

**Board of County
Commissioners**

County Manager
William D. Beasley

**Natural Resources &
Environment
Result Area**
(Divisions)

Parks & Natural
Resources

Waste
&
Recycling

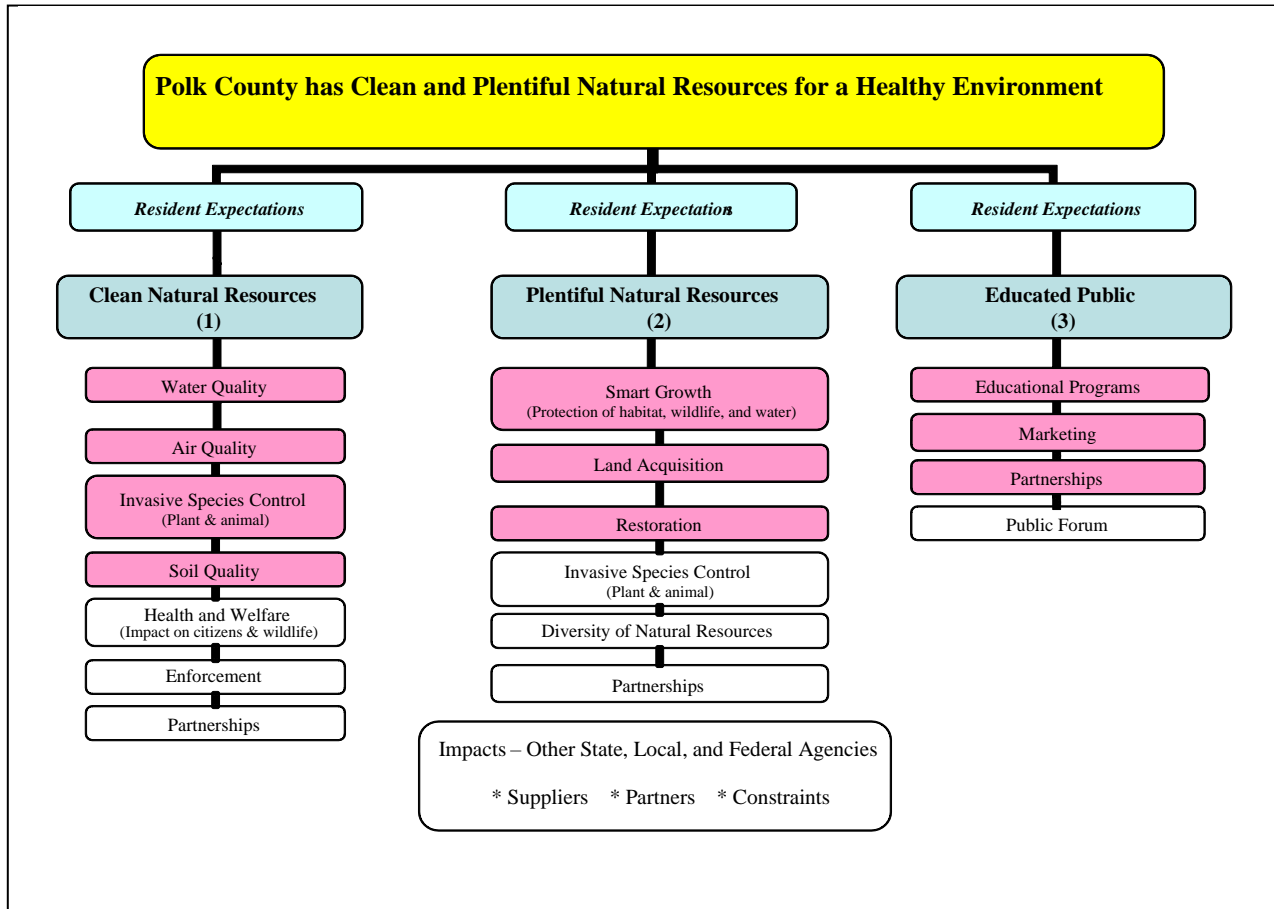
Natural Resources and Environment

“Polk County has clean and plentiful natural resources for a healthy environment.”

