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 and 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 user's fees.

In July, 2009, Paul Criswell was appointed to fill the vacant position on the Board of Public works that arose with the resignation of Michael Humphrys in June, 2009. His appointment expired at the next town election. In March, 2010, Paul L. Criswell was elected to a three-year term on the Board of Public Works and David A.T. Donohue was elected to fill out the balance of the term that was vacant following the resignation of Michael Humphrys.

In June, 2010, Paul L. Criswell was elected as Chairmen of the Board of Public Works, William E. Charlton, will serve as Vice Chairman, and David A.T. Donohue as Secretary.

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 2010.

Reconstruction of Weston Road

During FY10, Paolini Corp of Newton, MA began work on the reconstruction of Weston Road. Phase 1, which consisted of work near the Hardy School, was constructed during the summer 2009. It was completed before the beginning of school in September, 2009. Phase 2A continued the work past Strathmore Road and included a new dedicated right turn lane at the end of Linden Street. In addition the work included full depth reconstruction of the roadway, installation of new drainage, granite curbing, new sidewalk on the east side of Weston Road and new pavement markings. Pedestrian signals were installed in front of the Hardy School and at the end of the Linden Street to facilitate the crossing of pedestrians and

school children. As FY10 ended, the project was awaiting final paving and sidewalk construction. The project is expected to be 100% complete by the end of July 2010. The Engineering Division is performing construction management and daily supervision of the project.

Municipal Facilities Building Project

During FY10 the Department of Public Works, along with the Municipal Light Plant, completed construction of the Municipal Facilities Building Project. The project consisted of the construction of a new MLP garage and warehouse, and a new DPW 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 space 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 was completed and the buildings were occupied during the summer season of 2009. The project construction was the responsibility of the Permanent Building Committee. The Engineering Division provided project 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 an on-site storm water drainage system, water quality devices, various utilities, paving, lighting and granite curbing installation.

Glen Road Reconstruction-Phase III

In July 2009, the contract was awarded to Green Acres Landscape & Construction Co. Inc. of Lakeville, MA 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 consisted of the full depth excavation of the roadway, modular concrete retaining wall (Redi-Rock), temporary brook diversion, storm water drainage, guardrail, paving, Cape Cod berm and other incidental work. Green Acres began working in August of 2009 and was nearing completion during the last quarter of FY10. The Engineering Division provided project and construction management of the project.

The project was constructed under a Superseding Order of Conditions issued by Mass DEP. The Order provided guidelines for working adjacent to and within the

wetlands buffer zone, river front area and Cold Stream Brook. In the spring of 2010, major storm events caused erosion along the banks of Cold Stream Brook and undermined most of the landscape planting above the brook. A representative of the Mass DEP met with a representative of the Engineering Division to discuss further improvements to Cold Stream Brook, which DEP requires and which will be constructed in early FY11.

The project was substantially completed ahead of schedule in the fall of 2009. The spring 2010 storms required additional work to be performed to comply with DEP requirements. Hence, it is anticipated that a Certificate of Compliance will be issued by DEP in the fall of 2010. The total cost of the project was $255,500.

Woodside Avenue Street Acceptance Construction

During FY10, the Town continued working with its contractors, Greener Excavating LLC of Lowell, MA to complete the reconstruction of Woodside Avenue. Punch list work was completed in the summer of 2009. The reconstruction of Woodside Avenue consisted of full depth reconstruction and bituminous concrete paving of Woodside Avenue,(total length of 1,287 feet), drainage structures, reconstruction (extension) of the existing Bogle Brook culvert, replacement of a 30" RCP 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 site restoration work. It is anticipated that a Certification of Compliance will be issued by the Wellesley Wetlands Protection Committee in the fall of 2010. The total project cost for the reconstruction of Woodside Avenue is $331,700.

