

BARNSTABLE

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3242	Sewer Extension and Hyannis WPCF Improvements	CWS-09-07	\$9,780,000.00
		Principal Forgiveness Amount:	\$1,146,274.00
	<i>This project will implement certain of the recommendations in the town's Comprehensive Wastewater Management Plan (CWMP) as approved by the EOEI including: protecting and improving the health and quality of the coastal areas surrounding the town, extending municipal sewers to ten areas of concern and performing improvements to the Hyannis Water Pollution Control Facility (WPCF), and improving water quality by reducing discharge of nutrients to the estuaries and Zone II groundwater supply areas.</i>		
CWSRF-3301	Energy Efficiency, Wind Turbine and Photovoltaic	CWSG-09-32	\$5,796,000.00
		Principal Forgiveness Amount:	\$5,796,000.00
	<i>The Town of Barnstable operates an advanced treatment facility that processes about 1.97 million gallons of wastewater per day. The facility serves approximately 4,000 direct customers and provides septage processing for additional customers.</i>		
	<i>The green energy upgrades to the plant will include:</i>		
	<i>1. Installing Variable Speed Drives (VSDs) and premium motor upgrades to the plant's pumping and aeration systems- \$150,000;</i>		
	<i>2. Installing up to (2) 250 kW wind turbines onsite- \$1,600,000</i>		
	<i>3. Installing up to a 500 kW solar photovoltaic system (ground-mounted)- \$5,525,000</i>		
	<i>In total, over \$250,000 in annual energy savings (providing over 100% of the electricity needed to power the plant – with excess clean power generation sold back to the electric grid), 1,500 kW of green power generation (solar photovoltaic & wind), and approximately 1,931 tons of carbon dioxide emission reductions will result annually from these green investments.</i>		
		Total:	\$15,576,000.00
		Total Principal Forgiveness Amount:	\$6,942,274.00

BELCHERTOWN

Project Number	Project Name	ARRA PRA	Amount
CWSRF-2905	Sewer Extension & Interceptor	CWS-06-23A	\$586,984.00
		Principal Forgiveness Amount:	\$68,798.00
	<i>The Town of Belchertown is seeking funds for two projects identified in the Town's comprehensive sewer planning document " Supplemental Planning Document Wastewater Treatment Plant & Sanitary Sewer Extensions ", February 27, 1997 & the " Former Belchertown State School Sewer Evaluation Study ", October 2003.</i>		
	<i>The Ledgewood Estates Sewer Extension project is the final phase of Belchertown's comprehensive sewer plan. The project will extend the existing municipal sanitary sewer collection system to allow approximately 68 residential homes which will enable the abandonment the existing septic systems many of them are failing & a source of contamination to surface & ground waters.</i>		
	<i>The Jackson Street Sewer Interceptor. This project involves the replacement of the existing sewer interceptor that is in poor condition. The replacement will allow the interceptor to convey additional flow produced by the Ledgewood Estates Sewer Extension. It will allow also abandonment of some portions of the existing sewer which are known to be in poor condition and are adjacent to and under the existing buildings (part of former Belchertown State School).</i>		
		Total:	\$586,984.00
		Total Principal Forgiveness Amount:	\$68,798.00

BELMONT

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-3097	Sanitary Sewer & Storm Drain Improvements	CWS-08-30	\$8,186,130.00
		Principal Forgiveness Amount:	\$959,463.00

The project involves the elimination of sanitary sewer illicit connections entering the storm drainage system tributary to the Wellington Brook, mitigating sanitary sewer overflows in the Winn's Brook Area and replacing two 40-year old sewage pumping stations.

Total:	\$8,186,130.00
Total Principal Forgiveness Amount:	\$959,463.00

BILLERICA

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3058	Tertiary Wastewater Treatment Plant Construction	CWS-07-21	\$10,792,389.00
		Principal Forgiveness Amount:	\$1,264,932.00

The project involves the installation of a CoMag tertiary treatment system, the design of which is mandated by the NPDES Permit MA0101711 to reduce phosphorous and aluminum concentrations in the Letchworth Avenue wastewater treatment plant (WWTP) effluent. Three 40-foot peripheral feed clarifiers will be replaced by a 60-foot center-feed clarifier to be built adjacent to the other three existing center-feed clarifiers. A pump station will be constructed to forward the flow to the CoMag system, as well as modifications to sludge handling, scum handling, flow splitting and disinfection. The CoMag system monitoring will be provided by a SCADA system with the ability to expand and monitor the entire WWTP.

Total:	\$10,792,389.00
Total Principal Forgiveness Amount:	\$1,264,932.00

BROCKTON

Project Number	Project Name	ARRA PRA	Amount
CWSRF-2914	Phase VI-IX Sewer Rehabilitation & Phase IV WWTF	CWS-08-35	\$11,007,885.00
		Principal Forgiveness Amount:	\$1,290,190.00

The project is for the rehabilitation of the aging sewer system under multiple contracts. The completed project will eliminate environmental and public health issues associated with sewer system overflows and discharge violations at the WWTF.

Total:	\$11,007,885.00
Total Principal Forgiveness Amount:	\$1,290,190.00

CANTON

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3011	Green Lodge Interceptor Sewer Replacement	CWS-07-38	\$4,243,000.00
		Principal Forgiveness Amount:	\$497,305.00

This project is for the replacement of the existing 18-inch diameter Green Lodge Interceptor Sewer with a new 30-inch diameter sewer. The portion of sewer to be replaced is situated between the MWRA Neponset Valley Interceptor in the Town of Westwood and Cedar Drive in the Town of Canton. The replacement sewer will consist primarily of new pipe installed along the existing sewer alignment, but a portion of the new pipe will be laid along the new alignment on property owned by Milton-Hoosic Golf Club. Approximately 8,950 linear feet of 30-inch diameter PVC sewer pipe will be installed, 1,560 linear feet of existing 18-inch diameter sewer rehabilitated, and 1,250 linear feet existing interceptor sewer abandoned. The project will provide the capacity required to properly accommodating existing and future peak hours design flows.

