20

2.00%

Massachusetts Water Pollution Abatement Trust Series 16 Ludlow Loan Amortization CW-08-05

921,027.00 Loan Origination Fee (\$5.57/1000) 5,130.12 Initial Loan Amount Principal Forgiveness Loan Term (in years) Net Loan Obligation 921,027.00 Loan Rate Closing Date 6/13/2012 First Payment 1/15/2013

				Admin Fee	Loan	Total Debt	
Date	Principal	Interest	Total Debt Service	(0.15%)	Origination Fee	Service	Annual Debt Service
6/13/2012	-						
1/15/2013		10,847.65	10,847.65	690.77	5,130.12	16,668.54	16,668.54
7/15/2013	37,256.00	9,210.27	46,466.27	690.77		47,157.04	
1/15/2014		8,837.71	8,837.71	662.83		9,500.54	56,657.58
7/15/2014	38,066.00	8,837.71	46,903.71	662.83		47,566.54	
1/15/2015		8,457.05	8,457.05	634.28		9,091.33	56,657.87
7/15/2015	38,894.00	8,457.05	47,351.05	634.28		47,985.33	
1/15/2016		8,068.11	8,068.11	605.11		8,673.22	56,658.55
7/15/2016	39,739.00	8,068.11	47,807.11	605.11		48,412.22	
1/15/2017		7,670.72	7,670.72	575.30		8,246.02	56,658.24
7/15/2017	40,602.00	7,670.72	48,272.72	575.30		48,848.02	
1/15/2018		7,264.70	7,264.70	544.85		7,809.55	56,657.58
7/15/2018	41,485.00	7,264.70	48,749.70	544.85		49,294.55	
1/15/2019		6,849.85	6,849.85	513.74		7,363.59	56,658.14
7/15/2019	42,387.00	6,849.85	49,236.85	513.74		49,750.59	
1/15/2020		6,425.98	6,425.98	481.95		6,907.93	56,658.52
7/15/2020	43,308.00	6,425.98	49,733.98	481.95		50,215.93	
1/15/2021		5,992.90	5,992.90	449.47		6,442.37	56,658.30
7/15/2021	44,249.00	5,992.90	50,241.90	449.47		50,691.37	
1/15/2022		5,550.41	5,550.41	416.28		5,966.69	56,658.06
7/15/2022	45,211.00	5,550.41	50,761.41	416.28		51,177.69	
1/15/2023		5,098.30	5,098.30	382.37		5,480.67	56,658.36
7/15/2023	46,193.00	5,098.30	51,291.30	382.37		51,673.67	
1/15/2024		4,636.37	4,636.37	347.73		4,984.10	56,657.77
7/15/2024	47,197.00	4,636.37	51,833.37	347.73		52,181.10	
1/15/2025		4,164.40	4,164.40	312.33		4,476.73	56,657.83
7/15/2025	48,223.00	4,164.40	52,387.40	312.33		52,699.73	
1/15/2026		3,682.17	3,682.17	276.16		3,958.33	56,658.06
7/15/2026	49,271.00	3,682.17	52,953.17	276.16		53,229.33	
1/15/2027		3,189.46	3,189.46	239.21		3,428.67	56,658.00
7/15/2027	50,342.00	3,189.46	53,531.46	239.21		53,770.67	
1/15/2028		2,686.04	2,686.04	201.45		2,887.49	56,658.16
7/15/2028	51,436.00	2,686.04	54,122.04	201.45		54,323.49	
1/15/2029		2,171.68	2,171.68	162.88		2,334.56	56,658.05
7/15/2029	52,554.00	2,171.68	54,725.68	162.88		54,888.56	
1/15/2030		1,646.14	1,646.14	123.46		1,769.60	56,658.16
7/15/2030	53,696,00	1,646.14	55,342.14	123.46		55,465.60	
1/15/2031		1,109.18	1,109.18	83.19		1,192.37	56,657.97
7/15/2031	54,863.00	1,109.18	55,972.18	83.19		56,055.37	
1/15/2032		560.55	560.55	42.04		602.59	56,657.96
7/15/2032	56,055.00	560.55	56,615.55	42.04		56,657.59	
1/15/2033							56,657.59
<u> </u>	921,027.00	208,181.36	1,129,208.36	15,490.80	5,130.12	1,149,829.28	1,149,829.28

Notes:

^{*} Not withstanding 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.

^{**}This project may qualify for principal forgiveness in accordance with schedule B to the Loan Agreement. Principal forgiveness shown on this schedule is an estimate, and is not a guarantee.

