

Massachusetts Clean Water Trust  
 Series 19  
 Needham Loan Amortization  
 CW-11-11-A

Initial Loan Amount	78,491.00	Loan Origination Fee (\$5.50/1000)	431.70
Principal Forgiveness		Loan Term (in years)	2
Net Loan Obligation	78,491.00	Loan Rate	2.00%
		Closing Date	2/11/2016
		First Interest Payment	7/15/2016
		First Principal Payment	1/15/2017

Date	Principal	Interest	Total Debt Service	Admin Fee (0.15%)	Loan Origination Fee	Total Debt Service	Annual Debt Service
2/11/2016							
7/15/2016		671.53	671.53	50.37	431.70	1,153.60	
1/15/2017	38,824.00	784.91	39,608.91	58.87		39,667.78	40,821.38
7/15/2017		396.67	396.67	29.75		426.42	
1/15/2018	39,667.00	396.67	40,063.67	29.75		40,093.42	40,519.84
7/15/2018							
	78,491.00	2,249.78	80,740.78	168.73	431.70	81,341.22	81,341.22

Massachusetts Water Pollution Abatement Trust  
Series 17A  
NEEDHAM Loan Amortization  
CW-11-11

Initial Loan Amount	6,034,290.00	Loan Origination Fee (\$5.50/1000)	33,188.60
Principal Forgiveness	-	Loan Term (in years)	20
Net Loan Obligation	6,034,290.00	Loan Rate	2.00%
		Closing Date	5/22/2013
		First Interest Payment	7/15/2013
		First Principal Payment	1/15/2014

Date	Principal	Interest	Total Debt Service	Admin Fee (0.15%)	Loan Origination Fee	Total Debt Service	Annual Debt Service
5/22/2013							
7/15/2013		17,767.63	17,767.63	1,332.57	33,188.60	52,288.80	
1/15/2014	244,093.00	60,342.90	304,435.90	4,525.72		308,961.62	361,250.42
7/15/2014		57,901.97	57,901.97	4,342.65		62,244.62	
1/15/2015	249,398.00	57,901.97	307,299.97	4,342.65		311,642.62	373,887.24
7/15/2015		55,407.99	55,407.99	4,155.60		59,563.59	
1/15/2016	254,818.00	55,407.99	310,225.99	4,155.60		314,381.59	373,945.18
7/15/2016		52,859.81	52,859.81	3,964.49		56,824.30	
1/15/2017	260,357.00	52,859.81	313,216.81	3,964.49		317,181.30	374,005.59
7/15/2017		50,256.24	50,256.24	3,769.22		54,025.46	
1/15/2018	266,015.00	50,256.24	316,271.24	3,769.22		320,040.46	374,065.92
7/15/2018		47,596.09	47,596.09	3,569.71		51,165.80	
1/15/2019	271,797.00	47,596.09	319,393.09	3,569.71		322,962.80	374,128.59
7/15/2019		44,878.12	44,878.12	3,365.86		48,243.98	
1/15/2020	277,704.00	44,878.12	322,582.12	3,365.86		325,947.98	374,191.96
7/15/2020		42,101.08	42,101.08	3,157.58		45,258.66	
1/15/2021	283,739.00	42,101.08	325,840.08	3,157.58		328,997.66	374,256.32
7/15/2021		39,263.69	39,263.69	2,944.78		42,208.47	
1/15/2022	289,906.00	39,263.69	329,169.69	2,944.78		332,114.47	374,322.93
7/15/2022		36,364.63	36,364.63	2,727.35		39,091.98	
1/15/2023	296,207.00	36,364.63	332,571.63	2,727.35		335,298.98	374,390.95
7/15/2023		33,402.56	33,402.56	2,505.19		35,907.75	
1/15/2024	302,644.00	33,402.56	336,046.56	2,505.19		338,551.75	374,459.50
7/15/2024		30,376.12	30,376.12	2,278.21		32,654.33	
1/15/2025	309,222.00	30,376.12	339,598.12	2,278.21		341,876.33	374,530.66
7/15/2025		27,283.90	27,283.90	2,046.29		29,330.19	
1/15/2026	315,942.00	27,283.90	343,225.90	2,046.29		345,272.19	374,602.39
7/15/2026		24,124.48	24,124.48	1,809.34		25,933.82	
1/15/2027	322,809.00	24,124.48	346,933.48	1,809.34		348,742.82	374,676.63
7/15/2027		20,896.39	20,896.39	1,567.23		22,463.62	
1/15/2028	329,825.00	20,896.39	350,721.39	1,567.23		352,288.62	374,752.24
7/15/2028		17,598.14	17,598.14	1,319.86		18,918.00	
1/15/2029	336,993.00	17,598.14	354,591.14	1,319.86		355,911.00	374,829.00
7/15/2029		14,228.21	14,228.21	1,067.12		15,295.33	
1/15/2030	344,317.00	14,228.21	358,545.21	1,067.12		359,612.33	374,907.65
7/15/2030		10,785.04	10,785.04	808.88		11,593.92	
1/15/2031	351,800.00	10,785.04	362,585.04	808.88		363,393.92	374,987.84
7/15/2031		7,267.04	7,267.04	545.03		7,812.07	
1/15/2032	359,446.00	7,267.04	366,713.04	545.03		367,258.07	375,070.14
7/15/2032		3,672.58	3,672.58	275.44		3,948.02	
1/15/2033	367,258.00	3,672.58	370,930.58	275.44		371,206.02	375,154.05
7/15/2033							
	6,034,290.00	1,310,638.69	7,344,928.69	98,297.90	33,188.60	7,476,415.19	7,476,415.19

Massachusetts Water Pollution Abatement Trust  
Pool 15-2012 Swap  
NEEDHAM Reamortization  
DWS-08-24

Original Loan Amount	1,064,706.00	Loan Origination Fee (\$7.5/1000)	0.00
Principal Forgiveness (ARRA)	214,891.00	Loan Term (in years)	18
Principal Paid Down	<u>34,905.00</u>	Loan Rate	2.00%
Outstanding Loan Obligation	814,910.00	Closing Date	6/6/2012
Remaining Balance	<u>(49,574.53)</u>	First Payment	7/15/2012
Net New Loan Obligation	<u>765,335.47</u>		

Date	Principal	Interest	Total Debt Service	Admin Fee (0.15%)	Loan Origination Fee	Total Debt Service	Annual Debt Service
6/6/2012							
7/15/2012	33,474.70	8,041.69	41,516.39	574.00		42,090.39	
1/15/2013		7,318.61	7,318.61	548.90		7,867.50	49,957.90
7/15/2013	34,148.29	7,318.61	41,466.90	548.90		42,015.80	
1/15/2014		6,977.12	6,977.12	523.28		7,500.41	49,516.21
7/15/2014	34,834.88	6,977.12	41,812.00	523.28		42,335.29	
1/15/2015		6,628.78	6,628.78	497.16		7,125.93	49,461.22
7/15/2015	35,535.43	6,628.78	42,164.21	497.16		42,661.37	
1/15/2016		6,273.42	6,273.42	470.51		6,743.93	49,405.29
7/15/2016	36,248.93	6,273.42	42,522.35	470.51		42,992.86	
1/15/2017		5,910.93	5,910.93	443.32		6,354.25	49,347.11
7/15/2017	36,978.36	5,910.93	42,889.29	443.32		43,332.61	
1/15/2018		5,541.15	5,541.15	415.59		5,956.73	49,289.34
7/15/2018	37,721.68	5,541.15	43,262.83	415.59		43,678.42	
1/15/2019		5,163.93	5,163.93	387.29		5,551.23	49,229.64
7/15/2019	38,479.88	5,163.93	43,643.81	387.29		44,031.11	
1/15/2020		4,779.13	4,779.13	358.43		5,137.57	49,168.68
7/15/2020	39,252.94	4,779.13	44,032.07	358.43		44,390.51	
1/15/2021		4,386.60	4,386.60	329.00		4,715.60	49,106.10
7/15/2021	40,042.82	4,386.60	44,429.42	329.00		44,758.42	
1/15/2022		3,986.18	3,986.18	298.96		4,285.14	49,043.56
7/15/2022	40,847.50	3,986.18	44,833.68	298.96		45,132.64	
1/15/2023		3,577.70	3,577.70	268.33		3,846.03	48,978.67
7/15/2023	41,668.96	3,577.70	45,246.66	268.33		45,514.99	
1/15/2024		3,161.01	3,161.01	237.08		3,398.09	48,913.08
7/15/2024	42,506.17	3,161.01	45,667.18	237.08		45,904.26	
1/15/2025		2,735.95	2,735.95	205.20		2,941.15	48,845.41
7/15/2025	43,361.11	2,735.95	46,097.05	205.20		46,302.25	
1/15/2026		2,302.34	2,302.34	172.68		2,475.01	48,777.26
7/15/2026	44,232.73	2,302.34	46,535.07	172.68		46,707.75	
1/15/2027		1,860.01	1,860.01	139.50		1,999.51	48,707.26
7/15/2027	45,121.02	1,860.01	46,981.04	139.50		47,120.54	
1/15/2028		1,408.80	1,408.80	105.66		1,514.46	48,635.00
7/15/2028	46,028.95	1,408.80	47,437.76	105.66		47,543.42	
1/15/2029		948.51	948.51	71.14		1,019.65	48,563.06
7/15/2029	46,953.49	948.51	47,902.00	71.14		47,973.14	
1/15/2030		478.98	478.98	35.92		514.90	48,488.04
7/15/2030	47,897.61	478.98	48,376.58	35.92		48,412.51	
1/15/2031							48,412.51
	<u>765,335.47</u>	<u>154,919.99</u>	<u>920,255.46</u>	<u>11,589.87</u>		<u>931,845.34</u>	<u>931,845.34</u>

