Thomas R. Teehan
Senior Counsel

September 5, 2012

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 4307- 2013 Electric Infrastructure, Safety and Reliability ("ISR") Plan
Electric ISR Plan FY 2012 Vegetation Management Cost Benefit Report

Dear Ms. Massaro:

In accordance with the Rhode Island Public Utilities Commission's (the "Commission") written Order 20724 issued May 3, 2012 in the above-referenced docket, attached are ten (10) copies of National Grid's Electric ISR Plan FY 2012 Vegetation Management Cost Benefit Report.

In its order, the Commission directed the Company and the Rhode Island Division of Public Utilities and Carriers (the "Division") to collaborate to develop the methodology by which such costs and benefits will be tracked and reported on by the Company in its future Electric Infrastructure, Safety and Reliability ("ISR") Plan filings. The description and method for tracking these programs was filed with the Commission on June 29, 2012. The Company is now filing its initial vegetation management cost benefit analysis. Section 2 of this report provides the Company's results of the FY 2012 Reliability Cost/Benefit for EHTM Program and Cycle Pruning Program. Section 3 provides the results of the Company's Damage Restoration Cost/Benefit for Enhanced Hazard Tree Mitigation.

Thank you for your attention to this transmittal. If you have any questions, please feel free to contact me at (401) 784-7667.

Very truly yours,

Thomas R. Teehan

Enclosure
cc: Docket 4307 Service List
Leo Wold, Esq.
Steve Scialabba, Division

280 Melrose Street, Providence, RI 02907
T: (401) 784-7667 ■ F: (401) 784-4321 ■ thomas.teehan@us.ngrid.com ■ www.nationalgrid.com

National Grid

The Narragansett Electric Company

Rhode Island Electric Infrastructure, Safety and Reliability Plan

Vegetation Management Program Cost/Benefit Methodology

Docket No. 4307

September 5, 2012

Submitted to:
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

1. Background

In its May 3, 2012 Report and Order issued approving National Grid's[1] 2013 Electric Infrastructure, Safety and Reliability ("ISR") Plan, the Rhode Island Public Utilities Commission (the "Commission") directed the Company to collaborate with the Division of Public Utilities and Carriers ("Division") to develop a method by which the costs and benefits of the Vegetation Management Program and Inspection and Maintenance Program will be tracked and reported in future ISR filings.[2]

National Grid met with the Division and its consultant, Mr. Gregory Booth, on June 15, 2012 to collaboratively develop a method for the tracking and reporting of costs and benefits for both the Vegetation Management and Inspection and Maintenance programs. The description and method for tracking each of these programs was filed with the Commission on June 29, 2012.[3]

With respect to the Vegetation Management Program, the Company agreed to quantify the reliability benefits for a) both the Enhanced Hazard Tree Mitigation ("EHTM") Program and the Cycle Pruning Program on a fiscal year basis with the benefits determined by comparing a pre-project three year average to a post-project tree-related number of customers interrupted and the costs calculated by a cost per feeder to determine an overall cost per change in customer interruptions; and b) a Damage Restoration Cost Benefit analysis for EHTM circuits using a similar method, and

1 The Narragansett Electric Company d/b/a National Grid (referred to herein as "National Grid" or the "Company").
2 Docket No. 4307, Report and Order, page 16.
3 Docket No. 4307 Compliance Filing of June 29, 2012, page 1.

estimating the costs or restoration. The first Vegetation Management analyses were to be filed with the Commission on August 1, as part of its annual Electric ISR reconciliation filing.[4] The first Inspection & Maintenance analyses are to be filed in 2014, since work for this program has just recently begun.

As set forth below, Section 2 provides the Company's results of the FY 2012 Reliability Cost/Benefit for EHTM Program and Cycle Pruning Program. Section 3 provides the results of the Company's Damage Restoration Cost/Benefit for Enhanced Hazard Tree Mitigation.

2. FY 2012 Reliability Cost/Benefit for Enhanced Hazard Tree Mitigation and Cycle Pruning Programs

To meet the requirements of the FY12 Rhode Island ISR, the following study of the Company's Vegetation Management Program was performed. The analysis was done for the work performed in FY08 through FY11 for the EHTM Program and FY07 – FY11 for the Cycle Pruning Program. To calculate the reliability benefits for the EHTM Program, the Company used the average number of tree-related customer interruptions ("CI") over a three-year period prior to the project year as the baseline. The project year was excluded from the analysis as both the EHTM and the cycle pruning often take the majority of the year to complete. Tree-related customer interruptions were then calculated for the first full year post project, and for all additional full years thereafter.

[4] Id., page 2. Because information was not yet available, the Company notified the Division and Commission that it would file its initial Vegetation Management Cost Benefit analysis by September 1, 2012

The Company then compared the difference between the pre-project average tree-related customer interruptions and the post-project average tree-related customer interruptions by calculating the percent improvement by individual circuit, for the total annual work plan, and a running average percent improvement for all circuits completed in the program.

The EHTM Program summary below shows favorable results for each year of the study.

Table 1 – EHTM Reliability Results

EHTM Project Year	Average Annual CI Pre-Project	CI 1st Year Post-Project	% Improved	Average Annual CI 2nd Year Post-Project	% Improved	Average Annual CI 3rd Year Post-Project	% Improved
2008	22,127	12,513	43%	7,477	66%	9,213	58%
2009	32,092	6,548	80%	9,013	72%	15,972	50%
2010	50,145	6,731	87%	13,032	74%	-	-
2011	1,133	186	84%	-	-	-	-

The summary of the EHTM Program, beginning in FY08, shows an average tree-related CI improvement of 75% for the first year post-project, 63% in second, and 52% in the third year following project completion. The full data set showing results by circuit for EHTM is included as Attachment 1 to this filing.

Table 2 – Cycle Prune Reliability Results

Cycle Prune Project Year	Average Annual CI Pre-Project	CI 1st Year Post-Project	% Improved	Average Annual CI 2nd Year Post-Project	% Improved	Average Annual CI 3rd Year Post-Project	% Improved
2007	55,494	60,868	-10%	48,121	13%	39,215	29%
2008	47,466	30,333	36%	28,356	40%	82,400	-74%
2009	50,362	38,327	24%	56,979	-13%	48,734	3%
2010	58,009	53,466	8%	48,340	17%	-	-
2011	77,634	26,171	66%	-	-	-	-

* Negative numbers represent an increase from established baseline value.

The primary goal of both the EHTM program and the Cycle Pruning Program is to maintain and improve reliability. In addition, the Cycle Pruning Program also provides benefits to National Grid and its customers by maintaining and improving both public and worker safety. Furthermore, the Cycle Pruning Program increases the efficiency of the Company's line maintenance crews, and increases the efficiency and accuracy of the Company's line inspectors. However, since the intermittent contact of branches against overhead distribution wires due to growth does not specifically cause service interruptions, the clearance of those branches through cycle pruning will not necessarily show a significant and consistent improvement in reliability. While the results for cycle pruning are less consistent than the reliability results from the EHTM Program, the study shows the Company's Cycle Pruning Program creates, on average, a 28% improvement in reliability following the project year. The second year improved by 21%, followed by a 2% improvement in the third year. These modest improvements in reliability are attributable to the fact that the cycle pruning specification does include the

removal of dead and damaged overhanging vegetation, the shortening of overhead pine branches and the removal of high risk hazard trees during cycle pruning. The full data set showing results by circuit for cycle pruning is included as Attachment 2 to this filing.

In an effort to normalize the data used to show the EHTM benefits, the Company compared state-wide tree-related customer interruptions for the same years as shown in the table below. The EHTM data previously discussed is included for direct comparison. Noting the percent change column on the far right of the table clearly shows that the EHTM Program provided statistically significant reliability benefits.

Table 3 – EHTM Benefits Compared to Statewide Performance

	Average Annual CI Pre-Project	**Average Annual CI - Post- Project**	**% Improvement**
FY08 (3 years of data post project)			
EHTM	22,127	9,734	56%
All RI	103,442	87,826	15%
FY09 (3 years of data post-project)			
EHTM	32,092	10,511	67%
All RI	117,673	94,133	20%
FY10 (2 years of data post-project)			
EHTM	**50,145**	9,882	80%
All RI	99,345	98,133	1%
FY11 (1 year of data post-project)			
EHTM	1,132	186	84%
All RI	93,243	99,143	-6%

3. Damage Restoration Cost/Benefit for Enhanced Hazard Tree Mitigation

The Company does not separately track repair costs by event. Estimates were created to perform analysis on damage restoration cost benefit. The Company generated repair cost estimates for the following types of repairs: replacing a blown fuse, replacing a broken cross-arm and replacing a broken pole. National Grid then reviewed interruption records for the EHTM feeders for three years pre-project and for three years post-project. The Company estimated the required repair work capital and expense costs using the event description record and information regarding any other work required, such as removing a tree or trimming vines. The table below includes the results of the calculation of repair costs on the EHTM feeders for both pre- and post-project periods. In summary, there is an average 47% reduction in annual repair costs on a circuit where EHTM has been employed.

Table 4 - Damage Restoration Cost Reductions

Project Year	Annual Average Repair Costs Pre-Project	Annual Average Repair Costs Post-Project	% Improvement
2008	$ 12,285	$ 10,087	18%
2009	$ 12,100	$ 5,161	57%
2010	$ 14,555	$ 5,954	59%
2011	$ 1,129	$ -	100%
Totals	**$ 40,069**	**$ 21,202**	**47%**

The Company also calculated the total cost benefit for the EHTM Program by program year. This calculation is made by dividing the program cost, in this case the actual annual

spend for EHTM, by the CI benefit or change. The table below shows the calculation and the benefit as a rolling index over the three years post project.

Table 5 – EHTM Cost/Benefit ($/ΔCI)

		Post-Project Year 1		Post-Project Year 2		Post-Project Year 3	
Project Year	**EHTM Cost**	**Δ CI**	**$ / Δ CI**	**Average Δ CI**	**$ / Δ CI**	**Average Δ CI**	**$ / Δ CI**
2008	$ 579,857	9,614	$ 60	12,132	$ 48	12,393	$ 47
2009	$ 497,187	25,544	$ 19	24,311	$ 20	21,581	$ 23
2010	$ 486,681	43,387	$ 11	40,264	$ 12	-	-
2011	$ 69,256	947	$ 73	-	-	-	-
Totals	**$ 1,632,981**	**79,492**	**$ 21**	**76,707**	**$ 20**	**33,974**	**$ 32**

In summary, from 2008-2011 the Company spent $1.6M on our EHTM Program. This resulted in a reduction of 79,492 customer interruptions following the project year, resulting in a unit cost of $21 per reduced customer interruption. Using two years of data, the cost is $20 per reduced CI and using three years, $32 per reduced CI.

Fiscal Year 2007								1st Year After Project		
Feeder ID	CI FY 2004	CI FY 2005	CI FY 2006	Total CI 4/1/03-3/31/06	Average CI	Standard Deviation	Project Year 4/1/06-3/31/07	Total CI 4/1/07-3/31/08	Difference	% Improved
No EHTM for FY '07	-	-	-	-	-	-		-	-	-
Totals	-	-	-	-	-	-		-	-	-

Fiscal Year 2008								1st Year After Project			2nd Year After Project			3rd Year After Project			4th Year After Project		
Feeder ID	CI FY 2005	CI FY 2006	CI FY 2007	Total CI 4/1/04-3/31/07	Average CI	Standard Deviation	Project Year 4/1/07-3/31/08	Total CI 4/1/08-3/31/09	Difference	% Improved	Total CI 4/1/09-3/31/10	Difference	% Improved	Total CI 4/1/10-3/31/11	Difference	% Improved	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_13F2	108	118	7484	7710	2570	4256		1	-2569	-100%	60	-2510	-98%	0	-2570	-100%	318	-2252	-88%
49_53_34F2	672	4365	3123	8160	2720	1879		200	-2520	-93%	1150	-1570	-58%	757	-1963	-72%	8253	5533	203%
49_53_51F1	1007	381	236	1624	541	410		97	-444	-82%	358	-183	-34%	1	-540	-100%	3	-538	-99%
49_53_69F1	3508	4434	0	7942	2647	2339		223	-2424	-92%	0	-2647	-100%	3	-2644	-100%	67	-2580	-97%
49_56_33F4	2991	1300	55	4346	1449	1474		3818	2369	164%	1345	-104	-7%	404	-1045	-72%	544	-905	-62%
49_56_54F1	12615	7994	10359	30968	10323	2311		5344	-4979	-48%	1667	-8656	-84%	1389	-8934	-87%	2439	-7884	-76%
49_56_63F6	3531	1875	225	5631	1877	1653		2830	953	51%	2897	1020	54%	6659	4782	255%	704	-1173	-62%
Totals	**24432**	**20467**	**21482**	**66381**	**22127**	**2060**		**12513**	**-9614**	**-43%**	**7477**	**-14650**	**-66%**	**9213**	**-12914**	**-58%**	**12328**	**-9799**	**-44%**

Fiscal Year 2009								1st Year After Project			2nd Year After Project			3rd Year After Project		
Feeder ID	CI FY 2006	CI FY 2007	CI FY 2008	Total CI 4/1/05-3/31/08	Average CI	Standard Deviation	Project Year 4/1/08-3/31/09	Total CI 4/1/09-3/31/10	Difference	% Improved	Total CI 4/1/10-3/31/11	Difference	% Improved	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_102W51	16979	0	553	17532	5844	9647		15	-5829	-100%	8	-5836	-100%	0	-5844	-100%
49_53_112W42	1467	13878	272	15617	5206	7534		629	-4577	-88%	2642	-2564	-49%	11421	6215	119%
49_53_2291	0	0	0	0	0	0		0	0	N/A	0	0	N/A	0	0	N/A
49_53_23F1	3229	6703	2465	12397	4132	2259		54	-4078	-99%	174	-3958	-96%	130	-4002	-97%
49_53_38F1	2630	1877	4846	9353	3118	1543		724	-2394	-77%	2964	-154	-5%	486	-2632	-84%
49_53_5F4	3184	230	9588	13002	4334	4784		0	-4334	-100%	0	-4334	-100%	3294	-1040	-24%
49_56_22F4	584	278	2409	3271	1090	1152		35	-1055	-97%	298	-792	-73%	26	-1064	-98%
49_56_30F1	1318	1003	11489	13810	4603	5965		4851	248	5%	2639	-1964	-43%	364	-4239	-92%
49_56_52F3	4915	1940	4438	11293	3764	1598		240	-3524	-94%	288	-3476	-92%	251	-3513	-93%
Totals	**34306**	**25909**	**36060**	**96275**	**32092**	**5426**		**6548**	**-25544**	**-80%**	**9013**	**-23079**	**-72%**	**15972**	**-16120**	**-50%**

Fiscal Year 2010								1st Year After Project			2nd Year After Project		
Feeder ID	CI FY 2007	CI FY 2008	CI FY 2009	Total CI 4/1/06-3/31/09	Average CI	Standard Deviation	Project Year 4/1/09-3/31/10	Total CI 4/1/10-3/31/11	Difference	% Improved	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_108W62	47	0	1586	1633	544	902		18	-526	-97%	1	-543	-100%
49_53_20F2	1988	1985	10	3983	1328	1141		0	-1328	-100%	1	-1327	-100%
49_53_38F5	306	553	2809	3668	1223	1379		2987	1764	144%	186	-1037	-85%
49_53_5F2	516	27442	7385	35343	11781	13991		495	-11286	-96%	319	-11462	-97%
49_53_5F3	6837	14602	3	21442	7147	7304		507	-6640	-93%	161	-6986	-98%
49_53_7F1	10	14790	14	14814	4938	8532		0	-4938	-100%	0	-4938	-100%
49_56_16F1	10226	5618	135	15979	5326	5052		52	-5274	-99%	1650	-3676	-69%
49_56_17F2	25	10990	22	11037	3679	6332		234	-3445	-94%	8790	5111	139%
49_56_42F1	290	14361	204	14855	4952	8149		19	-4933	-100%	1	-4951	-100%
49_56_43F1	445	2856	4204	7505	2502	1904		1208	-1294	-52%	1657	-845	-34%
49_56_46F2	3537	975	1109	5621	1874	1442		756	-1118	-60%	261	-1613	-86%
49_56_59F4	529	1472	222	2223	741	651		362	-379	-51%	2	-739	-100%
49_56_72F3	265	12010	57	12332	4111	6842		93	-4018	-98%	3	-4108	-100%
Totals	**25021**	**107654**	**17760**	**150435**	**50145**	**49936**		**6731**	**-43414**	**-87%**	**13032**	**-37113**	**-74%**

Fiscal Year 2011								1st Year After Project		
Feeder ID	CI FY 2008	CI FY 2009	CI FY 2010	Total CI 4/1/07-3/31/10	Average CI	Standard Deviation	Project Year 4/1/10-3/31/11	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_38F5	553	2809	34	3399	1133	1475		186	-947	-84%
Totals	**553**	**2809**	**34**	**3399**	**1133**	**1475**		**186**	**-947**	**-84%**

				Total CI	Average CI Before Project Year		Project Year	Average CI After Project Year	Difference	% Improved	Average CI 2 Years After	Difference	% Improved	Average CI 3 Years After	Difference	% Improved	Average CI 4 Years After	Difference	% Improved
Program Totals				-	26374			6495	-19880	-75%	9841	-16534	-63%	12593	-13782	-52%	12328	-9799	-44%