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

Series 15
Ludlow
CWS-08-05
Final Structuring Analysis

Loan Interest Rate	2.00%
ARRA Principal Forgiveness*	462,120
Total Loan Amount	3,942,805

Schedule of Loan Repayments

Initial Loan Obligation: \$3,480,685.00

	Schedule	of Loan Repayments		Admin. Fee	Loan	T
Date	<u>Principal</u>	<u>Interest</u>	<u>Total</u>	0.00075	Origination Fee	ļ
08-Jul-10						
5-Jan-11	\$0.00	\$36,160.45	\$36,160.45	\$2,610.51	23,146.56	\$61,917
15-Jul-11	142,966.00	34,806.85	177,772.85	2,610.51	20,710.00	180,383
5-Jan-12	0.00	33,377.19	33,377.19	2,503.29		35,88
15-Jul-12	145,854.00	33,377.19	179,231.19	2,503,29		181,73
5-Jan-13	0.00	31,918.65	31,918.65	2,393.90		34,31
	148,800.00		180,718.65	2,393.90		183,11
15-Jul-13	0.00	31,918.65	30,430.65	2,282.30		32,71
5-Jan-14		30,430.65				
15-Jul-14	151,806.00	30,430.65	182,236.65	2,282.30		184,51
5-Jan-15	0.00	28,912.59	28,912.59	2,168.44		31,08
15-Jul-15	154,873.00	28,912.59	183,785.59	2,168.44		185,95
5-Jan-16	0.00	27,363.86	27,363.86	2,052.29		29,41
15-Jul-16	158,002.00	27,363.86	185,365.86	2,052.29		187,41
5-Jan-17	0,00	25,783.84	25,783.84	1,933.79		27,71
15-Jul-17	161,194.00	25,783.84	186,977.84	1,933.79		188,91
5-Jan-18	0.00	24,171.90	24,171.90	1,812.89		25,98
15-Jui-18	164,450.00	24,171.90	188,621.90	1,812.89		190,43
5-Jan-19	0.00	22,527.40	22,527.40	1,689.56		24,21
15-Jul-19	167,773.00	22,527.40	190,300.40	1,689.56		191,98
5-Jan-20	0.00	20,849.67	20,849.67	1,563.73		22,41
15-Jul-20	171,162.00	20,849.67	192,011.67	1,563.73		193,57
5-Jan-21	0.00	19,138.05	19,138.05	1,435.35		20,57
15-Jul-21	174,620.00	19,138.05	193,758.05	1,435.35		195,19
5-Jan-22	0.00	17,391.85	17,391.85	1,304.39		18,69
15-Jul-22	178,148.00	17,391.85	195,539.85	1,304.39		196,84
5-Jan-23	0.00	15,610.37	15,610.37	1,170.78		16,78
15-Jul-23	181,746.00	15,610.37	197,356.37	1,170.78		198,52
5-Jan-24	0.00	13,792.91	13,792.91	1,034.47		14.82
15-Jul-24	185,418.00	13,792,91	199,210.91	1,034.47		200,24
5-Jan-25	0.00	11,938.73	11,938.73	895.40		12,83
15-Jul-25	189,164.00	11,938.73	201,102.73	895.40		201,99
5-Jan-26	0.00	10,047.09	10,047.09	753.53		10,80
15-Jul-26	192,985.00	10,047.09	203,032.09	753.53		203,78
5-Jan-27	0.00	8,117.24	8,117.24	608.79		8,72
15-Jul-27	196,884.00	8,117.24	205,001.24	608.79		205,61
				461.13		6,60
5-Jan-28	0.00	6,148.40	6,148.40	461.13		
15-Jul-28	200,862.00	6,148.40	207,010.40			207,47
5-Jan-29	0.00	4,139.78	4,139.78	310.48		4,45
15-Jul-29	204,919.00	4,139.78	209,058.78	310.48		209,36
5-Jan-30	0.00	2,090.59	2,090.59	156.79		2,24
15-Jul-30	209,059.00	2,090.59	211,149.59	156.79		211,30
5-Jan-31	0.00	0.00	0.00	0.00		
15-Jul-31	0.00	0.00	0.00	0.00		
5-Jan-32	0.00	0.00	0.00	0.00		
15-Jul-32	0.00	0.00	0.00	0.00		
5-Jan-33	0.00	0.00	0.00	0.00		
15-Jul-33	0.00	0.00	0.00	0.00		
5-Jan-34	0.00	0.00	0.00	0.00		
15-Jul-34	0.00	0.00	0.00	0.00		
5-Jan-35	0.00	0.00	0.00	0.00		
15-Jul-35	0.00	0.00	0.00	0.00		
5-Jan-36	0.00	0.00	0.00	0.00		
15-Jul-36	0.00	0.00	0.00	0.00		
5-Jan-37	0.00	0.00	0.00	0.00		
15-Jul-37	0.00	0.00	0.00	0.00		
5-Jan-38	0.00	0.00	0.00	0.00		
15-Jul-38	0.00	0.00	0.00	0.00		
5-Jan-39	0.00	0.00	0.00	0.00		
5-Jan-39 15-Jul-39	0.00	0.00	0.00	0.00		
				0.00		
5-Jan-40	0.00	0.00	0.00			
15-Jul-40	0.00	0.00	0.00	0.00		
5-Jan-41	0.00	0.00	0.00	0.00		
15-Jul-41	0.00	0.00	0.00	0.00		

