



Forest Conservation Program Annual Report for FY 2015

Katherine E. Nelson, Planner Coordinator, Katherine.Nelson@montgomeryplanning.org 301-495-4622
Kipling Reynolds, AICP, Chief, Area 3, Kipling.Reynolds@montgomeryplanning.org 301-495-4575

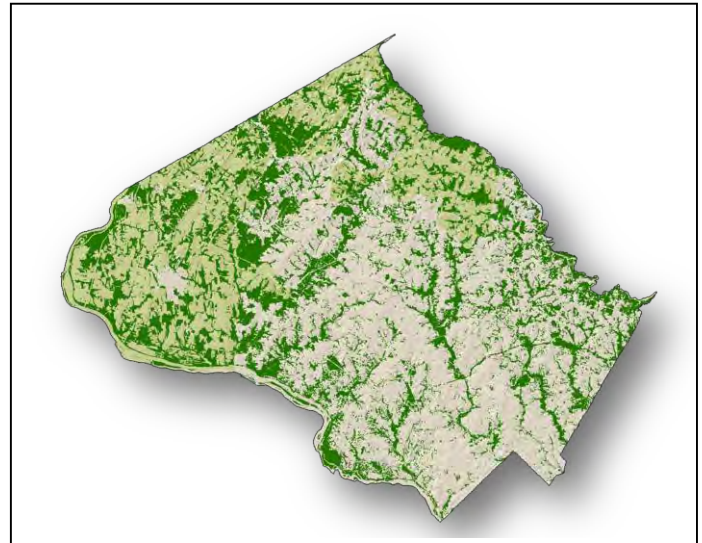
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Description

FY 15 Forest Conservation Program Annual Report

Review the performance of the forest conservation program

Staff Recommendation: Transmit Data to Maryland Department of Natural Resources (DNR)