Fiscal Year 2007								1st Year After Project			2nd Year After Project			3rd Year After Project			4th Year After Project		
Feeder ID	CI FY 2004	CI FY 2005	CI FY 2006	Total CI 4/1/03-3/31/06	Average CI	Standard Deviation	Project Year 4/1/06-3/31/07	Total CI 4/1/07-3/31/08	Difference	% Improved	Total CI 4/1/08-3/31/09	Difference	% Improved	Total CI 4/1/09-3/31/10	Difference	% Improved	Total CI 4/1/10-3/31/11	Difference	% Improved
49_53_102W44	15	0	493	508	169.3	280.4		0	-169.3	-100.0%	0	-169.3	-100%	0	-169.3	-100.0%	0	-169.3	-100.0%
49_53_102W51	0	7378	16979	24357	8119.0	8513.7		553	-7566.0	-93.2%	838	-7281.0	-90%	15	-8104.0	-99.8%	8	-8111.0	-99.9%
49_53_108W51	0	0	0	0	0.0	0.0		0	0.0	N/A	1	1.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_108W53	0	2990	753	3743	1247.7	1555.2		1	-1246.7	-99.9%	77	-1170.7	-94%	101	-1146.7	-91.9%	8265	7017.3	562.4%
49_53_108W55	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	2	2.0	N/A	0	0.0	N/A
49_53_108W61	0	0	76	76	25.3	43.9		0	-25.3	-100.0%	0	-25.3	-100%	86	60.7	239.5%	34	8.7	34.2%
49_53_108W62	2635	0	13562	16197	5399.0	7191.1		0	-5399.0	-100.0%	1586	-3813.0	-71%	1592	-3807.0	-70.5%	18	-5381.0	-99.7%
49_53_108W63	9	0	13	22	7.3	6.7		0	-7.3	-100.0%	7908	7900.7	107736%	5	-2.3	-31.8%	1	-6.3	-86.4%
49_53_108W65	0	0	3	3	1.0	1.7		3	2.0	200.0%	0	-1.0	-100%	1	0.0	0.0%	41	40.0	4000.0%
49_53_126W40	0	2	18	20	6.7	9.9		0	-6.7	-100.0%	3	-3.7	-55%	34	27.3	410.0%	183	176.3	2645.0%
49_53_126W50	0	1460	4033	5493	1831.0	2041.9		19108	17277.0	943.6%	220	-1611.0	-88%	1846	15.0	0.8%	574	-1257.0	-68.7%
49_53_127W40	236	387	995	1618	539.3	401.8		548	8.7	1.6%	262	-277.3	-51%	8195	7655.7	1419.5%	1198	658.7	122.1%
49_53_127W42	5	0	508	513	171.0	291.9		0	-171.0	-100.0%	0	-171.0	-100%	0	-171.0	-100.0%	0	-171.0	-100.0%
49_53_15F2	150	2215	3786	6151	2050.3	1823.6		8790	6739.7	328.7%	10634	8583.7	419%	596	-1454.3	-70.9%	139	-1911.3	-93.2%
49_53_17W43	2635	0	0	2635	878.3	1521.3		0	-878.3	-100.0%	0	-878.3	-100%	0	-878.3	-100.0%	0	-878.3	-100.0%
49_53_18F1	0	45	52	97	32.3	28.2		225	192.7	595.9%	3883	3850.7	11909%	196	163.7	506.2%	37	4.7	14.4%
49_53_18F2	0	0	9	9	3.0	5.2		0	-3.0	-100.0%	0	-3.0	-100%	79	76.0	2533.3%	0	-3.0	-100.0%
49_53_18F3	34	214	124	372	124.0	90.0		203	79.0	63.7%	1	-123.0	-99%	63	-61.0	-49.2%	360	236.0	190.3%
49_53_18F7	0	97	11	108	36.0	53.1		9	-27.0	-75.0%	9	-27.0	-75%	0	-36.0	-100.0%	4361	4325.0	12013.9%
49_53_18F8	0	0	20	20	6.7	11.5		0	-6.7	-100.0%	60	53.3	800%	106	99.3	1490.0%	49	42.3	635.0%
49_53_18F9	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	51	51.0	N/A	1	1.0	N/A
49_53_20F1	0	0	0	0	0.0	0.0		0	0.0	N/A	1284	1284.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_20F2	178	0	9849	10027	3342.3	5635.6		1985	-1357.3	-40.6%	10	-3332.3	-100%	2	-3340.3	-99.9%	0	-3342.3	-100.0%
49_53_21F1	0	5849	6992	12841	4280.3	3750.7		554	-3726.3	-87.1%	65	-4215.3	-98%	170	-4110.3	-96.0%	490	-3790.3	-88.6%
49_53_21F2	4	6	69	79	26.3	37.0		34	7.7	29.1%	37	10.7	41%	1182	1155.7	4388.6%	54	27.7	105.1%
49_53_21F4	0	0	18	18	6.0	10.4		16	10.0	166.7%	109	103.0	1717%	22	16.0	266.7%	1490	1484.0	24733.3%
49_53_23F1	0	0	3229	3229	1076.3	1864.3		2465	1388.7	129.0%	2707	1630.7	152%	54	-1022.3	-95.0%	174	-902.3	-83.8%
49_53_23F4	0	0	15	15	5.0	8.7		0	-5.0	-100.0%	0	-5.0	-100%	0	-5.0	-100.0%	82	77.0	1540.0%
49_53_27F1	0	11172	111	11283	3761.0	6418.4		49	-3712.0	-98.7%	2599	-1162.0	-31%	182	-3579.0	-95.2%	78	-3683.0	-97.9%
49_53_34F1	4530	3821	2258	10609	3536.3	1162.4		1388	-2148.3	-60.8%	907	-2629.3	-74%	3098	-438.3	-12.4%	1265	-2271.3	-64.2%
49_53_37J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_37J2	12	0	16	28	9.3	8.3		17	7.7	82.1%	12	2.7	29%	140	130.7	1400.0%	34	24.7	264.3%
49_53_37J3	43	0	0	43	14.3	24.8		0	-14.3	-100.0%	0	-14.3	-100%	0	-14.3	-100.0%	1	-13.3	-93.0%
49_53_37J4	0	32	0	32	10.7	18.5		0	-10.7	-100.0%	0	-10.7	-100%	0	-10.7	-100.0%	4	-6.7	-62.5%
49_53_38F1	10	7281	2630	9921	3307.0	3682.5		4846	1539.0	46.5%	449	-2858.0	-86%	724	-2583.0	-78.1%	2964	-343.0	-10.4%
49_53_38F3	112	142	7590	7844	2614.7	4308.8		67	-2547.7	-97.4%	3989	1374.3	53%	248	-2366.7	-90.5%	142	-2472.7	-94.6%
49_53_77J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_77J2	0	0	29	29	9.7	16.7		1	-8.7	-89.7%	0	-9.7	-100%	0	-9.7	-100.0%	0	-9.7	-100.0%
49_53_77J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_77J4	0	518	0	518	172.7	299.1		0	-172.7	-100.0%	0	-172.7	-100%	0	-172.7	-100.0%	0	-172.7	-100.0%
49_53_9J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_9J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A

49_56_16F2	40	113	362	515	171.7	168.8		419	247.3	144.1%	197	25.3	15%	5	-166.7	-97.1%	15	-156.7	-91.3%
49_56_16J2	14	0	0	14	4.7	8.1		0	-4.7	-100.0%	0	-4.7	-100%	0	-4.7	-100.0%	0	-4.7	-100.0%
49_56_17F1	0	88	254	342	114.0	129.0		4	-110.0	-96.5%	34	-80.0	-70%	31	-83.0	-72.8%	0	-114.0	-100.0%
49_56_30F2	8	3061	17	3086	1028.7	1760.1		321	-707.7	-68.8%	360	-668.7	-65%	9122	8093.3	786.8%	44	-984.7	-95.7%
49_56_33F3	118	242	2521	2881	960.3	1353.0		1864	903.7	94.1%	1480	519.7	54%	973	12.7	1.3%	1498	537.7	56.0%
49_56_36W41	52	36	11	99	33.0	20.7		3	-30.0	-90.9%	52	19.0	58%	128	95.0	287.9%	1	-32.0	-97.0%
49_56_36W42	9	15	182	206	68.7	98.2		12	-56.7	-82.5%	1	-67.7	-99%	27	-41.7	-60.7%	0	-68.7	-100.0%
49_56_36W43	15	0	19	34	11.3	10.0		12	0.7	5.9%	39	27.7	244%	7	-4.3	-38.2%	71	59.7	526.5%
49_56_36W44	15	4	1497	1516	505.3	858.8		151	-354.3	-70.1%	1	-504.3	-100%	13	-492.3	-97.4%	15	-490.3	-97.0%
49_56_3F1	4397	271	4963	9631	3210.3	2561.2		9	-3201.3	-99.7%	198	-3012.3	-94%	6876	3665.7	114.2%	384	-2826.3	-88.0%
49_56_42F1	69	77	37	183	61.0	21.2		14361	14300.0	23442.6%	204	143.0	234%	223	162.0	265.6%	19	-42.0	-68.9%
49_56_45J2	0	0	0	0	0.0	0.0		148	148.0	N/A	0	0.0	N/A	9	9.0	N/A	42	42.0	N/A
49_56_45J6	32	0	0	32	10.7	18.5		198	187.3	1756.3%	124	113.3	1063%	0	-10.7	-100.0%	61	50.3	471.9%
49_56_46F1	190	199	802	1191	397.0	350.8		175	-222.0	-55.9%	14	-383.0	-96%	647	250.0	63.0%	718	321.0	80.9%
49_56_46F2	2182	1460	3381	7023	2341.0	970.3		975	-1366.0	-58.4%	1109	-1232.0	-53%	503	-1838.0	-78.5%	756	-1585.0	-67.7%
49_56_46F3	2333	2991	69	5393	1797.7	1532.8		540	-1257.7	-70.0%	230	-1567.7	-87%	231	-1566.7	-87.2%	10	-1787.7	-99.4%
49_56_46F4	491	3	18	512	170.7	277.5		18	-152.7	-89.5%	8	-162.7	-95%	288	117.3	68.8%	593	422.3	247.5%
49_56_59F2	108	27	177	312	104.0	75.1		1	-103.0	-99.0%	681	577.0	555%	10	-94.0	-90.4%	5998	5894.0	5667.3%
49_56_59F3	23	43	476	542	180.7	256.0		533	352.3	195.0%	5004	4823.3	2670%	834	653.3	361.6%	108	-72.7	-40.2%
49_56_63F2	3	120	237	360	120.0	117.0		2	-118.0	-98.3%	620	500.0	417%	10	-110.0	-91.7%	500	380.0	316.7%
49_56_65J2	244	2	2147	2393	797.7	1174.8		72	-725.7	-91.0%	0	-797.7	-100%	2	-795.7	-99.7%	729	-68.7	-8.6%
49_56_68F4	9	1151	131	1291	430.3	627.1		188	-242.3	-56.3%	90	-340.3	-79%	204	-226.3	-52.6%	319	-111.3	-25.9%
49_56_72F2	32	128	309	469	156.3	140.7		0	-156.3	-100.0%	25	-131.3	-84%	282	125.7	80.4%	76	-80.3	-51.4%
Totals	**20992**	**53640**	**91851**	**166483**	**55494.3**	**35465.9**		**60868**	**5373.7**	**9.7%**	**48121**	**-7373.3**	**-13%**	**39215**	**-16279.3**	**-29.3%**	**34004**	**-21490.3**	**-38.7%**

Fiscal Year 2008								**1st Year After Project**			**2nd Year After Project**			**3rd Year After Project**			**4th Year After Project**		
Feeder ID	**CI FY 2005**	**CI FY 2006**	**CI FY 2007**	**Total CI 4/1/04-3/31/07**	**Average CI**	**Standard Deviation**	**Project Year 4/1/07-3/31/08**	**Total CI 4/1/08-3/31/09**	**Difference**	**% Improved**	**Total CI 4/1/09-3/31/10**	**Difference**	**% Improved**	**Total CI 4/1/10-3/31/11**	**Difference**	**% Improved**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_102K22	0	18	0	18	6.0	10.4		0	-6.0	-100.0%	0	-6.0	-100.0%	0	-6.0	-100.0%	0	-6.0	-100.0%
49_53_102W41	0	0	1186	1186	395.3	684.7		0	-395.3	-100.0%	0	-395.3	-100.0%	0	-395.3	-100.0%	0	-395.3	-100.0%
49_53_102W42	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_102W50	0	0	0	0	0.0	0.0		14	14.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_102W52	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_12J6	0	0	87	87	29.0	50.2		0	-29.0	-100.0%	62	33.0	113.8%	0	-29.0	-100.0%	0	-29.0	-100.0%
49_53_13F2	108	118	7484	7710	2570.0	4255.7		1	-2569.0	-100.0%	60	-2510.0	-97.7%	0	-2570.0	-100.0%	318	-2252.0	-87.6%
49_53_13F3	0	71	123	194	64.7	61.7		0	-64.7	-100.0%	0	-64.7	-100.0%	0	-64.7	-100.0%	23	-41.7	-64.4%
49_53_13F4	7	104	49	160	53.3	48.6		99	45.7	85.6%	1	-52.3	-98.1%	19	-34.3	-64.4%	541	487.7	914.4%
49_53_13F9	9	0	44	53	17.7	23.2		0	-17.7	-100.0%	133	115.3	652.8%	11	-6.7	-37.7%	6	-11.7	-66.0%
49_53_15F1	0	106	122	228	76.0	66.3		242	166.0	218.4%	7	-69.0	-90.8%	149	73.0	96.1%	2613	2537.0	3338.2%
49_53_27F5	0	30	16	46	15.3	15.0		0	-15.3	-100.0%	393	377.7	2463.0%	70	54.7	356.5%	119	103.7	676.1%
49_53_28J1	0	120	0	120	40.0	69.3		89	49.0	122.5%	0	-40.0	-100.0%	22	-18.0	-45.0%	86	46.0	115.0%
49_53_2J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A	0	0.0	N/A
49_53_34F2	672	4365	3123	8160	2720.0	1879.2		200	-2520.0	-92.6%	1150	-1570.0	-57.7%	757	-1963.0	-72.2%	8253	5533.0	203.4%

49_53_34F3	182	2725	108	3015	1005.0	1490.0		2541	1536.0	152.8%	8074	7069.0	703.4%	4327	3322.0	330.5%	6884	5879.0	585.0%
49_53_37J5	0	748	0	748	249.3	431.9		32	-217.3	-87.2%	17	-232.3	-93.2%	0	-249.3	-100.0%	1	-248.3	-99.6%
49_53_47J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_47J2	0	0	0	0	0.0	0.0		0	0.0	N/A	1	1.0	N/A	2	2.0	N/A	0	0.0	N/A
49_53_47J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_47J4	0	49	0	49	16.3	28.3		2225	2208.7	13522.4%	0	-16.3	-100.0%	50	33.7	206.1%	0	-16.3	-100.0%
49_53_48F1	0	3600	31	3631	1210.3	2069.6		0	-1210.3	-100.0%	0	-1210.3	-100.0%	179	-1031.3	-85.2%	2	-1208.3	-99.8%
49_53_48F2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_48F5	0	161	41	202	67.3	83.7		2	-65.3	-97.0%	40	-27.3	-40.6%	71	3.7	5.4%	0	-67.3	-100.0%
49_53_48F6	24	108	0	132	44.0	56.7		0	-44.0	-100.0%	1	-43.0	-97.7%	2826	2782.0	6322.7%	20	-24.0	-54.5%
49_53_4F1	1275	367	76	1718	572.7	625.4		589	16.3	2.9%	45	-527.7	-92.1%	3390	2817.3	492.0%	156	-416.7	-72.8%
49_53_51F1	1007	381	236	1624	541.3	409.7		97	-444.3	-82.1%	358	-183.3	-33.9%	1	-540.3	-99.8%	3	-538.3	-99.4%
49_53_51F2	408	0	168	576	192.0	205.1		0	-192.0	-100.0%	430	238.0	124.0%	209	17.0	8.9%	441	249.0	129.7%
49_53_51F3	0	1038	5747	6785	2261.7	3062.7		713	-1548.7	-68.5%	218	-2043.7	-90.4%	867	-1394.7	-61.7%	0	-2261.7	-100.0%
49_53_5F1	41	1208	12080	13329	4443.0	6639.5		1068	-3375.0	-76.0%	33	-4410.0	-99.3%	192	-4251.0	-95.7%	1031	-3412.0	-76.8%
49_53_5F2	325	64	516	905	301.7	226.9		7385	7083.3	2348.1%	109	-192.7	-63.9%	495	193.3	64.1%	319	17.3	5.7%
49_53_5F3	47	4673	6837	11557	3852.3	3468.6		3	-3849.3	-99.9%	2	-3850.3	-99.9%	507	-3345.3	-86.8%	161	-3691.3	-95.8%
49_53_5F4	0	3184	230	3414	1138.0	1775.6		0	-1138.0	-100.0%	0	-1138.0	-100.0%	0	-1138.0	-100.0%	3294	2156.0	189.5%
49_53_66J2	34	9	0	43	14.3	17.6		0	-14.3	-100.0%	0	-14.3	-100.0%	0	-14.3	-100.0%	0	-14.3	-100.0%
49_53_66J4	0	20	0	20	6.7	11.5		0	-6.7	-100.0%	807	800.3	12005.0%	0	-6.7	-100.0%	1	-5.7	-85.0%
49_53_69F1	3508	4434	0	7942	2647.3	2338.9		223	-2424.3	-91.6%	0	-2647.3	-100.0%	3	-2644.3	-99.9%	67	-2580.3	-97.5%
49_53_69F3	0	0	12432	12432	4144.0	7177.6		37	-4107.0	-99.1%	1	-4143.0	-100.0%	16	-4128.0	-99.6%	44	-4100.0	-98.9%
49_53_6J6	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	59	59.0	N/A	0	0.0	N/A
49_53_71J1	764	0	0	764	254.7	441.1		2	-252.7	-99.2%	37	-217.7	-85.5%	0	-254.7	-100.0%	0	-254.7	-100.0%
49_53_71J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_71J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_71J4	32	30	0	62	20.7	17.9		1	-19.7	-95.2%	0	-20.7	-100.0%	0	-20.7	-100.0%	32	11.3	54.8%
49_53_71J5	25	0	0	25	8.3	14.4		0	-8.3	-100.0%	0	-8.3	-100.0%	0	-8.3	-100.0%	0	-8.3	-100.0%
49_53_76F1	0	9	1972	1981	660.3	1135.9		28	-632.3	-95.8%	1	-659.3	-99.8%	5	-655.3	-99.2%	22	-638.3	-96.7%
49_53_78F3	0	938	0	938	312.7	541.6		1	-311.7	-99.7%	1	-311.7	-99.7%	2082	1769.3	565.9%	0	-312.7	-100.0%
49_53_78F4	0	147	7	154	51.3	82.9		0	-51.3	-100.0%	2	-49.3	-96.1%	8302	8250.7	16072.7%	49	-2.3	-4.5%
49_53_79F1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_79F2	0	0	6	6	2.0	3.5		0	-2.0	-100.0%	49	47.0	2350.0%	0	-2.0	-100.0%	0	-2.0	-100.0%
49_53_7F1	0	7499	10	7509	2503.0	4326.7		14	-2489.0	-99.4%	1	-2502.0	-100.0%	0	-2503.0	-100.0%	0	-2503.0	-100.0%
49_53_7F2	0	0	60	60	20.0	34.6		0	-20.0	-100.0%	0	-20.0	-100.0%	0	-20.0	-100.0%	1	-19.0	-95.0%
49_56_122J4	0	5889	5	5894	1964.7	3398.6		0	-1964.7	-100.0%	0	-1964.7	-100.0%	0	-1964.7	-100.0%	10	-1954.7	-99.5%
49_56_131J2	195	32	0	227	75.7	104.6		0	-75.7	-100.0%	0	-75.7	-100.0%	0	-75.7	-100.0%	0	-75.7	-100.0%
49_56_131J4	0	859	714	1573	524.3	459.8		0	-524.3	-100.0%	0	-524.3	-100.0%	0	-524.3	-100.0%	1	-523.3	-99.8%
49_56_146J14	0	712	0	712	237.3	411.1		1437	1199.7	505.5%	0	-237.3	-100.0%	0	-237.3	-100.0%	0	-237.3	-100.0%
49_56_146J2	0	0	657	657	219.0	379.3		130	-89.0	-40.6%	0	-219.0	-100.0%	0	-219.0	-100.0%	3	-216.0	-98.6%
49_56_14F2	0	0	2340	2340	780.0	1351.0		0	-780.0	-100.0%	108	-672.0	-86.2%	9680	8900.0	1141.0%	25	-755.0	-96.8%
49_56_14F3	3	923	0	926	308.7	532.0		0	-308.7	-100.0%	2	-306.7	-99.4%	6168	5859.3	1898.3%	1186	877.3	284.2%
49_56_16J1	2	0	0	2	0.7	1.2		0	-0.7	-100.0%	0	-0.7	-100.0%	0	-0.7	-100.0%	0	-0.7	-100.0%
49_56_16J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_17F2	55	76	25	156	52.0	25.6		22	-30.0	-57.7%	16	-36.0	-69.2%	234	182.0	350.0%	8790	8738.0	16803.8%
49_56_17F3	79	45	0	124	41.3	39.6		5230	5188.7	12553.2%	99	57.7	139.5%	39	-2.3	-5.6%	12	-29.3	-71.0%
49_56_19J16	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A