## Notes:

\* Notwithstanding the schedule of Loan Repayments set forth above, until the Loan is refinanced with proceeds of bonds to be issued by the Trust, interest shall accrue at the Discount Rate set forth in the Loan Agreement only on that portion of the Loan that has been disbursed to or for the account of the Borrower, payable on the date of such refinancing. Thereafter, Loan Repayments shall be payable on the Loan in accordance.

FINAL

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement and Drinking Water Revenue Bonds  
 State Revolving Fund Bonds  
 Series 15

SCHEDULE C

Needham
DWS-08-24

Loan Interest Rate	2.00%
ARRA Principal Forgiveness*	214,891
Total Loan Amount	1,064,706

Schedule of Loan Repayments

Initial Loan Obligation:	\$849,815.00
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Date	Schedule of Loan Repayments			Admin. Fee 0.00075	Loan Origination Fee	Total Due
	Principal	Interest	Total			
08-Jul-10						
15-Jan-11	\$0.00	\$8,828.63	\$8,828.63	\$637.36	5,651.27	\$15,117.26
15-Jul-11	34,905.00	8,498.15	43,403.15	637.36		44,040.51
15-Jan-12	0.00	8,149.10	8,149.10	611.18		8,760.28
15-Jul-12	35,610.00	8,149.10	43,759.10	611.18		44,370.28
15-Jan-13	0.00	7,793.00	7,793.00	584.48		8,377.48
15-Jul-13	36,330.00	7,793.00	44,123.00	584.48		44,707.48
15-Jan-14	0.00	7,429.70	7,429.70	557.23		7,986.93
15-Jul-14	37,064.00	7,429.70	44,493.70	557.23		45,050.93
15-Jan-15	0.00	7,059.06	7,059.06	529.43		7,588.49
15-Jul-15	37,813.00	7,059.06	44,872.06	529.43		45,401.49
15-Jan-16	0.00	6,680.93	6,680.93	501.07		7,182.00
15-Jul-16	38,576.00	6,680.93	45,256.93	501.07		45,758.00
15-Jan-17	0.00	6,295.17	6,295.17	472.14		6,767.31
15-Jul-17	39,356.00	6,295.17	45,651.17	472.14		46,123.31
15-Jan-18	0.00	5,901.61	5,901.61	442.62		6,344.23
15-Jul-18	40,151.00	5,901.61	46,052.61	442.62		46,495.23
15-Jan-19	0.00	5,500.10	5,500.10	412.51		5,912.61
15-Jul-19	40,962.00	5,500.10	46,462.10	412.51		46,874.61
15-Jan-20	0.00	5,090.48	5,090.48	381.79		5,472.27
15-Jul-20	41,789.00	5,090.48	46,879.48	381.79		47,261.27
15-Jan-21	0.00	4,672.59	4,672.59	350.44		5,023.03
15-Jul-21	42,634.00	4,672.59	47,306.59	350.44		47,657.03
15-Jan-22	0.00	4,246.25	4,246.25	318.47		4,564.72
15-Jul-22	43,495.00	4,246.25	47,741.25	318.47		48,059.72
15-Jan-23	0.00	3,811.30	3,811.30	285.85		4,097.15
15-Jul-23	44,374.00	3,811.30	48,185.30	285.85		48,471.15
15-Jan-24	0.00	3,367.56	3,367.56	252.57		3,620.13
15-Jul-24	45,270.00	3,367.56	48,637.56	252.57		48,890.13
15-Jan-25	0.00	2,914.86	2,914.86	218.61		3,133.47
15-Jul-25	46,185.00	2,914.86	49,099.86	218.61		49,318.47
15-Jan-26	0.00	2,453.01	2,453.01	183.98		2,636.99
15-Jul-26	47,118.00	2,453.01	49,571.01	183.98		49,754.99
15-Jan-27	0.00	1,981.83	1,981.83	148.64		2,130.47
15-Jul-27	48,069.00	1,981.83	50,050.83	148.64		50,199.47
15-Jan-28	0.00	1,501.14	1,501.14	112.59		1,613.73
15-Jul-28	49,041.00	1,501.14	50,542.14	112.59		50,654.73
15-Jan-29	0.00	1,010.73	1,010.73	75.80		1,086.53
15-Jul-29	50,031.00	1,010.73	51,041.73	75.80		51,117.53
15-Jan-30	0.00	510.42	510.42	38.28		548.70
15-Jul-30	51,042.00	510.42	51,552.42	38.28		51,590.70
15-Jan-31	0.00	0.00	0.00	0.00		0.00
15-Jul-31	0.00	0.00	0.00	0.00		0.00
15-Jan-32	0.00	0.00	0.00	0.00		0.00
15-Jul-32	0.00	0.00	0.00	0.00		0.00
15-Jan-33	0.00	0.00	0.00	0.00		0.00
15-Jul-33	0.00	0.00	0.00	0.00		0.00
15-Jan-34	0.00	0.00	0.00	0.00		0.00
15-Jul-34	0.00	0.00	0.00	0.00		0.00
15-Jan-35	0.00	0.00	0.00	0.00		0.00
15-Jul-35	0.00	0.00	0.00	0.00		0.00
15-Jan-36	0.00	0.00	0.00	0.00		0.00
15-Jul-36	0.00	0.00	0.00	0.00		0.00
15-Jan-37	0.00	0.00	0.00	0.00		0.00
15-Jul-37	0.00	0.00	0.00	0.00		0.00
15-Jan-38	0.00	0.00	0.00	0.00		0.00
15-Jul-38	0.00	0.00	0.00	0.00		0.00
15-Jan-39	0.00	0.00	0.00	0.00		0.00
15-Jul-39	0.00	0.00	0.00	0.00		0.00
15-Jan-40	0.00	0.00	0.00	0.00		0.00
15-Jul-40	0.00	0.00	0.00	0.00		0.00
15-Jan-41	0.00	0.00	0.00	0.00		0.00
15-Jul-41	0.00	0.00	0.00	0.00		0.00
	\$849,815.00	\$190,064.46	\$1,039,879.46	\$14,230.08	\$5,651.27	\$1,059,760.81

\* This Project may qualify for principal forgiveness under the American Recovery and Reinvestment Act of 2009 ("ARRA") upon issuance of a Project Completion Certificate. To qualify for principal forgiveness, the Borrower must comply with the requirements of ARRA listed on Schedule B of this Loan Agreement.