DPW Operations Building

The 2010 Annual Town Meeting approved $253,000 in funding for the design of a new DPW Operations Building to be located in front of the recently completed DPW Water and Sewer Division Garage. During FY10 the DPW began working with the Permanent Building Committee (PBC) and the project architect AECOM in the design of the two-story building, which will provide adequate space for the DPW Management Services and Engineering Divisions. The DPW Director and administrative staff will also be located in the proposed building.

The estimated construction cost of the building is $3,600,000, which includes the design fee of $253,000. The DPW anticipates seeking an appropriation for construction costs at the 2011 Annual Town Meeting, funded by a debt override outside the levy.

Stormwater Program Management

During FY10, the Engineering Division continued its management of 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 under

the US EPA's Phase II National Pollutant Discharge Elimination System (NPDES) Program. The initial General Permit expired on April 30, 2008. The EPA issued a new draft General Permit for which a public comment period was held in March 2010. The Town reviewed and provided comment and testimony at a Public Hearing regarding the drain permit. The Town is expecting the issuance of the final General Permit later in CY2010. In the meantime, the Town continues to function under the terms of the original General Permit.

RDF Multi-Sector General Permit

As an industrial facility, the RDF is required to have a NPDES permit to allow stormwater runoff to adjacent wetlands and waterways. 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. The inspections and the sampling program 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, which were then analyzed by a DEP certified laboratory. This sampling period was for the fall of 2009 and spring of 2010. The samples were taken during rainstorm events. All monitoring concentrations were slightly over 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 continues to assist the GIS Department by providing as-built plans for new projects, GPS work, updates to the Town's utility infrastructure and ongoing assistance with data development.

HVAC Study for DPW Highway Building

During FY10, the Engineering Division was responsible for the project management for the heating, ventilating and air conditioning (HVAC) study for the DPW Highway Building. There are a number of problems with the existing DPW Highway building HVAC systems including air quality, heat loss, air temperature control problems, etc.

The Engineering Division worked closely with Weston and Sampson Engineers to inspect and evaluate the condition of the existing facility and to develop

recommendations for the HVAC system modifications and to the building itself to enhance air quality, safety and improve energy efficiency.

The study will provide a phased approach, which will provide prioritized recommendations with cost estimates for various elements of the implementation plan.

RDF Transfer Station Building Concrete Slab

During FY10, the Engineering Division was responsible for the project management for the design of a concrete slab in the new Recycling and Disposal Facility Transfer Station Building. The Engineering Division coordinated permitting of the project, which included submission of a permit application for the project to Mass DEP Solid Waste Division.

The existing bituminous concrete surface in the transfer station building is in poor condition. Plans and bid documents were prepared for the removal of and its replacement with a new reinforced concrete slab.

Bids will be opened in early FY 2011 and construction work is scheduled to be completed during the fall of 2010.

RDF Transfer Station Building Fire Sprinkler System

During FY10, the Engineering Division was responsible for the project management for the replacement of the fire sprinkler system in the old Recycling and Disposal Facility Transfer Station building.

The existing overhead sprinkler system in the old Transfer Station Building is approximately 30 years old and in poor condition. Plans and bid documents were prepared for the removal and replacement of the sprinkler system

Bids were opened in the spring of 2010 and a contract awarded to Cogswell Sprinkler Company, Inc. in the amount of $29,300. The construction work is scheduled to be completed during the summer of 2010.

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 FY08, FY09 and FY10 are:

	FY 08	**FY09**	**FY10**
Number of permits issued:	836	943	861
Number of permits completed (as of 6/30)	478	337	497
Number of outstanding permits	358	606	363

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 Division

The Park Unit 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. Listed below is a breakdown of the town properties routinely maintained by the Park Division.

- The grounds of Wellesley's branch Libraries, Town Hall and Police Station
- The Recreation Department's Morses 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 Morses Ponds
- 3,150 Public shade trees and vegetation management along town roadways.

During the fiscal year **2010**, the Park & Tree Unit also completed the following tasks and capital improvements:

- **Hunnewell Field:** In cooperation with the High School Green Team installed 24 recycling trash receptacles for plastic bottles, along with a recycle dumpster for plastic bottles. We estimate that trash has been reduced by 30% along with fuel savings from decreased trash pickups.