Total:	\$4,243,000.00
Total Principal Forgiveness Amount:	\$497,305.00

CHARLTON

Project Number	Project Name	ARRA PRA	Amount
CWSRF-2982	Wastewater Treatment Plant Upgrade	CWS-07-36	\$2,827,276.00
	Principal Forgiveness Amount:		\$331,374.00
			<i>This project is for an upgrade the Charlton wastewater treatment plant. The objectives are to provide capacity for the existing sewer service area that meets its permitted capacity of 0.45 MGD, upgrade the plant to comply with its current NPDES permit requirements for allowable concentrations of ammonia, phosphorus, aluminum and copper.</i>
Total:			\$2,827,276.00
Total Principal Forgiveness Amount:			\$331,374.00

CHATHAM

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3245	Collection System Improvements	CWS-09-16	\$12,243,500.00
	Principal Forgiveness Amount:		\$1,435,011.00
			<i>CWS-09-16 Collection System Improvements The project is the first step in a multi phase project for the Town of Chatham to expand their wastewater facilities to meet the needs of the Town. The CWMP and EIR have provided plans and approvals for the expansion of the existing WWTF and large scale expansion of the wastewater collection system in Town of Chatham. The plan is a comprehensive strategy for wastewater and nitrogen management in Chatham for a 20-year period. The collection system improvements under this project initiate sewerage of the areas that have been identified as needing collection systems in the recommended plan. The project includes expansion of the collection system backbone along Route 28 and sewer extensions along portions of George Ryder Road, Barn Hill Road, Vineyard Ave., Meadow View Road and other adjacent roads. The project also includes 5 wastewater pump stations. \$12,243,500.00</i>
Total:			\$12,243,500.00
Total Principal Forgiveness Amount:			\$1,435,011.00

CHELMSFORD

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3132	Lateral Sewers Phases 4H & 4I	CWS-08-23	\$7,303,063.00
	Principal Forgiveness Amount:		\$855,962.00
			<i>This project, Phase 4H and 4I of the Chelmsford Lateral Sewer Project will reduce surface water pollution in Chelmsford and waters down stream. Earlier phases of the sewer project have accomplished this goal by eliminating inadequate on-site wastewater disposal systems. This project meets the following objectives: Reduces Chelmsford's adverse impacts on the impaired waters identified on the Massachusetts Year 2002 Integrated List of Waters. Protects Chelmsford's aquifers from contamination due to inadequate or failing on-site septic systems. Prevents further degradation of wetlands and rare species from contamination associated with on-site septic systems. Eliminates ALL illicit discharges for compliance with the NPDES Phase II Storm water rule. Allows every Chelmsford resident a permanent means to comply with MA Reg. 310 CMR 15.000 (Title 5) without enduring great financial burden.</i>
CWSRF-3132	Lateral Sewers Phases 4H & 4I	CWS-09-28	\$6,179,624.00
	Principal Forgiveness Amount:		\$724,289.00
			<i>This project, Phase 4H and 4I of the Chelmsford Lateral Sewer Project will reduce surface water pollution in Chelmsford and waters down stream. Earlier phases of the sewer project have accomplished this goal by eliminating inadequate on-site wastewater disposal systems. This project meets the following objectives: Reduces Chelmsford's adverse impacts on the impaired waters identified on the Massachusetts Year 2002 Integrated List of Waters. Protects Chelmsford's aquifers from contamination due to inadequate or failing on-site septic systems. Prevents further degradation of wetlands and rare species from contamination associated with on-site septic systems. Eliminates ALL illicit discharges for compliance with the NPDES Phase II Storm water rule. Allows every Chelmsford resident a permanent means to comply with MA Reg. 310 CMR 15.000 (Title 5) without enduring great financial burden.</i>

Total: \$13,482,687.00
 Total Principal Forgiveness Amount: \$1,580,251.00

CHICOPEE

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3177	Combined Sewer Overflow Projects	CWS-09-02	\$22,876,874.00
		Principal Forgiveness Amount:	\$2,681,306.00

The Combined Sewer Overflow Project consists of three contracts: (1) Area 8 Upper Granby Road, (2) Area 31.3 Broadway & Beauchamp, (3) Area 34.3 Cecil Drive. Construction of these three projects will result in a significant reduction of CSO volumes and frequencies, eliminating approximately 20% of Chicopee's total annual CSO volume and will also provide needed relief for a number of sewer back-up conditions in some of the most seriously affected high priority areas.

Total: \$22,876,874.00
 Total Principal Forgiveness Amount: \$2,681,306.00

CRPCD

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3300	Energy Efficiency and Photovoltaic Installation	CWSG-09-25	\$847,583.00
		Principal Forgiveness Amount:	\$847,583.00

The Charles River Pollution Control District operates an advanced, nutrient removal treatment facility that can process up to 4.6 million gallons of wastewater per day. The facility treats the combined wastewater and domestic septage from the towns of Bellingham, Franklin, Medway, Millis, Norfolk, Wrentham, Dover and Sherborn.

*The green energy upgrades to the plant will include:
 1. Upgrading the existing fine bubble aeration system by installing two (2) new energy-efficient turbo blowers - \$835,000;
 2. Installing up to a 40 kW solar photovoltaic system (roof -mounted) - \$60,000.*

In total, over \$102,000 (22%) in annual energy savings, 40 kW of green power generation (solar photovoltaic), and approximately 558 tons of carbon dioxide emission reductions will result annually from these green investments.