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4  
 Needham  
 97-63

Revised Schedule C

Final Loan Structuring Analysis

Schedule of Loan Repayments

Initial Loan Obligation: 1,019,778.00

Loan Subsidy Amounts

G.E. 50.00%

	Scheduled Loan Repayments			Loan Subsidy Amounts			Net Loan Repayment		
	Principal	Interest	Total	DSRF Earnings	Contract Assistance	Total	Principal	Interest	Total
01-Feb-05	0.00	22,436.20	22,436.20	11,665.75	299.11	11,964.86	0.00	10,471.34	10,471.34
01-Aug-05	63,263.00	21,249.08	84,512.08	11,665.75	23,913.82	35,579.57	48,932.51	0.00	48,932.51
01-Feb-06	0.00	24,836.11	24,836.11	10,942.05	1,214.54	12,156.59	0.00	12,679.52	12,679.52
01-Aug-06	64,757.00	20,174.96	84,931.96	10,942.05	24,503.80	35,445.85	49,466.11	0.00	49,466.11
01-Feb-07	0.00	24,206.02	24,206.02	10,201.27	1,214.54	11,415.80	0.00	12,790.21	12,790.21
01-Aug-07	66,650.00	16,745.16	83,395.16	10,201.27	24,110.54	34,311.81	49,083.35	0.00	49,083.35
01-Feb-08	0.00	23,564.13	23,564.13	9,438.82	1,214.54	10,653.36	0.00	12,910.77	12,910.77
01-Aug-08	68,344.00	14,054.54	82,398.54	9,438.82	23,977.92	33,416.74	48,981.80	0.00	48,981.80
01-Feb-09	0.00	22,870.94	22,870.94	8,657.00	1,214.54	9,871.54	0.00	12,999.40	12,999.40
01-Aug-09	70,137.00	10,652.46	80,789.46	8,657.00	22,975.38	31,632.38	49,157.08	0.00	49,157.08
01-Feb-10	0.00	21,018.38	21,018.38	7,854.67	1,214.54	9,069.21	0.00	11,949.17	11,949.17
01-Aug-10	72,127.00	11,746.09	83,873.09	7,854.67	24,121.42	31,976.09	51,897.00	0.00	51,897.00
01-Feb-11	0.00	18,571.32	18,571.32	7,029.57	1,214.54	8,244.11	0.00	10,327.21	10,327.21
01-Aug-11	74,400.00	6,489.96	80,889.96	7,029.57	22,148.48	29,178.06	51,711.90	0.00	51,711.90
01-Feb-12	0.00	16,126.82	16,126.82	6,178.47	1,214.54	7,393.01	0.00	8,733.81	8,733.81
01-Aug-12	39,700.00	44,182.31	83,882.31	6,178.47	24,242.56	30,421.03	39,700.00	13,761.28	53,461.28
01-Feb-13	0.00	15,846.94	15,846.94	5,724.33	1,214.54	6,938.86	0.00	8,908.08	8,908.08
01-Aug-13	77,300.00	8,036.67	85,336.67	5,724.33	23,342.11	29,066.44	56,270.23	0.00	56,270.23
01-Feb-14	0.00	13,080.07	13,080.07	4,840.05	1,214.54	6,054.59	0.00	7,025.48	7,025.48
01-Aug-14	79,700.00	8,383.30	88,083.30	4,840.05	24,070.45	28,910.50	59,172.80	0.00	59,172.80
01-Feb-15	0.00	10,166.98	10,166.98	3,928.32	1,214.54	5,142.86	0.00	5,024.12	5,024.12
01-Aug-15	82,100.00	7,162.52	89,262.52	3,928.32	24,009.59	27,937.91	61,324.61	0.00	61,324.61
01-Feb-16	0.00	7,119.91	7,119.91	2,989.14	1,214.54	4,203.68	0.00	2,916.24	2,916.24
01-Aug-16	84,600.00	5,949.78	90,549.78	2,989.14	24,187.85	27,176.99	63,372.79	0.00	63,372.79
01-Feb-17	0.00	4,366.91	4,366.91	2,021.36	1,189.24	3,210.60	0.00	1,156.31	1,156.31
01-Aug-17	87,100.00	2,343.46	89,443.46	2,021.36	23,468.62	25,489.98	63,953.48	0.00	63,953.48
01-Feb-18	0.00	2,240.00	2,240.00	1,024.98	1,215.02	2,240.00	0.00	0.00	0.00
01-Aug-18	89,600.00	2,240.00	91,840.00	1,024.98	24,505.64	25,530.62	66,309.38	0.00	66,309.38
01-Feb-19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	\$1,019,778.00	\$405,861.02	\$1,425,639.02	\$184,991.59	\$349,641.46	\$534,633.04	\$759,353.04	\$131,652.94	\$891,005.98

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4

Needham
97-63

Final Loan Structuring Analysis

Schedule of Administrative Fee [After October 25, 2000 Swap]

<u>Date</u>	<u>Principal Outstanding</u>	<u>Administrative Fee Payable @ 0.075%</u>
25-Oct-00		
01-Feb-01	1,261,272.00	947.61
01-Aug-01	1,261,272.00	945.95
01-Feb-02	1,202,592.00	901.94
01-Aug-02	1,202,592.00	901.94
01-Feb-03	1,142,816.00	857.11
01-Aug-03	1,142,816.00	857.11
01-Feb-04	1,081,845.00	811.38
01-Aug-04	1,081,845.00	811.38
01-Feb-05	1,019,778.00	764.83
01-Aug-05	1,019,778.00	764.83
01-Feb-06	956,515.00	717.39
01-Aug-06	956,515.00	717.39
01-Feb-07	891,758.00	668.82
01-Aug-07	891,758.00	668.82
01-Feb-08	825,108.00	618.83
01-Aug-08	825,108.00	618.83
01-Feb-09	756,764.00	567.57
01-Aug-09	756,764.00	567.57
01-Feb-10	686,627.00	514.97
01-Aug-10	686,627.00	514.97
01-Feb-11	614,500.00	460.88
01-Aug-11	614,500.00	460.88
01-Feb-12	540,100.00	405.08
01-Aug-12	540,100.00	405.08
01-Feb-13	500,400.00	375.30
01-Aug-13	500,400.00	375.30
01-Feb-14	423,100.00	317.33
01-Aug-14	423,100.00	317.33
01-Feb-15	343,400.00	257.55
01-Aug-15	343,400.00	257.55
01-Feb-16	261,300.00	195.98
01-Aug-16	261,300.00	195.98
01-Feb-17	176,700.00	132.53
01-Aug-17	176,700.00	132.53
01-Feb-18	89,600.00	67.20
01-Aug-18	89,600.00	67.20
01-Feb-19	0.00	0.00
01-Aug-19	0.00	0.00
01-Feb-20	0.00	0.00
01-Aug-20	0.00	0.00
01-Feb-21	0.00	0.00
01-Aug-21	0.00	0.00
01-Feb-22	0.00	0.00
		<u>\$19,162.94</u>

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4  
 Needham  
 97-33  
 Final Loan Structuring Analysis