- **Elementary School:** Upgrade the electrical and water connections at Brown Playground as part one of a two part renovation for the park`s irrigation system.

- **Playground:** During the summer and fall of 2009 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:** Supplemented field aeration with contracting out a verti-quaking aeration service to help reduce compaction on the town`s busiest athletic facility during the spring of 2010.

- **Tree Planting:** During the spring of 2010 planted and maintained 100 new public shade trees town-wide with funding provided by the Natural Resources Commission and other varies capital project funds and donations.

- **Traffic Island**: Renovated the traffic island at Oak Street and Route 9 with street print asphalt to reduce maintenance and improve visibility at that intersection.

- **Winter Moth Spraying Program:** In the spring of 2010 successfully sprayed over 700 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 Middlesex Mosquito Control and the Wellesley Heath Department with treating over 3,100 catch basins with larvicide to help reduce the mosquito population in the town during the summer of 2009.

- **Aquatic Weed Harvesting:** From mid May to mid September continued annual mechanical weed harvesting of invasive aquatic plants at Longfellow Rockridge and Morses Ponds. During late November and early December limited weed harvesting was done in the north basin to assist engineers with depth surveys for future dredging. Then in the spring of 2010 an extensive weed harvesting, along with contracted hydro raking was conducted the north basin to help prep the area for dredging in late 2010.

- **Cameron Street and Hills Parking Lots:** With funding from the Board of Selectmen the Cameron St. and Hills Parking Lots had new landscapes designed and installed during the spring of 2010.

- **MLP & Water Department Buildings:** Designed and installed new landscaping for the new Municipal Light Plant and Water Department buildings during the early fall of 2009.

- **Weston Road Project:** Conducted tree removals, pruning and planting as part of the Weston Road construction project, along with electrical and water connection upgrades for the Hardy School irrigation system.

- **Glen Road Project:** Conducted tree removals, pruning and planting as part of the Glen Road construction project, along with wetland plantings along Cold Stream Brook.

- **Site Amenities:** During the winter months over 50 town picnic tables were renovated town wide.

- **Wellesley High School:** Installed 5 new bike racks that can hold a total of 55 bicycles as part of a $2,700, Massachusetts Area Planning Council Grant, along with funding from the DPW for 10 additional bike racks at the Hardy, Sprague and Upham Elementary Schools.

Highway Division

The Highway Division 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, chipsealing, 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 2009-2010

The winter of 2009-2010 was generally characterized as being warmer and wetter than normal. December led with a snowier than normal month. January and February were warmer than normal but wetter than normal, the precipitation just came in the form of rain. While March had no snow accumulation it was one of the more challenging months in terms of weather response due to the two rain events which lead to historic flooding along the Charles River. These events required the use of crews to control flooding by clearing debris and using pumps where required. The total rain fall amount for March was 10” above normal for our area.

The total snow accumulation measured at the Park and Highway Divisions facility for the winter of 2009-2010 was 32.6 inches. The DPW responded to a total of 18 events. Seven of the 18 events required the attention of snowplowing crews. The remainder of the storms was treated with a combination of sand, salt and liquid

calcium chloride. Responding to storms resulted in the use of 31 tons of sand, 2,202 tons of salt, and 5,775 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.

M**onthly Snow Accumulation for the Winter of 2009-2010**

December	16.9”	February	7.5”
January	8.25”	March	0”*

*Two rain events totaling over 13” of rain

FY10 Street Resurfacing
The resurfacing capital program was intentionally put on hold in FY10. Due the 2008 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 roads were categorized for treatment and prioritized. Alternative resurfacing treatments were considered and will be used as appropriate.

The new program began with the preparation of streets for resurfacing in June but no streets were completed.