Total: \$847,583.00
 Total Principal Forgiveness Amount: \$847,583.00

Dighton Rehoboth Regional School District

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3123	WWTF & Dispersal System Upgrade	CWS-08-02	\$650,000.00
		Principal Forgiveness Amount:	\$76,184.00

The project is the replacement of the existing wastewater treatment system at the Dighton Rehoboth Regional High School with an onsite treatment system (packed-bed textile aerobic treatment units) followed by effluent dispersal through pressure distribution networks to subsurface leaching systems on school property. Wastewater from the school is currently treated by an aerobic treatment system with discharge to a small stream associated with Poppasquash Swamp, which drains into the Segreganset River then into the Taunton River. The existing wastewater treatment system will not be able to meet the new NPDES permit requirements. Recent monitoring of the existing system shows that periodically high levels of fecal coliform and/or residual chlorine are being released at the outfall as well as periodic releases of high nutrient levels. The project will eliminate the threat to public health and the environment by eliminating the outfall discharge.

Total: \$650,000.00
 Total Principal Forgiveness Amount: \$76,184.00

DRACUT

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3139	Contract 27 Peters Pond West Area Sewers	CWS-08-18	\$6,288,764.00
		Principal Forgiveness Amount:	\$737,080.00
	<i>The project work involves the construction of 25,200 LF of sanitary sewers, 2,800 LF of force main and 2 pump stations in Peters Pond West Area.</i>		
CWSRF-3138	Arlington St. Area Sewers	CWS-08-15	\$2,546,716.00
		Principal Forgiveness Amount:	\$298,490.00
	<i>The project work includes the construction of 14,700 LF of sanitary sewers and the elimination of an existing pump station in the Arlington Street area.</i>		
		Total:	\$8,835,480.00
		Total Principal Forgiveness Amount:	\$1,035,570.00

EASTHAMPTON

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3294	Wastewater Outfall Pipe to CT River Repair	CWS-08-40	\$445,000.00
		Principal Forgiveness Amount:	\$52,157.00
	<i>This project, using emergency set aside funding, includes permanent protection/stabilization of the damaged wastewater treatment facility outfall and adjacent stone culvert; and restoration of the surrounding embankment and channel areas that were impacted by river actions.</i>		
		Total:	\$445,000.00
		Total Principal Forgiveness Amount:	\$52,157.00

FAIRHAVEN

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3308	Fairhaven Green Energy projects	CWSG-09-27	\$7,867,000.00
		Principal Forgiveness Amount:	\$7,867,000.00
	<i>The Town of Fairhaven operates the Water Pollution Control Facility and the West Island Treatment Plant. The green energy upgrades will include three contracts. Contract-1: Construction of anaerobic sludge digestion system with combined heat/power recovery at the WPCF and installing high efficiency motors, variable frequency drives, and heating & lighting improvements. Contract-2: Replacement of HVAC system with new geothermal heating system at the Operation Building and replacement of roofing systems on the Operation, Sludge, and Chlorination buildings at the WPCF. Contract-3: Solar Photovoltaic Installation at WPCF, a pump station, DPW building, and West Island Treatment Plant.</i>		
		Total:	\$7,867,000.00
		Total Principal Forgiveness Amount:	\$7,867,000.00

FALMOUTH

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-3297	Wind Energy Facility "WIND 2"	CWSG-09-36	\$4,865,000.00
		Principal Forgiveness Amount:	\$4,865,000.00
	<i>The Town of Falmouth operates an advanced, nutrient-removal system that has a capacity of 1.2 million gallons per day, and processes approximately 0.384 million gallons of wastewater per day.</i>		
	<i>The green energy upgrades to the plant will include:</i>		
	<i>1. Installing a 1.65 Megawatt wind turbine at the wastewater plant- \$4,992,000;</i>		
	<i>In total, over \$400,000 in annual energy savings, 1,650 kW of green power generation (wind), and approximately 2,400 tons of carbon dioxide emission reductions will result annually from these green investments.</i>		
		Total:	\$4,865,000.00
		Total Principal Forgiveness Amount:	\$4,865,000.00

FRAMINGHAM

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3290	Central Street Siphon/Sudbury Interceptor	CWS-09-11	\$6,085,386.00
		Principal Forgiveness Amount:	\$713,243.00
	<i>This project is a component of the Capital Improvement Program for the Town's collection system that includes elimination of the two siphons under the Sudbury River and rehabilitation of the Sudbury River interceptor from Central Street continuing south along the Sudbury River to Worcester Road.</i>		
CWSRF-3291	East Framingham Sewer Improvements	CWS-09-17	\$38,066,137.00
		Principal Forgiveness Amount:	\$4,461,577.00
	<i>Phase 1 of this project includes the elimination of three existing pumping stations and approximately 22,000 feet of existing force main by combining two separate major pumping stations into one and by redirecting flow by gravity from the tributary areas of two other pumping stations to a new interceptor sewer installed at a lower depth. This project represents the central project in a series of proposed projects that are recommended in the recently completed CWMP.</i>		
CWSRF-3059	Wastewater Collection System Improvements	CWS-07-27A	\$3,919,474.00
		Principal Forgiveness Amount:	\$459,386.00
	<i>This project will improve various aspects of the Framingham wastewater collection system. The first part of the project is to improve the Beaver Dam Brook interceptor to alleviate hydraulic deficiencies and improve flow characteristics. The second part of the project is to replace an existing sewer and siphon on Concord and School Streets to improve hydraulic capacity and to eliminate sanitary sewer overflows (SSOs) to the Sudbury River. The third part of the project is the project replacement of four existing wastewater pumping stations located on Michaud Drive, Cypress Street, Lakeview Road and Ransom Road. In addition to age and condition issues, three of the pumping stations have insufficient capacity to handle existing peak wet weather flows, which increase the probabilities of sewer back-ups and potential SSOs.</i>		
		Total:	\$48,070,997.00
		Total Principal Forgiveness Amount:	\$5,634,206.00