49_56_21J4	0	5155	0	5155	1718.3	2976.2		0	-1718.3	-100.0%	923	-795.3	-46.3%	0	-1718.3	-100.0%	0	-1718.3	-100.0%
49_56_22F1	127	18	0	145	48.3	68.7		1	-47.3	-97.9%	1	-47.3	-97.9%	86	37.7	77.9%	49	0.7	1.4%
49_56_22F3	92	17	41	150	50.0	38.3		1	-49.0	-98.0%	18	-32.0	-64.0%	140	90.0	180.0%	4	-46.0	-92.0%
49_56_22F4	74	584	278	936	312.0	256.7		154	-158.0	-50.6%	35	-277.0	-88.8%	298	-14.0	-4.5%	26	-286.0	-91.7%
49_56_23J2	0	0	1314	1314	438.0	758.6		0	-438.0	-100.0%	0	-438.0	-100.0%	4576	4138.0	944.7%	0	-438.0	-100.0%
49_56_23J4	0	0	0	0	0.0	0.0		0	0.0	N/A	1	1.0	N/A	4566	4566.0	N/A	2	2.0	N/A
49_56_29F1	122	48	2098	2268	756.0	1162.8		75	-681.0	-90.1%	1	-755.0	-99.9%	108	-648.0	-85.7%	0	-756.0	-100.0%
49_56_29F2	0	0	0	0	0.0	0.0		0	0.0	N/A	3	3.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_31J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_33F1	69	22	37	128	42.7	24.0		101	58.3	136.7%	31	-11.7	-27.3%	8067	8024.3	18807.0%	47	4.3	10.2%
49_56_33F2	48	2445	1568	4061	1353.7	1212.8		45	-1308.7	-96.7%	49	-1304.7	-96.4%	11320	9966.3	736.2%	7595	6241.3	461.1%
49_56_36W42	15	182	10	207	69.0	97.9		1	-68.0	-98.6%	27	-42.0	-60.9%	0	-69.0	-100.0%	9	-60.0	-87.0%
49_56_37J2	0	185	370	555	185.0	185.0		0	-185.0	-100.0%	0	-185.0	-100.0%	0	-185.0	-100.0%	0	-185.0	-100.0%
49_56_37W41	0	926	49	975	325.0	521.1		5	-320.0	-98.5%	1	-324.0	-99.7%	14	-311.0	-95.7%	7682	7357.0	2263.7%
49_56_37W42	42	6	152	200	66.7	76.1		73	6.3	9.5%	1	-65.7	-98.5%	435	368.3	552.5%	0	-66.7	-100.0%
49_56_37W43	134	374	55	563	187.7	166.1		376	188.3	100.4%	28	-159.7	-85.1%	64	-123.7	-65.9%	55	-132.7	-70.7%
49_56_40F1	2994	13	13	3020	1006.7	1721.1		101	-905.7	-90.0%	1010	3.3	0.3%	14	-992.7	-98.6%	12	-994.7	-98.8%
49_56_52F1	0	81	84	165	55.0	47.7		684	629.0	1143.6%	323	268.0	487.3%	54	-1.0	-1.8%	1	-54.0	-98.2%
49_56_52F2	28	109	26	163	54.3	47.4		16	-38.3	-70.6%	3390	3335.7	6139.3%	72	17.7	32.5%	1	-53.3	-98.2%
49_56_57J3	0	14	9	23	7.7	7.1		117	109.3	1426.1%	0	-7.7	-100.0%	2	-5.7	-73.9%	0	-7.7	-100.0%
49_56_61F1	0	657	0	657	219.0	379.3		0	-219.0	-100.0%	0	-219.0	-100.0%	4	-215.0	-98.2%	1	-218.0	-99.5%
49_56_61F3	32	43	19	94	31.3	12.0		283	251.7	803.2%	83	51.7	164.9%	1598	1566.7	5000.0%	633	601.7	1920.2%
49_56_63F3	127	749	347	1223	407.7	315.4		593	185.3	45.5%	6819	6411.3	1572.7%	3066	2658.3	652.1%	6399	5991.3	1469.7%
49_56_63F4	0	113	0	113	37.7	65.2		25	-12.7	-33.6%	208	170.3	452.2%	24	-13.7	-36.3%	0	-37.7	-100.0%
49_56_63F5	42	87	77	206	68.7	23.6		54	-14.7	-21.4%	12	-56.7	-82.5%	122	53.3	77.7%	10	-58.7	-85.4%
49_56_63F6	3531	1875	225	5631	1877.0	1653.0		2830	953.0	50.8%	2897	1020.0	54.3%	6659	4782.0	254.8%	704	-1173.0	-62.5%
49_56_65J12	0	16	0	16	5.3	9.2		78	72.7	1362.5%	0	-5.3	-100.0%	2	-3.3	-62.5%	3	-2.3	-43.8%
49_56_72F1	0	0	21	21	7.0	12.1		0	-7.0	-100.0%	15	8.0	114.3%	0	-7.0	-100.0%	1	-6.0	-85.7%
49_56_72F4	0	85	273	358	119.3	139.7		107	-12.3	-10.3%	201	81.7	68.4%	220	100.7	84.4%	168	48.7	40.8%
49_56_83F2	18	206	1700	1924	641.3	921.6		1811	1169.7	182.4%	18	-623.3	-97.2%	64	-577.3	-90.0%	88	-553.3	-86.3%
49_56_84T1	0	0	1529	1529	509.7	882.8		0	-509.7	-100.0%	0	-509.7	-100.0%	0	-509.7	-100.0%	0	-509.7	-100.0%
49_56_85T1	169	70	164	403	134.3	55.8		377	242.7	180.6%	3	-131.3	-97.8%	91	-43.3	-32.3%	1129	994.7	740.4%
49_56_87F1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A	0	0.0	N/A
Totals	**16466**	**58940**	**66991**	**142397**	**47465.7**	**27146.6**		**30333**	**-17132.7**	**-36.1%**	**28356**	**-19109.7**	**-40.3%**	**82400**	**34934.3**	**73.6%**	**59133**	**11667.3**	**24.6%**

Fiscal Year 2009								**1st Year After Project**			**2nd Year After Project**			**3rd Year After Project**		
Feeder ID	**CI FY 2006**	**CI FY 2007**	**CI FY 2008**	**Total CI 4/1/05-3/31/08**	**Average CI**	**Standard Deviation**	**Project Year 4/1/08-3/31/09**	**Total CI 4/1/09-3/31/10**	**Difference**	**% Improved**	**Total CI 4/1/10-3/31/11**	**Difference**	**% Improved**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_102W54	12204	93	1524	13821	4607.0	6618.0		0	-4607.0	-100.0%	66	-4541.0	-98.6%	1	-4606.0	-100.0%
49_53_104J1	0	593	0	593	197.7	299.8		0	-197.7	-100.0%	0	-197.7	-100.0%	0	-197.7	-100.0%
49_53_104J5	1077	0	0	1077	359.0	544.5		0	-359.0	-100.0%	0	-359.0	-100.0%	0	-359.0	-100.0%
49_53_106J1	0	32	0	32	10.7	16.2		0	-10.7	-100.0%	0	-10.7	-100.0%	0	-10.7	-100.0%
49_53_107W43	0	593	0	593	197.7	299.8		28	-169.7	-85.8%	0	-197.7	-100.0%	0	-197.7	-100.0%

49_53_107W50	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W53	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W60	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W61	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W62	19	15	48	82	27.3	27.6		0	-27.3	-100.0%	0	-27.3	-100.0%	0	-27.3	-100.0%
49_53_107W63	14	20	528	562	187.3	267.6		1392	1204.7	643.1%	0	-187.3	-100.0%	0	-187.3	-100.0%
49_53_107W65	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	10	10.0	N/A
49_53_107W66	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W81	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W83	18	0	0	18	6.0	9.1		1	-5.0	-83.3%	0	-6.0	-100.0%	0	-6.0	-100.0%
49_53_107W84	0	0	5	5	1.7	2.5		0	-1.7	-100.0%	0	-1.7	-100.0%	0	-1.7	-100.0%
49_53_108W60	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_109J5	0	0	3420	3420	1140.0	1728.9		0	-1140.0	-100.0%	0	-1140.0	-100.0%	1506	366.0	32.1%
49_53_112W43	0	21	0	21	7.0	10.6		58	51.0	728.6%	32	25.0	357.1%	2878	2871.0	41014.3%
49_53_112W44	2139	491	5541	8171	2723.7	3041.5		11165	8441.3	309.9%	1034	-1689.7	-62.0%	795	-1928.7	-70.8%
49_53_126W41	295	302	6173	6770	2256.7	3134.6		454	-1802.7	-79.9%	686	-1570.7	-69.6%	11646	9389.3	416.1%
49_53_127W41	318	3352	112	3782	1260.7	1707.9		23	-1237.7	-98.2%	442	-818.7	-64.9%	142	-1118.7	-88.7%
49_53_12J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_12J2	0	0	0	0	0.0	0.0		0	0.0	N/A	3	3.0	N/A	0	0.0	N/A
49_53_12J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_12J4	0	42	16	58	19.3	22.9		0	-19.3	-100.0%	0	-19.3	-100.0%	0	-19.3	-100.0%
49_53_12J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_13F5	13	108	15	136	45.3	55.8		0	-45.3	-100.0%	0	-45.3	-100.0%	97	51.7	114.0%
49_53_17W42	84	0	0	84	28.0	42.5		0	-28.0	-100.0%	0	-28.0	-100.0%	0	-28.0	-100.0%
49_53_18F5	0	52	0	52	17.3	26.3		0	-17.3	-100.0%	0	-17.3	-100.0%	0	-17.3	-100.0%
49_53_18F6	372	162	215	749	249.7	236.3		1389	1139.3	456.3%	280	30.3	12.1%	225	-24.7	-9.9%
49_53_23F2	68	2009	443	2520	840.0	1046.2		19	-821.0	-97.7%	259	-581.0	-69.2%	407	-433.0	-51.5%
49_53_23F3	7	166	282	455	151.7	167.1		83	-68.7	-45.3%	246	94.3	62.2%	696	544.3	358.9%
49_53_23F4	15	0	0	15	5.0	7.6		0	-5.0	-100.0%	82	77.0	1540.0%	0	-5.0	-100.0%
49_53_23F5	0	0	3	3	1.0	1.5		0	-1.0	-100.0%	0	-1.0	-100.0%	0	-1.0	-100.0%
49_53_27F6	0	15	11	26	8.7	9.5		0	-8.7	-100.0%	1	-7.7	-88.5%	1	-7.7	-88.5%
49_53_36J1	0	0	1	1	0.3	0.5		0	-0.3	-100.0%	0	-0.3	-100.0%	0	-0.3	-100.0%
49_53_36J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	2	2.0	N/A
49_53_36J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_36J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_38F2	54	0	0	54	18.0	27.3		0	-18.0	-100.0%	82	64.0	355.6%	21	3.0	16.7%
49_53_38F4	111	211	57	379	126.3	125.8		28	-98.3	-77.8%	29	-97.3	-77.0%	70	-56.3	-44.6%
49_53_38F5	341	306	556	1203	401.0	371.2		34	-367.0	-91.5%	2987	2586.0	644.9%	513	112.0	27.9%
49_53_38F6	0	0	12	12	4.0	6.1		63	59.0	1475.0%	55	51.0	1275.0%	369	365.0	9125.0%
49_53_45F2	3235	72	37	3344	1114.7	1637.1		75	-1039.7	-93.3%	150	-964.7	-86.5%	768	-346.7	-31.1%
49_53_48F3	2753	5348	249	8350	2783.3	3073.7		97	-2686.3	-96.5%	91	-2692.3	-96.7%	2697	-86.3	-3.1%
49_53_48F4	126	135	7	268	89.3	94.5		46	-43.3	-48.5%	81	-8.3	-9.3%	185	95.7	107.1%
49_53_4F2	228	3141	6004	9373	3124.3	3461.1		3086	-38.3	-1.2%	348	-2776.3	-88.9%	902	-2222.3	-71.1%
49_53_50J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_50J3	35	0	67	102	34.0	38.6		0	-34.0	-100.0%	0	-34.0	-100.0%	0	-34.0	-100.0%
49_53_66J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_66J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A

49_53_66J5	0	0	387	387	129.0	195.6		0	-129.0	-100.0%	0	-129.0	-100.0%	50	-79.0	-61.2%
49_53_6J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_6J5	462	917	205	1584	528.0	536.7		0	-528.0	-100.0%	0	-528.0	-100.0%	0	-528.0	-100.0%
49_53_73J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_73J2	0	0	37	37	12.3	18.7		0	-12.3	-100.0%	0	-12.3	-100.0%	0	-12.3	-100.0%
49_53_73J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_73J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_73J5	24	0	0	24	8.0	12.1		0	-8.0	-100.0%	0	-8.0	-100.0%	1	-7.0	-87.5%
49_53_76F2	15	54	1	70	23.3	28.5		2	-21.3	-91.4%	0	-23.3	-100.0%	2	-21.3	-91.4%
49_53_76F4	43	0	0	43	14.3	21.7		0	-14.3	-100.0%	0	-14.3	-100.0%	75	60.7	423.3%
49_53_76F6	15	0	99	114	38.0	50.8		0	-38.0	-100.0%	0	-38.0	-100.0%	0	-38.0	-100.0%
49_53_76F7	0	0	57	57	19.0	28.8		0	-19.0	-100.0%	2205	2186.0	11505.3%	22	3.0	15.8%
49_53_9J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_9J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_122J2	4252	1632	295	6179	2059.7	2328.0		0	-2059.7	-100.0%	0	-2059.7	-100.0%	0	-2059.7	-100.0%
49_56_122J6	4252	0	0	4252	1417.3	2149.5		0	-1417.3	-100.0%	0	-1417.3	-100.0%	0	-1417.3	-100.0%
49_56_131J12	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_131J14	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_131J6	0	691	1	692	230.7	349.3		0	-230.7	-100.0%	1	-229.7	-99.6%	0	-230.7	-100.0%
49_56_154J14	0	0	14	14	4.7	7.1		0	-4.7	-100.0%	0	-4.7	-100.0%	0	-4.7	-100.0%
49_56_154J16	0	26	0	26	8.7	13.1		0	-8.7	-100.0%	0	-8.7	-100.0%	0	-8.7	-100.0%
49_56_154J18	0	0	0	0	0.0	0.0		0	0.0	N/A	47	47.0	N/A	0	0.0	N/A
49_56_154J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_154J6	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_154J8	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	220	220.0	N/A
49_56_19J14	0	0	0	0	0.0	0.0		0	0.0	N/A	537	537.0	N/A	0	0.0	N/A
49_56_19J2	4252	0	0	4252	1417.3	2149.5		0	-1417.3	-100.0%	4558	3140.7	221.6%	42	-1375.3	-97.0%
49_56_21J2	4265	12	0	4277	1425.7	2156.2		0	-1425.7	-100.0%	0	-1425.7	-100.0%	0	-1425.7	-100.0%
49_56_21J6	4252	0	1	4253	1417.7	2149.5		0	-1417.7	-100.0%	0	-1417.7	-100.0%	0	-1417.7	-100.0%
49_56_23J12	0	0	0	0	0.0	0.0		0	0.0	N/A	5032	5032.0	N/A	0	0.0	N/A
49_56_23J14	9	0	0	9	3.0	4.5		0	-3.0	-100.0%	6055	6052.0	201733.3%	0	-3.0	-100.0%
49_56_23J6	0	0	0	0	0.0	0.0		0	0.0	N/A	4558	4558.0	N/A	0	0.0	N/A
49_56_31J2	0	8	0	8	2.7	4.0		0	-2.7	-100.0%	0	-2.7	-100.0%	0	-2.7	-100.0%
49_56_32J12	4252	1422	500	6174	2058.0	2302.1		0	-2058.0	-100.0%	4	-2054.0	-99.8%	0	-2058.0	-100.0%
49_56_32J14	0	0	0	0	0.0	0.0		28	28.0	N/A	1	1.0	N/A	0	0.0	N/A
49_56_32J2	926	0	0	926	308.7	468.1		0	-308.7	-100.0%	0	-308.7	-100.0%	0	-308.7	-100.0%
49_56_32J4	0	2	2109	2111	703.7	1066.2		0	-703.7	-100.0%	0	-703.7	-100.0%	0	-703.7	-100.0%
49_56_33F4	1300	55	6258	7613	2537.7	3245.9		1345	-1192.7	-47.0%	404	-2133.7	-84.1%	544	-1993.7	-78.6%
49_56_37J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_38J2	0	35	0	35	11.7	17.7		0	-11.7	-100.0%	0	-11.7	-100.0%	0	-11.7	-100.0%
49_56_38J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_41F1	61	281	1187	1529	509.7	621.2		654	144.3	28.3%	127	-382.7	-75.1%	263	-246.7	-48.4%
49_56_49J1	60	0	0	60	20.0	30.3		216	196.0	980.0%	0	-20.0	-100.0%	0	-20.0	-100.0%
49_56_49J2	224	0	0	224	74.7	113.2		50	-24.7	-33.0%	0	-74.7	-100.0%	0	-74.7	-100.0%
49_56_49J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	20	20.0	N/A
49_56_49J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_51J12	0	0	0	0	0.0	0.0		0	0.0	N/A	4558	4558.0	N/A	0	0.0	N/A