Linden Street Reconstruction
The Highway Division continued construction on Linden Street on the portion from Geraldine Drive to Rockland Street. This began with the removal of all the existing sidewalks and installation of a binder base sidewalk. The remainder of the drainage work was completed with installation of some new pipe and catch basins and patching all associated work. The roadway from Geraldine Drive to Rockland Street was fully reconstructed by full depth grinding. It was then paved with binder and top. Highway crews completed work on driveway aprons after the final paving. By the end of the fall the portion of Linden Street from Geraldine Drive to Rockland was considered substantially complete. In the spring, some final driveways and cleanup work was performed to complete the project.

Stormwater Drainage Projects
Several drainage projects were completed during the year to address storm water issues:

- Crescent Street – A new high profile berm was installed, driveway aprons were reconstructed and an existing catch basin was upgraded to a double catch basin with back inlet.
- Garden Road – Approximately 320 feet of existing drain line was replaced by a new 15” drain line. New berm and a berm in need of repair were installed

to prevent breaching of street water onto the sidewalk. Various portions of sidewalk and a few driveway aprons were reconstructed.

- Grantland Road – Approximately 340 feet of existing drain line was replaced by new 12" drain line. Four new catch basin structures were installed.

Other FY10 Highway Activities

- In an effort to provide better access to sidewalks in Town and comply with ADA regulations, wheelchair ramps were constructed at a new crosswalk at Beechwood Road and Shirley Road and on Cameron Street at the Fuller Brook Path.
- The Reed's Pond forebay was dredged of approximately 70 yards of material by a private contractor with a long reach excavator. This is part of the Town's stormwater maintenance program.
- 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.

Comparative Statistics	FY09	FY10
Street Resurfacing & Cracksealing		
Bituminous concrete resurfacing (public ways)	0.72 mi*	0.00 mi*
Roadway cold planned	0.51 mi*	0.00 mi*
Streets cracksealed	0.0 mi.	0.00 mi
Curbing		
Granite curbing	3,586 lf*	-- lf*
Bituminous concrete curbing	914 lf	836 lf
Sidewalks		
Sidewalks resurfaced	246 lf	675 lf
New sidewalk construction	--	--
Sidewalks reconstructed	1,241 lf	74 lf
Guardrail fencing		
Highway steel guardrail fencing installed	--	--
Winter Maintenance		
Winter weather events responded by DPW	20	18
Total snowfall, inches	67.5	32.6
Salt used for ice control on roads and walks, tons	3,720	2,202
Calcium chloride for ice control on roads, gallons	5,400	5,775
Sand used for ice control on roads and walks, tons	354	31
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	3,892

*Includes the work done on Glen Road and Linden

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.

Recycling
Recycling eliminates the financial and environmental costs of landfilling waste and can generate revenues that are deposited 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, 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 the RDF to have more control over the operation by developing long-term relations with mill buyers.

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 includes 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 approximately 50 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 fabric roof structure will help these items extend their useful life – and keep them out of the waste stream. With the total cost of solid waste disposal at approximately $100 per ton, this could amount to real savings for Wellesley!

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 these 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 Revenue and Cost Avoidance:

The following is compilation of all relative recycling statistics:

Product Sales Revenue	$399,511
Compost Sales	14,522
Appliance Fees	14,920
Commercial Yard Waste Fees*	36,008
Commercial Recycling Fees**	8,820

Recycling Container Sales:	2, 537
Sub Total	476,318
Cost Avoidance Benefits***	649,794
Total Recycling Benefit	**$1,126,112**

*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 FY10, a total of 8,781 tons of municipal solid waste (MSW) was processed and hauled off-site to a disposal facility in Seneca Falls, New York. 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.

Twentieth 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 2, 2010. A total of 316 residents participated in bringing in a total of 10.65 tons of hazardous material. The Wellesley Health Department also was involved with the collection of 601 pounds of sharps collected from 56 households. All products were collected and removed from the RDF by licensed and trained technicians and chemists.