GLOUCESTER

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3142	Wastewater Treatment Plant Improvements	CWS-08-33	\$6,407,250.00
		Principal Forgiveness Amount:	\$750,968.00
	<i>The project involves upgrades and improvements to the existing wastewater treatment plant on Essex Avenue, which was constructed in 1984. Failures of systems and equipment have been increasing and permit violations have occurred. The City is currently negotiating an Administrative Consent Order (ACO) with MassDEP.</i>		
CWSRF-2936	SSES/Sewer Rehab (Washington St. Area)	CWS-06-45	\$4,306,065.00
		Principal Forgiveness Amount:	\$504,696.00
	<i>The work includes a field investigation program; design infrastructure required for I/I removal; and construction and construction management of I/I removal activities on Washington St. Drain area.</i>		

Total: **\$10,713,315.00**
 Total Principal Forgiveness Amount: \$1,255,664.00

GLSD

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3295	Energy Efficiency & Photovoltaic	CWSG-09-23	\$4,922,384.00
		Principal Forgiveness Amount:	\$4,922,384.00

The Greater Lawrence Sanitary District Facility operates a secondary treatment facility, which processes on average 50 million gallons of wastewater per day. Its Biosolids Drying Facility fully utilizes waste methane digester gas on-site for sludge drying - thereby reducing auxiliary fuel costs by up to \$600,000 annually. The facility treats municipal and industrial wastes from Andover, N. Andover, Lawrence, Methuen, and Salem, NH.

*The green energy upgrades to the plant will include:
 1. Installing Variable Speed Drives (VSDs) to Riverside pumping station and other wastewater motor / pumping systems; insulating digesters and perform process maintenance, improve heat recovery system, boiler and temperature control replacements, and Energy Management System; and Implementing operational measures, aeration, plant water pumping system and lighting improvements-;
 2. Installing up to a 310 kW solar photovoltaic system (roof and ground-mounted)-;*

In total, over \$1,500,000 in annual energy savings (52%), 410 kW of green power generation (solar photovoltaic), and approximately 5,887 tons of carbon dioxide emission reductions will result annually from these green investments

Total: **\$4,922,384.00**
 Total Principal Forgiveness Amount: \$4,922,384.00

HOPKINTON

Project Number	Project Name	ARRA PRA	Amount
CWSRF-2942	New Fruit Street WWTF, Disposal Beds, & Force Main	CWS-06-37	\$10,490,441.00
		Principal Forgiveness Amount:	\$1,229,542.00

The project is the construction of the Fruit Street Wastewater Treatment Facility (WWTF), subsurface effluent disposal beds, and a force main at the Fruit Street parcel. This is the first part of a multiple phase project recommended in the Town's Phase III CWMP/DEIR. Currently the Town does not have a treatment facility and all existing collection system sewage flows are discharged to the Town of Westborough WWTF with final discharge of treated effluent into the Assabet River. The Fruit Street WWTF will handle the additional wastewater needs identified in the Phase I CWMP - Needs Analysis. The Fruit Street parcel is located within the Concord River Basin and Whitehall Brook sub-basin. The sub-basin was identified in the EIR as a stressed basin in need of aquifer recharge. The new Fruit Street WWTF with subsurface effluent disposal beds will provide aquifer recharge.

Total: **\$10,490,441.00**
 Total Principal Forgiveness Amount: \$1,229,542.00

LEOMINSTER

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3209	WPCF Upgrades	CWS-09-20	\$20,000,000.00
		Principal Forgiveness Amount:	\$2,344,119.00

The City of Leominster's secondary wastewater treatment facility has been operational since 1983 with capacity to handle 9.3 million gallons per day. The facility has yet to receive any significant upgrades. The facility discharges to North Nashua River with ultimate discharge to the Atlantic Ocean via the Merrimack River under EPA NPDES Permit (MA-0100617) issued on Sep. 28. 2006.. The facility is currently not in compliance with its current discharge permit, and as a result has entered into an Administrative Consent Decree with EPA which requires the facility to comply with its total Phosphorous discharge limits no later than Nov. 30, 2011 This project will implement all treatment facility upgrades and process modifications required to achieve compliance with Total Phosphorous discharges limits mandated in the 2006 EPA NPDES Permit.

Total: **\$20,000,000.00**
 Total Principal Forgiveness Amount: \$2,344,119.00

LOWELL

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3057	Phase I CSO LTCP	CWS-08-16	\$10,585,659.00
		Principal Forgiveness Amount:	\$1,240,702.00

The project is for the construction of new drains and/or sewers to complete separation of portions of the combined sewer area in the Warren Street Drainage Basin, as part of the City's EPA-approved Phase I Long-Term CSO Control Plan per USEPA AO No. 03-22. The purpose of the project is to reduce untreated CSO discharges to the Merrimack and Concord Rivers. The Phase I LTCP Implementation Plan includes WWTP Modifications for wet weather treatment, CSO Diversion Structure Modifications for in-line storage and Sewer Separation in key areas of the combined sewer system.

Total: **\$10,585,659.00**
 Total Principal Forgiveness Amount: \$1,240,702.00

Lowell Regional Wastewater Utility

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3136	WWTF & Collection System Improvements Phase 1	CWS-08-24	\$22,824,659.00
		Principal Forgiveness Amount:	\$2,675,185.00

The improvements to be implemented under this Phase I Capital Improvements Program will address equipment life-cycle and maintenance requirements and will improve overall reliability for treatment of sewage and wet weather flow and address deficiencies in the wastewater collection system including pumping facilities and piping.

CWSRF-3298	Green Roof and Photovoltaic Installation	CWSG-09-24	\$4,666,880.00
		Principal Forgiveness Amount:	\$4,666,880.00

The Lowell Regional Wastewater Plant, an ISO 14001- Environmental Management System - approved facility, operates a secondary treatment facility that processes 31 million gallons of wastewater per day. The facility treats the combined wastewater, stormwater and domestic septage from the City of Lowell and the towns of Chelmsford, Dracut, Tewksbury and Tyngsboro.