Primary Factors for Achieving the Result

As shown below on the Natural Resources and Environment causal map, the primary factors affecting the Polk County Board of County Commissioners’ (BoCC) ability to meet the residents’ expectations are:

1. Clean Natural Resources
2. Plentiful Natural Resources
3. Educated Public



Strategies for Achieving the Result

The programs in this result area are in the Parks and Natural Resources Division and Waste and Recycling Division. They were submitted to the Natural Resources and Environment Result Area because they help the County achieve the result through one or more of the following strategies:

1. Maintain and/or improve clean natural resources of the County
2. Provide, maintain, and restore plentiful natural resources of the County
3. Provide programs that educate the public on the character and value of natural resources, initiatives that help protect those resources, and the public's role in providing good stewardship

**NATURAL RESOURCES AND ENVIRONMENT
DIVISION PROGRAM SUMMARY**

Program <i>(number listed is the program number)</i>	FTE	Adopted FY 23/24			Plan FY 24/25		
		General Fund	Other Funds/ Sources	Total	General Fund	Other Funds/ Sources	Total
Parks and Natural Resources							
Parks and Natural Resources Administration - 67	9.00	675,815	15,002	690,817	700,150	15,613	715,763
Environmental Lands Mgmt. Reserves/Other - 334	0.00	-	35,107,866	35,107,866	-	37,391,595	37,391,595
Natural Resources CIP - 211	0.00	-	19,771,400	19,771,400	-	7,905,000	7,905,000
Environmental Lands Acquisition CIP - 72	2.00	-	10,006,214	10,006,214	-	8,770,381	8,770,381
Environmental Lands Acq. Reserves/Transfers - 335	0.00	-	2,037,460	2,037,460	-	2,325,137	2,325,137
Environmental Lands Mgmt. - 78	9.40	-	2,835,462	2,835,462	-	2,419,008	2,419,008
Invasive Plant Management - 71	6.90	1,576,023	-	1,576,023	1,415,699	-	1,415,699
Mosquito Control - 69	16.00	2,537,659	101,376	2,639,035	2,437,024	101,376	2,538,400
Water Resources - 1162	12.70	1,310,242	3,488,169	4,798,411	1,331,632	2,017,543	3,349,175
Natural Resources Reserves/Oth - 226	0.00	-	11,006,064	11,006,064	-	2,510,579	2,510,579
Subtotal	56.00	6,099,739	84,369,013	90,468,752	5,884,505	63,456,232	69,340,737
Waste and Recycling							
Waste Recycling Operations CIP - 288	0.00	-	27,182,244	27,182,244	-	8,519,847	8,519,847
Landfill Operations - 1187	44.00	-	6,400,997	6,400,997	-	7,077,986	7,077,986
Residential Waste Management Collection - 1188	27.00	-	36,597,863	36,597,863	-	37,861,170	37,861,170
Community Clean-Up - 98	0.00	195,000	-	195,000	195,000	-	195,000
Waste Recycling Reserves/Other - 287	0.00	-	162,120,447	162,120,447	-	169,234,149	169,234,149
Subtotal	71.00	195,000	232,301,551	232,496,551	195,000	222,693,152	222,888,152
TOTAL BoCC	127.00	6,294,739	316,670,564	322,965,303	6,079,505	286,149,384	292,228,889

Programs highlighted in gray are not printed

Natural Resources and Environment

Appropriations	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses	5,958,742	8,871,135	11,319,961	11,778,159
Operating Expenses	35,515,812	37,791,631	40,119,801	40,998,039
Capital Expenses	18,983,677	39,655,493	59,784,642	26,876,853
Debt Service	8,567	0	0	0
Grants And Aids	700,452	126,019	146,023	146,026
Interfund Transfers	5,541,114	4,608,838	6,260,376	4,210,689
Indirect Expense	681,948	697,076	668,093	668,093
InKind Expense	103,674	4,604,418	6,959,418	2,167,168
Reserves	0	212,802,227	197,706,989	205,383,862
County Total	67,493,986	309,156,837	322,965,303	292,228,889
FFWCC Herbicide	1,611,127	1,400,000	1,400,000	1,400,000
Total Result Area	69,105,113	310,556,837	324,365,303	293,628,889

