number of outstanding permits at year's end also includes those streets that require cold planing, followed by an overlay of the pavement surface and those permits where the contractor is required to delay the final patch for a period of 60 days to account for settlement of the excavation.

**Park & Highway Division
Park Program**

The Park & Tree Program of the Public Works Department is responsible for the year-round maintenance of the Town's parks, athletic fields, outdoor recreation facilities, conservation lands and public shade trees. The following is a breakdown of the Town properties routinely maintained by the division.

- The grounds of Wellesley's branch Libraries, Town Hall and Police Station
- The Recreation Department's Moses Pond Beach Facility
- 9 Playgrounds of Wellesley's Public Schools
- 13 Playing Field sites totaling 47 acres of the Natural Resource Commission and School Department properties.
- 4 Tennis Courts (Hunnewell, Sprague, Schofield, Kelley) totaling 17 courts.
- 6 Conservation Reservations and the Wellesley Town Forest
- 10 Municipal Parking Lots of the Board of Selectmen
- 18 Parks and 5 Playgrounds of the Natural Resources Commission
- 68 Traffic Islands
- 3 Linear Parks (Caroline Path, Cochituate Path and Fuller Brook)
- 8 Ponds including annual mechanical and manual harvesting of invasive weeds at Longfellow, Rockridge and Moses Ponds
- 3,150 Public shade trees and vegetation management along town roadways.

During the fiscal year **2009**, the Park & Tree Unit also completed the following tasks and capital improvements:

- **Hunnewell Field Capital 09:** Made \$11,000 of repairs to the Hunnewell Tot Lot that was damaged by a downed tree during a September wind storm. Also, cleaned out 500 feet of the drainage ditch around the Hunnewell Field Tennis Courts to improve drainage in that area.
- **Elementary School Capital 09:** During July and August of 2008 installed a new drinking fountain, irrigation system and 30,000 square feet of new sod at the Fiske Elementary School.
- **Playground Capital 09:** During the summer and fall of 2008, all the Town's 9 School playgrounds and 6 Parkland playgrounds had safety fiber added and renovated as needed to meet required ADA and safety standards.
- **Sprague Field Capital 09:** Supplemented the Sprague Field Renovation by installing 6 new picnic tables, 2 scorer's tables, 6 foul poles, 10 players benches, 12 trash receptacles, 16 trees and 300 feet of new fencing and guardrail during the spring of 2009.
- **Tree Planting:** During the spring of 2009 planted and maintained 114 new public shade trees town-wide with funding provided by the Natural Resources Commission and other various capital project funds and donations.
- **Traffic Island Capital 09:** Renovated the traffic islands at Eaton Court and the Great Plain Avenue Rotary. Renovations included removing invasive shrubs and plants, followed by replanting with shade trees and grass to improve visibility, aesthetics and reduce maintenance cost.
- **Winter Moth Spraying Program:** In the spring of 2009 successfully sprayed over 800 public shade trees to control damage from invasive Winter Moth caterpillars. Also, in cooperation with the Natural Resources Commission,

provided public information to Town residents on how they can best protect their private trees against this destructive pest.

- **Mosquito Control:** In response to the West Nile Virus, assisted the Eastern Middlesex Mosquito Control and the Wellesley Health Department with treating over 3,100 catch basins with larvicide to help reduce the mosquito population in the town during the summer of 2008.
- **Aquatic Weed Harvesting:** From mid-May to mid-September continued annual mechanical weed harvesting of invasive aquatic plants at Longfellow, Rockridge and Morses Ponds.
- **Warren Park:** With funding from the Natural Resources Commission renovated the Warren Park Basketball Court. Four new basketball Hoops were installed with a new paved and painted surface.
- **Town Hall:** With funding from the Natural Resources Commission installed a new entrance at the Duck Pond along with 200 feet of new colored concrete sidewalk from the Duck Pond to the Town Hall Building.