^{*} 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 Clean Water Trust Series 19 Ludlow Loan Amortization CW-08-05-A

503,676.00 Loan Origination Fee (\$5.50/1000) 2,770.22 Initial Loan Amount Loan Term (in years) Principal Forgiveness Net Loan Obligation 503,676.00 Loan Rate 2.00% 2/11/2016 Closing Date First Interest Payment 7/15/2016

First Principal Payment

20

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		4,309.23	4,309.23	323.19	2,770.22	7,402.64	
1/15/2017	20,374.00	5,036.76	25,410.76	377.76		25,788.52	33,191.16
7/15/2017		4,833.02	4,833.02	362.48		5,195.50	
1/15/2018	20,817.00	4,833.02	25,650.02	362.48		26,012.50	31,207.99
7/15/2018		4,624.85	4,624.85	346.86		4,971.71	
1/15/2019	21,269.00	4,624.85	25,893.85	346.86		26,240.71	31,212.43
7/15/2019		4,412.16	4,412.16	330.91		4,743.07	
1/15/2020	21,732.00	4,412.16	26,144.16	330.91		26,475.07	31,218.14
7/15/2020	,	4,194.84	4,194.84	314.61		4,509.45	- , -
1/15/2021	22,204.00	4,194.84	26,398.84	314.61		26,713.45	31,222.91
7/15/2021	,	3,972.80	3,972.80	297.96		4,270.76	,
1/15/2022	22,687.00	3,972.80	26,659.80	297.96		26,957.76	31,228.52
7/15/2022	22,001.00	3,745.93	3,745.93	280.94		4,026.87	01,220.02
1/15/2023	23,180.00	3,745.93	26,925.93	280.94		27,206.87	31,233.75
7/15/2023	20,100.00	3,514.13	3,514.13	263.56		3,777.69	01,200.70
1/15/2024	23,683.00	3,514.13	27,197.13	263.56		27,460.69	31,238.38
7/15/2024	25,005.00	3,277.30	3,277.30	245.80		3,523.10	31,230.30
1/15/2025	24,198.00	3,277.30	27,475.30	245.80		27,721.10	24 244 20
7/15/2025	24,196.00	3,035.32	3,035.32	245.60		3,262.97	31,244.20
	04.704.00						04.040.04
1/15/2026	24,724.00	3,035.32	27,759.32	227.65		27,986.97	31,249.94
7/15/2026	05.004.00	2,788.08	2,788.08	209.11		2,997.19	04.055.07
1/15/2027	25,261.00	2,788.08	28,049.08	209.11		28,258.19	31,255.37
7/15/2027	05.040.00	2,535.47	2,535.47	190.16		2,725.63	04 004 00
1/15/2028	25,810.00	2,535.47	28,345.47	190.16		28,535.63	31,261.26
7/15/2028		2,277.37	2,277.37	170.80		2,448.17	
1/15/2029	26,371.00	2,277.37	28,648.37	170.80		28,819.17	31,267.35
7/15/2029		2,013.66	2,013.66	151.02		2,164.68	
1/15/2030	26,945.00	2,013.66	28,958.66	151.02		29,109.68	31,274.37
7/15/2030		1,744.21	1,744.21	130.82		1,875.03	
1/15/2031	27,530.00	1,744.21	29,274.21	130.82		29,405.03	31,280.05
7/15/2031		1,468.91	1,468.91	110.17		1,579.08	
1/15/2032	28,129.00	1,468.91	29,597.91	110.17		29,708.08	31,287.16
7/15/2032		1,187.62	1,187.62	89.07		1,276.69	
1/15/2033	28,740.00	1,187.62	29,927.62	89.07		30,016.69	31,293.38
7/15/2033		900.22	900.22	67.52		967.74	
1/15/2034	29,364.00	900.22	30,264.22	67.52		30,331.74	31,299.47
7/15/2034		606.58	606.58	45.49		652.07	
1/15/2035	30,003.00	606.58	30,609.58	45.49		30,655.07	31,307.15
7/15/2035		306.55	306.55	22.99		329.54	
1/15/2036	30,655.00	306.55	30,961.55	22.99		30,984.54	31,314.08
7/15/2036							
	503,676.00	112,224.03	615,900.03	8,416.80	2,770.22	627,087.05	627,087.05