Revenue by Fund		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
00100	General Fund	5,576,322	5,733,678	6,294,739	6,079,505
10150	Special Revenue Grants	1,312,585	12,062,262	22,220,276	6,146,026
15010	Land Management Nonexpendable Trust Funds	407,814	40,274,252	37,881,231	39,764,832
18000	Stormwater MSTU	2,431,229	11,337,606	12,124,635	6,554,985
30800	General Capital Improvement Funds	0	200,000	1,200,000	0
31200	Environmental Land Acquisition Funds	924,057	2,854,777	10,942,871	10,990,389
41010	Solid Waste Funds	25,847,439	114,259,722	111,349,105	100,532,475
41110	Landfill Closure Funds	115,276	80,022,828	73,626,115	75,316,215
41210	Universal Solid Waste Collection Funds	32,023,980	42,411,712	47,326,331	46,844,462
41310	Community Cleanup Funds	15,364	0	0	0
County Total		68,654,066	309,156,837	322,965,303	292,228,889
FFWCC Herbicide		1,611,127	1,400,000	1,400,000	1,400,000
Total Result Area		70,265,193	310,556,837	324,365,303	293,628,889

Personnel

Full Time Equivalents	106	111	127	127
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TRENDS AND ISSUES

The programs in this Result Area are from the Parks and Natural Resources Division and the Waste and Recycling Division. Residents have stated that they expect Polk County to have clean and plentiful natural resources for a healthy environment. To address these expectations, these programs focus on clean natural resources, such as water quality, air quality, and soil quality; plentiful natural resources through smart growth, land acquisition, and restoration; and educating the public with partnerships, marketing, and other educational programs. The narrative below presents the trends and issues affecting the natural resources and environment related divisions and programs.

Parks and Natural Resources

In 2011, Polk County received a National Pollutant Discharge Elimination System (NPDES) permit, which placed multiple new requirements on the County such as street sweeping, outfall location and evaluation, public education, additional restoration projects, pet waste control, fertilizer regulation, and more roadway pipe inspections. To continue enhancing services required by the permit, Parks and Natural Resources Division received additional funding through a Stormwater MSTU established in FY 13/14 and continues this budget year. The permit was reissued in 2016 with the same requirements, and in 2023 a new permit will be issued with additional requirements. The MSTU is estimated to generate about \$3.1 million in FY 23/24 to fund some of the permit requirements and enhance water quality in Polk County. The Board established a Stormwater Technical Advisory Committee to assist in providing oversight in selecting projects and monitor permit implementation. The Advisory Committee's water quality enhancement Community Investment Plan (CIP) projects have been included in the County's CIP and work continues to progress. The County is partnering with municipalities, Southwest Florida Water Management District (SFWMD), and others whenever feasible. The current funding level is anticipated to be sufficient for this part of the Water Resources program for the foreseeable future. Significant progress will be reported over the next few years on various projects; in 2021 the County completed the construction/restoration of Lake Gwyn Stormwater Treatment Wetland and in partnership with the City of Winter Haven, the County completed the Lake Conine Stormwater Treatment Wetland.

State and Federal agencies have recognized the immediate shortfall in resiliency planning. Funding through grants have become available for local governments to assist with resiliency planning and associated infrastructures.

As a special note, supply chain and workforce issues will continue to impact the way the Division does business for the foreseeable future. Workload and service methods continue to be examined and adjusted as new information becomes available and based on the available resources at the time.

Waste and Recycling

The Waste and Recycling Division's budget focuses on four key areas: people, customers, environment, and economic vitality. These four pillars are supported by a strong emphasis on fiscal responsibility and transparency.

Under the people facet, the budget reflects a commitment to value-added activities such as professional development, equity, and workload balance. The customer service emphasis is closely related to the people factor, which prepares employees to resolve any service issues in the field and in the office. Emphasis is also placed on 100% environmental compliance which includes people and customers. Without sound environmental programs, the Waste and Recycling enterprise will cease to exist. To continue to excel in financial performance, it is critical to instill a strong commitment to the monetary aspects of Waste and Recycling to accomplish this; the budget reflects a continuous improvement process of best management practices and balancing its workforce to meet the core business needs and better serve customers.