Highway Program

The Highway Program is responsible for the maintenance and repair of all Town roads, street signs, sidewalks, and all surface and subsurface drainage systems. Maintenance includes the cleaning of streets, drains, catch basins, brooks, and culverts. The resurfacing program maintains the structure of streets through trench and pothole repair, crack sealing, resurfacing and reconstruction. During the winter, roads and sidewalks are kept safe for travel through the winter maintenance program, which includes surface treatment, plowing and snow removal. The Sign Shop maintains all of the traffic control signs, street signs, street line painting and parking meters. This includes replacement of worn, damaged or missing signs and meters and the installation of new signs and meters. Highway also provides a wide range of construction and maintenance services to all Town departments in both emergency and non-emergency situations.

Winter of 2008-2009

The winter of 2008-2009 was generally characterized as being colder, snowier and wetter than normal. December was a snowier than normal while January was colder than normal and February was drier than normal. The total snow accumulation measured at the Park and Highway Division facility for the winter of 2008-2009 was 67.5 inches. The DPW responded to a total of 20 events. Ten of the 20 events required the attention of snowplowing crews. The remainder of the storms were treated with a combination of sand, salt and liquid calcium chloride. Responding to storms resulted in the use of 354 tons of sand, 3,720 tons of salt, and 5,400 gallons of liquid calcium chloride. There were no snow removal operations necessary this year. Hand crews were used on numerous occasions to clear passages in the snow banks for pedestrians in the commercial areas or high use areas of Town.

**Monthly Snow Accumulation
Winter 2008-2009**

December	26.75"	February	7"
January	23.5"	March	10.25"

FY09 Street Resurfacing

The resurfacing capital program was intentionally put on hold in FY09. Due to last summer's spike in liquid asphalt costs, it was decided the resurfacing program needed to be re-evaluated so that the budget could be maximized. A contractor was hired to survey our roadways and come up with suggested alternative resurfacing treatments.

The hold on the resurfacing program lead to paving of only Sheridan Road and Sheridan Circle in August 2008.

Linden Street Reconstruction

The Highway Division continued construction on Linden Street on the portion from Kingsbury Street to Rockland Street. This began with the removal of all the existing sidewalks and installation of a binder base sidewalk. Crews worked extensively on drainage performing cleaning of catch basins and pipes, installation of new pipe and catch basins and patching all associated work. Approximately 70% of the drainage work for the project was completed. The roadway was also saw cut and asphalt removed where the roadway was narrowed. Ductline for the new pedestrian crossing signals were installed. Milling, chipsealing and paving were performed on the roadway from Kingsbury Street to Geraldine Drive by private contractors. Highway crews completed work on driveway aprons and sidewalks for this portion of the roadway also. By the end of the spring the portion of Linden Street from Kingsbury to Geraldine Drive was considered substantially complete.

Glen Road Reconstruction Project (Phase 2)

The Highway Division continued work on Phase 2 of the Glen Road Reconstruction Project. Phase 2 extends from Hundreds Road to Ridgeway Road. Highway Division crews completed all the drainage work. After considering formal requests by abutters of the street, it was decided to upgrade the curb installation to granite curb. The Highway Division was required to assist the private granite curbing installation contractor to assure the drainage, driveway aprons, sidewalk and intersecting roadways were appropriately addressed due to this last minute change. Phase 2 of the project was milled, chipsealed and paved in the Fall of 2008 and complete in the Spring of 2009 with all cleanup performed.

DPW/MLP Building Construction

The Highway Division crews continued with the drainage work in the DPW & MLP yard where they excavated and installed the second "Storm Water Recharging" system located at the rear of the Highway building. The purpose of the system is to prevent excessive runoff waters from rain to enter the drainage system. The installation consisted of 30 pre-cast concrete vaults imbedded in trap rock to allow for rain water to "re-enter" the ground in the immediate area and be in compliance with newer DEP regulations.