49_56_51J14	0	0	0	0	0.0	0.0		0	0.0	N/A	4558	4558.0	N/A	0	0.0	N/A
49_56_51J16	0	0	34	34	11.3	17.2		21	9.7	85.3%	4558	4546.7	40117.6%	0	-11.3	-100.0%
49_56_51J2	0	6	0	6	2.0	3.0		26	24.0	1200.0%	4558	4556.0	227800.0%	0	-2.0	-100.0%
49_56_54F1	7994	10359	2073	20426	6808.7	6796.7		1667	-5141.7	-75.5%	1389	-5419.7	-79.6%	2439	-4369.7	-64.2%
49_56_57J2	0	13	0	13	4.3	6.6		0	-4.3	-100.0%	0	-4.3	-100.0%	1	-3.3	-76.9%
49_56_57J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A
49_56_57J5	26	0	54	80	26.7	30.6		0	-26.7	-100.0%	8	-18.7	-70.0%	2	-24.7	-92.5%
49_56_59F1	147	115	205	467	155.7	142.9		443	287.3	184.6%	444	288.3	185.2%	264	108.3	69.6%
49_56_59F4	138	3714	1472	5324	1774.7	2037.7		747	-1027.7	-57.9%	362	-1412.7	-79.6%	2	-1772.7	-99.9%
49_56_61F2	24	133	38	195	65.0	71.7		75	10.0	15.4%	4613	4548.0	6996.9%	24	-41.0	-63.1%
49_56_61F4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_64F1	88	0	17	105	35.0	45.5		4	-31.0	-88.6%	201	166.0	474.3%	2044	2009.0	5740.0%
49_56_64F2	0	50	18	68	22.7	27.0		0	-22.7	-100.0%	443	420.3	1854.4%	176	153.3	676.5%
49_56_68F3	101	785	2145	3031	1010.3	1165.3		5857	4846.7	479.7%	162	-848.3	-84.0%	13089	12078.7	1195.5%
49_56_72F5	9178	22	363	9563	3187.7	4647.6		16	-3171.7	-99.5%	56	-3131.7	-98.2%	231	-2956.7	-92.8%
49_56_72F6	0	35	0	35	11.7	17.7		140	128.3	1100.0%	35	23.3	200.0%	6	-5.7	-48.6%
49_56_83F1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_83F3	0	0	4	4	1.3	2.0		0	-1.3	-100.0%	0	-1.3	-100.0%	0	-1.3	-100.0%
49_56_84T2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_84T4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_85T3	127	138	370	635	211.7	212.7		8995	8783.3	4149.6%	551	339.3	160.3%	4949	4737.3	2238.1%
49_56_87F2	0	18	0	18	6.0	9.1		0	-6.0	-100.0%	0	-6.0	-100.0%	0	-6.0	-100.0%
49_56_87F4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	335	335.0	N/A
Totals	**70013**	**37802**	**43270**	**151085**	**50361.7**	**46664.7**		**38327**	**-12034.7**	**-23.9%**	**56979**	**6617.3**	**13.1%**	**48734**	**-1627.7**	**-3.2%**

Fiscal Year 2010								**1st Year After Project**			**2nd Year After Project**		
Feeder ID	**CI FY 2007**	**CI FY 2008**	**CI FY 2009**	**Total CI 4/1/06-3/31/09**	**Average CI**	**Standard Deviation**	**Project Year 4/1/09-3/31/10**	**Total CI 4/1/10-3/31/11**	**Difference**	**% Improved**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_104J3	0	0	0	0	0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_104J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_106J3	0	1886	0	1886	628.7	1088.9		0	-628.7	-100.0%	0	-628.7	-100.0%
49_53_106J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_107W51	0	0	84	84	28.0	48.5		0	-28.0	-100.0%	0	-28.0	-100.0%
49_53_107W80	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_108W61	1491	0	0	1491	497.0	860.8		34	-463.0	-93.2%	0	-497.0	-100.0%
49_53_108W62	47	0	1586	1633	544.3	902.4		18	-526.3	-96.7%	1	-543.3	-99.8%
49_53_108W63	8	0	7908	7916	2638.7	4563.4		1	-2637.7	-100.0%	21	-2617.7	-99.2%
49_53_109J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_109J3	0	0	0	0	0.0	0.0		0	0.0	N/A	28	28.0	N/A
49_53_1119	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_111J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_111J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_1123	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A

49_53_1125	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_112W41	0	86	41	127	42.3	43.0		5284	5241.7	12381.9%	800	757.7	1789.8%
49_53_112W42	13878	272	0	14150	4716.7	7935.1		2642	-2074.7	-44.0%	11421	6704.3	142.1%
49_53_1131	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_1133	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_113J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_113J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_126W42	7	0	0	7	2.3	4.0		0	-2.3	-100.0%	16	13.7	585.7%
49_53_126W51	205	449	400	1054	351.3	129.1		44	-307.3	-87.5%	260	-91.3	-26.0%
49_53_127W40	1701	548	262	2511	837.0	761.8		1198	361.0	43.1%	1049	212.0	25.3%
49_53_148J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_148J3	0	0	0	0	0.0	0.0		1560	1560.0	N/A	40	40.0	N/A
49_53_148J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_148J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_18F3	8537	203	1	8741	2913.7	4871.0		360	-2553.7	-87.6%	70	-2843.7	-97.6%
49_53_21F1	286	554	65	905	301.7	244.9		490	188.3	62.4%	266	-35.7	-11.8%
49_53_23F1	6703	2465	2707	11875	3958.3	2380.0		174	-3784.3	-95.6%	130	-3828.3	-96.7%
49_53_23F2	2009	443	107	2559	853.0	1015.1		259	-594.0	-69.6%	407	-446.0	-52.3%
49_53_23F3	166	282	282	730	243.3	67.0		246	2.7	1.1%	696	452.7	186.0%
49_53_23F6	11094	1	2747	13842	4614.0	5777.4		128	-4486.0	-97.2%	121	-4493.0	-97.4%
49_53_24J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_28J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_2J1	0	0	0	0	0.0	0.0		17	17.0	N/A	31	31.0	N/A
49_53_2J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_2J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_2J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_30J1	0	0	0	0	0.0	0.0		0	0.0	N/A	883	883.0	N/A
49_53_30J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_30J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_34F1	584	1388	907	2879	959.7	404.6		1265	305.3	31.8%	9409	8449.3	880.4%
49_53_50F2	7	1645	8	1660	553.3	945.4		1	-552.3	-99.8%	0	-553.3	-100.0%
49_53_50J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_60J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_60J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_60J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_67J1	0	0	0	0	0.0	0.0		4	4.0	N/A	0	0.0	N/A
49_53_6J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_6J3	0	0	3	3	1.0	1.7		0	-1.0	-100.0%	0	-1.0	-100.0%
49_53_6J7	0	1	0	1	0.3	0.6		0	-0.3	-100.0%	0	-0.3	-100.0%
49_53_6J8	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_73J6	0	0	8	8	2.7	4.6		0	-2.7	-100.0%	0	-2.7	-100.0%
49_53_76F5	0	0	19	19	6.3	11.0		0	-6.3	-100.0%	1	-5.3	-84.2%
49_53_7F4	0	0	2	2	0.7	1.2		15	14.3	2150.0%	0	-0.7	-100.0%
49_56_14F1	221	386	5	612	204.0	191.1		12405	12201.0	5980.9%	5	-199.0	-97.5%
49_56_14F4	0	848	10	858	286.0	486.7		6170	5884.0	2057.3%	10	-276.0	-96.5%
49_56_16F1	10226	5618	135	15979	5326.3	5051.8		52	-5274.3	-99.0%	1650	-3676.3	-69.0%
49_56_16F3	101	6	0	107	35.7	56.7		33	-2.7	-7.5%	0	-35.7	-100.0%

49_56_16F4	0	10	0	10	3.3	5.8		2199	2195.7	65870.0%	27	23.7	710.0%
49_56_22F2	6613	59	1	6673	2224.3	3800.8		24	-2200.3	-98.9%	20	-2204.3	-99.1%
49_56_30F1	1003	11489	2268	14760	4920.0	5724.0		2639	-2281.0	-46.4%	364	-4556.0	-92.6%
49_56_30F2	6507	321	360	7188	2396.0	3560.3		44	-2352.0	-98.2%	207	-2189.0	-91.4%
49_56_42F1	290	14361	204	14855	4951.7	8148.8		19	-4932.7	-99.6%	1	-4950.7	-100.0%
49_56_43F1	445	2986	4898	8329	2776.3	2233.9		1208	-1568.3	-56.5%	1657	-1119.3	-40.3%
49_56_46F2	3537	975	1109	5621	1873.7	1442.0		756	-1117.7	-59.7%	261	-1612.7	-86.1%
49_56_46F3	1038	540	230	1808	602.7	407.6		10	-592.7	-98.3%	99	-503.7	-83.6%
49_56_52F3	1940	4438	376	6754	2251.3	2048.8		288	-1963.3	-87.2%	251	-2000.3	-88.9%
49_56_57J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_56_68F1	2385	1908	462	4755	1585.0	1001.4		1032	-553.0	-34.9%	708	-877.0	-55.3%
49_56_68F2	657	4240	197	5094	1698.0	2213.4		680	-1018.0	-60.0%	960	-738.0	-43.5%
49_56_68F4	121	188	90	399	133.0	50.1		319	186.0	139.8%	16	-117.0	-88.0%
49_56_86F1	9	0	154	163	54.3	86.4		0	-54.3	-100.0%	6930	6875.7	12654.6%
49_56_88F1	409	116	184	709	236.3	153.4		645	408.7	172.9%	472	235.7	99.7%
49_56_88F3	206	390	430	1026	342.0	119.5		754	412.0	120.5%	7899	7557.0	2209.6%
49_56_88F5	153	3842	250	4245	1415.0	2102.4		10449	9034.0	638.4%	1153	-262.0	-18.5%
Totals	**82584**	**62944**	**28500**	**174028**	**58009.3**	**27377.6**		**53466**	**-4543.3**	**-7.8%**	**48340**	**-9669.3**	**-16.7%**

Fiscal Year 2011								**1st Year After Project**		
Feeder ID	**CI FY 2008**	**CI FY 2009**	**CI FY 2010**	**Total CI 4/1/07-3/31/10**	**Average CI**	**Standard Deviation**	**Project Year 4/1/10-3/31/11**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_102W44	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_102W51	553	838	15	1406	468.7	417.9		0	-468.7	-100.0%
49_53_107W85	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_108W51	0	1	0	1	0.3	0.6		0	-0.3	-100.0%
49_53_108W53	1	77	101	179	59.7	52.2		303	243.3	407.8%
49_53_108W55	0	0	2	2	0.7	1.2		845	844.3	126650.0%
49_53_108W65	3	0	1	4	1.3	1.5		0	-1.3	-100.0%
49_53_126W40	0	3	34	37	12.3	18.8		34	21.7	175.7%
49_53_126W50	19108	220	1846	21174	7058.0	10467.2		346	-6712.0	-95.1%
49_53_126W54	7990	138	0	8128	2709.3	4573.7		0	-2709.3	-100.0%
49_53_127W42	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_15F2	8790	10634	596	20020	6673.3	5343.3		859	-5814.3	-87.1%
49_53_17W43	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_18F1	225	3883	196	4304	1434.7	2120.4		45	-1389.7	-96.9%
49_53_18F7	9	9	0	18	6.0	5.2		4036	4030.0	67166.7%
49_53_18F8	0	60	106	166	55.3	53.2		31	-24.3	-44.0%
49_53_18F9	0	0	51	51	17.0	29.4		3	-14.0	-82.4%
49_53_20F1	0	1284	0	1284	428.0	741.3		0	-428.0	-100.0%
49_53_20F2	1985	10	2	1997	665.7	1142.6		1	-664.7	-99.8%
49_53_21F2	34	37	1182	1253	417.7	661.9		67	-350.7	-84.0%
49_53_21F4	16	109	22	147	49.0	52.0		2	-47.0	-95.9%

49_53_27F1	49	2599	182	2830	943.3	1435.4		13	-930.3	-98.6%
49_53_27F2	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_27F3	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_27F4	0	1	0	1	0.3	0.6		0	-0.3	-100.0%
49_53_2J7	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_2J8	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_2J9	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J1	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J2	17	12	140	169	56.3	72.5		0	-56.3	-100.0%
49_53_37J3	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J4	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J5	16	32	17	65	21.7	9.0		1	-20.7	-95.4%
49_53_38F1	4846	449	724	6019	2006.3	2463.1		486	-1520.3	-75.8%
49_53_38F3	67	3989	248	4304	1434.7	2214.0		230	-1204.7	-84.0%
49_53_51F1	1513	97	358	1968	656.0	753.6		3	-653.0	-99.5%
49_53_51F2	265	0	430	695	231.7	216.9		441	209.3	90.4%
49_53_51F3	132	713	218	1063	354.3	313.6		0	-354.3	-100.0%
49_53_5F1	6464	1068	33	7565	2521.7	3453.2		1031	-1490.7	-59.1%
49_53_5F2	27442	7385	109	34936	11645.3	14155.8		319	-11326.3	-97.3%
49_53_5F3	14602	3	2	14607	4869.0	8429.0		161	-4708.0	-96.7%
49_53_5F4	9588	0	0	9588	3196.0	5535.6		3294	98.0	3.1%
49_53_76F1	0	28	1	29	9.7	15.9		22	12.3	127.6%
49_53_77J1	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_77J2	1	0	0	1	0.3	0.6		0	-0.3	-100.0%
49_53_77J3	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_77J4	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_79F1	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_79F2	8	0	49	57	19.0	26.3		0	-19.0	-100.0%
49_56_14F1	386	5	165	556	185.3	191.3		5	-180.3	-97.3%
49_56_14F2	178	0	108	286	95.3	89.7		25	-70.3	-73.8%
49_56_14F3	13	0	2	15	5.0	7.0		1186	1181.0	23620.0%
49_56_16F2	419	197	5	621	207.0	207.2		244	37.0	17.9%
49_56_17F1	4	34	31	69	23.0	16.5		17	-6.0	-26.1%
49_56_17F2	10990	22	16	11028	3676.0	6334.1		8790	5114.0	139.1%
49_56_17F3	279	5230	99	5608	1869.3	2911.8		12	-1857.3	-99.4%
49_56_22F1	24	1	1	26	8.7	13.3		49	40.3	465.4%
49_56_22F4	2409	154	35	2598	866.0	1337.6		26	-840.0	-97.0%
49_56_29F1	1	75	1	77	25.7	42.7		0	-25.7	-100.0%
49_56_29F2	0	0	3	3	1.0	1.7		0	-1.0	-100.0%
49_56_30F2	321	360	9122	9803	3267.7	5070.0		207	-3060.7	-93.7%
49_56_36W41	3	52	128	183	61.0	63.0		31	-30.0	-49.2%
49_56_36W42	12	1	27	40	13.3	13.1		9	-4.3	-32.5%
49_56_36W43	12	39	7	58	19.3	17.2		27	7.7	39.7%
49_56_36W44	151	1	13	165	55.0	83.4		2	-53.0	-96.4%
49_56_3F1	9	198	6876	7083	2361.0	3911.2		77	-2284.0	-96.7%
49_56_3F2	1	97	72	170	56.7	49.8		1	-55.7	-98.2%
49_56_42F1	14361	204	223	14788	4929.3	8168.1		1	-4928.3	-100.0%

49_56_45J2	148	0	9	157	52.3	83.0		46	-6.3	-12.1%
49_56_45J4	29	12	17	58	19.3	8.7		10	-9.3	-48.3%
49_56_45J6	198	124	0	322	107.3	100.0		4	-103.3	-96.3%
49_56_46F1	175	14	647	836	278.7	329.0		105	-173.7	-62.3%
49_56_46F4	18	8	288	314	104.7	158.9		307	202.3	193.3%
49_56_52F1	0	684	323	1007	335.7	342.2		1	-334.7	-99.7%
49_56_52F2	0	16	3390	3406	1135.3	1952.6		1	-1134.3	-99.9%
49_56_59F2	1	681	10	692	230.7	390.0		606	375.3	162.7%
49_56_59F3	533	5004	834	6371	2123.7	2499.0		1293	-830.7	-39.1%
49_56_65J12	0	78	0	78	26.0	45.0		3	-23.0	-88.5%
49_56_65J2	72	0	2	74	24.7	41.0		14	-10.7	-43.2%
49_56_72F1	0	0	15	15	5.0	8.7		1	-4.0	-80.0%
49_56_72F2	0	25	282	307	102.3	156.1		327	224.7	219.5%
49_56_72F3	12010	57	9453	21520	7173.3	6294.1		3	-7170.3	-100.0%
49_56_72F4	192	107	201	500	166.7	51.9		168	1.3	0.8%
49_56_64F5	0	0	0	0	0.0	0.0		0	0.0	N/A
Totals	**146673**	**47159**	**39070**	**232902**	**77634.0**	**59926.2**		**26171**	**-51463.0**	**-66.3%**

				Total CI	Average CI Before Project Year		Project Year	Average CI After Project Year	Difference	% Improved	Average CI 2 Years After	Difference	% Improved	Average CI 3 Years After	Difference	% Improved	Average CI 4 Years After	Difference	% Improved
Program Totals				**-**	**57793.0**			**41833.0**	**-15960.0**	**-27.6%**	**45449.0**	**-12344.0**	**-21.4%**	**56783.0**	**-1010.0**	**-1.7%**	**46568.5**	**-11224.50**	**-19%**

Cycle Prune Project Year	AVG Annual CI Pre-Project	Total CI 1st Year Post-Project	% Improved	Total CI 1nd Year Post-Project	% Improved	Total CI 3rd Year Post-Project	% Improved	Total CI 4th Year Post-Project	% Improved
2007	55,494	60,868	10%	48,121	13%	39,215	29%	34004	39%
2008	47,466	30,333	36%	28,356	40%	82,400	74%	59,133	25%
2009	50,362	38,327	24%	56,979	13%	48,734	3%	-	-
2010	58,009	53,466	8%	48,340	17%	-	-	-	-
2011	77,634	26,171	66%	-	-	-	-	-	-

National Grid

The Narragansett Electric Company

Rhode Island Electric Infrastructure, Safety and Reliability Plan

Vegetation Management Program Cost Benefit Methodology

Docket No. 4307

September 5, 2012

Submitted to:
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

1. Background

In its May 3, 2012 Report and Order issued approving National Grid's[1] 2013 Electric Infrastructure, Safety and Reliability ("ISR") Plan, the Rhode Island Public Utilities Commission (the "Commission") directed the Company to collaborate with the Division of Public Utilities and Carriers ("Division") to develop a method by which the costs and benefits of the Vegetation Management Program and Inspection and Maintenance Program will be tracked and reported in future ISR filings.[2]

National Grid met with the Division and its consultant, Mr. Gregory Booth, on June 15, 2012 to collaboratively develop a method for the tracking and reporting of costs and benefits for both the Vegetation Management and Inspection and Maintenance programs. The description and method for tracking each of these programs was filed with the Commission on June 29, 2012.[3]

With respect to the Vegetation Management Program, the Company agreed to quantify the reliability benefits for a) both the Enhanced Hazard Tree Mitigation ("EHTM") Program and the Cycle Pruning Program on a fiscal year basis with the benefits determined by comparing a pre-project three year average to a post-project tree-related number of customers interrupted and the costs calculated by a cost per feeder to determine an overall cost per change in customer interruptions; and b) a Damage Restoration Cost Benefit analysis for EHTM circuits using a similar method, and

1 The Narragansett Electric Company d/b/a National Grid (referred to herein as "National Grid" or the "Company").
2 Docket No. 4307, Report and Order, page 16.
3 Docket No. 4307 Compliance Filing of June 29, 2012, page 1.

estimating the costs or restoration. The first Vegetation Management analyses were to be filed with the Commission on August 1, as part of its annual Electric ISR reconciliation filing.[4] The first Inspection & Maintenance analyses are to be filed in 2014, since work for this program has just recently begun.