Step Up Program

Step Up! You should have heard a lot by now about the RDF's recycling initiative called the Step Up! Program. This is an effort to encourage **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 pickup of trash and recyclables at Town Hall and the Main Library saving considerable money for the Town.

The RDF strives to be innovative and come up with ideas that will maximize the recycling diversion rate. Every ton of recyclables that is diverted from the waste stream saves over $100 per ton for the Town. In the third year of diverting construction material from the waste stream, in FY 2010 a total of 951 tons of wood waste, concrete, and bricks were diverted from the waste stream.

New Initiatives

The goal of the RDF is to continue with the success of the **Business Initiative Program.** The RDF accepted 1,535 tons of recycled products from three other communities and a few recycling haulers. The gross revenue from the Business Initiative Program in FY10 was $124,360. The cost of doing business was $39,679 for a net benefit of $ $84,681. The four-year net benefit is $283,500. All revenues generated were deposited into the Town's General Fund.

RDF Comparative Statistics

All figures in tons unless otherwise noted

(A) Recyclables*	FY09	FY10	FY10 ($Sales)**
Paper	2,607	2,465	199,542
Cardboard	1,397	1,385	159,142
Glass: Clear	145	143	3,073
Brown	60	63	945
Green	218	213	N/A
Ferrous Metal	413	388	61,556
Non-Ferrous Metal	24	34	4,990
Aluminum Foil and Plates	4	3	334
Steel Cans	38	37	7,426
Refundable Containers	20	17	10,461
Plastics	299	351	29,190
Books	15	8	700
Wood Products	657	760	N/A
Stone/Brick/Concrete	223	191	N/A
Batteries (Automotive)	5	8	1,787
Waste Oil	9	16	111
Tires	16	16	N/A
Textiles (Used Clothing)	152	132	N/A
Paint	7	11	N/A
Hazardous Products	136	131	N/A
Miscellaneous	105	105	N/A
Crutches & Canes	122 units	334 units	N/A
Ink Jet Cartridges	683 units	216 units	94
Mobile Phones	622 units	318 units	N/A
Eye Glasses	2,212 units	253 units	N/A
(A) Total Recyclables	**6,551**	**6,478**	**$479,351**

Subtotal by source (estimated)			
Residential	3,688	3,220	$231,266
Municipal	17	227	$16,302
Commercial	1,228	1,496	$107,423
Business Initiatives	1,618	1,535	$124,360

(B) Solid Waste	**FY08**	**FY09**	**FY10**
Residential	7,703	7,182	7,207
Municipal	294	222	279
Commercial	839	825	1,295
(B) Total Solid Waste	**8,836**	**8,229**	**8,781**

*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 Fy11.

(C) Yard Waste (tons)	**FY08**	**FY09**	**FY10**
Residential	5,459	6,820	5,941
Municipal	1,372	1,333	1,419
Commercial	1,819	567	1,140
(C) Total Yard Waste	**8,650**	**8,720**	**8,500**

All Waste Materials	**FY08**	**FY09**	**FY10**
Total Weight (A+B+C)	**24,320**	**23,500**	**23,207**

Recycling Percentages

Excluding Yard waste	**FY08**	**FY09**	**FY10**
Residential	37.9%	33.9%	31.7%
Municipal	12.5%	7.1%	44.9%
Commercial	73.3%	77.5%	75.3%
(C) Total Excluding Yard waste	**44.4%**	**44.3%**	**44.0%**

Including Yard waste	**FY08**	**FY09**	**FY10**
Residential	56.9%	59.4%	56.8%
Municipal	82.8%	85.9%	85.5%

Commercial	83.1%	80.5%	80.7%
(C) Total including Yard waste	**64.0%**	**65.0%**	**64.5%**

Per Capita Recycling

Per Capita Recycling (tons) ***	FY08	FY09	FY10
Residential	353	277	242
Municipal	3	1	17
Commercial	173	214	228
Total Per Capita Recycling	**529**	**492**	**487**

*** does not include Yard waste

Total Sales Revenue ($)

Sales Revenue ****	FY08	FY09	FY10
Recycling Sales and Fees	640,501	347,126	479,651
Commercial Trash Tipping Fees	170,629	151,789	165,715
Earth Product Sales and Fees	49,901	24,349	52,107
Commercial Snow Permits	16,650	10,988	14,900
Total Sales Revenue	**$877,681**	**$534,252**	**$712,373**

**** $655,759 was deposited in to the General Fund in FY10

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 FY10 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 nine 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 9 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 FY10.