*The green energy upgrades to the plant will include:
 1. Upgrading the existing fine bubble aeration system by installing two (2) new energy-efficient turbo blowers- \$3,039,500;
 2. Installing up to a 90 kW solar photovoltaic system (roof and ground-mounted)- \$630,000;
 3. Installing 32,000 sq. ft. of green roofs on (5) buildings- \$1,000,000.*

In total, over \$66,000 (6%) in annual energy savings, 90 kW of green power generation (solar photovoltaic), and approximately 400 tons of carbon dioxide emission reductions will result annually from these green investments.

Total: **\$27,491,539.00**
 Total Principal Forgiveness Amount: \$7,342,065.00

LUDLOW

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3074	Combined Sewer Overflow	CWS-08-05	\$3,942,805.00
		Principal Forgiveness Amount:	\$462,120.00

The main objective of this project is the separation of a combined sewer system existing in the Hubbard Street area of the Town of Ludlow. The Hubbard Street sewer separation will reduce environmental stresses placed on the Chicopee River due to discharged, untreated sanitary waste. The new sewer system will also address dangers to public health by decreasing backups of the combined stormwater and sanitary waste. The recreational uses of the Chicopee River, which include boating swimming and fishing, will also be protected.

Total: \$3,942,805.00
 Total Principal Forgiveness Amount: \$462,120.00

MARION

Project Number	Project Name	ARRA PRA	Amount
CWSRF-1725	WWTF and Collection System Improvements	CWS-03-09D	\$1,020,000.00
		Principal Forgiveness Amount:	\$119,550.00

The project includes upgrading the Marion Wastewater Treatment facility, rehabilitating portions of the collection system, and extending sewers to three densely populated areas of town with poorly functioning or failing septic systems. These improvements will reduce the nitrogen loading to Aucoot Cove and Buzzards Bay, in addition to eliminating sanitary sewer overflows, and pollution to the Weweantic and Sippican Rivers from failed septic systems

Total: \$1,020,000.00
 Total Principal Forgiveness Amount: \$119,550.00

MARLBOROUGH

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3101	Westerly Wastewater Treatment Facility Upgrade	CWS-08-25	\$24,004,442.00
		Principal Forgiveness Amount:	\$2,813,463.00

The Westerly Wastewater Treatment Facility treats wastewater from the western parts of the city as well as the Town of Northborough and discharges to the Assabet River. The Assabet River is designated by MassDEP as impaired due to excessive pollutants such as metals, pathogens, nutrients, low dissolved oxygen, and noxious aquatic plants. This project will install a phosphorous removal system to comply with the new NPDES permit discharge level of 0.1 mg/l of Total Phosphorous in the effluent. It will also include UV disinfection system that will help lower the concentration of fecal coliform and eliminate Chlorine in the effluent.

Total: \$24,004,442.00
 Total Principal Forgiveness Amount: \$2,813,463.00

MAYNARD

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3146	Wastewater Treatment Plant Upgrade-Phosphorus Rem	CWS-08-31	\$10,677,000.00
		Principal Forgiveness Amount:	\$1,251,408.00

This project is for the construction of upgrades and improvements to the Maynard wastewater treatment plant (WWTP) to meet the new NPDES Permit phosphorous limit of 0.1 mg/l. The project will include a CoMag magnetic separation process for low-level phosphorus removal. The project will insure that NPDES permit requirements will be met, that water quality standards will be met and ultimately the water quality conditions of the Assabet River will be improved.

Total: \$10,677,000.00
 Total Principal Forgiveness Amount: \$1,251,408.00

MWRA

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-3280	CSO Phase 10	CWS-09-03	\$35,832,140.00
		Principal Forgiveness Amount:	\$13,763,340.00
	<i>The project involves additional work under the DEP approved CSO program which consists of Sewer Separation in the following areas: South Dorchester (BOS088-089, BOS090); Stony Brook (MWR023); Fort Point Channel (BOS072/073); Reserved Channel; Bulfinch Triangle; Brookline; Union Park Detention/Treatment Facility; East Boston Branch Sewer Relief (BOS003-014); BOS019 Storage Conduits; MWRO03 Gate & Siphon; Charles River CSO Controls; North Dorchester Bay Facilities; Morrissey Boulevard Drain.</i>		
CWSRF-3134	Deer Island Treatment Plant Improvements	CWS-09-35	\$8,500,000.00
		Principal Forgiveness Amount:	\$4,236,660.00
	<i>This project is included in the Deer Island Treatment Plant Asset Protection Program, in order to ensure that all of the structures and equipment installed at Deer Island remain in good working condition, and/or are replaced when needed.</i>		
CWSRF-3309	DITP Photovoltaic Installation	CWSG-09-19	\$735,000.00
		Principal Forgiveness Amount:	\$735,000.00
	<i>The green energy upgrades to the plant will include: 1. Installing of an 180kW photovoltaic system on the Maintenance/Warehouse building at Deer Island. The installation of the photovoltaic panels will cover more than 17,400 square feet of roof on the northern and eastern sections of the building- \$735,000.</i>		
CWSRF-3317	MWRA DeLauri Pump Station Wind Turbine	CWSG-09-21	\$4,750,000.00
		Principal Forgiveness Amount:	\$4,750,000.00
	<i>The project includes a single 1500 kW wind turbine that would produce approximately 3,000,000 kWh/yr of renewable electricity and cost an estimated \$4.75 million. The DeLauri Pump Station, formerly the Charlestown Pump Station, is a sewerage pumping station adjacent to the Mystic River just over 2 miles north of the Boston center. MWRA completed a wind feasibility study in June 2009 and it was concluded that this project has the potential for significant financial and environmental benefit to MWRA. In June 2009, MWRA received a "Notice of No Hazard to Air Navigation" from FAA for a proposed wind turbine project at this location for height not to exceed 386 ft above ground level, a decision giving height approval for construction of a 1500kW wind turbine.</i>		
		Total:	\$49,817,140.00
		Total Principal Forgiveness Amount:	\$23,485,000.00