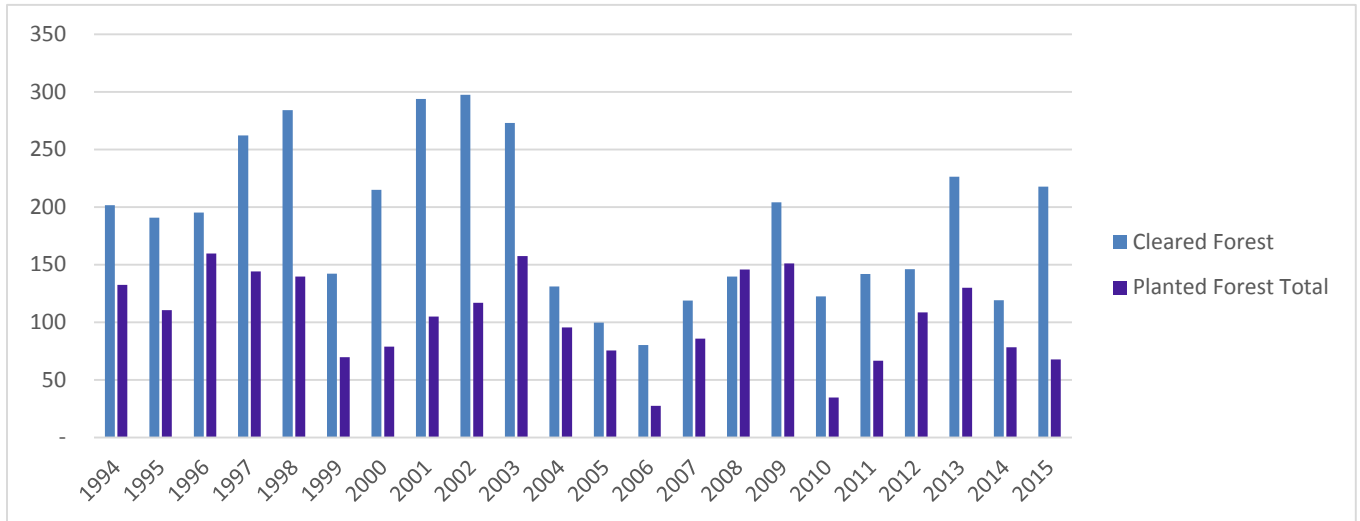


SUMMARY

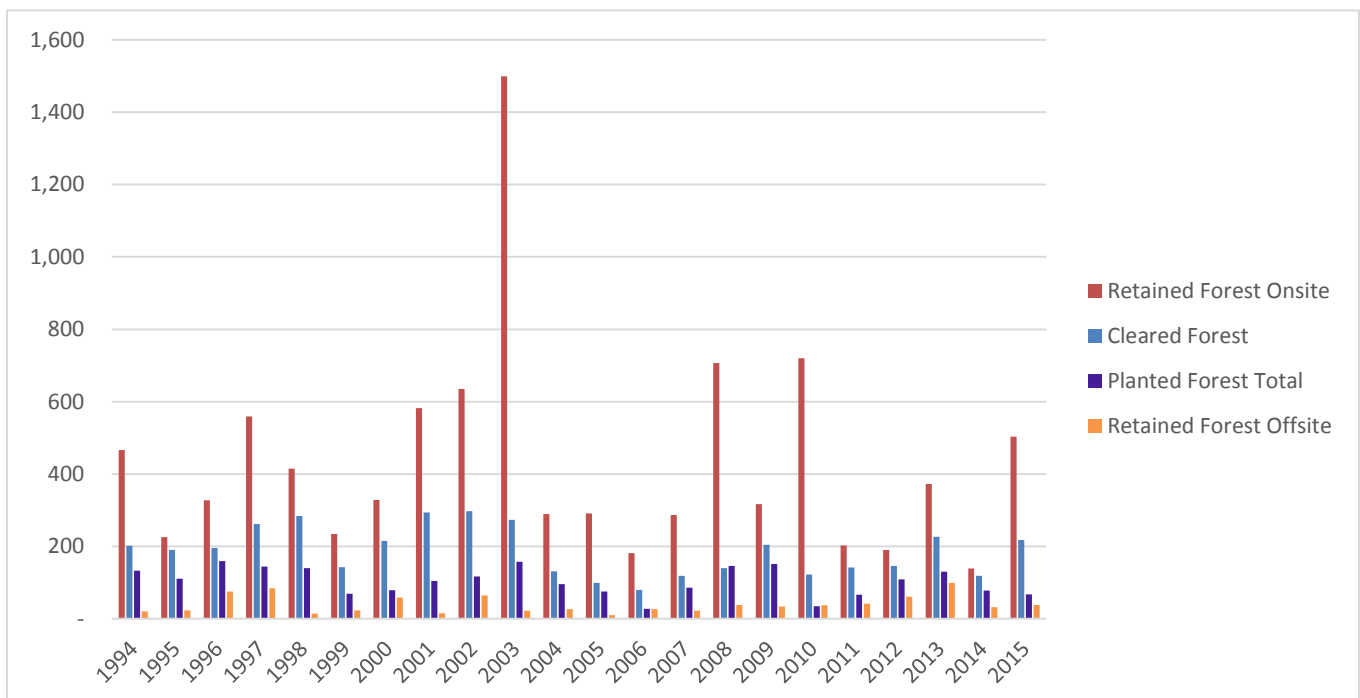
The State Forest Conservation Law requires all jurisdictions to report to the Maryland Department of Natural Resources (DNR) each year regarding their efforts to implement and enforce the law. This report includes tables and other data depicting Montgomery County's ongoing implementation of the law, as well as other aspects of the forest conservation program and forest related issues.

Forest Conservation in Montgomery County

The Forest Conservation Program in Montgomery County has been in effect for over twenty years. The County experiences an average loss of 187 acres of forest each year due to development. Forest lost to development continues to decline with fewer green field developments in the County. Forest planting averages approximately 104 acres per year.