Revised Schedule C

Schedule of Loan Repayments

Scheduled Loan Repayments			Loan Subsidy Amounts			Net Loan Repayment			
Principal	Interest	Total	DSRF Earnings	Contract Assistance	Total	Principal	Interest	Total	
01-Feb-05	0.00	3,967.02							
01-Aug-05	11,200.00	3,757.03	2,062.54	52.33	2,114.87	0.00	1,852.15	1,852.15	
01-Feb-06	0.00	4,391.35	2,062.54	4,231.13	6,293.68	8,663.35	0.00	8,663.35	
01-Aug-06	11,400.00	3,566.84	1,934.42	214.26	2,148.68	0.00	2,242.68	2,242.68	
01-Feb-07	0.00	4,281.27	1,934.42	4,335.50	6,269.92	8,696.92	0.00	8,696.92	
01-Aug-07	11,800.00	2,961.51	1,804.01	214.26	2,018.27	0.00	2,263.00	2,263.00	
01-Feb-08	0.00	4,167.47	1,669.02	4,265.93	6,069.94	8,691.57	0.00	8,691.57	
01-Aug-08	12,100.00	2,485.31	1,669.02	214.26	1,883.28	0.00	2,284.19	2,284.19	
01-Feb-09	0.00	4,044.62	1,530.61	4,242.47	5,911.50	8,673.81	0.00	8,673.81	
01-Aug-09	12,400.00	1,883.76	1,530.61	214.26	1,744.87	0.00	2,299.76	2,299.76	
01-Feb-10	0.00	3,716.80	1,388.76	4,065.23	5,595.84	8,687.92	0.00	8,687.92	
01-Aug-10	12,800.00	2,075.00	1,388.76	214.26	1,603.02	0.00	2,113.79	2,113.79	
01-Feb-11	0.00	3,284.76	1,242.33	4,267.70	5,656.46	9,218.54	0.00	9,218.54	
01-Aug-11	13,200.00	1,143.07	1,242.33	214.26	1,456.59	0.00	1,828.17	1,828.17	
01-Feb-12	0.00	2,851.01	1,091.33	3,917.99	5,160.32	9,182.75	0.00	9,182.75	
01-Aug-12	7,000.00	7,793.15	1,091.33	214.26	1,305.59	0.00	1,545.43	1,545.43	
01-Feb-13	0.00	2,799.71	1,011.25	4,289.33	5,380.66	7,000.00	2,412.49	9,412.49	
01-Aug-13	13,700.00	1,417.37	1,011.25	214.26	1,225.51	0.00	1,574.20	1,574.20	
01-Feb-14	0.00	2,309.47	854.53	4,129.02	5,140.28	9,977.10	0.00	9,977.10	
01-Aug-14	14,100.00	1,479.39	854.53	214.26	1,068.79	0.00	1,240.68	1,240.68	
01-Feb-15	0.00	1,794.74	693.23	4,258.86	5,113.39	10,466.01	0.00	10,466.01	
01-Aug-15	14,500.00	1,263.77	693.23	214.26	907.49	0.00	887.25	887.25	
01-Feb-16	0.00	1,256.21	527.36	4,248.22	4,941.45	10,822.32	0.00	10,822.32	
01-Aug-16	14,900.00	1,049.86	527.36	214.26	741.62	0.00	514.59	514.59	
01-Feb-17	0.00	771.06	356.91	4,279.85	4,807.21	11,142.65	0.00	11,142.65	
01-Aug-17	15,400.00	413.29	356.91	209.79	566.70	0.00	204.36	204.36	
01-Feb-18	0.00	395.00	180.74	4,152.47	4,509.38	11,303.91	0.00	11,303.91	
01-Aug-18	15,800.00	395.00	180.74	214.26	395.00	0.00	0.00	0.00	
01-Feb-19	0.00	0.00	0.00	4,335.82	4,516.57	11,678.43	0.00	11,678.43	
	\$180,300.00	\$71,714.85	\$252,014.85	\$32,694.09	\$61,852.77	\$94,546.86	\$134,205.27	\$23,262.72	\$157,467.99

G.E. 50.00%

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)

Series 4

Needham  
 33 97-33  
 Pool Loan Structuring Analysis

Estimated Net Borrower Debt Service

Date	Principal Outstanding	Debt Service [Net of Accrued Interest]	LESS DSRF Earnings @ 4.575800%	LESS Contract Assistance	Estimated Net Debt Service	PLUS Administrative Fee Payable @ 0.075%	Estimated Total Payment	Estimated Total Payment [Fiscal Year ending] 30-Jun
09-Dec-1998								
01-Aug-1999	\$243,300.00	\$17,187.01	\$3,587.27	\$6,503.74	\$7,096.00	\$235.19	\$7,331.19	--
01-Feb-2000	233,300.00	5,363.63	2,668.84	214.26	2,480.53	174.98	2,655.51	\$9,986.70
01-Aug-2000	233,300.00	15,563.63	2,668.84	4,335.82	8,558.97	174.98	8,733.95	--
01-Feb-2001	223,100.00	5,146.88	2,552.15	214.26	2,380.47	167.33	2,547.80	11,281.75
01-Aug-2001	223,100.00	15,546.88	2,552.15	4,335.82	8,658.91	167.33	8,826.24	--
01-Feb-2002	212,700.00	4,938.88	2,433.18	214.26	2,291.44	159.53	2,450.97	11,277.21
01-Aug-2002	212,700.00	15,538.88	2,433.18	4,335.82	8,769.88	159.53	8,929.41	--
01-Feb-2003	202,100.00	4,726.88	2,311.92	214.26	2,200.70	151.58	2,352.28	11,281.69
01-Aug-2003	202,100.00	15,526.88	2,311.92	4,335.82	8,879.14	151.58	9,030.72	--
01-Feb-2004	191,300.00	4,510.88	2,188.38	214.26	2,108.24	143.48	2,251.72	11,282.44
01-Aug-2004	191,300.00	15,510.88	2,188.38	4,335.82	8,986.68	143.48	9,130.16	--
01-Feb-2005	180,300.00	4,290.88	2,062.54	214.26	2,014.08	135.23	2,149.31	11,279.47
01-Aug-2005	180,300.00	15,490.88	2,062.54	4,335.82	9,092.52	135.23	9,227.75	--
01-Feb-2006	169,100.00	4,066.88	1,934.42	214.26	1,918.20	126.83	2,045.03	11,272.78
01-Aug-2006	169,100.00	15,466.88	1,934.42	4,335.82	9,196.64	126.83	9,323.47	--
01-Feb-2007	157,700.00	3,781.88	1,804.01	214.26	1,763.61	118.28	1,881.89	11,205.36
01-Aug-2007	157,700.00	15,581.88	1,804.01	4,335.82	9,442.05	118.28	9,560.33	--
01-Feb-2008	145,900.00	3,486.88	1,669.02	214.26	1,603.60	109.43	1,713.03	11,273.36
01-Aug-2008	145,900.00	15,586.88	1,669.02	4,335.82	9,582.04	109.43	9,691.47	--
01-Feb-2009	133,800.00	3,229.75	1,530.61	214.26	1,484.88	100.35	1,585.23	11,276.70
01-Aug-2009	133,800.00	15,629.75	1,530.61	4,335.82	9,763.32	100.35	9,863.67	--
01-Feb-2010	121,400.00	2,912.00	1,388.76	214.26	1,308.98	91.05	1,400.03	11,263.70
01-Aug-2010	121,400.00	15,712.00	1,388.76	4,335.82	9,987.42	91.05	10,078.47	--
01-Feb-2011	108,600.00	2,584.00	1,242.33	214.26	1,127.41	81.45	1,208.86	11,287.33
01-Aug-2011	108,600.00	15,784.00	1,242.33	4,335.82	10,205.85	81.45	10,287.30	--
01-Feb-2012	95,400.00	2,245.75	1,091.33	214.26	940.16	71.55	1,011.71	11,299.01
01-Aug-2012	95,400.00	15,440.10	1,091.33	4,335.82	10,012.95	71.55	10,084.50	--
01-Feb-2013	88,400.00	2,245.75	1,011.25	214.26	1,020.24	66.30	1,086.54	11,171.04
01-Aug-2013	88,400.00	15,945.75	1,011.25	4,335.82	10,598.68	66.30	10,664.98	--
01-Feb-2014	74,700.00	1,894.69	854.53	214.26	825.90	56.03	881.93	11,546.91
01-Aug-2014	74,700.00	15,994.69	854.53	4,335.82	10,804.34	56.03	10,860.37	--
01-Feb-2015	60,600.00	1,533.38	693.23	214.26	625.89	45.45	671.34	11,531.71
01-Aug-2015	60,600.00	16,033.38	693.23	4,335.82	11,004.33	45.45	11,049.78	--
01-Feb-2016	46,100.00	1,161.81	527.36	214.26	420.19	34.58	454.77	11,504.55
01-Aug-2016	46,100.00	16,061.81	527.36	4,335.82	11,198.63	34.58	11,233.21	--
01-Feb-2017	31,200.00	780.00	356.91	214.26	208.83	23.40	232.23	11,465.44
01-Aug-2017	31,200.00	16,180.00	356.91	4,335.82	11,487.27	23.40	11,510.67	--
01-Feb-2018	15,800.00	395.00	180.74	214.26	0.00	11.85	11.85	11,522.52
01-Aug-2018	15,800.00	16,195.00	180.74	4,335.82	11,678.44	11.85	11,690.29	--
01-Feb-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11,690.29
01-Aug-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		\$375,272.96	\$60,590.29	\$92,955.33	\$221,727.41	\$3,972.55	\$225,699.96	\$225,699.96

Total may not add due to penny rounding.



Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4  
 Needham  
 98-10

Revised Schedule C

Final Loan Structuring Analysis

Schedule of Loan Repayments

Initial Loan Obligation: 130,200.00

G.E. 50.00%

	Scheduled Loan Repayments			Loan Subsidy Amounts			Net Loan Repayment		
	Principal	Interest	Total	DSRF Earnings	Contract Assistance	Total	Principal	Interest	Total
	01-Feb-05	0.00	2,863.76	2,863.76	1,489.42	37.72	1,527.15	0.00	1,336.62
01-Aug-05	8,100.00	2,712.21	10,812.21	1,489.42	3,051.94	4,541.36	6,270.85	0.00	6,270.85
01-Feb-06	0.00	3,169.68	3,169.68	1,396.76	154.59	1,551.35	0.00	1,618.33	1,618.33
01-Aug-06	8,300.00	2,574.61	10,874.61	1,396.76	3,127.26	4,524.02	6,350.59	0.00	6,350.59
01-Feb-07	0.00	3,088.42	3,088.42	1,301.82	154.59	1,456.41	0.00	1,632.01	1,632.01
01-Aug-07	8,500.00	2,135.93	10,635.93	1,301.82	3,077.05	4,378.87	6,257.06	0.00	6,257.06
01-Feb-08	0.00	3,006.69	3,006.69	1,204.58	154.59	1,359.17	0.00	1,647.52	1,647.52
01-Aug-08	8,700.00	1,792.65	10,492.65	1,204.58	3,060.12	4,264.70	6,227.95	0.00	6,227.95
01-Feb-09	0.00	2,918.74	2,918.74	1,105.06	154.59	1,259.65	0.00	1,659.09	1,659.09
01-Aug-09	8,900.00	1,362.75	10,262.75	1,105.06	2,932.91	4,037.97	6,224.79	0.00	6,224.79
01-Feb-10	0.00	2,681.28	2,681.28	1,003.24	154.59	1,157.83	0.00	1,523.44	1,523.44
01-Aug-10	9,200.00	1,500.10	10,700.10	1,003.24	3,078.46	4,081.70	6,618.40	0.00	6,618.40
01-Feb-11	0.00	2,371.21	2,371.21	898.00	154.59	1,052.59	0.00	1,318.61	1,318.61
01-Aug-11	9,500.00	828.65	10,328.65	898.00	2,826.45	3,724.45	6,604.20	0.00	6,604.20
01-Feb-12	0.00	2,059.46	2,059.46	789.33	154.59	943.92	0.00	1,115.54	1,115.54
01-Aug-12	5,100.00	5,668.55	10,768.55	789.33	3,093.87	3,883.19	5,100.00	1,785.36	6,885.36
01-Feb-13	0.00	2,023.98	2,023.98	730.98	154.59	885.57	0.00	1,138.41	1,138.41
01-Aug-13	9,900.00	1,024.72	10,924.72	730.98	2,978.16	3,709.14	7,215.57	0.00	7,215.57
01-Feb-14	0.00	1,669.69	1,669.69	617.73	154.59	772.32	0.00	897.37	897.37
01-Aug-14	10,200.00	1,069.27	11,269.27	617.73	3,071.81	3,689.55	7,579.73	0.00	7,579.73
01-Feb-15	0.00	1,297.37	1,297.37	501.05	154.59	655.64	0.00	641.73	641.73
01-Aug-15	10,500.00	913.11	11,413.11	501.05	3,064.07	3,565.12	7,848.00	0.00	7,848.00
01-Feb-16	0.00	907.60	907.60	380.94	154.59	535.53	0.00	372.07	372.07
01-Aug-16	10,800.00	758.11	11,558.11	380.94	3,086.92	3,467.86	8,090.26	0.00	8,090.26
01-Feb-17	0.00	556.05	556.05	257.39	151.37	408.76	0.00	147.30	147.30
01-Aug-17	11,100.00	298.18	11,398.18	257.39	2,995.33	3,252.72	8,145.46	0.00	8,145.46
01-Feb-18	0.00	285.00	285.00	130.41	154.59	285.00	0.00	0.00	0.00
01-Aug-18	11,400.00	285.00	11,685.00	130.41	3,127.49	3,257.90	8,427.10	0.00	8,427.10
01-Feb-19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	\$130,200.00	\$51,822.79	\$182,022.79	\$23,613.42	\$44,616.01	\$68,229.43	\$96,959.95	\$16,833.41	\$113,793.36

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4

Needham  
 98-10

Final Loan Structuring Analysis

Estimated Net Borrower Debt Service

Date	Principal Outstanding	Debt Service	LESS	LESS	Estimated Net Debt Service	PLUS	Estimated Total Payment	Estimated
		[Net of Accrued Interest]	DSRF Earnings @ 4.575800%	Contract Assistance		Administrative Fee Payable @ 0.075%		[Fiscal Year ending] 30-Jun
09-Dec-1998								
01-Aug-1999	\$175,500.00	\$12,383.43	\$2,587.61	\$4,691.24	\$5,104.58	\$169.65	\$5,274.23	--
01-Feb-2000	168,300.00	3,868.63	1,925.27	154.59	1,788.77	126.23	1,915.00	\$7,189.23
01-Aug-2000	168,300.00	11,168.63	1,925.27	3,127.49	6,115.87	126.23	6,242.10	--
01-Feb-2001	161,000.00	3,713.50	1,841.76	154.59	1,717.15	120.75	1,837.90	8,080.00
01-Aug-2001	161,000.00	11,213.50	1,841.76	3,127.49	6,244.25	120.75	6,365.00	--
01-Feb-2002	153,500.00	3,563.50	1,755.96	154.59	1,652.95	115.13	1,768.08	8,133.08
01-Aug-2002	153,500.00	11,163.50	1,755.96	3,127.49	6,280.05	115.13	6,395.18	--
01-Feb-2003	145,900.00	3,411.50	1,669.02	154.59	1,587.89	109.43	1,697.32	8,092.50
01-Aug-2003	145,900.00	11,211.50	1,669.02	3,127.49	6,414.99	109.43	6,524.42	--
01-Feb-2004	138,100.00	3,255.50	1,579.79	154.59	1,521.12	103.58	1,624.70	8,149.12
01-Aug-2004	138,100.00	11,155.50	1,579.79	3,127.49	6,448.22	103.58	6,551.80	--
01-Feb-2005	130,200.00	3,097.50	1,489.42	154.59	1,453.49	97.65	1,551.14	8,102.94
01-Aug-2005	130,200.00	11,197.50	1,489.42	3,127.49	6,580.59	97.65	6,678.24	--
01-Feb-2006	122,100.00	2,935.50	1,396.76	154.59	1,384.15	91.58	1,475.73	8,153.97
01-Aug-2006	122,100.00	11,235.50	1,396.76	3,127.49	6,711.25	91.58	6,802.83	--
01-Feb-2007	113,800.00	2,728.00	1,301.82	154.59	1,271.59	85.35	1,356.94	8,159.77
01-Aug-2007	113,800.00	11,228.00	1,301.82	3,127.49	6,798.69	85.35	6,884.04	--
01-Feb-2008	105,300.00	2,515.50	1,204.58	154.59	1,156.33	78.98	1,235.31	8,119.35
01-Aug-2008	105,300.00	11,215.50	1,204.58	3,127.49	6,883.43	78.98	6,962.41	--
01-Feb-2009	96,600.00	2,330.63	1,105.06	154.59	1,070.98	72.45	1,143.43	8,105.84
01-Aug-2009	96,600.00	11,230.63	1,105.06	3,127.49	6,998.08	72.45	7,070.53	--
01-Feb-2010	87,700.00	2,102.56	1,003.24	154.59	944.73	65.78	1,010.51	8,081.04
01-Aug-2010	87,700.00	11,302.56	1,003.24	3,127.49	7,171.83	65.78	7,237.61	--
01-Feb-2011	78,500.00	1,866.81	898.00	154.59	814.22	58.88	873.10	8,110.71
01-Aug-2011	78,500.00	11,366.81	898.00	3,127.49	7,341.32	58.88	7,400.20	--
01-Feb-2012	69,000.00	1,623.38	789.33	154.59	679.46	51.75	731.21	8,131.41
01-Aug-2012	69,000.00	11,236.40	789.33	3,127.49	7,319.58	51.75	7,371.33	--
01-Feb-2013	63,900.00	1,623.38	730.98	154.59	737.81	47.93	785.74	8,157.07
01-Aug-2013	63,900.00	11,523.38	730.98	3,127.49	7,664.91	47.93	7,712.84	--
01-Feb-2014	54,000.00	1,369.69	617.73	154.59	597.37	40.50	637.87	8,350.71
01-Aug-2014	54,000.00	11,569.69	617.73	3,127.49	7,824.47	40.50	7,864.97	--
01-Feb-2015	43,800.00	1,108.31	501.05	154.59	452.67	32.85	485.52	8,350.49
01-Aug-2015	43,800.00	11,608.31	501.05	3,127.49	7,979.77	32.85	8,012.62	--
01-Feb-2016	33,300.00	839.25	380.94	154.59	303.72	24.98	328.70	8,341.32
01-Aug-2016	33,300.00	11,639.25	380.94	3,127.49	8,130.82	24.98	8,155.80	--
01-Feb-2017	22,500.00	562.50	257.39	154.59	150.52	16.88	167.40	8,323.20
01-Aug-2017	22,500.00	11,662.50	257.39	3,127.49	8,277.62	16.88	8,294.50	--
01-Feb-2018	11,400.00	285.00	130.41	154.59	0.00	8.55	8.55	8,303.05
01-Aug-2018	11,400.00	11,685.00	130.41	3,127.49	8,427.10	8.55	8,435.65	--
01-Feb-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8,435.65
01-Aug-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		\$270,797.73	\$43,744.63	\$67,050.79	\$160,002.34	\$2,868.11	\$162,870.45	\$162,870.45