NEW BEDFORD

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3256	CSO Main Interceptor PCB Contam. Grit removal	CWS-09-12	\$19,300,000.00
		Principal Forgiveness Amount:	\$2,262,075.00
	<i>This project is for the removal of grit and sediments from the existing New Bedford Sewer System. The Interceptor Grit Removal Program is located along the main interceptor in New Bedford extending for a length of approximately four miles from the City's WWTF outfall at Taber Park to the intersection of Acushnet Avenue and Pearl Street. The objective of the Interceptor Grit Removal Program is to improve water quality in coastal receiving waters by removing PCB contaminated sediment from the City's main intercepting sewer ultimately leading to the reduction in CSO's. The sediments utilize capacity within the interceptor leading to street flooding and combined sewer overflow (CSO) discharges. Removal of the sediment will provide additional capacity during wet weather events, mitigate street flooding, eliminate the potential for dry weather discharges and reduce the volume and frequency of combined sewer overflow (CSO) from the New Bedford Sewer System. Reducing CSO's and Stormwater discharges will have direct benefits in terms of both water quality improvements, reduction in nutrient loading and restoration of use.</i>		
		Total:	\$19,300,000.00
		Total Principal Forgiveness Amount:	\$2,262,075.00

NEWBURYPORT

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-3313	Energy Efficiency and Photovoltaic Installation	CWSG-09-31	\$3,055,000.00
		Principal Forgiveness Amount:	\$3,055,000.00

The green energy upgrades to the plant will include:
 1. Replacing existing process operations building with a more energy-efficient structure. Energy efficient improvements include: reconstruction of the main operations building using energy efficient (LEED) design principles (including replacement of existing belt filter press with rotary press, aeration system upgrade of existing mechanical surface aerators, and pump replacement with higher efficiency equipment); lighting, heating and ventilation systems upgrade; and upgrading building exterior (windows and insulation) - \$2,600,000;
 2. Installing up to a 65 kW solar photovoltaic system onsite- \$455,000

CWSRF-3266	WWTF Improvements	CWS-09-10	\$11,592,123.00
		Principal Forgiveness Amount:	\$1,358,666.00

The objective of this project is to modernize and improve the unit processes identified by the Preliminary WWTF Evaluation and Modification Study, to meet the current and future flows and loads to the wastewater treatment plant, and to prevent potential future NPDES permit exceedances to the Merrimack River. Also included are improvements to support facilities (buildings, electrical, instrumentation & control systems, etc.) and aeration improvements, previously submitted for SRF funding under the Plum Island project.

Total:	\$14,647,123.00
Total Principal Forgiveness Amount:	\$4,413,666.00

NORTH ATTLEBOROUGH

Project Number	Project Name	ARRA PRA	Amount
CWSRF-2813	Construction of I/I Rehabilitation	CWS-05-32	\$441,123.00
		Principal Forgiveness Amount:	\$51,702.00

This project includes sewer rehabilitation for removal of infiltration/inflow (I/I) occurring within North Attleborough's collection system reported in the 2004 Sewer System Evaluation Survey (SSES). Contract-1 and Contract-2 I/I rehabilitation work includes: cleaning, inspection and cured-in-place pipe lining of sanitary sewer pipe, hydraulic cement mortar grouting or lining of sanitary service connections, post installation TV inspection, and low-pressure air testing. The North Attleborough Wastewater Treatment Facility (WWTF) violated the NPDES permit due to excessive I/I flows entering the collection system during rainfall periods. This project will mitigate future NPDES permit and water quality violations. This project should improve water quality and aquatic life within the Ten Mile River at the discharge point of the WWTF.

Total:	\$441,123.00
Total Principal Forgiveness Amount:	\$51,702.00

PALMER

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3176	Sewer Separation Project	CWS-09-08	\$5,666,924.00
		Principal Forgiveness Amount:	\$664,197.00

The project work implements the fourth phase of the CSO Control Program - eliminate the remaining six CSOs by constructing a new sanitary sewer collection system within each of the drainage areas.

Total:	\$5,666,924.00
Total Principal Forgiveness Amount:	\$664,197.00

PITTSFIELD

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-3168	WWTP Improvement	CWS-09-26	\$2,380,400.00
		Principal Forgiveness Amount:	\$278,997.00

The project work involves the replacement of three existing mechanically cleaned bar screens, which were installed within the original headworks in 1963 of the Pittsfield Wastewater Treatment Plant. These existing screens are beyond their design life, are severely corroded and prone to mechanical failure. A traveling rack bar screen is the proposed alternative for the wastewater treatment plant.

CWSRF-3296	Energy Efficiency, Photovoltaic & CHP Installation	CWSG-09-22	\$13,741,622.00
		Principal Forgiveness Amount:	\$13,741,622.00

The City of Pittsfield operates an advanced, nutrient-removal treatment facility that processes approximately 10.8 million gallons of wastewater per day. The facility treats municipal and industrial wastes from Pittsfield, Dalton, Hinsdale, Lanesborough, and North Lenox.

*The green energy upgrades to the plant will include:
 1. Upgrading the existing single-speed mechanical mixing system to a fine bubble aeration system, performing heating and lighting upgrades;
 2. Upgrading the existing anaerobic sludge digestion system by installing a 195 kW biomass (sludge) cogeneration system for on-site electric power generation;
 3. Installing up to a 1,575 kW solar photovoltaic system (roof and ground-mounted);*

In total, over \$647,000 (89%) in annual energy savings, 1,770 kW of green power generation (solar photovoltaic & Combined Heat and Power -CHP), and approximately 3,252 tons of carbon dioxide emission reductions will result annually from these green investments.

Total:	\$16,122,022.00
Total Principal Forgiveness Amount:	\$14,020,619.00

SAUGUS

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3275	SSO Reduction	CWS-09-01	\$2,494,943.00
		Principal Forgiveness Amount:	\$292,422.00

The project includes continued comprehensive sewer system rehabilitation of Subsystem PS-5 and Lincoln Avenue Pump Station upgrades for Sanitary Sewer Overflow (SSO) reduction.