The crews also installed stormceptor (WQD-P3) and associated drainage pipe. Other projects completed included the grading and paving of the new parking areas, installation of all electrical duct work and bases for parking lot lighting, paving the end of the parking area near the outer shed to provide additional parking, and performed rough grading and moving of material piles.

Other FY09 Highway Activities

- Approximately 300 feet of sidewalk was reconstructed on Abbott Road including installation of new berm. The existing sidewalk was in disrepair, narrow and is a heavily used sidewalk that we plow in the winter.

- During breaks between snow events, work was accomplished in the cleaning of brooks and culverts. Stream beds were cleared of brush and debris in the following areas: Boulder Brook near Wingate Road and Pine Plain Road, and Cold Stream Brook near Indian Springs Way and Glen Road.

- As required by the Department of Environmental Protection, the street sweeping materials and catch basin cleaning materials stored in the DPW yard were properly disposed of at a lined landfill.

HIGHWAY

Comparative Statistics	FY08	FY09
Street Resurfacing & Cracksealing		
Bituminous concrete resurfacing (public ways)	2.93 mi.	0.72 mi*
Roadway cold planned	0.0 mi	0.51 mi*
Streets cracksealed	0.0 mi.	0.0 mi
Curbing		
Granite curbing	1,072 lf	3,586 lf*
Bituminous concrete curbing	914 lf	914 lf
Sidewalks		
Sidewalks resurfaced	246 lf	246 lf
New sidewalk construction	--	--
Sidewalks reconstructed	3,470 lf	1,241 lf
Guardrail fencing		
Highway steel guardrail fencing installed	--	--
Winter Maintenance		
Winter weather events responded by DPW	22	20
Total snowfall, inches	46.0	67.5
Salt used for ice control on roads and walks, tons	3,933	3,720
Calcium chloride for ice control on roads, gallons	6,000	5,400
Sand used for ice control on roads and walks, tons	515	354
Sidewalks plowed each storm, miles	49	49
Highway Maintenance Inventory		
Streets, miles	110	110
Sidewalk, miles	118	118
Curbing, miles	78	78
Fencing, miles	6	6
Culverts, miles	75	75
Brooks & streams, miles	15	15
Catch basins, each	3,657	3,657

*Includes the work done on Glen Road and Linden Street

Recycling and Disposal Facility

The Recycling and Disposal Facility (RDF) is located at 169 Great Plain Avenue (Route 135). This 88-acre facility is open 6 days a week. The hours of operation are: Monday, Tuesday and Wednesday 7:00 AM to 12:00 PM. Thursday and Friday, 7:00 AM to 3:45 PM and Saturday, 7:00 AM to 4:45 PM. The facility is closed on Sunday.

The solid waste management strategy utilized by the RDF is the "3 R's" diversion method. Waste that cannot be diverted from the waste stream via **Reduction, Reuse, or Recycling** is transported to a State-approved disposal facility. All materials are processed in an environmentally, operationally and financially sound method.

Reduction:

Source reduction is the first step in managing the Town's waste. Home-composters are available for purchase at the RDF and can significantly reduce each household's waste. Additionally, the Massachusetts' Department of Environmental Protection provided the RDF with "Junk Mail Reduction Kits", which include information on how to remove oneself from mailing lists and a "Non-Toxic Products" brochure with a listing of environmentally friendly products that can be used at home.

Reuse:

Reuse is the next component in the Town's solid waste management strategy and the RDF has a few areas for residents to take or leave items that still have value.

The most visible and popular of these areas is the Reusables Area (Take-It-Or-Leave-It). The area was closed July 1, 2005 because of budget cuts. Friends of Recycling Inc. (FOR), a community based non-profit organization made up of Wellesley residents dedicated to helping the Town's recycling program, organized a volunteer effort to operate and manage the area. The area has since reopened with a volunteer force of over 100 volunteers. The RDF staff and volunteers have successfully worked together to keep the area open.