As set forth below, Section 2 provides the Company's results of the FY 2012 Reliability Cost/Benefit for EHTM Program and Cycle Pruning Program. Section 3 provides the results of the Company's Damage Restoration Cost/Benefit for Enhanced Hazard Tree Mitigation.

2. FY 2012 Reliability Cost/Benefit for Enhanced Hazard Tree Mitigation and Cycle Pruning Programs

To meet the requirements of the FY12 Rhode Island ISR, the following study of the Company's Vegetation Management Program was performed. The analysis was done for the work performed in FY08 through FY11 for the EHTM Program and FY07 – FY11 for the Cycle Pruning Program. To calculate the reliability benefits for the EHTM Program, the Company used the average number of tree-related customer interruptions ("CI") over a three-year period prior to the project year as the baseline. The project year was excluded from the analysis as both the EHTM and the cycle pruning often take the majority of the year to complete. Tree-related customer interruptions were then calculated for the first full year post project, and for all additional full years thereafter.

[4] Id., page 2. Because information was not yet available, the Company notified the Division and Commission that it would file its initial Vegetation Management Cost Benefit analysis by September 1, 2012

The Company then compared the difference between the pre-project average tree-related customer interruptions and the post-project average tree-related customer interruptions by calculating the percent improvement by individual circuit, for the total annual work plan, and a running average percent improvement for all circuits completed in the program.

The EHTM Program summary below shows favorable results for each year of the study.

Table 1 – EHTM Reliability Results

EHTM Project Year	Average Annual CI Pre-Project	CI 1st Year Post-Project	% Improved	Average Annual CI 2nd Year Post-Project	% Improved	Average Annual CI 3rd Year Post-Project	% Improved
2008	22,127	12,513	43%	7,477	66%	9,213	58%
2009	32,092	6,548	80%	9,013	72%	15,972	50%
2010	50,145	6,731	87%	13,032	74%	-	-
2011	1,133	186	84%	-	-	-	-

The summary of the EHTM Program, beginning in FY08, shows an average tree-related CI improvement of 75% for the first year post-project, 63% in second, and 52% in the third year following project completion. The full data set showing results by circuit for EHTM is included as Attachment 1 to this filing.

Table 2 – Cycle Prune Reliability Results

Cycle Prune Project Year	Average Annual CI Pre-Project	CI 1st Year Post-Project	% Improved	Average Annual CI 2nd Year Post-Project	% Improved	Average Annual CI 3rd Year Post-Project	% Improved
2007	55,494	60,868	-10%	48,121	13%	39,215	29%
2008	47,466	30,333	36%	28,356	40%	82,400	-74%
2009	50,362	38,327	24%	56,979	-13%	48,734	3%
2010	58,009	53,466	8%	48,340	17%	-	-
2011	77,634	26,171	66%	-	-	-	-

* Negative numbers represent an increase from established baseline value.

The primary goal of both the EHTM program and the Cycle Pruning Program is to maintain and improve reliability. In addition, the Cycle Pruning Program also provides benefits to National Grid and its customers by maintaining and improving both public and worker safety. Furthermore, the Cycle Pruning Program increases the efficiency of the Company's line maintenance crews, and increases the efficiency and accuracy of the Company's line inspectors. However, since the intermittent contact of branches against overhead distribution wires due to growth does not specifically cause service interruptions, the clearance of those branches through cycle pruning will not necessarily show a significant and consistent improvement in reliability. While the results for cycle pruning are less consistent than the reliability results from the EHTM Program, the study shows the Company's Cycle Pruning Program creates, on average, a 28% improvement in reliability following the project year. The second year improved by 21%, followed by a 2% improvement in the third year. These modest improvements in reliability are attributable to the fact that the cycle pruning specification does include the

removal of dead and damaged overhanging vegetation, the shortening of overhead pine branches and the removal of high risk hazard trees during cycle pruning. The full data set showing results by circuit for cycle pruning is included as Attachment 2 to this filing.

In an effort to normalize the data used to show the EHTM benefits, the Company compared state-wide tree-related customer interruptions for the same years as shown in the table below. The EHTM data previously discussed is included for direct comparison. Noting the percent change column on the far right of the table clearly shows that the EHTM Program provided statistically significant reliability benefits.

Table 3 – EHTM Benefits Compared to Statewide Performance

	Average Annual CI Pre-Project	**Average Annual CI - Post- Project**	**% Improvement**
FY08 (3 years of data post project)			
EHTM	22,127	9,734	56%
All RI	103,442	87,826	15%
FY09 (3 years of data post-project)			
EHTM	32,092	10,511	67%
All RI	117,673	94,133	20%
FY10 (2 years of data post-project)			
EHTM	**50,145**	9,882	80%
All RI	99,345	98,133	1%
FY11 (1 year of data post-project)			
EHTM	1,132	186	84%
All RI	93,243	99,143	-6%

3. Damage Restoration Cost/Benefit for Enhanced Hazard Tree Mitigation

The Company does not separately track repair costs by event. Estimates were created to perform analysis on damage restoration cost benefit. The Company generated repair cost estimates for the following types of repairs: replacing a blown fuse, replacing a broken cross-arm and replacing a broken pole. National Grid then reviewed interruption records for the EHTM feeders for three years pre-project and for three years post-project. The Company estimated the required repair work capital and expense costs using the event description record and information regarding any other work required, such as removing a tree or trimming vines. The table below includes the results of the calculation of repair costs on the EHTM feeders for both pre- and post-project periods. In summary, there is an average 47% reduction in annual repair costs on a circuit where EHTM has been employed.

Table 4 - Damage Restoration Cost Reductions

Project Year	Annual Average Repair Costs Pre-Project	Annual Average Repair Costs Post-Project	% Improvement
2008	$ 12,285	$ 10,087	18%
2009	$ 12,100	$ 5,161	57%
2010	$ 14,555	$ 5,954	59%
2011	$ 1,129	$ -	100%
Totals	**$ 40,069**	**$ 21,202**	**47%**

The Company also calculated the total cost benefit for the EHTM Program by program year. This calculation is made by dividing the program cost, in this case the actual annual

spend for EHTM, by the CI benefit or change. The table below shows the calculation and the benefit as a rolling index over the three years post project.

Table 5 – EHTM Cost/Benefit ($/ΔCI)

		Post-Project Year 1		Post-Project Year 2		Post-Project Year 3	
Project Year	**EHTM Cost**	**Δ CI**	**$ / Δ CI**	**Average Δ CI**	**$ / Δ CI**	**Average Δ CI**	**$ / Δ CI**
2008	$ 579,857	9,614	$ 60	12,132	$ 48	12,393	$ 47
2009	$ 497,187	25,544	$ 19	24,311	$ 20	21,581	$ 23
2010	$ 486,681	43,387	$ 11	40,264	$ 12	-	-
2011	$ 69,256	947	$ 73	-	-	-	-
Totals	**$ 1,632,981**	**79,492**	**$ 21**	**76,707**	**$ 20**	**33,974**	**$ 32**

In summary, from 2008-2011 the Company spent $1.6M on our EHTM Program. This resulted in a reduction of 79,492 customer interruptions following the project year, resulting in a unit cost of $21 per reduced customer interruption. Using two years of data, the cost is $20 per reduced CI and using three years, $32 per reduced CI.

Fiscal Year 2007								1st Year After Project		
Feeder ID	CI FY 2004	CI FY 2005	CI FY 2006	Total CI 4/1/03-3/31/06	Average CI	Standard Deviation	Project Year 4/1/06-3/31/07	Total CI 4/1/07-3/31/08	Difference	% Improved
No EHTM for FY '07	-	-	-	-	-	-		-	-	-
Totals	-	-	-	-	-	-		-	-	-

Fiscal Year 2008								1st Year After Project			2nd Year After Project			3rd Year After Project			4th Year After Project		
Feeder ID	CI FY 2005	CI FY 2006	CI FY 2007	Total CI 4/1/04-3/31/07	Average CI	Standard Deviation	Project Year 4/1/07-3/31/08	Total CI 4/1/08-3/31/09	Difference	% Improved	Total CI 4/1/09-3/31/10	Difference	% Improved	Total CI 4/1/10-3/31/11	Difference	% Improved	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_13F2	108	118	7484	7710	2570	4256		1	-2569	-100%	60	-2510	-98%	0	-2570	-100%	318	-2252	-88%
49_53_34F2	672	4365	3123	8160	2720	1879		200	-2520	-93%	1150	-1570	-58%	757	-1963	-72%	8253	5533	203%
49_53_51F1	1007	381	236	1624	541	410		97	-444	-82%	358	-183	-34%	1	-540	-100%	3	-538	-99%
49_53_69F1	3508	4434	0	7942	2647	2339		223	-2424	-92%	0	-2647	-100%	3	-2644	-100%	67	-2580	-97%
49_56_33F4	2991	1300	55	4346	1449	1474		3818	2369	164%	1345	-104	-7%	404	-1045	-72%	544	-905	-62%
49_56_54F1	12615	7994	10359	30968	10323	2311		5344	-4979	-48%	1667	-8656	-84%	1389	-8934	-87%	2439	-7884	-76%
49_56_63F6	3531	1875	225	5631	1877	1653		2830	953	51%	2897	1020	54%	6659	4782	255%	704	-1173	-62%
Totals	**24432**	**20467**	**21482**	**66381**	**22127**	**2060**		**12513**	**-9614**	**-43%**	**7477**	**-14650**	**-66%**	**9213**	**-12914**	**-58%**	**12328**	**-9799**	**-44%**

Fiscal Year 2009								1st Year After Project			2nd Year After Project			3rd Year After Project		
Feeder ID	CI FY 2006	CI FY 2007	CI FY 2008	Total CI 4/1/05-3/31/08	Average CI	Standard Deviation	Project Year 4/1/08-3/31/09	Total CI 4/1/09-3/31/10	Difference	% Improved	Total CI 4/1/10-3/31/11	Difference	% Improved	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_102W51	16979	0	553	17532	5844	9647		15	-5829	-100%	8	-5836	-100%	0	-5844	-100%
49_53_112W42	1467	13878	272	15617	5206	7534		629	-4577	-88%	2642	-2564	-49%	11421	6215	119%
49_53_2291	0	0	0	0	0	0		0	0	N/A	0	0	N/A	0	0	N/A
49_53_23F1	3229	6703	2465	12397	4132	2259		54	-4078	-99%	174	-3958	-96%	130	-4002	-97%
49_53_38F1	2630	1877	4846	9353	3118	1543		724	-2394	-77%	2964	-154	-5%	486	-2632	-84%
49_53_5F4	3184	230	9588	13002	4334	4784		0	-4334	-100%	0	-4334	-100%	3294	-1040	-24%
49_56_22F4	584	278	2409	3271	1090	1152		35	-1055	-97%	298	-792	-73%	26	-1064	-98%
49_56_30F1	1318	1003	11489	13810	4603	5965		4851	248	5%	2639	-1964	-43%	364	-4239	-92%
49_56_52F3	4915	1940	4438	11293	3764	1598		240	-3524	-94%	288	-3476	-92%	251	-3513	-93%
Totals	**34306**	**25909**	**36060**	**96275**	**32092**	**5426**		**6548**	**-25544**	**-80%**	**9013**	**-23079**	**-72%**	**15972**	**-16120**	**-50%**

Fiscal Year 2010								1st Year After Project			2nd Year After Project		
Feeder ID	CI FY 2007	CI FY 2008	CI FY 2009	Total CI 4/1/06-3/31/09	Average CI	Standard Deviation	Project Year 4/1/09-3/31/10	Total CI 4/1/10-3/31/11	Difference	% Improved	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_108W62	47	0	1586	1633	544	902		18	-526	-97%	1	-543	-100%
49_53_20F2	1988	1985	10	3983	1328	1141		0	-1328	-100%	1	-1327	-100%
49_53_38F5	306	553	2809	3668	1223	1379		2987	1764	144%	186	-1037	-85%
49_53_5F2	516	27442	7385	35343	11781	13991		495	-11286	-96%	319	-11462	-97%
49_53_5F3	6837	14602	3	21442	7147	7304		507	-6640	-93%	161	-6986	-98%
49_53_7F1	10	14790	14	14814	4938	8532		0	-4938	-100%	0	-4938	-100%
49_56_16F1	10226	5618	135	15979	5326	5052		52	-5274	-99%	1650	-3676	-69%
49_56_17F2	25	10990	22	11037	3679	6332		234	-3445	-94%	8790	5111	139%
49_56_42F1	290	14361	204	14855	4952	8149		19	-4933	-100%	1	-4951	-100%
49_56_43F1	445	2856	4204	7505	2502	1904		1208	-1294	-52%	1657	-845	-34%
49_56_46F2	3537	975	1109	5621	1874	1442		756	-1118	-60%	261	-1613	-86%
49_56_59F4	529	1472	222	2223	741	651		362	-379	-51%	2	-739	-100%
49_56_72F3	265	12010	57	12332	4111	6842		93	-4018	-98%	3	-4108	-100%
Totals	**25021**	**107654**	**17760**	**150435**	**50145**	**49936**		**6731**	**-43414**	**-87%**	**13032**	**-37113**	**-74%**

Fiscal Year 2011								1st Year After Project		
Feeder ID	CI FY 2008	CI FY 2009	CI FY 2010	Total CI 4/1/07-3/31/10	Average CI	Standard Deviation	Project Year 4/1/10-3/31/11	Total CI 4/1/11-3/31/12	Difference	% Improved
49_53_38F5	553	2809	34	3399	1133	1475		186	-947	-84%
Totals	**553**	**2809**	**34**	**3399**	**1133**	**1475**		**186**	**-947**	**-84%**

				Total CI	Average CI Before Project Year		Project Year	Average CI After Project Year	Difference	% Improved	Average CI 2 Years After	Difference	% Improved	Average CI 3 Years After	Difference	% Improved	Average CI 4 Years After	Difference	% Improved
Program Totals				-	26374			6495	-19880	-75%	9841	-16534	-63%	12593	-13782	-52%	12328	-9799	-44%