Total:	\$2,494,943.00
Total Principal Forgiveness Amount:	\$292,422.00

SCITUATE

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3262	Rosa's Lane Area Sewer	CWS-09-06	\$394,959.00
		Principal Forgiveness Amount:	\$46,292.00

The project is for the construction of gravity sewers to the Rosa's Lane Area of Scituate, with flows going to the existing Scituate WWTF as recommended in the Facilities Plan and Sewer Expansion Study 2001 for the Town of Scituate. The objective of providing sewers to the Rosa's Lane Area is to reduce pollution caused from failing or malfunctioning private on-site sewage disposal systems. This will be accomplished by connecting the properties within the project area to the upgraded wastewater treatment plant via existing wastewater collection and transmission facilities. Widespread failures of on-site disposal systems have a direct negative effect on public health from exposure to raw or inadequately treated wastewater at breakout locations. The sensitive water resources are located in the Satuit Brook Drainage Basin which discharges directly to Scituate Harbor. The project includes approximately ½ mile of sewer collection mains with individual on-lot grinder pumps. The project will result in improved ground and surface water quality in Satuit Brook and surrounding wetlands.

Total:	\$394,959.00
Total Principal Forgiveness Amount:	\$46,292.00

SOMERSET

Project Number	Project Name	ARRA PRA	Amount
CWSRF-2968	Upgrade Pump Stations	CWS-06-42A	\$728,000.00
		Principal Forgiveness Amount:	\$85,326.00
	<i>The project includes upgrades to the Grove Avenue Pumping Station and the Angus Street Pumping Station to increase pumping capacity at both stations. The project objective is to eliminate a threat to public health and the environment associated with sewer overflows to the roadways and Labor-in-Vain Brook. The pump station upgrades project will prevent sewer overflows, thereby improving surface and groundwater water quality in the Taunton River Area and the Somerset Marina, protect Town's beaches, parks and conservation areas, as well as wetlands.</i>		
		Total:	\$728,000.00
		Total Principal Forgiveness Amount:	\$85,326.00

SOUTHBRIDGE

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3100	Brownfields Redevelopment	CWS-08-38	\$1,282,334.00
		Principal Forgiveness Amount:	\$150,297.00
	<i>This project is one stage in an ongoing brownfields redevelopment of a municipally-owned property at 185 Guelphwood Road in Southbridge. This stage includes soil and sediment cleanup and contaminated stormwater management at the site. Work includes: removal of PCB contaminated soil from the southern portion of the property; removal of contaminated sediment and surface water from Cotton Pond; construction of a stormwater detention pond; installation of stormwater catch basins, drainage channels, and piping; and construction of an asphalt pavement over contaminated areas. The project will clean up the site and prevent contamination of stormwater runoff from contact with contaminated soil. The project will allow redevelopment of the building on the site as a multi-use municipal building.</i>		
		Total:	\$1,282,334.00
		Total Principal Forgiveness Amount:	\$150,297.00

Springfield Water and Sewer Commission

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3091	Combined Sewer Separation	CWS-08-36	\$22,251,162.00
		Principal Forgiveness Amount:	\$2,607,968.00
	<i>The project work involves the separation of combined sewers in areas 007 and 049 in the City of Springfield in accordance with Administrative Order (AO #04-13) of July 22, 2004. The work will reduce surcharging and flooding of the collection system, reduce annual activations and volume of untreated CSO discharges, reduce annual fecal coliform bacterial loads, and reduce exceedances of water quality criteria in the Connecticut River.</i>		
		Total:	\$22,251,162.00
		Total Principal Forgiveness Amount:	\$2,607,968.00

STURBRIDGE

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-3198 **Sturbridge WWTF Improvements** **CWS-09-09** **\$16,989,000.00**
Principal Forgiveness Amount: \$1,991,212.00

This project is for the proposed Sturbridge WWTF Upgrade Project. The upgrade is necessary to meet future, more stringent NPDES regulations on BOD, TSS, total Phosphorus, and total nitrogen and to accommodate the expansion of the Town's municipal sewer system as recommended by the 2008 Sturbridge Comprehensive Wastewater Management Plan. The proposed Sturbridge WWTF Upgrade project will upgrade the facility to treat 1.3 MGD and to meet future more stringent regulations. The completed WWTF will produce: improved water quality in the Quinebaug River, better protection of public and private water supplies near the river and alleviate resident's problems with failing and or poorly functioning septic systems.

Total: \$16,989,000.00
Total Principal Forgiveness Amount: \$1,991,212.00

TAUNTON

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3127	Phases 5-7 SSES and Pump Station Upgrades	CWS-08-21	\$6,000,000.00
		Principal Forgiveness Amount:	\$633,615.00

The project includes phases 5 through 7 of ongoing sewer system evaluation and rehabilitation work as well as pump station upgrades. The project will help eliminate sanitary and combined sewer overflows and thereby protect public health. Implementation of the project is in compliance with an Administrative Consent Order issued by the Mass DEP.

CWSRF-3264	Sewer Extensions & Septic Sys. Replacement	CWS-09-13	\$4,733,600.00
		Principal Forgiveness Amount:	\$554,806.00

The proposed project consists of gravity sewer and low pressure sewer extensions to multiple locations in Taunton, MA. The project is comprised of four parts for sewer extensions to: Winthrop Street between Joseph Warner Boulevard and Range Avenue, on Williams Street and the associated neighborhoods of Duffy Drive and Donna Terrace, Davenport Terrace and Replacement of three failed community septic systems with new septic tanks and pressure-dosed infiltration systems servicing Matthews Drive. The objective of installing sewer in these needs areas is to reduce and avoid potential contamination of the Three Mile River from failing septic systems in the area. Contamination from the Needs Areas has the potential to adversely affect the Three Mile River. By sewerage these two areas, multiple sources of contamination to these rivers will be eliminated. This project, in association with previous and future projects, will work towards the elimination of potential public health threats and nuisances resulting from elevated levels of nutrients and pathogens in the rivers.