You may have noticed the new structure at the Reusables Area, an exciting change for the RDF and the FOR volunteers. In previous years, items placed at the Reusables Area were often damaged by weather and had to be thrown away. This roof structure will help these items extend their useful life – and keep them out of the waste stream.

The Book Exchange is also a very popular area in the facility. It is not uncommon to see residents relaxing and enjoying a good book, or just browsing through the many different types of books. Surplus books that are not taken are shipped free of charge to third world countries for reuse at libraries and schools. The Town's benefit is the avoided disposal costs (estimated at \$2,000 a year) and the fact that we are doing our part in helping to improve the world's literacy rate. The RDF has taken a leading role with other Massachusetts communities by assisting and helping to coordinate shipments.

The Earth Products Area gives residents an opportunity to take screened compost back home with them. Brush, leaves and grass clippings are dropped off,

composted on site and screened for debris. This compost is available by the shovel full to Wellesley residents at no charge or larger quantities are available for purchase for residents and local businesses.

Recycling:

Recycling eliminates the financial and environmental costs of landfilling waste and can generate revenues that go back into the Town's General Fund. A major component to the success of the RDF operation is the Lindemann Baler. This is a high-density baler that produces an export quality bale, thus enabling the RDF to market to upper level worldwide markets that are typically accessible only to high volume private companies. In order to achieve the highest economic benefit for the Town, every pound of recyclable material is inspected and/or sorted on a quality control conveyor. Contaminates are removed to ensure mill acceptance at a premium grade classification. The most important aspect of our marketing strategy is to eliminate the profit making middle companies or brokers. This enhances the Town's position to capitalize on the constantly changing market conditions to maximize revenue. Another benefit of this strategy is that it allows us to have more control over the operation, and allows us to develop long-term relations with mill buyers.

Recycling Revenue and Cost Avoidance:

The following is compilation of key recycling statistics:

Product Sales Revenue:	\$ 347,126
Compost Sales:	3,739
Appliance Fees:	16,800
Commercial Yard Waste Fees*:	24,349
Commercial Recycling Fees**:	5,906
Recycling Container Sales:	520
Cost Avoidance Benefits***:	639,600

Total Recycling Benefit: \$1,038,040

*Fees collected from commercial costumers for the disposal of leaves, grass. clippings, brush and woodchips that ultimately decomposes and is moved off site as compost

**Includes fees collected from commercial customers for RDF labor reimbursement to separate out commercial wood from the waste stream.

***Avoided landfill disposal costs by diverting material out of the waste stream.

Municipal Solid Waste

In FY09, a total of 8,229 tons of municipal solid waste (MSW) was processed through the RDF. The DPW has a multi-year contract with Seneca Meadows Incorporated for the disposal of solid waste.

The Department of Environmental Protection has included Commercial Construction and Demolition Material (C&D) on their waste ban list. This means that the RDF had to develop a plan to accept commercial C&D material and divert it from the waste stream and process and ship C&D material to a recycling company. C&D material

as defined in the Waste Ban Laws is the following material: asphalt pavement, bricks, concrete, metal and wood (treated and untreated wood). The RDF has implemented a program to divert residential wood products, brick and concrete. Residents separate these products at a disposal cost to the Town that's lower than the cost of solid waste disposal.

The Executive Office of Environmental Affairs (EOEA) and the Department of Environmental Protection (DEP) have issued a Solid Waste Master Plan, which describes strategies and policies for working toward the State's goals in the coming decade. These goals are to: 1) Reduce the quantity and toxicity of our waste to the irreducible minimum, leaving as little waste as possible to be disposed; 2) Dispose only residuals from recycling and other waste reduction efforts; and 3) Ensure that waste handling facilities are environmentally sound.

The DEP expanded its regulatory requirements on all municipal and private waste disposal operations. We must inspect and conduct daily monitoring of all incoming commercial waste and also perform random comprehensive inspections on commercial loads. The RDF has been visited by State Inspectors and it has been determined that the RDF is in compliance with all pertinent laws.