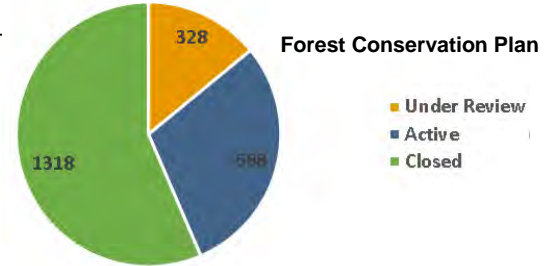
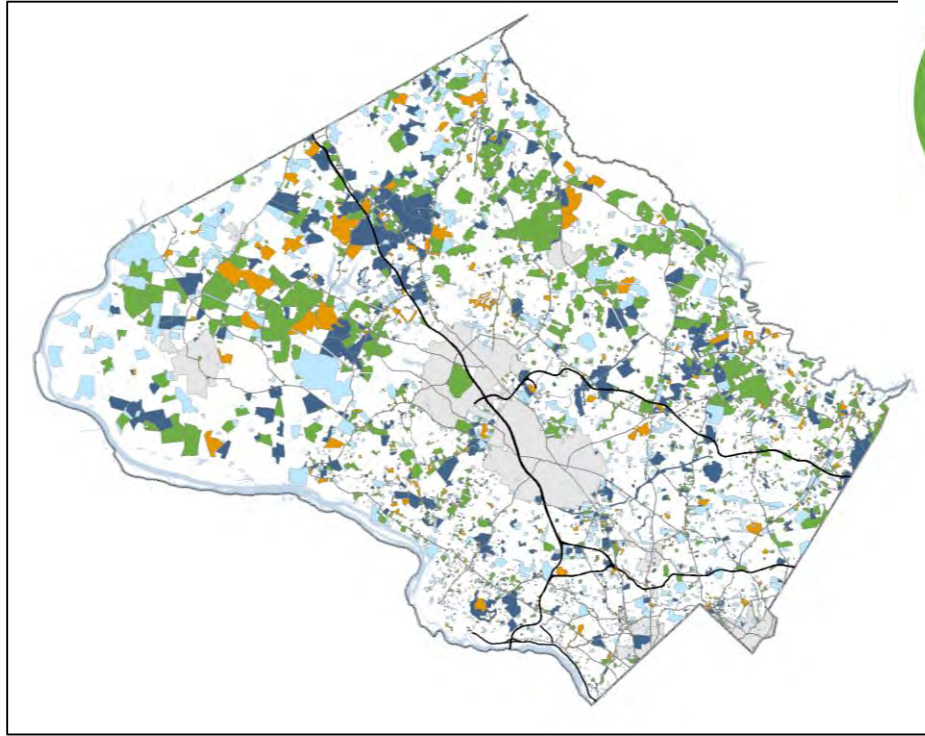


Protection of Existing Forest (Retained Forest onsite in the County, including forest mitigation banks (primarily Retained forest offsite) averages approximately 470 acres per year and exceeds the Cleared and Planted forest totals as shown below.



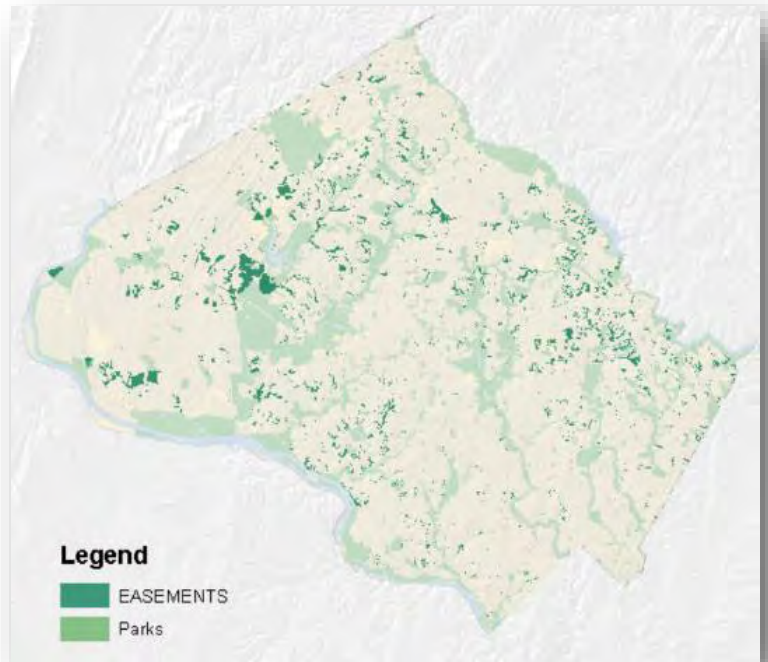
Forest Conservation Plans

These efforts are the result of over two thousand forest conservation plans since the beginning of the program that are fully implemented or actively within the construction process. The graphic below shows the extent of forest conservation plans in the County. The light blue indicated exemptions that have been reviewed. All others represent forest conservation plans.



Forest Conservation Easements

Seven hundred acres of forest were placed in permanent conservation easements on private land in FY 2015. The total easement areas under the jurisdiction of the Planning Department is approximately 11,706 acres. These figures do not include other easement types such as scenic easements or those held by other jurisdictions such as the City of Rockville, or privately held easements.