Total: \$10,733,600.00
Total Principal Forgiveness Amount: \$1,188,421.00

UBWPAD

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3299	Energy Efficiency and Photovoltaic Installation	CWSG-09-33	\$3,041,039.00
		Principal Forgiveness Amount:	\$3,041,039.00

The project involves the installation of 275KW of ground-mounted solar photovoltaic panels and associated site work, inverters, electrical conduits and connections to existing electrical substations. The panels will be gold-connected and supply renewable electricity to the wastewater treatment facility.

CWSRF-3197	Phase III WWTF Improvements	CWS-09-18	\$31,950,000.00
		Principal Forgiveness Amount:	\$3,744,730.00

This project will implement the third phase of the four-phase project plan recommendations of the 2001 Regional Wastewater Treatment Facilities Plan. The Phase III improvements will increase the capacity of the sludge collection, pumping, storage, and handling systems. Upon completion of this project the treatment plant will be able to process sludge volumes generated by high flow events as well as allow all year advanced nutrient removal. This project will also evaluate and implement alternative and efficient energy systems.

Total: **\$34,991,039.00**
 Total Principal Forgiveness Amount: \$6,785,769.00

WALTHAM

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3144	Illicit Connections Removal	CWS-08-37	\$528,401.00
		Principal Forgiveness Amount:	\$61,932.00

This project consists of removing illegal sump pumps detected during inspections. Private contractors will be selected to perform sump pump redirection for sewer bank credits. This project is in response to MassDEP Amended Consent Order No. ACOP-NE-04-1N004.

Total: **\$528,401.00**
 Total Principal Forgiveness Amount: \$61,932.00

WAREHAM

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3022	Sewer System Extension	CWS-07-37	\$12,727,000.00
		Principal Forgiveness Amount:	\$1,491,680.00

The Town's 2002 Comprehensive Wastewater Management Plan (CWMP) identified twelve priority areas of the town as needing sewers. Sewer construction is complete in two areas and under way in three other areas. This project will implement construction of sewers in the remaining seven priority areas. This project will eliminate existing non-compliant and failing on-site disposal systems. Providing sewers to this area will alleviate nutrient impacts on Wareham River Estuary and Buzzards Bay Watershed.

Total: **\$12,727,000.00**
 Total Principal Forgiveness Amount: \$1,491,680.00

WEBSTER

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3105	Wastewater Treatment Facility Upgrade	CWS-08-20	\$10,328,000.00
		Principal Forgiveness Amount:	\$1,210,503.00

The Webster-Dudley Wastewater Treatment Facility has an average daily flow of 6mgd and a peak hourly flow of 15mgd. The effluent is discharged via the French River to the Quinebaug River basin and ultimately to Long Island Sound. The March 2006 EPA NPDES permit requires the plant to limit its Total Phosphorus discharge to 0.2mg/L as a monthly average from April to November and 1mg/L the rest of the year.

This project will install Phosphorous removal technology to bring it to compliance with the new permit. The project will also implement improvements to the 25-year old treatment plant's various unit processes to bring it code and modern practices and extend its useful life.

Total: **\$10,328,000.00**
 Total Principal Forgiveness Amount: \$1,210,503.00

WESTBOROUGH

Project Number	Project Name	ARRA PRA	Amount
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CWSRF-2981	Wastewater Treatment Plant Upgrade	CWS-07-19	\$51,407,777.00
		Principal Forgiveness Amount:	\$6,025,297.00

The Westborough Wastewater Treatment Plant (WWTP) discharges its effluent to the Assabet River under an NPDES Permit. Westborough is a member of the Assabet River Consortium. The Assabet River is distressed due to severe eutrophication as a result of excessive nutrients such as Phosphorous and Nitrogen. The new 2005 discharge permit EPA issued to the Town imposes stringent Phosphorus and Copper limits. This project will implement a construction upgrade of the WWTP that will enable it to achieve compliance with the permit.

Total:	\$51,407,777.00
Total Principal Forgiveness Amount:	\$6,025,297.00

WHITMAN

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3128	I/I Detection Program & Sewer Rehabilitation	CWS-08-19	\$524,454.00
		Principal Forgiveness Amount:	\$61,469.00

The project consists of two parts: first identifying areas within the Town's wastewater collection system that are experiencing extraneous flow due to inflow and/or infiltration (I/I) and secondly removing these sources of I/I. The Town's sewerage flow is conveyed to the City of Brockton's Wastewater Treatment Facility, which has exceeded its NPDES permit limits. The flow from the Town is getting close to reaching the 1 MGD allowable under the intermunicipal agreement between the City of Brockton and the Town of Whitman. The project will serve to protect public health and the environment by reducing sewer overflows.

Total:	\$524,454.00
Total Principal Forgiveness Amount:	\$61,469.00

WORCESTER

Project Number	Project Name	ARRA PRA	Amount
CWSRF-3164	Phase V - Worcester Wachusett Reservoir Sewers	CWS-08-10	\$3,664,829.00
		Principal Forgiveness Amount:	\$429,540.00

Massachusetts DCR (then MDC), has overseen the construction of sanitary sewers in the Wachusett Reservoir watershed, a project that protects drinking water quality throughout the MWRA system. DCR was obligated to undertake some system repairs and upgrades within the City of Worcester's wastewater infrastructure, in order to convey the sewage collected around the Wachusett Reservoir, through the city and on to the wastewater treatment facility. This project will finance those upgrades within the Worcester system.

Total:	\$3,664,829.00
Total Principal Forgiveness Amount:	\$429,540.00

Total:	\$572,291,200.00
Total Principal Forgiveness Amount:	\$127,735,008.00