Nineteenth Household Hazardous Products Collection Day

A fundamental component in Wellesley's environmentally responsible approach to integrated solid waste management is the annual Household Hazardous Products Collection Day. This year the event was held on Sunday, May 3, 2009. A total of 409 residents participated in bringing in a total of 10 tons of hazardous material. All products were collected and removed from the RDF by licensed and trained technicians and chemists.

Step Up! Program

The RDF's recycling initiative called the Step Up! Program encourages **all** residents to increase their participation in waste reduction, regardless of where they are today, in terms of how much and what they recycle. Envision a staircase of recyclable materials; a non-recycler would be at the bottom step and veteran recyclers that recycle certain items occupy the next few steps. If the non-recycler started to recycle just paper, he would take a step up. If a resident who now only recycles paper started to also recycle bottles and cans, which would be a step up. The top step is community education and outreach. If every household took a step up and started to recycle one more product line, we would reach our overall goal of five percent more recycling over the next five years. Every resident can nudge us towards our goal by looking for one or two more items to recycle or remove from their trash. Recycling saves natural resources and makes the Town a lot of money.

The RDF picks up municipal recyclables and trash at most municipal buildings as well as the trash barrels on the sidewalk in the commercial areas in town. Last year, these routes were expanded to include the pick up of trash and recyclables at Town Hall and the Main Library, saving considerable money for the Town.

New Initiatives

The goal of the RDF is to continue with the success of the **Business Initiative Program**. The RDF accepted 1,700 tons of recycled products from three other communities and a few recycling haulers. The third year was less profitable than the

second year because of the down markets but it's important to note that the Town still made a significant profit from the program. The gross revenue from the Business Initiative Program in FY09 was \$105,814. The cost of doing business was \$38,870 for a net benefit of \$ \$66,944. The three-year net benefit is \$198,819. All revenues generated were deposited into the Town's General Fund.

RDF Comparative Statistics

All figures in tons unless otherwise noted

Recyclables*	FY08	FY09	FY09 (\$Sales)**
Paper	2,844	2,607	178,815
Cardboard	1,249	1,397	81,095
Glass: Clear	146	145	2,895
Brown	51	60	806
Green	199	218	N/A
Ferrous Metal	434	413	39,731
Non-Ferrous Metal	24	24	1,840
Aluminum Foil and Plates	3	4	634
Steel Cans	32	38	933
Refundable Containers	34	20	11,513
Plastics	231	299	26,428
Books	6	15	420
Wood Products	808	657	N/A
Stone/Brick/Concrete	618	223	N/A
Batteries (Automotive)	3	5	1,388
Waste Oil	13	9	354
Tires	18	16	N/A
Textiles (Used Clothing)	138	152	N/A
Paint	6	7	N/A
Hazardous Products	97	136	N/A
Miscellaneous	90	105	N/A
Crutches & Canes	160 units	122 units	N/A
Ink Jet Cartridges	1,189 units	683 units	207
Mobile Phones	548 units	622 units	67
Eye Glasses	2000 units	2,212 units	N/A
Total Recyclables	7,044	6,551	\$347,126
Subtotal by source (estimated)			
Residential	4,697	3,688	\$211,131
Municipal	42	17	926
Commercial	1,705	1,228	42,444
Business Initiatives	679	1,618	92,625

(B) Solid Waste	FY07	FY08	FY09
Residential	7,333	7,703	7,182
Municipal	327	294	222
Commercial	1,384	839	825
(B) Total Solid Waste	9,044	8,836	8,229

(C) Yard Waste (tons)	FY07	FY08	FY09
Residential	7,136	5,459	6,820
Municipal	862	1372	1,333
Commercial	406	1819	567
(C) Total Yard Waste	8,404	8,650	8,720

All Waste Materials	FY07	FY08	FY09
Total Weight (A+B+C)	23,720	24,320	23,500

*Unsold tonnage in inventory is not included in the above figures, actual tonnage may be slightly higher