Forest Banks

Forest mitigation banks are necessary since many development projects are unable to meet their planting requirements onsite. Banks provide the opportunity to meet requirements using an off-site location within the County. The Planning Department administers this program by approving bank locations and approving transactions between developers and forest conservation bank owners.



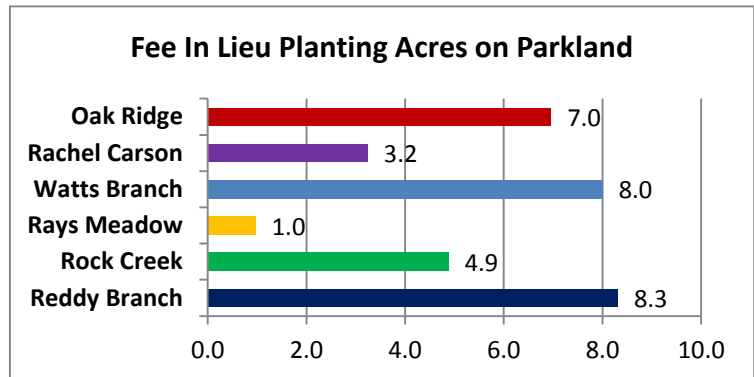
Five new forest banks were created in FY 2015, two of them within the sensitive Ten Mile Creek watershed. Of those, two Banks have already sold all of their credits. FY 15 Bank sales also exceeded average sales with large purchases for the Cabin Branch, the Purple Line, and several capital projects.

Forty-one Forest Banks totaling over 1,300 acres have been created since the beginning of this program. Most of the Banks have sold their credits and are closed. The Department maintains a list of active forest banks, which total approximately 133 acres.

Information and a description of the Bank program is now available on the Department's web site. It helps the buyer understand the transaction process and provides a list of available banks and an interactive map for bank location. The website also describes the process of setting up a forest bank and outlines eligibility policies.

Reforestation Program

The forest conservation fund (fee in lieu) is used by developers to meet forest mitigation requirements when on-site planting is impractical and mitigation requirements are fractional. This fund is also used when no forest mitigation banks are available. The Planning Department continues to work with the Parks Department to use this fund to plant unforested stream valleys in conservation parks. The Oak Ridge Conservation Park was planted in FY 2015, approximately 7 acres. Since 2008 approximately 32 acres of forest in five different Parks have been planted through this program.



In 2016, the Planning Department is partnering with the Department of Parks to address the loss of Ash trees on Parkland. Infestation of the Emerald Ash Borer is leaving large riparian areas completely denuded. The Department of Parks is in the process of identifying these areas and removing large trees that pose a safety hazard to Park trail users. The Planning Department will use the forest conservation fund to plant and maintain young trees in these areas to help jump-start reforestation of these sensitive areas.

Volunteer Efforts

The forest conservation fund is also used as a resource for community projects on the Planning Department's reforestation sites to provide much needed maintenance in the newer planting areas. The Planning Department continues to rely on the Parks Department's Volunteer Services Office to find corporate organizations for sponsored volunteer events. The Wildlife Achievement Chapter of the Izaak Walton League continues to be one of our strongest partners. In addition to providing maintenance, Chapter members also donate and plant dozens of additional trees in these riparian areas. Although staff continues to employ contractors to plant trees, volunteer efforts are needed to bring trees to maturity. In FY 2015, there were five volunteer events held; the Planning Department hosts approximately five volunteer efforts each year.

Volunteer Events				
Fiscal Year	Events	Participants	Total Hours	M-NCPPC Contribution
2010	2	24	72	\$0
2011	5	61	183	\$1,353.10
2012	5	89	167	\$2,642.98
2013	6	134	377	\$1,678.87
2014	5	106	268	\$1,922.20
2015	5	120	309	\$1,246.17
Average	5	89	229	\$1,473.90

Leaves for Neighborhoods Program

Leaves for Neighborhoods is a coupon program established in 2010 and also funded by in-lieu fees. The Coupon discount has been raised to forty dollars (\$40.00) and may be used when a qualifying tree is purchased from participating private nurseries in Montgomery County. Seven Montgomery County nurseries participate in the program. In FY 15, 325 coupons were issued.



Shades of Green

The forest conservation fund may also be used to meet urban tree canopy goals. This allows use of developer funds to enhance urban canopy cover to improve quality of life, air, and water. Staff has developed the Shades of Green urban planting program, which has expanded to include 22 County central business districts and urban/village centers. An interactive website enables residents to learn about the program, tree care, and to register to receive free trees. During 2015, staff partnered with Casey Trees to plant 72 trees in Silver Spring and Bethesda. Additional program publicity is needed for further growth.