Fiscal Year 2007								1st Year After Project			2nd Year After Project			3rd Year After Project			4th Year After Project		
Feeder ID	CI FY 2004	CI FY 2005	CI FY 2006	Total CI 4/1/03-3/31/06	Average CI	Standard Deviation	Project Year 4/1/06-3/31/07	Total CI 4/1/07-3/31/08	Difference	% Improved	Total CI 4/1/08-3/31/09	Difference	% Improved	Total CI 4/1/09-3/31/10	Difference	% Improved	Total CI 4/1/10-3/31/11	Difference	% Improved
49_53_102W44	15	0	493	508	169.3	280.4		0	-169.3	-100.0%	0	-169.3	-100%	0	-169.3	-100.0%	0	-169.3	-100.0%
49_53_102W51	0	7378	16979	24357	8119.0	8513.7		553	-7566.0	-93.2%	838	-7281.0	-90%	15	-8104.0	-99.8%	8	-8111.0	-99.9%
49_53_108W51	0	0	0	0	0.0	0.0		0	0.0	N/A	1	1.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_108W53	0	2990	753	3743	1247.7	1555.2		1	-1246.7	-99.9%	77	-1170.7	-94%	101	-1146.7	-91.9%	8265	7017.3	562.4%
49_53_108W55	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	2	2.0	N/A	0	0.0	N/A
49_53_108W61	0	0	76	76	25.3	43.9		0	-25.3	-100.0%	0	-25.3	-100%	86	60.7	239.5%	34	8.7	34.2%
49_53_108W62	2635	0	13562	16197	5399.0	7191.1		0	-5399.0	-100.0%	1586	-3813.0	-71%	1592	-3807.0	-70.5%	18	-5381.0	-99.7%
49_53_108W63	9	0	13	22	7.3	6.7		0	-7.3	-100.0%	7908	7900.7	107736%	5	-2.3	-31.8%	1	-6.3	-86.4%
49_53_108W65	0	0	3	3	1.0	1.7		3	2.0	200.0%	0	-1.0	-100%	1	0.0	0.0%	41	40.0	4000.0%
49_53_126W40	0	2	18	20	6.7	9.9		0	-6.7	-100.0%	3	-3.7	-55%	34	27.3	410.0%	183	176.3	2645.0%
49_53_126W50	0	1460	4033	5493	1831.0	2041.9		19108	17277.0	943.6%	220	-1611.0	-88%	1846	15.0	0.8%	574	-1257.0	-68.7%
49_53_127W40	236	387	995	1618	539.3	401.8		548	8.7	1.6%	262	-277.3	-51%	8195	7655.7	1419.5%	1198	658.7	122.1%
49_53_127W42	5	0	508	513	171.0	291.9		0	-171.0	-100.0%	0	-171.0	-100%	0	-171.0	-100.0%	0	-171.0	-100.0%
49_53_15F2	150	2215	3786	6151	2050.3	1823.6		8790	6739.7	328.7%	10634	8583.7	419%	596	-1454.3	-70.9%	139	-1911.3	-93.2%
49_53_17W43	2635	0	0	2635	878.3	1521.3		0	-878.3	-100.0%	0	-878.3	-100%	0	-878.3	-100.0%	0	-878.3	-100.0%
49_53_18F1	0	45	52	97	32.3	28.2		225	192.7	595.9%	3883	3850.7	11909%	196	163.7	506.2%	37	4.7	14.4%
49_53_18F2	0	0	9	9	3.0	5.2		0	-3.0	-100.0%	0	-3.0	-100%	79	76.0	2533.3%	0	-3.0	-100.0%
49_53_18F3	34	214	124	372	124.0	90.0		203	79.0	63.7%	1	-123.0	-99%	63	-61.0	-49.2%	360	236.0	190.3%
49_53_18F7	0	97	11	108	36.0	53.1		9	-27.0	-75.0%	9	-27.0	-75%	0	-36.0	-100.0%	4361	4325.0	12013.9%
49_53_18F8	0	0	20	20	6.7	11.5		0	-6.7	-100.0%	60	53.3	800%	106	99.3	1490.0%	49	42.3	635.0%
49_53_18F9	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	51	51.0	N/A	1	1.0	N/A
49_53_20F1	0	0	0	0	0.0	0.0		0	0.0	N/A	1284	1284.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_20F2	178	0	9849	10027	3342.3	5635.6		1985	-1357.3	-40.6%	10	-3332.3	-100%	2	-3340.3	-99.9%	0	-3342.3	-100.0%
49_53_21F1	0	5849	6992	12841	4280.3	3750.7		554	-3726.3	-87.1%	65	-4215.3	-98%	170	-4110.3	-96.0%	490	-3790.3	-88.6%
49_53_21F2	4	6	69	79	26.3	37.0		34	7.7	29.1%	37	10.7	41%	1182	1155.7	4388.6%	54	27.7	105.1%
49_53_21F4	0	0	18	18	6.0	10.4		16	10.0	166.7%	109	103.0	1717%	22	16.0	266.7%	1490	1484.0	24733.3%
49_53_23F1	0	0	3229	3229	1076.3	1864.3		2465	1388.7	129.0%	2707	1630.7	152%	54	-1022.3	-95.0%	174	-902.3	-83.8%
49_53_23F4	0	0	15	15	5.0	8.7		0	-5.0	-100.0%	0	-5.0	-100%	0	-5.0	-100.0%	82	77.0	1540.0%
49_53_27F1	0	11172	111	11283	3761.0	6418.4		49	-3712.0	-98.7%	2599	-1162.0	-31%	182	-3579.0	-95.2%	78	-3683.0	-97.9%
49_53_34F1	4530	3821	2258	10609	3536.3	1162.4		1388	-2148.3	-60.8%	907	-2629.3	-74%	3098	-438.3	-12.4%	1265	-2271.3	-64.2%
49_53_37J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_37J2	12	0	16	28	9.3	8.3		17	7.7	82.1%	12	2.7	29%	140	130.7	1400.0%	34	24.7	264.3%
49_53_37J3	43	0	0	43	14.3	24.8		0	-14.3	-100.0%	0	-14.3	-100%	0	-14.3	-100.0%	1	-13.3	-93.0%
49_53_37J4	0	32	0	32	10.7	18.5		0	-10.7	-100.0%	0	-10.7	-100%	0	-10.7	-100.0%	4	-6.7	-62.5%
49_53_38F1	10	7281	2630	9921	3307.0	3682.5		4846	1539.0	46.5%	449	-2858.0	-86%	724	-2583.0	-78.1%	2964	-343.0	-10.4%
49_53_38F3	112	142	7590	7844	2614.7	4308.8		67	-2547.7	-97.4%	3989	1374.3	53%	248	-2366.7	-90.5%	142	-2472.7	-94.6%
49_53_77J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_77J2	0	0	29	29	9.7	16.7		1	-8.7	-89.7%	0	-9.7	-100%	0	-9.7	-100.0%	0	-9.7	-100.0%
49_53_77J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_77J4	0	518	0	518	172.7	299.1		0	-172.7	-100.0%	0	-172.7	-100%	0	-172.7	-100.0%	0	-172.7	-100.0%
49_53_9J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_9J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A

49_56_16F2	40	113	362	515	171.7	168.8		419	247.3	144.1%	197	25.3	15%	5	-166.7	-97.1%	15	-156.7	-91.3%
49_56_16J2	14	0	0	14	4.7	8.1		0	-4.7	-100.0%	0	-4.7	-100%	0	-4.7	-100.0%	0	-4.7	-100.0%
49_56_17F1	0	88	254	342	114.0	129.0		4	-110.0	-96.5%	34	-80.0	-70%	31	-83.0	-72.8%	0	-114.0	-100.0%
49_56_30F2	8	3061	17	3086	1028.7	1760.1		321	-707.7	-68.8%	360	-668.7	-65%	9122	8093.3	786.8%	44	-984.7	-95.7%
49_56_33F3	118	242	2521	2881	960.3	1353.0		1864	903.7	94.1%	1480	519.7	54%	973	12.7	1.3%	1498	537.7	56.0%
49_56_36W41	52	36	11	99	33.0	20.7		3	-30.0	-90.9%	52	19.0	58%	128	95.0	287.9%	1	-32.0	-97.0%
49_56_36W42	9	15	182	206	68.7	98.2		12	-56.7	-82.5%	1	-67.7	-99%	27	-41.7	-60.7%	0	-68.7	-100.0%
49_56_36W43	15	0	19	34	11.3	10.0		12	0.7	5.9%	39	27.7	244%	7	-4.3	-38.2%	71	59.7	526.5%
49_56_36W44	15	4	1497	1516	505.3	858.8		151	-354.3	-70.1%	1	-504.3	-100%	13	-492.3	-97.4%	15	-490.3	-97.0%
49_56_3F1	4397	271	4963	9631	3210.3	2561.2		9	-3201.3	-99.7%	198	-3012.3	-94%	6876	3665.7	114.2%	384	-2826.3	-88.0%
49_56_42F1	69	77	37	183	61.0	21.2		14361	14300.0	23442.6%	204	143.0	234%	223	162.0	265.6%	19	-42.0	-68.9%
49_56_45J2	0	0	0	0	0.0	0.0		148	148.0	N/A	0	0.0	N/A	9	9.0	N/A	42	42.0	N/A
49_56_45J6	32	0	0	32	10.7	18.5		198	187.3	1756.3%	124	113.3	1063%	0	-10.7	-100.0%	61	50.3	471.9%
49_56_46F1	190	199	802	1191	397.0	350.8		175	-222.0	-55.9%	14	-383.0	-96%	647	250.0	63.0%	718	321.0	80.9%
49_56_46F2	2182	1460	3381	7023	2341.0	970.3		975	-1366.0	-58.4%	1109	-1232.0	-53%	503	-1838.0	-78.5%	756	-1585.0	-67.7%
49_56_46F3	2333	2991	69	5393	1797.7	1532.8		540	-1257.7	-70.0%	230	-1567.7	-87%	231	-1566.7	-87.2%	10	-1787.7	-99.4%
49_56_46F4	491	3	18	512	170.7	277.5		18	-152.7	-89.5%	8	-162.7	-95%	288	117.3	68.8%	593	422.3	247.5%
49_56_59F2	108	27	177	312	104.0	75.1		1	-103.0	-99.0%	681	577.0	555%	10	-94.0	-90.4%	5998	5894.0	5667.3%
49_56_59F3	23	43	476	542	180.7	256.0		533	352.3	195.0%	5004	4823.3	2670%	834	653.3	361.6%	108	-72.7	-40.2%
49_56_63F2	3	120	237	360	120.0	117.0		2	-118.0	-98.3%	620	500.0	417%	10	-110.0	-91.7%	500	380.0	316.7%
49_56_65J2	244	2	2147	2393	797.7	1174.8		72	-725.7	-91.0%	0	-797.7	-100%	2	-795.7	-99.7%	729	-68.7	-8.6%
49_56_68F4	9	1151	131	1291	430.3	627.1		188	-242.3	-56.3%	90	-340.3	-79%	204	-226.3	-52.6%	319	-111.3	-25.9%
49_56_72F2	32	128	309	469	156.3	140.7		0	-156.3	-100.0%	25	-131.3	-84%	282	125.7	80.4%	76	-80.3	-51.4%
Totals	**20992**	**53640**	**91851**	**166483**	**55494.3**	**35465.9**		**60868**	**5373.7**	**9.7%**	**48121**	**-7373.3**	**-13%**	**39215**	**-16279.3**	**-29.3%**	**34004**	**-21490.3**	**-38.7%**

Fiscal Year 2008								**1st Year After Project**			**2nd Year After Project**			**3rd Year After Project**			**4th Year After Project**		
Feeder ID	**CI FY 2005**	**CI FY 2006**	**CI FY 2007**	**Total CI 4/1/04-3/31/07**	**Average CI**	**Standard Deviation**	**Project Year 4/1/07-3/31/08**	**Total CI 4/1/08-3/31/09**	**Difference**	**% Improved**	**Total CI 4/1/09-3/31/10**	**Difference**	**% Improved**	**Total CI 4/1/10-3/31/11**	**Difference**	**% Improved**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_102K22	0	18	0	18	6.0	10.4		0	-6.0	-100.0%	0	-6.0	-100.0%	0	-6.0	-100.0%	0	-6.0	-100.0%
49_53_102W41	0	0	1186	1186	395.3	684.7		0	-395.3	-100.0%	0	-395.3	-100.0%	0	-395.3	-100.0%	0	-395.3	-100.0%
49_53_102W42	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_102W50	0	0	0	0	0.0	0.0		14	14.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_102W52	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_12J6	0	0	87	87	29.0	50.2		0	-29.0	-100.0%	62	33.0	113.8%	0	-29.0	-100.0%	0	-29.0	-100.0%
49_53_13F2	108	118	7484	7710	2570.0	4255.7		1	-2569.0	-100.0%	60	-2510.0	-97.7%	0	-2570.0	-100.0%	318	-2252.0	-87.6%
49_53_13F3	0	71	123	194	64.7	61.7		0	-64.7	-100.0%	0	-64.7	-100.0%	0	-64.7	-100.0%	23	-41.7	-64.4%
49_53_13F4	7	104	49	160	53.3	48.6		99	45.7	85.6%	1	-52.3	-98.1%	19	-34.3	-64.4%	541	487.7	914.4%
49_53_13F9	9	0	44	53	17.7	23.2		0	-17.7	-100.0%	133	115.3	652.8%	11	-6.7	-37.7%	6	-11.7	-66.0%
49_53_15F1	0	106	122	228	76.0	66.3		242	166.0	218.4%	7	-69.0	-90.8%	149	73.0	96.1%	2613	2537.0	3338.2%
49_53_27F5	0	30	16	46	15.3	15.0		0	-15.3	-100.0%	393	377.7	2463.0%	70	54.7	356.5%	119	103.7	676.1%
49_53_28J1	0	120	0	120	40.0	69.3		89	49.0	122.5%	0	-40.0	-100.0%	22	-18.0	-45.0%	86	46.0	115.0%
49_53_2J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A	0	0.0	N/A
49_53_34F2	672	4365	3123	8160	2720.0	1879.2		200	-2520.0	-92.6%	1150	-1570.0	-57.7%	757	-1963.0	-72.2%	8253	5533.0	203.4%

49_53_34F3	182	2725	108	3015	1005.0	1490.0		2541	1536.0	152.8%	8074	7069.0	703.4%	4327	3322.0	330.5%	6884	5879.0	585.0%
49_53_37J5	0	748	0	748	249.3	431.9		32	-217.3	-87.2%	17	-232.3	-93.2%	0	-249.3	-100.0%	1	-248.3	-99.6%
49_53_47J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_47J2	0	0	0	0	0.0	0.0		0	0.0	N/A	1	1.0	N/A	2	2.0	N/A	0	0.0	N/A
49_53_47J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_47J4	0	49	0	49	16.3	28.3		2225	2208.7	13522.4%	0	-16.3	-100.0%	50	33.7	206.1%	0	-16.3	-100.0%
49_53_48F1	0	3600	31	3631	1210.3	2069.6		0	-1210.3	-100.0%	0	-1210.3	-100.0%	179	-1031.3	-85.2%	2	-1208.3	-99.8%
49_53_48F2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_48F5	0	161	41	202	67.3	83.7		2	-65.3	-97.0%	40	-27.3	-40.6%	71	3.7	5.4%	0	-67.3	-100.0%
49_53_48F6	24	108	0	132	44.0	56.7		0	-44.0	-100.0%	1	-43.0	-97.7%	2826	2782.0	6322.7%	20	-24.0	-54.5%
49_53_4F1	1275	367	76	1718	572.7	625.4		589	16.3	2.9%	45	-527.7	-92.1%	3390	2817.3	492.0%	156	-416.7	-72.8%
49_53_51F1	1007	381	236	1624	541.3	409.7		97	-444.3	-82.1%	358	-183.3	-33.9%	1	-540.3	-99.8%	3	-538.3	-99.4%
49_53_51F2	408	0	168	576	192.0	205.1		0	-192.0	-100.0%	430	238.0	124.0%	209	17.0	8.9%	441	249.0	129.7%
49_53_51F3	0	1038	5747	6785	2261.7	3062.7		713	-1548.7	-68.5%	218	-2043.7	-90.4%	867	-1394.7	-61.7%	0	-2261.7	-100.0%
49_53_5F1	41	1208	12080	13329	4443.0	6639.5		1068	-3375.0	-76.0%	33	-4410.0	-99.3%	192	-4251.0	-95.7%	1031	-3412.0	-76.8%
49_53_5F2	325	64	516	905	301.7	226.9		7385	7083.3	2348.1%	109	-192.7	-63.9%	495	193.3	64.1%	319	17.3	5.7%
49_53_5F3	47	4673	6837	11557	3852.3	3468.6		3	-3849.3	-99.9%	2	-3850.3	-99.9%	507	-3345.3	-86.8%	161	-3691.3	-95.8%
49_53_5F4	0	3184	230	3414	1138.0	1775.6		0	-1138.0	-100.0%	0	-1138.0	-100.0%	0	-1138.0	-100.0%	3294	2156.0	189.5%
49_53_66J2	34	9	0	43	14.3	17.6		0	-14.3	-100.0%	0	-14.3	-100.0%	0	-14.3	-100.0%	0	-14.3	-100.0%
49_53_66J4	0	20	0	20	6.7	11.5		0	-6.7	-100.0%	807	800.3	12005.0%	0	-6.7	-100.0%	1	-5.7	-85.0%
49_53_69F1	3508	4434	0	7942	2647.3	2338.9		223	-2424.3	-91.6%	0	-2647.3	-100.0%	3	-2644.3	-99.9%	67	-2580.3	-97.5%
49_53_69F3	0	0	12432	12432	4144.0	7177.6		37	-4107.0	-99.1%	1	-4143.0	-100.0%	16	-4128.0	-99.6%	44	-4100.0	-98.9%
49_53_6J6	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	59	59.0	N/A	0	0.0	N/A
49_53_71J1	764	0	0	764	254.7	441.1		2	-252.7	-99.2%	37	-217.7	-85.5%	0	-254.7	-100.0%	0	-254.7	-100.0%
49_53_71J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_71J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_71J4	32	30	0	62	20.7	17.9		1	-19.7	-95.2%	0	-20.7	-100.0%	0	-20.7	-100.0%	32	11.3	54.8%
49_53_71J5	25	0	0	25	8.3	14.4		0	-8.3	-100.0%	0	-8.3	-100.0%	0	-8.3	-100.0%	0	-8.3	-100.0%
49_53_76F1	0	9	1972	1981	660.3	1135.9		28	-632.3	-95.8%	1	-659.3	-99.8%	5	-655.3	-99.2%	22	-638.3	-96.7%
49_53_78F3	0	938	0	938	312.7	541.6		1	-311.7	-99.7%	1	-311.7	-99.7%	2082	1769.3	565.9%	0	-312.7	-100.0%
49_53_78F4	0	147	7	154	51.3	82.9		0	-51.3	-100.0%	2	-49.3	-96.1%	8302	8250.7	16072.7%	49	-2.3	-4.5%
49_53_79F1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_79F2	0	0	6	6	2.0	3.5		0	-2.0	-100.0%	49	47.0	2350.0%	0	-2.0	-100.0%	0	-2.0	-100.0%
49_53_7F1	0	7499	10	7509	2503.0	4326.7		14	-2489.0	-99.4%	1	-2502.0	-100.0%	0	-2503.0	-100.0%	0	-2503.0	-100.0%
49_53_7F2	0	0	60	60	20.0	34.6		0	-20.0	-100.0%	0	-20.0	-100.0%	0	-20.0	-100.0%	1	-19.0	-95.0%
49_56_122J4	0	5889	5	5894	1964.7	3398.6		0	-1964.7	-100.0%	0	-1964.7	-100.0%	0	-1964.7	-100.0%	10	-1954.7	-99.5%
49_56_131J2	195	32	0	227	75.7	104.6		0	-75.7	-100.0%	0	-75.7	-100.0%	0	-75.7	-100.0%	0	-75.7	-100.0%
49_56_131J4	0	859	714	1573	524.3	459.8		0	-524.3	-100.0%	0	-524.3	-100.0%	0	-524.3	-100.0%	1	-523.3	-99.8%
49_56_146J14	0	712	0	712	237.3	411.1		1437	1199.7	505.5%	0	-237.3	-100.0%	0	-237.3	-100.0%	0	-237.3	-100.0%
49_56_146J2	0	0	657	657	219.0	379.3		130	-89.0	-40.6%	0	-219.0	-100.0%	0	-219.0	-100.0%	3	-216.0	-98.6%
49_56_14F2	0	0	2340	2340	780.0	1351.0		0	-780.0	-100.0%	108	-672.0	-86.2%	9680	8900.0	1141.0%	25	-755.0	-96.8%
49_56_14F3	3	923	0	926	308.7	532.0		0	-308.7	-100.0%	2	-306.7	-99.4%	6168	5859.3	1898.3%	1186	877.3	284.2%
49_56_16J1	2	0	0	2	0.7	1.2		0	-0.7	-100.0%	0	-0.7	-100.0%	0	-0.7	-100.0%	0	-0.7	-100.0%
49_56_16J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_17F2	55	76	25	156	52.0	25.6		22	-30.0	-57.7%	16	-36.0	-69.2%	234	182.0	350.0%	8790	8738.0	16803.8%
49_56_17F3	79	45	0	124	41.3	39.6		5230	5188.7	12553.2%	99	57.7	139.5%	39	-2.3	-5.6%	12	-29.3	-71.0%
49_56_19J16	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A