Water Distribution

During FY10 the Division contracted with North Atlantic Constructors of Gloucester, MA to upgrade the Hegarty Pump Station, which was designed by the consultant firm of Wright-Pierce Engineers of Andover, MA. The Hegarty Pump Station boosts the Massachusetts Water Resources Authority (MWRA) water supply to the Town's pressure. This upgrade includes redundant pumping and emergency power for the facility. At the end of the year the majority of the equipment was installed, but the final piping connection and control instrumentation was yet to be completed.

Water Supply

In FY10 two new supplemental wells were added to the Coughlin Wellfield. During the year these two wells were constructed by FG Sullivan Drilling Company of Lancaster, MA. These two new wells have increased our local supply capacity by up to 250 gpm.

Also in FY10 a hydrogeologic study was contracted with Wright-Pierce Engineers of Andover, MA to evaluate the potential of restoring the yield of our Morses Pond Wellfield. This study was completed with the recommendation that two of the three existing wells be abandoned and replaced by three new wells. It is also proposed that the pumping configuration of the wellfield be modified and that the filtration media be replaced. These recommendations have been submitted to the Massachusetts Department of Environmental Protection for review and approval. Upon receipt of DEP's approval, it is expected that we will contract for the design and construction of the Upgraded Morse Pond Wellfield.

Water Conservation

Our public awareness program included the distribution of complimentary rain/sprinkler gauges to encourage less frequent lawn irrigation and the use of webpage notices of our current water conservation status. The conservation statuses include: NORMAL, ADVISORY, WATCH, WARNING, and EMERGENCY. The latter two statuses involve mandatory outdoor watering bans, which have not been enacted since the commencement of the program in 2003. The WATCH status calls for a 20% voluntary reduction of outdoor water use, which thus far has caused the avoidance of any mandatory bans.

Another primary component of our water conservation program is leakage detection and mitigation. A comprehensive survey of our entire distribution system was conducted by sounding the 149 miles of pipe. A total of 39 leaks were identified and corrected. In addition to the comprehensive survey a new technology was also employed with preset timed devices that sound for pipe vibrations during early morning hours. As a result of these two surveys a total of eleven hydrants were found to be chronically leaking and were replaced.

The peak day (June 29, 2010) water pumpage for FY10 was 4.5 million gallons. The peak month (August 2009) pumpage was 105.6 million gallons.

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. At the end of FY10 a total of 9,096 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 Collection System Rehabilitation
In FY10 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 FY10 a total of 1,520 sewer pipe joints were tested and of that total 707 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:

Calendar Year	MWRA Wastewater Flow Measurements	
	Ave. Daily, MGD	Peak Monthly, MGD
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%)
2009	3.55 (1.09%)	4.62 (1.16%)

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 FY2010 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

	FY08	FY09	FY10
Number of Water Accounts	11,804	11,894	12,016
Water Pumped from Local Wells, mg	786.21	674.99	662.26
Water Pumped from MWRA, mg	319.90	338.48	313.63
Total Water Pumped, mg	1,106.11	1,013.47	975.89
Peak-to-Average Day Water Demand	1.79	1.80	1.70
Total Water Billed, mg	976.28	840.81	780.01
Unaccounted Water, %	11.7	17.0	20.0
New Meters Installed	189	255	184
Hydrants Replaced	8	4	11
Number of Sewer Accounts	8,156	8,156	8,190
Number of House Services Rodded	290	340	329
Feet of Sewer Main Rodded/Flushed	333,983	304,242	297,780