\* Total may not add due to penny rounding.

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4  
 Needham  
 97-13  
 Final Loan Structuring Analysis

Revised Schedule C

Schedule of Loan Repayments

Initial Loan Obligation: 67,700.00

G.E. 50.00%

	Scheduled Loan Repayments			Loan Subsidy Amounts			Net Loan Repayment		
	Principal	Interest	Total	DSRF Earnings	Contract Assistance	Total	Principal	Interest	Total
01-Feb-05	0.00	1,490.39	1,490.39						
01-Aug-05	4,200.00	1,411.49	5,611.49	774.45	20.52	794.98	0.00	695.41	695.41
01-Feb-06	0.00	1,649.96	1,649.96	774.45	1,588.61	2,363.07	3,248.43	0.00	3,248.43
01-Aug-06	4,300.00	1,340.20	5,640.20	726.41	81.36	807.77	0.00	842.19	842.19
01-Feb-07	0.00	1,608.18	1,608.18	726.41	1,627.82	2,354.23	3,285.97	0.00	3,285.97
01-Aug-07	4,400.00	1,112.36	5,512.36	677.22	81.36	758.58	0.00	849.60	849.60
01-Feb-08	0.00	1,566.25	1,566.25	626.88	1,601.69	2,278.90	3,233.45	0.00	3,233.45
01-Aug-08	4,500.00	934.28	5,434.28	626.88	81.36	708.24	0.00	858.01	858.01
01-Feb-09	0.00	1,521.08	1,521.08	575.41	1,592.87	2,219.76	3,214.52	0.00	3,214.52
01-Aug-09	4,700.00	706.28	5,406.28	575.41	81.36	656.77	0.00	864.32	864.32
01-Feb-10	0.00	1,398.64	1,398.64	521.64	1,526.68	2,101.09	3,305.19	0.00	3,305.19
01-Aug-10	4,800.00	780.55	5,580.55	521.64	81.36	603.00	0.00	795.64	795.64
01-Feb-11	0.00	1,234.35	1,234.35	466.73	1,602.39	2,124.03	3,456.51	0.00	3,456.51
01-Aug-11	4,900.00	435.03	5,335.03	466.73	81.36	548.09	0.00	686.26	686.26
01-Feb-12	0.00	1,071.28	1,071.28	410.68	1,472.38	1,939.11	3,395.92	0.00	3,395.92
01-Aug-12	2,600.00	2,903.41	5,503.41	410.68	81.36	492.04	0.00	579.25	579.25
01-Feb-13	0.00	1,054.26	1,054.26	380.94	1,610.46	2,021.14	2,600.00	882.27	3,482.27
01-Aug-13	5,100.00	537.18	5,637.18	380.94	81.36	462.30	0.00	591.97	591.97
01-Feb-14	0.00	871.59	871.59	322.59	1,551.73	1,932.67	3,704.51	0.00	3,704.51
01-Aug-14	5,300.00	559.07	5,859.07	322.59	81.36	403.95	0.00	467.63	467.63
01-Feb-15	0.00	677.73	677.73	261.96	1,599.00	1,921.59	3,937.48	0.00	3,937.48
01-Aug-15	5,500.00	477.25	5,977.25	261.96	81.36	343.32	0.00	334.41	334.41
01-Feb-16	0.00	474.28	474.28	199.05	1,594.74	1,856.70	4,120.55	0.00	4,120.55
01-Aug-16	5,600.00	396.42	5,996.42	199.05	81.36	280.41	0.00	193.87	193.87
01-Feb-17	0.00	291.63	291.63	134.99	1,606.90	1,805.95	4,190.47	0.00	4,190.47
01-Aug-17	5,800.00	156.89	5,956.89	134.99	79.68	214.66	0.00	76.97	76.97
01-Feb-18	0.00	150.00	150.00	68.64	1,558.89	1,693.87	4,263.02	0.00	4,263.02
01-Aug-18	6,000.00	150.00	6,150.00	68.64	81.36	150.00	0.00	0.00	0.00
01-Feb-19	0.00	0.00	0.00	0.00	1,627.94	1,696.58	4,453.42	0.00	4,453.42
					0.00	0.00	0.00	0.00	0.00
	\$67,700.00	\$26,960.03	\$94,660.03	\$12,295.17	\$23,237.63	\$35,532.81	\$50,409.43	\$8,717.79	\$59,127.22