49_56_21J4	0	5155	0	5155	1718.3	2976.2		0	-1718.3	-100.0%	923	-795.3	-46.3%	0	-1718.3	-100.0%	0	-1718.3	-100.0%
49_56_22F1	127	18	0	145	48.3	68.7		1	-47.3	-97.9%	1	-47.3	-97.9%	86	37.7	77.9%	49	0.7	1.4%
49_56_22F3	92	17	41	150	50.0	38.3		1	-49.0	-98.0%	18	-32.0	-64.0%	140	90.0	180.0%	4	-46.0	-92.0%
49_56_22F4	74	584	278	936	312.0	256.7		154	-158.0	-50.6%	35	-277.0	-88.8%	298	-14.0	-4.5%	26	-286.0	-91.7%
49_56_23J2	0	0	1314	1314	438.0	758.6		0	-438.0	-100.0%	0	-438.0	-100.0%	4576	4138.0	944.7%	0	-438.0	-100.0%
49_56_23J4	0	0	0	0	0.0	0.0		0	0.0	N/A	1	1.0	N/A	4566	4566.0	N/A	2	2.0	N/A
49_56_29F1	122	48	2098	2268	756.0	1162.8		75	-681.0	-90.1%	1	-755.0	-99.9%	108	-648.0	-85.7%	0	-756.0	-100.0%
49_56_29F2	0	0	0	0	0.0	0.0		0	0.0	N/A	3	3.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_31J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_33F1	69	22	37	128	42.7	24.0		101	58.3	136.7%	31	-11.7	-27.3%	8067	8024.3	18807.0%	47	4.3	10.2%
49_56_33F2	48	2445	1568	4061	1353.7	1212.8		45	-1308.7	-96.7%	49	-1304.7	-96.4%	11320	9966.3	736.2%	7595	6241.3	461.1%
49_56_36W42	15	182	10	207	69.0	97.9		1	-68.0	-98.6%	27	-42.0	-60.9%	0	-69.0	-100.0%	9	-60.0	-87.0%
49_56_37J2	0	185	370	555	185.0	185.0		0	-185.0	-100.0%	0	-185.0	-100.0%	0	-185.0	-100.0%	0	-185.0	-100.0%
49_56_37W41	0	926	49	975	325.0	521.1		5	-320.0	-98.5%	1	-324.0	-99.7%	14	-311.0	-95.7%	7682	7357.0	2263.7%
49_56_37W42	42	6	152	200	66.7	76.1		73	6.3	9.5%	1	-65.7	-98.5%	435	368.3	552.5%	0	-66.7	-100.0%
49_56_37W43	134	374	55	563	187.7	166.1		376	188.3	100.4%	28	-159.7	-85.1%	64	-123.7	-65.9%	55	-132.7	-70.7%
49_56_40F1	2994	13	13	3020	1006.7	1721.1		101	-905.7	-90.0%	1010	3.3	0.3%	14	-992.7	-98.6%	12	-994.7	-98.8%
49_56_52F1	0	81	84	165	55.0	47.7		684	629.0	1143.6%	323	268.0	487.3%	54	-1.0	-1.8%	1	-54.0	-98.2%
49_56_52F2	28	109	26	163	54.3	47.4		16	-38.3	-70.6%	3390	3335.7	6139.3%	72	17.7	32.5%	1	-53.3	-98.2%
49_56_57J3	0	14	9	23	7.7	7.1		117	109.3	1426.1%	0	-7.7	-100.0%	2	-5.7	-73.9%	0	-7.7	-100.0%
49_56_61F1	0	657	0	657	219.0	379.3		0	-219.0	-100.0%	0	-219.0	-100.0%	4	-215.0	-98.2%	1	-218.0	-99.5%
49_56_61F3	32	43	19	94	31.3	12.0		283	251.7	803.2%	83	51.7	164.9%	1598	1566.7	5000.0%	633	601.7	1920.2%
49_56_63F3	127	749	347	1223	407.7	315.4		593	185.3	45.5%	6819	6411.3	1572.7%	3066	2658.3	652.1%	6399	5991.3	1469.7%
49_56_63F4	0	113	0	113	37.7	65.2		25	-12.7	-33.6%	208	170.3	452.2%	24	-13.7	-36.3%	0	-37.7	-100.0%
49_56_63F5	42	87	77	206	68.7	23.6		54	-14.7	-21.4%	12	-56.7	-82.5%	122	53.3	77.7%	10	-58.7	-85.4%
49_56_63F6	3531	1875	225	5631	1877.0	1653.0		2830	953.0	50.8%	2897	1020.0	54.3%	6659	4782.0	254.8%	704	-1173.0	-62.5%
49_56_65J12	0	16	0	16	5.3	9.2		78	72.7	1362.5%	0	-5.3	-100.0%	2	-3.3	-62.5%	3	-2.3	-43.8%
49_56_72F1	0	0	21	21	7.0	12.1		0	-7.0	-100.0%	15	8.0	114.3%	0	-7.0	-100.0%	1	-6.0	-85.7%
49_56_72F4	0	85	273	358	119.3	139.7		107	-12.3	-10.3%	201	81.7	68.4%	220	100.7	84.4%	168	48.7	40.8%
49_56_83F2	18	206	1700	1924	641.3	921.6		1811	1169.7	182.4%	18	-623.3	-97.2%	64	-577.3	-90.0%	88	-553.3	-86.3%
49_56_84T1	0	0	1529	1529	509.7	882.8		0	-509.7	-100.0%	0	-509.7	-100.0%	0	-509.7	-100.0%	0	-509.7	-100.0%
49_56_85T1	169	70	164	403	134.3	55.8		377	242.7	180.6%	3	-131.3	-97.8%	91	-43.3	-32.3%	1129	994.7	740.4%
49_56_87F1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A	0	0.0	N/A
Totals	**16466**	**58940**	**66991**	**142397**	**47465.7**	**27146.6**		**30333**	**-17132.7**	**-36.1%**	**28356**	**-19109.7**	**-40.3%**	**82400**	**34934.3**	**73.6%**	**59133**	**11667.3**	**24.6%**

Fiscal Year 2009								**1st Year After Project**			**2nd Year After Project**			**3rd Year After Project**		
Feeder ID	**CI FY 2006**	**CI FY 2007**	**CI FY 2008**	**Total CI 4/1/05-3/31/08**	**Average CI**	**Standard Deviation**	**Project Year 4/1/08-3/31/09**	**Total CI 4/1/09-3/31/10**	**Difference**	**% Improved**	**Total CI 4/1/10-3/31/11**	**Difference**	**% Improved**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_102W54	12204	93	1524	13821	4607.0	6618.0		0	-4607.0	-100.0%	66	-4541.0	-98.6%	1	-4606.0	-100.0%
49_53_104J1	0	593	0	593	197.7	299.8		0	-197.7	-100.0%	0	-197.7	-100.0%	0	-197.7	-100.0%
49_53_104J5	1077	0	0	1077	359.0	544.5		0	-359.0	-100.0%	0	-359.0	-100.0%	0	-359.0	-100.0%
49_53_106J1	0	32	0	32	10.7	16.2		0	-10.7	-100.0%	0	-10.7	-100.0%	0	-10.7	-100.0%
49_53_107W43	0	593	0	593	197.7	299.8		28	-169.7	-85.8%	0	-197.7	-100.0%	0	-197.7	-100.0%

49_53_107W50	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W53	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W60	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W61	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W62	19	15	48	82	27.3	27.6		0	-27.3	-100.0%	0	-27.3	-100.0%	0	-27.3	-100.0%
49_53_107W63	14	20	528	562	187.3	267.6		1392	1204.7	643.1%	0	-187.3	-100.0%	0	-187.3	-100.0%
49_53_107W65	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	10	10.0	N/A
49_53_107W66	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W81	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_107W83	18	0	0	18	6.0	9.1		1	-5.0	-83.3%	0	-6.0	-100.0%	0	-6.0	-100.0%
49_53_107W84	0	0	5	5	1.7	2.5		0	-1.7	-100.0%	0	-1.7	-100.0%	0	-1.7	-100.0%
49_53_108W60	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_109J5	0	0	3420	3420	1140.0	1728.9		0	-1140.0	-100.0%	0	-1140.0	-100.0%	1506	366.0	32.1%
49_53_112W43	0	21	0	21	7.0	10.6		58	51.0	728.6%	32	25.0	357.1%	2878	2871.0	41014.3%
49_53_112W44	2139	491	5541	8171	2723.7	3041.5		11165	8441.3	309.9%	1034	-1689.7	-62.0%	795	-1928.7	-70.8%
49_53_126W41	295	302	6173	6770	2256.7	3134.6		454	-1802.7	-79.9%	686	-1570.7	-69.6%	11646	9389.3	416.1%
49_53_127W41	318	3352	112	3782	1260.7	1707.9		23	-1237.7	-98.2%	442	-818.7	-64.9%	142	-1118.7	-88.7%
49_53_12J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_12J2	0	0	0	0	0.0	0.0		0	0.0	N/A	3	3.0	N/A	0	0.0	N/A
49_53_12J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_12J4	0	42	16	58	19.3	22.9		0	-19.3	-100.0%	0	-19.3	-100.0%	0	-19.3	-100.0%
49_53_12J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_13F5	13	108	15	136	45.3	55.8		0	-45.3	-100.0%	0	-45.3	-100.0%	97	51.7	114.0%
49_53_17W42	84	0	0	84	28.0	42.5		0	-28.0	-100.0%	0	-28.0	-100.0%	0	-28.0	-100.0%
49_53_18F5	0	52	0	52	17.3	26.3		0	-17.3	-100.0%	0	-17.3	-100.0%	0	-17.3	-100.0%
49_53_18F6	372	162	215	749	249.7	236.3		1389	1139.3	456.3%	280	30.3	12.1%	225	-24.7	-9.9%
49_53_23F2	68	2009	443	2520	840.0	1046.2		19	-821.0	-97.7%	259	-581.0	-69.2%	407	-433.0	-51.5%
49_53_23F3	7	166	282	455	151.7	167.1		83	-68.7	-45.3%	246	94.3	62.2%	696	544.3	358.9%
49_53_23F4	15	0	0	15	5.0	7.6		0	-5.0	-100.0%	82	77.0	1540.0%	0	-5.0	-100.0%
49_53_23F5	0	0	3	3	1.0	1.5		0	-1.0	-100.0%	0	-1.0	-100.0%	0	-1.0	-100.0%
49_53_27F6	0	15	11	26	8.7	9.5		0	-8.7	-100.0%	1	-7.7	-88.5%	1	-7.7	-88.5%
49_53_36J1	0	0	1	1	0.3	0.5		0	-0.3	-100.0%	0	-0.3	-100.0%	0	-0.3	-100.0%
49_53_36J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	2	2.0	N/A
49_53_36J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_36J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_38F2	54	0	0	54	18.0	27.3		0	-18.0	-100.0%	82	64.0	355.6%	21	3.0	16.7%
49_53_38F4	111	211	57	379	126.3	125.8		28	-98.3	-77.8%	29	-97.3	-77.0%	70	-56.3	-44.6%
49_53_38F5	341	306	556	1203	401.0	371.2		34	-367.0	-91.5%	2987	2586.0	644.9%	513	112.0	27.9%
49_53_38F6	0	0	12	12	4.0	6.1		63	59.0	1475.0%	55	51.0	1275.0%	369	365.0	9125.0%
49_53_45F2	3235	72	37	3344	1114.7	1637.1		75	-1039.7	-93.3%	150	-964.7	-86.5%	768	-346.7	-31.1%
49_53_48F3	2753	5348	249	8350	2783.3	3073.7		97	-2686.3	-96.5%	91	-2692.3	-96.7%	2697	-86.3	-3.1%
49_53_48F4	126	135	7	268	89.3	94.5		46	-43.3	-48.5%	81	-8.3	-9.3%	185	95.7	107.1%
49_53_4F2	228	3141	6004	9373	3124.3	3461.1		3086	-38.3	-1.2%	348	-2776.3	-88.9%	902	-2222.3	-71.1%
49_53_50J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_50J3	35	0	67	102	34.0	38.6		0	-34.0	-100.0%	0	-34.0	-100.0%	0	-34.0	-100.0%
49_53_66J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_66J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A

49_53_66J5	0	0	387	387	129.0	195.6		0	-129.0	-100.0%	0	-129.0	-100.0%	50	-79.0	-61.2%
49_53_6J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_6J5	462	917	205	1584	528.0	536.7		0	-528.0	-100.0%	0	-528.0	-100.0%	0	-528.0	-100.0%
49_53_73J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_73J2	0	0	37	37	12.3	18.7		0	-12.3	-100.0%	0	-12.3	-100.0%	0	-12.3	-100.0%
49_53_73J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_73J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_73J5	24	0	0	24	8.0	12.1		0	-8.0	-100.0%	0	-8.0	-100.0%	1	-7.0	-87.5%
49_53_76F2	15	54	1	70	23.3	28.5		2	-21.3	-91.4%	0	-23.3	-100.0%	2	-21.3	-91.4%
49_53_76F4	43	0	0	43	14.3	21.7		0	-14.3	-100.0%	0	-14.3	-100.0%	75	60.7	423.3%
49_53_76F6	15	0	99	114	38.0	50.8		0	-38.0	-100.0%	0	-38.0	-100.0%	0	-38.0	-100.0%
49_53_76F7	0	0	57	57	19.0	28.8		0	-19.0	-100.0%	2205	2186.0	11505.3%	22	3.0	15.8%
49_53_9J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_53_9J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_122J2	4252	1632	295	6179	2059.7	2328.0		0	-2059.7	-100.0%	0	-2059.7	-100.0%	0	-2059.7	-100.0%
49_56_122J6	4252	0	0	4252	1417.3	2149.5		0	-1417.3	-100.0%	0	-1417.3	-100.0%	0	-1417.3	-100.0%
49_56_131J12	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_131J14	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_131J6	0	691	1	692	230.7	349.3		0	-230.7	-100.0%	1	-229.7	-99.6%	0	-230.7	-100.0%
49_56_154J14	0	0	14	14	4.7	7.1		0	-4.7	-100.0%	0	-4.7	-100.0%	0	-4.7	-100.0%
49_56_154J16	0	26	0	26	8.7	13.1		0	-8.7	-100.0%	0	-8.7	-100.0%	0	-8.7	-100.0%
49_56_154J18	0	0	0	0	0.0	0.0		0	0.0	N/A	47	47.0	N/A	0	0.0	N/A
49_56_154J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_154J6	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_154J8	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	220	220.0	N/A
49_56_19J14	0	0	0	0	0.0	0.0		0	0.0	N/A	537	537.0	N/A	0	0.0	N/A
49_56_19J2	4252	0	0	4252	1417.3	2149.5		0	-1417.3	-100.0%	4558	3140.7	221.6%	42	-1375.3	-97.0%
49_56_21J2	4265	12	0	4277	1425.7	2156.2		0	-1425.7	-100.0%	0	-1425.7	-100.0%	0	-1425.7	-100.0%
49_56_21J6	4252	0	1	4253	1417.7	2149.5		0	-1417.7	-100.0%	0	-1417.7	-100.0%	0	-1417.7	-100.0%
49_56_23J12	0	0	0	0	0.0	0.0		0	0.0	N/A	5032	5032.0	N/A	0	0.0	N/A
49_56_23J14	9	0	0	9	3.0	4.5		0	-3.0	-100.0%	6055	6052.0	201733.3%	0	-3.0	-100.0%
49_56_23J6	0	0	0	0	0.0	0.0		0	0.0	N/A	4558	4558.0	N/A	0	0.0	N/A
49_56_31J2	0	8	0	8	2.7	4.0		0	-2.7	-100.0%	0	-2.7	-100.0%	0	-2.7	-100.0%
49_56_32J12	4252	1422	500	6174	2058.0	2302.1		0	-2058.0	-100.0%	4	-2054.0	-99.8%	0	-2058.0	-100.0%
49_56_32J14	0	0	0	0	0.0	0.0		28	28.0	N/A	1	1.0	N/A	0	0.0	N/A
49_56_32J2	926	0	0	926	308.7	468.1		0	-308.7	-100.0%	0	-308.7	-100.0%	0	-308.7	-100.0%
49_56_32J4	0	2	2109	2111	703.7	1066.2		0	-703.7	-100.0%	0	-703.7	-100.0%	0	-703.7	-100.0%
49_56_33F4	1300	55	6258	7613	2537.7	3245.9		1345	-1192.7	-47.0%	404	-2133.7	-84.1%	544	-1993.7	-78.6%
49_56_37J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_38J2	0	35	0	35	11.7	17.7		0	-11.7	-100.0%	0	-11.7	-100.0%	0	-11.7	-100.0%
49_56_38J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_41F1	61	281	1187	1529	509.7	621.2		654	144.3	28.3%	127	-382.7	-75.1%	263	-246.7	-48.4%
49_56_49J1	60	0	0	60	20.0	30.3		216	196.0	980.0%	0	-20.0	-100.0%	0	-20.0	-100.0%
49_56_49J2	224	0	0	224	74.7	113.2		50	-24.7	-33.0%	0	-74.7	-100.0%	0	-74.7	-100.0%
49_56_49J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	20	20.0	N/A
49_56_49J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_51J12	0	0	0	0	0.0	0.0		0	0.0	N/A	4558	4558.0	N/A	0	0.0	N/A