GIS Forest Layer Update

The County's GIS forest layer is vital in tracking trends in forest gains, losses, and quality. The forest layer is also used in the development of Natural Resource Inventories and Forest Stand Delineations (NRI/FSDs, master plans, and parks-related plans. The County's Department of Environmental Protection (DEP) uses the forest layer, along with other information, in developing watershed restoration and implementation plans to comply with the County's Municipal Separate Stormwater Sewer System (MS4) Permit, and track progress in meeting Total Maximum Daily Loads (TMDLs) set by the State for County waters.

The State uses more detailed local data, when it is available, to improve the data sets it uses in various compliance programs, including local TMDLs, and studies. In the absence of such data, the State defaults to using less detailed Statewide data.

The Chesapeake Bay Program Office of the Environmental Protection Agency (EPA) used the County's current (2008) forest layer in developing the most recent version of the Chesapeake Bay Model. The Bay Model is used to develop and allocate TMDLs for each local jurisdiction, to comply with the Chesapeake Bay water quality standards. The EPA recently requested the County's most recent forest layer to support the upcoming 2017 recalibration of the Bay Model. Without more detailed local data, however, the EPA will use less detailed data obtained for the Bay region as a whole.

To continue to support the applications mentioned above, it is important to periodically update the County's forest layer. The current forest layer was created in 2008, and the Department is working towards updating the data.

Tree Canopy Assessment Tool

The County recently updated the County's canopy analysis. This enables staff to begin tracking changes in canopy within urbanized areas and to assess the effectiveness of efforts such as Shades of Green and landscape requirements as part of development review projects. Using the new on-line tool, citizens may now view the 2009 canopy of a neighborhood side by side with the 2014 canopy assessment. The assessment tool is particularly useful in intensely developed areas where trees coexist with and mitigate the built environment.

CONCLUSION

The Forest Conservation Program Annual Report summarizes the impact of development on the forest in Montgomery County. Staff recommends transmitting the report to the Maryland Department of Natural Resources.

KN:rb

Attachment



Composite Montgomery County Forest Conservation Annual Report

All area figures are in acres

Fiscal Year	Total Review <i>Project Reviews</i>	Exemptions <i>Total exemptions and NRIs</i>	Forest Conservation Plans <i>FCPs reviewed</i>	Net Tract Area <i>Net tract area under review</i>	Existing Forest <i>Forest in net tract area minus floodplain</i>	Cleared Forest <i>All forest cleared including floodplain</i>	Retained Forest <i>Retained forest</i>			Planted Forest <i>All forest planted for all projects</i>		
							onsite	offsite	total	onsite	offsite	total
1994	586	457	129	2242.4	675.0	201.6	466.3	20.9	487.2	87.1	45.3	132.4
1995	358	272	86	1349.5	417.2	190.7	225.8	23.0	248.7	90.3	20.0	110.4
1996	346	267	79	1971.0	523.2	195.2	327.7	75.1	402.9	145.9	13.9	159.7
1997	310	241	69	2805.1	821.7	262.4	559.2	84.2	643.4	130.7	13.5	144.2
1998	381	313	68	2038.3	699.2	284.1	415.1	14.2	429.3	120.0	19.6	139.6
1999	395	336	59	1077.4	375.3	142.2	234.7	23.3	258.1	50.4	19.1	69.5
2000	414	328	86	1449.7	543.0	215.1	328.7	58.6	387.2	56.1	22.8	78.8
2001	432	376	56	2447.4	870.9	294.0	581.8	14.9	596.6	95.2	9.6	104.8
2002	511	426	85	2534.3	934.4	297.6	634.9	64.9	699.8	94.4	22.5	116.9
2003	447	364	83	3987.3	1817.8	273.2	1499.1	22.2	1521.2	127.2	30.1	157.3
2004	470	393	77	1284.3	419.7	131.0	289.0	26.3	315.3	75.5	19.9	95.4
2005	434	374	60	1025.3	384.5	99.5	291.5	9.7	301.2	55.8	19.8	75.6
2006	435	367	68	744.8	260.6	80.2	181.1	27.0	208.1	21.7	5.6	27.3
2007	387	323	64	1290.3	403.4	118.9	286.3	22.3	308.6	66.8	18.9	85.8
2008	322	235	87	2633.3	779.3	139.6	706.8	38.1	744.9	135.9	9.8	145.7
2009	305	232	73	1915.6	516.8	204.2	317.1	33.4	350.5	114.6	36.4	151.0
2010	301	237	64	1492.8	838.2	122.5	720.4	37.5	757.9	20.1	14.5	34.7
2011	305	229	76	1113.7	348.0	141.9	202.3	41.6	243.8	53.7	12.9	66.6
2012	260	196	64	1003.9	336.8	146.1	190.0	61.0	251.1	61.8	46.7	108.5
2013	293	213	80	1640.3	585.7	226.3	372.6	99.3	471.9	88.0	41.9	129.9
2014	285	202	83	990.6	258.0	119.0	139.3	32.3	171.6	41.3	36.9	78.2
2015	217	148	69	1,701.8	720.10	217.8	503.6	37.8	541.3	65.7	1.8	67.5
							186.5		470.0			103.6