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 4

Needham  
 3 97-13  
 Loan Structuring Analysis

Estimated Net Borrower Debt Service

Date	Principal Outstanding	Debt Service [Net of Accrued Interest]	LESS Earnings @ 4.575800%	LESS Contract Assistance	Estimated Net Debt Service	PLUS Administrative Fee Payable @ 0.075%	Estimated Total Payment	Estimated Total Payment [Fiscal Year ending] 30-Jun
09-Dec-1998								
01-Aug-1999	\$91,400.00	\$6,500.94	\$1,347.62	\$2,441.91	\$2,711.41	\$88.35	\$2,799.76	--
01-Feb-2000	87,600.00	2,014.81	1,002.10	81.36	931.35	65.70	997.05	\$3,796.81
01-Aug-2000	87,600.00	5,814.81	1,002.10	1,627.94	3,184.77	65.70	3,250.47	--
01-Feb-2001	83,800.00	1,934.06	958.63	81.36	894.07	62.85	956.92	4,207.39
01-Aug-2001	83,800.00	5,834.06	958.63	1,627.94	3,247.49	62.85	3,310.34	--
01-Feb-2002	79,900.00	1,856.06	914.02	81.36	860.68	59.93	920.61	4,230.95
01-Aug-2002	79,900.00	5,856.06	914.02	1,627.94	3,314.10	59.93	3,374.03	--
01-Feb-2003	75,900.00	1,776.06	868.26	81.36	826.44	56.93	883.37	4,257.40
01-Aug-2003	75,900.00	5,876.06	868.26	1,627.94	3,379.86	56.93	3,436.79	--
01-Feb-2004	71,800.00	1,694.06	821.36	81.36	791.34	53.85	845.19	4,281.98
01-Aug-2004	71,800.00	5,794.06	821.36	1,627.94	3,344.76	53.85	3,398.61	--
01-Feb-2005	67,700.00	1,612.06	774.45	81.36	756.25	50.78	807.03	4,205.64
01-Aug-2005	67,700.00	5,812.06	774.45	1,627.94	3,409.67	50.78	3,460.45	--
01-Feb-2006	63,500.00	1,528.06	726.41	81.36	720.29	47.63	767.92	4,228.37
01-Aug-2006	63,500.00	5,828.06	726.41	1,627.94	3,473.71	47.63	3,521.34	--
01-Feb-2007	59,200.00	1,420.56	677.22	81.36	661.98	44.40	706.38	4,227.72
01-Aug-2007	59,200.00	5,820.56	677.22	1,627.94	3,515.40	44.40	3,559.80	--
01-Feb-2008	54,800.00	1,310.56	626.88	81.36	602.32	41.10	643.42	4,203.22
01-Aug-2008	54,800.00	5,810.56	626.88	1,627.94	3,555.74	41.10	3,596.84	--
01-Feb-2009	50,300.00	1,214.94	575.41	81.36	558.17	37.73	595.90	4,192.74
01-Aug-2009	50,300.00	5,914.94	575.41	1,627.94	3,711.59	37.73	3,749.32	--
01-Feb-2010	45,600.00	1,094.50	521.64	81.36	491.50	34.20	525.70	4,275.02
01-Aug-2010	45,600.00	5,894.50	521.64	1,627.94	3,744.92	34.20	3,779.12	--
01-Feb-2011	40,800.00	971.50	466.73	81.36	423.41	30.60	454.01	4,233.13
01-Aug-2011	40,800.00	5,871.50	466.73	1,627.94	3,776.83	30.60	3,807.43	--
01-Feb-2012	35,900.00	845.94	410.68	81.36	353.90	26.93	380.83	4,188.26
01-Aug-2012	35,900.00	5,746.70	410.68	1,627.94	3,708.08	26.93	3,735.01	--
01-Feb-2013	33,300.00	845.94	380.94	81.36	383.64	24.98	408.62	4,143.63
01-Aug-2013	33,300.00	5,945.94	380.94	1,627.94	3,937.06	24.98	3,962.04	--
01-Feb-2014	28,200.00	715.25	322.59	81.36	311.30	21.15	332.45	4,294.49
01-Aug-2014	28,200.00	6,015.25	322.59	1,627.94	4,064.72	21.15	4,085.87	--
01-Feb-2015	22,900.00	579.44	261.96	81.36	236.12	17.18	253.30	4,339.17
01-Aug-2015	22,900.00	6,079.44	261.96	1,627.94	4,189.54	17.18	4,206.72	--
01-Feb-2016	17,400.00	438.50	199.05	81.36	158.09	13.05	171.14	4,377.86
01-Aug-2016	17,400.00	6,038.50	199.05	1,627.94	4,211.51	13.05	4,224.56	--
01-Feb-2017	11,800.00	295.00	134.99	81.36	78.65	8.85	87.50	4,312.06
01-Aug-2017	11,800.00	6,095.00	134.99	1,627.94	4,332.07	8.85	4,340.92	--
01-Feb-2018	6,000.00	150.00	68.64	81.36	0.00	4.50	4.50	4,345.42
01-Aug-2018	6,000.00	6,150.00	68.64	1,627.94	4,453.42	4.50	4,457.92	--
01-Feb-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,457.92
01-Aug-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2026	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2027	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2028	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-2029	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
01-Feb-2030	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		\$140,996.30	\$22,771.54	\$34,918.68	\$83,306.15	\$1,493.03	\$84,799.18	\$84,799.18

may not add due to penny rounding.

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 5  
 Needham  
 98-92  
 Final Loan Structuring Analysis

AMENDED SCHEDULE C

G.E. 50.00%

Schedule of Loan Repayments

Initial Loan Obligation: 364,979.37

Date	Scheduled Loan Repayments			Loan Subsidy Amounts			Net Loan Repayment		
	Principal	Interest	Total	DSRF Earnings	Contract Assistance	Total	Principal	Interest	Total
01-Feb-05	0.00	8,651.78	8,651.78	4,859.88	0.00	4,859.88	0.00	3,791.89	3,791.89
01-Aug-05	20,031.51	8,990.72	29,022.23	4,859.88	8,762.99	13,622.87	15,399.36	0.00	15,399.36
01-Feb-06	0.00	9,475.23	9,475.23	4,593.15	394.36	4,987.51	0.00	4,487.71	4,487.71
01-Aug-06	20,519.90	8,139.56	28,659.46	4,593.15	8,712.96	13,306.11	15,353.35	0.00	15,353.35
01-Feb-07	0.00	9,236.97	9,236.97	4,319.92	394.36	4,714.28	0.00	4,522.69	4,522.69
01-Aug-07	21,098.19	7,820.78	28,918.97	4,319.92	8,976.77	13,296.69	15,622.28	0.00	15,622.28
01-Feb-08	0.00	8,990.89	8,990.89	4,038.99	394.36	4,433.35	0.00	4,557.54	4,557.54
01-Aug-08	21,643.11	6,425.93	28,069.04	4,038.99	8,714.50	12,753.48	15,315.55	0.00	15,315.55
01-Feb-09	0.00	8,787.93	8,787.93	3,750.80	394.36	4,145.16	0.00	4,642.77	4,642.77
01-Aug-09	22,199.16	6,116.78	28,315.94	3,750.80	8,997.84	12,748.64	15,567.30	0.00	15,567.30
01-Feb-10	0.00	8,561.59	8,561.59	3,455.21	394.36	3,849.57	0.00	4,712.03	4,712.03
01-Aug-10	23,168.53	3,755.96	26,924.49	3,455.21	8,070.95	11,526.16	15,398.33	0.00	15,398.33
01-Feb-11	0.00	7,906.71	7,906.71	3,146.71	394.36	3,541.07	0.00	4,365.64	4,365.64
01-Aug-11	23,168.53	3,748.77	26,917.30	3,146.71	8,509.20	11,655.90	15,261.40	0.00	15,261.40
01-Feb-12	0.00	7,588.51	7,588.51	2,838.20	394.36	3,232.56	0.00	4,355.94	4,355.94
01-Aug-12	23,168.53	4,216.09	27,384.62	2,838.20	8,761.30	11,599.51	15,785.11	0.00	15,785.11
01-Feb-13	0.00	6,365.61	6,365.61	2,529.70	394.36	2,924.06	0.00	3,441.55	3,441.55
01-Aug-13	23,168.53	3,851.37	27,019.90	2,529.70	8,967.86	11,497.57	15,522.34	0.00	15,522.34
01-Feb-14	0.00	5,869.17	5,869.17	2,221.20	394.36	2,615.56	0.00	3,253.61	3,253.61
01-Aug-14	27,802.23	3,328.94	31,131.17	2,221.20	8,732.10	10,953.30	20,177.87	0.00	20,177.87
01-Feb-15	0.00	4,518.38	4,518.38	1,851.00	394.36	2,245.36	0.00	2,273.01	2,273.01
01-Aug-15	27,802.23	2,885.11	30,687.34	1,851.00	8,730.63	10,581.63	20,105.71	0.00	20,105.71
01-Feb-16	0.00	3,464.90	3,464.90	1,480.80	394.36	1,875.16	0.00	1,589.74	1,589.74
01-Aug-16	27,802.23	2,490.96	30,293.19	1,480.80	8,770.00	10,250.80	20,042.38	0.00	20,042.38
01-Feb-17	0.00	2,408.68	2,408.68	1,110.60	394.36	1,504.96	0.00	903.71	903.71
01-Aug-17	27,802.23	1,991.19	29,793.42	1,110.60	8,897.03	10,007.63	19,785.79	0.00	19,785.79
01-Feb-18	0.00	1,355.95	1,355.95	740.40	290.40	1,030.80	0.00	325.16	325.16
01-Aug-18	27,802.23	1,507.44	29,309.67	740.40	9,154.92	9,895.32	19,414.35	0.00	19,414.35
01-Feb-19	0.00	564.34	564.34	370.20	194.14	564.34	0.00	0.00	0.00
01-Aug-19	27,802.23	764.56	28,566.79	370.20	9,083.03	9,453.23	19,113.56	0.00	19,113.56
01-Feb-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Feb-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Feb-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Feb-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	\$364,979.37	\$159,780.78	\$524,760.15	\$82,613.55	\$137,058.94	\$219,672.49	\$257,864.66	\$47,223.00	\$305,087.66

Massachusetts Water Pollution Abatement Trust  
 Water Pollution Abatement Revenue Bonds  
 (Pool Loan Program Bonds)  
 Series 5  
 Needham  
 98-92  
 Final Loan Structuring Analysis

Schedule of Administrative Fee [After September 28, 2001 Swap]