** Recycling Sales Revenue indicates the amount of all recycled products sold, however, some of these monies may be received in FY10

Recycling Percentages

Excluding Yardwaste	FY07	FY08	FY09
Residential	34.4%	37.9%	33.9%
Municipal	10.7%	12.5%	7.1%
Commercial	63.3%	73.3%	77.5%
(C) Total Excluding Yardwaste	41.0%	44.4%	44.3%

Including Yardwaste	FY07	FY08	FY09
Residential	60.0%	56.9%	59.4%
Municipal	73.4%	82.8%	85.9%
Commercial	66.8%	83.1%	80.5%
(C) Total including Yardwaste	61.9%	64.0%	65.0%

Per Capita Recycling

Per Capita Recycling (tons) ***	FY07	FY08	FY09
Residential	289	353	277
Municipal	3	3	1
Commercial	179	173	214
Total Per Capita Recycling	471	529	492

*** does not include yardwaste

Total Sales Revenue (\$)

Sales Revenue ****	FY07	FY08	FY09
Recycling Sales and Commercial Fees	477,065	640,501	347,126
Commercial Trash Tipping Fees	180,377	170,629	151,789
Earth Product Sales and Commercial Fees	30,263	49,901	24,349
Commercial Snow Permits	950	16,650	10,988
Total Sales Revenue	\$688,655	\$ 877,681	\$534,252

****The RDF deposited \$665,872 to the General Fund in FY09. This includes \$131,620 from FY08 sales that were paid in FY09.

Water & Sewer Division

The Water and Sewer Division is responsible for the operation and maintenance of the Town's water and sanitary sewer systems. Described herein are the Division's FY09 accomplishments.

Water Program

The Water Program is responsible for the operation and maintenance of the Town's wells, pump stations, water treatment facilities, water distribution and storage systems. The program provides a potable and reliable water supply for its users and for fire protection. Water conservation and water resource protection are important components of the program.

Wellesley's water system consists of seven wells, five well pump stations, three water treatment facilities, two booster pump stations, two storage facilities with a combined capacity of about 6 million gallons, and 149 miles of distribution main. Wellesley's water is supplied from 7 local wells and from the Massachusetts Water Resources Authority (MWRA). All water users connected to the system are metered.

We are pleased to report that the water quality of our supplies was in compliance with the Federal Safe Drinking Water Act throughout FY09.

Water Distribution:

During FY09 the Division contracted with the consultant firm of Wright-Pierce Engineers of Andover, MA to design upgraded pumping facilities at its Hegarty Pump Station, which boosts the Massachusetts Water Resources Authority (MWRA) water supply to the Town's pressure. This upgrade includes emergency redundant pumping and power for the facility.

Water Supply:

In FY09 the Massachusetts Department of Environmental Protection (DEP) approved our construction of two new supplemental wells at the Coughlin Wellfield. This DEP approval was based on a study and design by Woodard and Curran

Engineers of Dedham, MA. During the year these two wells were constructed by FG Sullivan Drilling Company of Lancaster, MA. These two new wells are expected to help restore the Division's water supply capacity by about 250 gpm once they achieve DEP activation approval after their final pump and water quality testing in FY10.

Water Conservation:

Our public awareness program included the distribution of complimentary rain/sprinkler gauges to encourage less frequent lawn irrigation and weekly advertisements in the Wellesley Townsmen newspaper, which gives notice of our current water conservation status. In FY09 weekly notices were printed in the Townsmen from June to September to alert residents of the current conservation status. The highest status reached during the year was ADVISORY. This status requests no more than one-day-per-week lawn watering with prescribed days per week according to street address numbers (e.g. odd-even).

The peak day (i.e. July 17th) water pumpage for FY09 was 5.0 million gallons. The peak month (i.e. July) pumpage was 113.9 million gallons. The total water pumped for FY09 was 1,013 million gallons. Of this total water pumped, 67 percent came from local wells and 33 percent from the MWRA.