MONTGOMERY COUNTY PLANNING DEPARTMENT THE MARYLAND-NATIONAL
CAPITAL PARK AND PLANNING COMMISSION

Fiscal Year	Long Term Protection <i>Forest Protected with Easement or Park Dedication</i>	Bond Amount Posted <i>Total amount of bond posted for all projects</i>	In-Lieu Fees		Implementation <i>Annual dollar cost of the program</i>	Labor Spent <i>Hours devoted to implementation</i>	Forest Mitigation Banks			
			Collected <i>for fiscal year</i>	Expended <i>for fiscal year</i>			<i>Existing forest</i>		<i>Newly planted forest</i>	
						Newly Created	Debited	Newly Created	Debited	
1994	448.5	\$125,937.82			NR	NR	NR	NR	NR	
1995	442.4	\$688,712.00			\$108,410.00	3,326.5	NR	NR	NR	
1996	397.2	\$775,751.00			\$134,113.00	2,760.0	NR	NR	NR	
1997	397.5	\$727,991.00			\$184,182.00	3,680.0	NR	NR	NR	
1998	688.8	\$794,623.70			\$190,700.00	3,680.0	NR	NR	NR	
1999	618.2	\$811,832.16			\$198,400.00	3,680.0	NR	NR	NR	
2000	606.6	\$1,107,570.78			\$212,094.00	NR	NR	NR	NR	
2001	674.7	\$1,497,141.60			\$222,698.00	NR	NR	NR	NR	
2002	903.0	\$1,249,410.70			\$267,411.00	NR	NR	NR	NR	
2003	760.5	\$1,374,934.68			NR	NR	NR	NR	NR	
2004	500.2	\$2,849,630.81	\$98,446.00		\$341,191.75	NR	NR	NR	NR	
2005	527.4	\$1,399,578.00	\$139,385.28		\$250,318.90	7,039.0	NR	NR	NR	
2006	557.0	\$2,649,434.58	\$40,068.18		\$333,197.00	8,945.0	NR	NR	NR	
2007	645.3	\$1,694,998.18	\$88,470.36		\$620,330.00	15,344.0	NR	NR	NR	
2008	1209.1	\$2,229,260.28	\$134,078.00	\$33,447.26	NR	19,002.0	160.50	24.00	0.00	17.90
2009	166.3	\$1,483,633.45	\$40,839.30	\$59,949.60	\$979,703.75	22,363.0	70.90	45.44	0.00	0.08
2010	210.4	\$1,964,316.62	\$30,056.40	\$98,000.00	\$1,130,710.59	22,813.5	0.00	39.70	0.00	0.00
2011	244.5	\$2,514,258.76	\$107,651.00	\$96,972.00	\$944,769.78	19,032.8	3.90	39.00	7.30	2.40
2012	358.3	\$4,491,638.62	\$140,757.00	\$9,820.00	\$872,476.38	18,162.3	7.80	27.10	2.13	0.00
2013	247.1	\$951,954.40	\$32,647.00	\$144,583.00	\$881,566.90	18,403.5	6.60	50.06	0.85	0.00
2014	403.9	\$392,660.13	\$125,568.00	\$127,124.00	\$917,125.66	18,979.5	0.00	22.81	0.00	17.02
2015	699.7	\$158,711.00	\$368,775.00	\$40,975.00	NR	NR	253.43	127.77	0.00	0.00