49_56_51J14	0	0	0	0	0.0	0.0		0	0.0	N/A	4558	4558.0	N/A	0	0.0	N/A
49_56_51J16	0	0	34	34	11.3	17.2		21	9.7	85.3%	4558	4546.7	40117.6%	0	-11.3	-100.0%
49_56_51J2	0	6	0	6	2.0	3.0		26	24.0	1200.0%	4558	4556.0	227800.0%	0	-2.0	-100.0%
49_56_54F1	7994	10359	2073	20426	6808.7	6796.7		1667	-5141.7	-75.5%	1389	-5419.7	-79.6%	2439	-4369.7	-64.2%
49_56_57J2	0	13	0	13	4.3	6.6		0	-4.3	-100.0%	0	-4.3	-100.0%	1	-3.3	-76.9%
49_56_57J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	1	1.0	N/A
49_56_57J5	26	0	54	80	26.7	30.6		0	-26.7	-100.0%	8	-18.7	-70.0%	2	-24.7	-92.5%
49_56_59F1	147	115	205	467	155.7	142.9		443	287.3	184.6%	444	288.3	185.2%	264	108.3	69.6%
49_56_59F4	138	3714	1472	5324	1774.7	2037.7		747	-1027.7	-57.9%	362	-1412.7	-79.6%	2	-1772.7	-99.9%
49_56_61F2	24	133	38	195	65.0	71.7		75	10.0	15.4%	4613	4548.0	6996.9%	24	-41.0	-63.1%
49_56_61F4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_64F1	88	0	17	105	35.0	45.5		4	-31.0	-88.6%	201	166.0	474.3%	2044	2009.0	5740.0%
49_56_64F2	0	50	18	68	22.7	27.0		0	-22.7	-100.0%	443	420.3	1854.4%	176	153.3	676.5%
49_56_68F3	101	785	2145	3031	1010.3	1165.3		5857	4846.7	479.7%	162	-848.3	-84.0%	13089	12078.7	1195.5%
49_56_72F5	9178	22	363	9563	3187.7	4647.6		16	-3171.7	-99.5%	56	-3131.7	-98.2%	231	-2956.7	-92.8%
49_56_72F6	0	35	0	35	11.7	17.7		140	128.3	1100.0%	35	23.3	200.0%	6	-5.7	-48.6%
49_56_83F1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_83F3	0	0	4	4	1.3	2.0		0	-1.3	-100.0%	0	-1.3	-100.0%	0	-1.3	-100.0%
49_56_84T2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_84T4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	0	0.0	N/A
49_56_85T3	127	138	370	635	211.7	212.7		8995	8783.3	4149.6%	551	339.3	160.3%	4949	4737.3	2238.1%
49_56_87F2	0	18	0	18	6.0	9.1		0	-6.0	-100.0%	0	-6.0	-100.0%	0	-6.0	-100.0%
49_56_87F4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A	335	335.0	N/A
Totals	**70013**	**37802**	**43270**	**151085**	**50361.7**	**46664.7**		**38327**	**-12034.7**	**-23.9%**	**56979**	**6617.3**	**13.1%**	**48734**	**-1627.7**	**-3.2%**

Fiscal Year 2010								**1st Year After Project**			**2nd Year After Project**		
Feeder ID	**CI FY 2007**	**CI FY 2008**	**CI FY 2009**	**Total CI 4/1/06-3/31/09**	**Average CI**	**Standard Deviation**	**Project Year 4/1/09-3/31/10**	**Total CI 4/1/10-3/31/11**	**Difference**	**% Improved**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_104J3	0	0	0	0	0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_104J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_106J3	0	1886	0	1886	628.7	1088.9		0	-628.7	-100.0%	0	-628.7	-100.0%
49_53_106J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_107W51	0	0	84	84	28.0	48.5		0	-28.0	-100.0%	0	-28.0	-100.0%
49_53_107W80	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_108W61	1491	0	0	1491	497.0	860.8		34	-463.0	-93.2%	0	-497.0	-100.0%
49_53_108W62	47	0	1586	1633	544.3	902.4		18	-526.3	-96.7%	1	-543.3	-99.8%
49_53_108W63	8	0	7908	7916	2638.7	4563.4		1	-2637.7	-100.0%	21	-2617.7	-99.2%
49_53_109J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_109J3	0	0	0	0	0.0	0.0		0	0.0	N/A	28	28.0	N/A
49_53_1119	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_111J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_111J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_1123	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A

49_53_1125	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_112W41	0	86	41	127	42.3	43.0		5284	5241.7	12381.9%	800	757.7	1789.8%
49_53_112W42	13878	272	0	14150	4716.7	7935.1		2642	-2074.7	-44.0%	11421	6704.3	142.1%
49_53_1131	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_1133	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_113J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_113J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_126W42	7	0	0	7	2.3	4.0		0	-2.3	-100.0%	16	13.7	585.7%
49_53_126W51	205	449	400	1054	351.3	129.1		44	-307.3	-87.5%	260	-91.3	-26.0%
49_53_127W40	1701	548	262	2511	837.0	761.8		1198	361.0	43.1%	1049	212.0	25.3%
49_53_148J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_148J3	0	0	0	0	0.0	0.0		1560	1560.0	N/A	40	40.0	N/A
49_53_148J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_148J7	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_18F3	8537	203	1	8741	2913.7	4871.0		360	-2553.7	-87.6%	70	-2843.7	-97.6%
49_53_21F1	286	554	65	905	301.7	244.9		490	188.3	62.4%	266	-35.7	-11.8%
49_53_23F1	6703	2465	2707	11875	3958.3	2380.0		174	-3784.3	-95.6%	130	-3828.3	-96.7%
49_53_23F2	2009	443	107	2559	853.0	1015.1		259	-594.0	-69.6%	407	-446.0	-52.3%
49_53_23F3	166	282	282	730	243.3	67.0		246	2.7	1.1%	696	452.7	186.0%
49_53_23F6	11094	1	2747	13842	4614.0	5777.4		128	-4486.0	-97.2%	121	-4493.0	-97.4%
49_53_24J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_28J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_2J1	0	0	0	0	0.0	0.0		17	17.0	N/A	31	31.0	N/A
49_53_2J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_2J4	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_2J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_30J1	0	0	0	0	0.0	0.0		0	0.0	N/A	883	883.0	N/A
49_53_30J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_30J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_34F1	584	1388	907	2879	959.7	404.6		1265	305.3	31.8%	9409	8449.3	880.4%
49_53_50F2	7	1645	8	1660	553.3	945.4		1	-552.3	-99.8%	0	-553.3	-100.0%
49_53_50J2	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_60J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_60J3	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_60J5	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_67J1	0	0	0	0	0.0	0.0		4	4.0	N/A	0	0.0	N/A
49_53_6J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_6J3	0	0	3	3	1.0	1.7		0	-1.0	-100.0%	0	-1.0	-100.0%
49_53_6J7	0	1	0	1	0.3	0.6		0	-0.3	-100.0%	0	-0.3	-100.0%
49_53_6J8	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_53_73J6	0	0	8	8	2.7	4.6		0	-2.7	-100.0%	0	-2.7	-100.0%
49_53_76F5	0	0	19	19	6.3	11.0		0	-6.3	-100.0%	1	-5.3	-84.2%
49_53_7F4	0	0	2	2	0.7	1.2		15	14.3	2150.0%	0	-0.7	-100.0%
49_56_14F1	221	386	5	612	204.0	191.1		12405	12201.0	5980.9%	5	-199.0	-97.5%
49_56_14F4	0	848	10	858	286.0	486.7		6170	5884.0	2057.3%	10	-276.0	-96.5%
49_56_16F1	10226	5618	135	15979	5326.3	5051.8		52	-5274.3	-99.0%	1650	-3676.3	-69.0%
49_56_16F3	101	6	0	107	35.7	56.7		33	-2.7	-7.5%	0	-35.7	-100.0%

49_56_16F4	0	10	0	10	3.3	5.8		2199	2195.7	65870.0%	27	23.7	710.0%
49_56_22F2	6613	59	1	6673	2224.3	3800.8		24	-2200.3	-98.9%	20	-2204.3	-99.1%
49_56_30F1	1003	11489	2268	14760	4920.0	5724.0		2639	-2281.0	-46.4%	364	-4556.0	-92.6%
49_56_30F2	6507	321	360	7188	2396.0	3560.3		44	-2352.0	-98.2%	207	-2189.0	-91.4%
49_56_42F1	290	14361	204	14855	4951.7	8148.8		19	-4932.7	-99.6%	1	-4950.7	-100.0%
49_56_43F1	445	2986	4898	8329	2776.3	2233.9		1208	-1568.3	-56.5%	1657	-1119.3	-40.3%
49_56_46F2	3537	975	1109	5621	1873.7	1442.0		756	-1117.7	-59.7%	261	-1612.7	-86.1%
49_56_46F3	1038	540	230	1808	602.7	407.6		10	-592.7	-98.3%	99	-503.7	-83.6%
49_56_52F3	1940	4438	376	6754	2251.3	2048.8		288	-1963.3	-87.2%	251	-2000.3	-88.9%
49_56_57J1	0	0	0	0	0.0	0.0		0	0.0	N/A	0	0.0	N/A
49_56_68F1	2385	1908	462	4755	1585.0	1001.4		1032	-553.0	-34.9%	708	-877.0	-55.3%
49_56_68F2	657	4240	197	5094	1698.0	2213.4		680	-1018.0	-60.0%	960	-738.0	-43.5%
49_56_68F4	121	188	90	399	133.0	50.1		319	186.0	139.8%	16	-117.0	-88.0%
49_56_86F1	9	0	154	163	54.3	86.4		0	-54.3	-100.0%	6930	6875.7	12654.6%
49_56_88F1	409	116	184	709	236.3	153.4		645	408.7	172.9%	472	235.7	99.7%
49_56_88F3	206	390	430	1026	342.0	119.5		754	412.0	120.5%	7899	7557.0	2209.6%
49_56_88F5	153	3842	250	4245	1415.0	2102.4		10449	9034.0	638.4%	1153	-262.0	-18.5%
Totals	**82584**	**62944**	**28500**	**174028**	**58009.3**	**27377.6**		**53466**	**-4543.3**	**-7.8%**	**48340**	**-9669.3**	**-16.7%**

Fiscal Year 2011								**1st Year After Project**		
Feeder ID	**CI FY 2008**	**CI FY 2009**	**CI FY 2010**	**Total CI 4/1/07-3/31/10**	**Average CI**	**Standard Deviation**	**Project Year 4/1/10-3/31/11**	**Total CI 4/1/11-3/31/12**	**Difference**	**% Improved**
49_53_102W44	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_102W51	553	838	15	1406	468.7	417.9		0	-468.7	-100.0%
49_53_107W85	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_108W51	0	1	0	1	0.3	0.6		0	-0.3	-100.0%
49_53_108W53	1	77	101	179	59.7	52.2		303	243.3	407.8%
49_53_108W55	0	0	2	2	0.7	1.2		845	844.3	126650.0%
49_53_108W65	3	0	1	4	1.3	1.5		0	-1.3	-100.0%
49_53_126W40	0	3	34	37	12.3	18.8		34	21.7	175.7%
49_53_126W50	19108	220	1846	21174	7058.0	10467.2		346	-6712.0	-95.1%
49_53_126W54	7990	138	0	8128	2709.3	4573.7		0	-2709.3	-100.0%
49_53_127W42	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_15F2	8790	10634	596	20020	6673.3	5343.3		859	-5814.3	-87.1%
49_53_17W43	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_18F1	225	3883	196	4304	1434.7	2120.4		45	-1389.7	-96.9%
49_53_18F7	9	9	0	18	6.0	5.2		4036	4030.0	67166.7%
49_53_18F8	0	60	106	166	55.3	53.2		31	-24.3	-44.0%
49_53_18F9	0	0	51	51	17.0	29.4		3	-14.0	-82.4%
49_53_20F1	0	1284	0	1284	428.0	741.3		0	-428.0	-100.0%
49_53_20F2	1985	10	2	1997	665.7	1142.6		1	-664.7	-99.8%
49_53_21F2	34	37	1182	1253	417.7	661.9		67	-350.7	-84.0%
49_53_21F4	16	109	22	147	49.0	52.0		2	-47.0	-95.9%

49_53_27F1	49	2599	182	2830	943.3	1435.4		13	-930.3	-98.6%
49_53_27F2	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_27F3	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_27F4	0	1	0	1	0.3	0.6		0	-0.3	-100.0%
49_53_2J7	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_2J8	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_2J9	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J1	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J2	17	12	140	169	56.3	72.5		0	-56.3	-100.0%
49_53_37J3	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J4	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_37J5	16	32	17	65	21.7	9.0		1	-20.7	-95.4%
49_53_38F1	4846	449	724	6019	2006.3	2463.1		486	-1520.3	-75.8%
49_53_38F3	67	3989	248	4304	1434.7	2214.0		230	-1204.7	-84.0%
49_53_51F1	1513	97	358	1968	656.0	753.6		3	-653.0	-99.5%
49_53_51F2	265	0	430	695	231.7	216.9		441	209.3	90.4%
49_53_51F3	132	713	218	1063	354.3	313.6		0	-354.3	-100.0%
49_53_5F1	6464	1068	33	7565	2521.7	3453.2		1031	-1490.7	-59.1%
49_53_5F2	27442	7385	109	34936	11645.3	14155.8		319	-11326.3	-97.3%
49_53_5F3	14602	3	2	14607	4869.0	8429.0		161	-4708.0	-96.7%
49_53_5F4	9588	0	0	9588	3196.0	5535.6		3294	98.0	3.1%
49_53_76F1	0	28	1	29	9.7	15.9		22	12.3	127.6%
49_53_77J1	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_77J2	1	0	0	1	0.3	0.6		0	-0.3	-100.0%
49_53_77J3	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_77J4	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_79F1	0	0	0	0	0.0	0.0		0	0.0	N/A
49_53_79F2	8	0	49	57	19.0	26.3		0	-19.0	-100.0%
49_56_14F1	386	5	165	556	185.3	191.3		5	-180.3	-97.3%
49_56_14F2	178	0	108	286	95.3	89.7		25	-70.3	-73.8%
49_56_14F3	13	0	2	15	5.0	7.0		1186	1181.0	23620.0%
49_56_16F2	419	197	5	621	207.0	207.2		244	37.0	17.9%
49_56_17F1	4	34	31	69	23.0	16.5		17	-6.0	-26.1%
49_56_17F2	10990	22	16	11028	3676.0	6334.1		8790	5114.0	139.1%
49_56_17F3	279	5230	99	5608	1869.3	2911.8		12	-1857.3	-99.4%
49_56_22F1	24	1	1	26	8.7	13.3		49	40.3	465.4%
49_56_22F4	2409	154	35	2598	866.0	1337.6		26	-840.0	-97.0%
49_56_29F1	1	75	1	77	25.7	42.7		0	-25.7	-100.0%
49_56_29F2	0	0	3	3	1.0	1.7		0	-1.0	-100.0%
49_56_30F2	321	360	9122	9803	3267.7	5070.0		207	-3060.7	-93.7%
49_56_36W41	3	52	128	183	61.0	63.0		31	-30.0	-49.2%
49_56_36W42	12	1	27	40	13.3	13.1		9	-4.3	-32.5%
49_56_36W43	12	39	7	58	19.3	17.2		27	7.7	39.7%
49_56_36W44	151	1	13	165	55.0	83.4		2	-53.0	-96.4%
49_56_3F1	9	198	6876	7083	2361.0	3911.2		77	-2284.0	-96.7%
49_56_3F2	1	97	72	170	56.7	49.8		1	-55.7	-98.2%
49_56_42F1	14361	204	223	14788	4929.3	8168.1		1	-4928.3	-100.0%

49_56_45J2	148	0	9	157	52.3	83.0		46	-6.3	-12.1%
49_56_45J4	29	12	17	58	19.3	8.7		10	-9.3	-48.3%
49_56_45J6	198	124	0	322	107.3	100.0		4	-103.3	-96.3%
49_56_46F1	175	14	647	836	278.7	329.0		105	-173.7	-62.3%
49_56_46F4	18	8	288	314	104.7	158.9		307	202.3	193.3%
49_56_52F1	0	684	323	1007	335.7	342.2		1	-334.7	-99.7%
49_56_52F2	0	16	3390	3406	1135.3	1952.6		1	-1134.3	-99.9%
49_56_59F2	1	681	10	692	230.7	390.0		606	375.3	162.7%
49_56_59F3	533	5004	834	6371	2123.7	2499.0		1293	-830.7	-39.1%
49_56_65J12	0	78	0	78	26.0	45.0		3	-23.0	-88.5%
49_56_65J2	72	0	2	74	24.7	41.0		14	-10.7	-43.2%
49_56_72F1	0	0	15	15	5.0	8.7		1	-4.0	-80.0%
49_56_72F2	0	25	282	307	102.3	156.1		327	224.7	219.5%
49_56_72F3	12010	57	9453	21520	7173.3	6294.1		3	-7170.3	-100.0%
49_56_72F4	192	107	201	500	166.7	51.9		168	1.3	0.8%
49_56_64F5	0	0	0	0	0.0	0.0		0	0.0	N/A
Totals	**146673**	**47159**	**39070**	**232902**	**77634.0**	**59926.2**		**26171**	**-51463.0**	**-66.3%**

				Total CI	Average CI Before Project Year		Project Year	Average CI After Project Year	Difference	% Improved	Average CI 2 Years After	Difference	% Improved	Average CI 3 Years After	Difference	% Improved	Average CI 4 Years After	Difference	% Improved
Program Totals				**-**	**57793.0**			**41833.0**	**-15960.0**	**-27.6%**	**45449.0**	**-12344.0**	**-21.4%**	**56783.0**	**-1010.0**	**-1.7%**	**46568.5**	**-11224.50**	**-19%**

Cycle Prune Project Year	AVG Annual CI Pre-Project	Total CI 1st Year Post-Project	% Improved	Total CI 1nd Year Post-Project	% Improved	Total CI 3rd Year Post-Project	% Improved	Total CI 4th Year Post-Project	% Improved
2007	55,494	60,868	10%	48,121	13%	39,215	29%	34004	39%
2008	47,466	30,333	36%	28,356	40%	82,400	74%	59,133	25%
2009	50,362	38,327	24%	56,979	13%	48,734	3%	-	-
2010	58,009	53,466	8%	48,340	17%	-	-	-	-
2011	77,634	26,171	66%	-	-	-	-	-	-