Water Meter Upgrade:

Customer meters have been read by radio since 1999; the devices that accompany the meters, which encode, receive, and transmit the data by radio signal are powered by batteries. The expected lives of these batteries are about half that of the meters. In FY07 we began replacing the batteries on these meters. In FY09 a total of 2,437 batteries were replaced, which is on pace with the projected 4-year battery replacement program.

Sewer Program

The Sewer Program is responsible for the operation and maintenance of Wellesley's sanitary sewer system, which includes 134 miles of collection lines and twenty-two lift stations. Sewage is delivered into the MWRA's regional sewerage collection system and is treated at the MWRA Wastewater Treatment Facilities at Deer Island near Boston Harbor.

Sewer Lift Station Replacement:

In FY09 the Division contracted with Weston & Sampson Engineers of Peabody, MA for the design of the upgrade of the Stoneclevé Road ejector station to a centrifugal pumping station. This facility upgrade involves the conversion of the existing buried vault into the pump wet well chamber.

Sewer Collection System Rehabilitation:

In FY09 the Division contracted with National Water Main Company of Canton, MA to continue our annual program of joint testing and sealing and manhole sealing. During FY09 a total of 4,862 sewer pipe joints were tested and of that total 2,063 joints were sealed.

MWRA Sewer Metering Program:

A large portion of Wellesley's MWRA sewer assessment (cost) is based on the metered wastewater flows leaving the Town and entering the MWRA system. These measured flows are reported on a calendar basis, and are used to formulate the following fiscal year's assessment. The following is a comparison of the five most recent calendar-year wastewater flow statistics:

<u>Calendar Year</u>	<u>MWRA Wastewater Flow Measurements</u>	
	<u>Ave. Daily, MGD</u>	<u>Peak Monthly, MGD</u>
2004	4.92 (1.34%)	6.46 (1.44%)
2005	4.48 (1.27%)	6.76 (1.42%)
2006	4.30 (1.20%)	6.50 (1.20%)
2007	3.67 (1.19%)	7.80 (1.54%)
2008	4.34 (1.23%)	6.91 (1.37%)

The percentage of Wellesley's contribution to the total MWRA system flow is noted within the parentheses. It is the goal of our Sewer Collection System Rehabilitation Program to reduce Wellesley's share of the total MWRA system flow (the numbers in the parentheses). By so doing our costs to the MWRA would be reduced. It can be noted that during wet conditions (i.e. peak month versus average day) Wellesley's proportionate share is increased. Such conditions are a reminder that it is illegal for sump pumps to be connected to the household sanitary plumbing. The discharging of sump pumps into basement set tubs, or directly to the plumbing, may result in surcharging of the public sewers and may cause overflows from downgradient sewers into house basements or onto streets as well as increases in our MWRA costs.

Water & Sewer Funds Audit Reports

The certified public accounting firm of Powers and Sullivan, L.L.P has prepared the FY2009 Financial Reports of the Water and Sewer Funds. The audited financial statements for the Water and Sewer Funds are included at the back of this Annual Town Report.

Division Statistics

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>
Number of Water Accounts	11,711	11,804	11,894
Water Pumped from Local Wells, mg	819.22	786.21	674.99
Water Pumped from MWRA, mg	225.34	319.90	338.48
Total Water Pumped, mg	1,044.56	1,106.11	1,013.47
Peak-to-Average Day Water Demand	1.81	1.79	1.80
Total Water Billed, mg	883.67	976.28	840.81
Unaccounted Water, %	15.4	11.7	17.0
New Meters Installed	289	189	255
Hydrants Replaced	12	8	4
Number of Sewer Accounts	8,160	8,156	8,156
Number of House Services Rodded	322	290	340
Feet of Sewer Main Rodded/Flushed	297,711	333,983	304,242