<u>Date</u>	<u>Principal Outstanding</u>	<u>Administrative Fee Payable @ 0.075%</u>
28-Sep-01		
01-Feb-02	422,873.82	325.09
01-Aug-02	422,873.82	317.16
01-Feb-03	403,909.92	302.93
01-Aug-03	403,909.92	302.93
01-Feb-04	384,622.58	288.47
01-Aug-04	384,622.58	288.47
01-Feb-05	364,979.37	273.73
01-Aug-05	364,979.37	273.73
01-Feb-06	344,947.86	258.71
01-Aug-06	344,947.86	258.71
01-Feb-07	324,427.96	243.32
01-Aug-07	324,427.96	243.32
01-Feb-08	303,329.77	227.50
01-Aug-08	303,329.77	227.50
01-Feb-09	281,686.66	211.26
01-Aug-09	281,686.66	211.26
01-Feb-10	259,487.50	194.62
01-Aug-10	259,487.50	194.62
01-Feb-11	236,318.97	177.24
01-Aug-11	236,318.97	177.24
01-Feb-12	213,150.44	159.86
01-Aug-12	213,150.44	159.86
01-Feb-13	189,981.91	142.49
01-Aug-13	189,981.91	142.49
01-Feb-14	166,813.38	125.11
01-Aug-14	166,813.38	125.11
01-Feb-15	139,011.15	104.26
01-Aug-15	139,011.15	104.26
01-Feb-16	111,208.92	83.41
01-Aug-16	111,208.92	83.41
01-Feb-17	83,406.69	62.56
01-Aug-17	83,406.69	62.56
01-Feb-18	55,604.46	41.70
01-Aug-18	55,604.46	41.70
01-Feb-19	27,802.23	20.85
01-Aug-19	27,802.23	20.85
01-Feb-20	0.00	0.00
01-Aug-20	0.00	0.00
01-Feb-21	0.00	0.00
01-Aug-21	0.00	0.00
01-Feb-22	0.00	0.00
01-Aug-22	0.00	0.00
01-Feb-23	0.00	0.00
01-Aug-23	0.00	0.00
01-Feb-24	0.00	0.00
01-Aug-24	0.00	0.00
01-Feb-25	0.00	0.00
01-Aug-25	0.00	0.00
01-Feb-26	0.00	0.00
01-Aug-26	0.00	0.00
01-Feb-27	0.00	0.00
01-Aug-27	0.00	0.00
01-Feb-28	0.00	0.00
01-Aug-28	0.00	0.00
01-Feb-29	0.00	0.00
01-Aug-29	0.00	0.00
01-Feb-30	0.00	0.00
01-Aug-30	0.00	0.00
		<u>\$6,478.29</u>

Massachusetts Water Pollution Abatement Trust  
Water Pollution Abatement Revenue Bonds  
(Pool Loan Program Bonds)

**SCHEDULE C**

Series 5

Le V Loan  
Needham T5-97-1027

*Preliminary Loan Structuring Analysis*

Schedule of Loan Repayments

Outstanding Loan Oblig \$85,894.00

	Scheduled Loan Repayments			Loan Subsidy Amounts			Net Loan Repayments		
	Principal	Interest	Total	Equity Earnings	Contract Assistance		Principal	Interest	Total
					Payments	Total			
01-Aug-01									
01-Feb-02	\$0.00	\$2,197.87	\$2,197.87	\$1,137.37	\$1,060.51	\$2,197.87	0.00	\$0.00	\$0.00
01-Aug-02	4,778.00	2,210.15	6,988.15	1,143.72	1,066.43	2,210.15	4,778.00	0.00	4,778.00
01-Feb-03	0.00	2,112.21	2,112.21	1,080.10	1,032.11	2,112.21	0.00	0.00	0.00
01-Aug-03	4,778.00	2,112.21	6,890.21	1,080.10	1,032.11	2,112.21	4,778.00	0.00	4,778.00
01-Feb-04	0.00	2,010.68	2,010.68	1,016.48	994.20	2,010.68	0.00	0.00	0.00
01-Aug-04	4,778.00	2,010.68	6,788.68	1,016.48	994.20	2,010.68	4,778.00	0.00	4,778.00
01-Feb-05	0.00	1,906.16	1,906.16	952.86	953.30	1,906.16	0.00	0.00	0.00
01-Aug-05	4,778.00	1,906.16	6,684.16	952.86	953.30	1,906.16	4,778.00	0.00	4,778.00
01-Feb-06	0.00	1,798.66	1,798.66	889.24	909.42	1,798.66	(0.00)	0.00	(0.00)
01-Aug-06	4,778.00	1,798.66	6,576.66	889.24	909.42	1,798.66	4,778.00	0.00	4,778.00
01-Feb-07	0.00	1,673.24	1,673.24	825.62	847.62	1,673.24	0.00	0.00	0.00
01-Aug-07	4,778.00	1,673.24	6,451.24	825.62	847.62	1,673.24	4,778.00	0.00	4,778.00
01-Feb-08	0.00	1,547.82	1,547.82	762.00	785.82	1,547.82	0.00	0.00	0.00
01-Aug-08	4,778.00	1,547.82	6,325.82	762.00	785.82	1,547.82	4,778.00	0.00	4,778.00
01-Feb-09	0.00	1,433.15	1,433.15	698.39	734.77	1,433.15	0.00	0.00	0.00
01-Aug-09	4,778.00	1,433.15	6,211.15	698.39	734.77	1,433.15	4,778.00	0.00	4,778.00
01-Feb-10	0.00	1,307.74	1,307.74	634.77	672.97	1,307.74	0.00	0.00	0.00
01-Aug-10	4,810.00	1,307.74	6,117.74	634.77	672.97	1,307.74	4,810.00	0.00	4,810.00
01-Feb-11	0.00	1,187.48	1,187.48	570.72	616.77	1,187.48	0.00	0.00	0.00
01-Aug-11	4,810.00	1,187.48	5,997.48	570.72	616.77	1,187.48	4,810.00	0.00	4,810.00
01-Feb-12	0.00	1,058.21	1,058.21	506.67	551.55	1,058.21	0.00	0.00	0.00
01-Aug-12	4,810.00	1,058.21	5,868.21	506.67	551.55	1,058.21	4,810.00	0.00	4,810.00
01-Feb-13	0.00	925.94	925.94	442.62	483.32	925.94	0.00	0.00	0.00
01-Aug-13	4,810.00	925.94	5,735.94	442.62	483.32	925.94	4,810.00	0.00	4,810.00
01-Feb-14	0.00	793.66	793.66	378.57	415.09	793.66	0.00	0.00	0.00
01-Aug-14	4,810.00	793.66	5,603.66	378.57	415.09	793.66	4,810.00	0.00	4,810.00
01-Feb-15	0.00	661.38	661.38	314.52	346.86	661.38	0.00	0.00	0.00
01-Aug-15	4,724.00	661.38	5,385.38	314.52	346.86	661.38	4,724.00	0.00	4,724.00
01-Feb-16	0.00	537.37	537.37	251.62	285.76	537.37	0.00	0.00	0.00
01-Aug-16	4,724.00	537.37	5,261.37	251.62	285.76	537.37	4,724.00	0.00	4,724.00
01-Feb-17	0.00	401.55	401.55	188.71	212.84	401.55	0.00	0.00	0.00
01-Aug-17	4,724.00	401.55	5,125.55	188.71	212.84	401.55	4,724.00	0.00	4,724.00
01-Feb-18	0.00	265.73	265.73	125.81	139.93	265.73	0.00	0.00	0.00
01-Aug-18	4,724.00	265.73	4,989.73	125.81	139.93	265.73	4,724.00	0.00	4,724.00
01-Feb-19	0.00	129.91	129.91	62.90	67.01	129.91	0.00	0.00	0.00
01-Aug-19	4,724.00	129.91	4,853.91	62.90	67.01	129.91	4,724.00	0.00	4,724.00
01-Feb-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Feb-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Feb-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Aug-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
01-Feb-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<b>\$85,894.00</b>	<b>\$43,909.87</b>	<b>\$129,803.87</b>	<b>\$21,684.33</b>	<b>\$22,225.55</b>	<b>\$43,909.87</b>	<b>\$85,894.00</b>	<b>\$0.00</b>	<b>\$85,894.00</b>

\* Note: Interest, Equity Earnings and Contract Assistance Payments reflect partial first period.