As the final budget illustrates, Waste & Recycling will be able to significantly control service costs. These control measures would continue to allow Waste and Recycling to offer competitive tipping fees, assessment rates, and dividend allocation without sacrificing service levels.

This commitment to people, customers, environment, and economic vitality translates to safe, reliable, and effective public services to Polk County residents and customers.

As in previous years the Waste and Recycling Division will provide an annual dividend to the General Fund to assist in the funding of general needs of other County divisions.

The Waste and Recycling Division has begun to implement its landfill expansion plan, with Phase VI being opened in early 2023, providing approximately seven years of landfill capacity. Construction of the Renewable Natural Gas (RNG) facility is underway to convert landfill gas to fuel for such equipment as Compressed Natural Gas (CNG) vehicles and electric generators. The RNG facility is expected to be in full operation by September 2024. The restructuring of the expansion plan and RNG facility will provide the greatest economic benefit for the County. Waste and Recycling has begun construction of the North Central Constructed Wetland Leachate Treatment System, which in conjunction with vertical integration will provide a treatment for landfill generated leachate at a significant cost savings to the County.

Environmental Lands Management

Program Number:	78
Result Area:	Natural Resources and Environment
Division:	Parks and Natural Resources
Section:	N/A

I. Program Offer Description:

Manage acquired environmentally-sensitive lands for the purpose of preserving, protecting, and restoring important water, wildlife, and wilderness resources in Polk County, increase natural resource knowledge, and manage compatible passive outdoor recreation for appropriate sites, in accordance with Ordinances 94-40 and 08-003. This program assists with providing important natural resources for a healthy environment. This program may participate in emergencies through complaint investigation and environmental/drainage repair if necessary.

II. Contribution to Result:

Environmental Lands Management Program (ELMP) contributes Natural Resources/Environment results area by:

Strategy 1: The ELMP meets strategy 1 by maintaining and improving the natural resources of the County. Managing the natural vegetation allows the plants to clean the air of pollutants and prevent soil erosion. The practice of fencing secures the sites to reduce illegal dumping, better protecting the soil from hazardous contamination. Managing the marshes assists with the wetlands serving as filters of pollutants from water, creating better water quality. By maintaining the majority of the environmental lands free of infrastructure, recharge for drinking water is allowed to occur on the property. Prescribed fire and invasive plant management encourages native vegetation growth, which provides for healthy wildlife environment. Managing environmental lands assists in providing clean natural resources.

Strategy 2: ELMP in reference to strategy 2 maintains plentiful natural resources and environmental space. The management of Polk County's environmental lands increases diverse natural resources through restoration projects, prescribed burning, and invasive species removal. The ELMP monitoring program assists with obtaining knowledge of important species and provides direction for adaptive management to protect those species and create plentiful diversity in plants and animals.

Strategy 3: The ELMP meets strategy 3 by providing programs that educate the public on the character and value of natural resources through Polk's Nature Discovery Center Programming. Conservation classes are taught, guided tours are given explaining the importance of natural resources, and youth are reached through special environmental education projects. Initiatives have been undertaken to explain the public's role in assisting with providing good stewardship to natural resources. Special emphasis has been on informing the public on the effect of actions on natural resources and environmental space and encouraging citizens to take positive action for the protection of the environment. Partnerships with organizations both public and private have been used to reach this objective. Coordination with volunteers has increased the environmental education programs available to the public and youth.

This Program is: **Not Mandated ()** **Mandated: Federal ()** **State ()** **Local (X)**

III. Performance Objectives:

- 1 Develop and update natural resource/recreation management plans on acquired sites
- 2 Coordinate management activities on all sites
- 3 Provide direct management activities on sites designated as lead managing agency (security, habitat enhancement, etc.)
- 4 Provide and manage for appropriate nature-based recreation opportunities
- 5 Coordinate and conduct community outreach programs, educational tours, presentations, and volunteer workdays on acquired sites
- 6 Control invasive, exotic species on acquired sites, as needed
- 7 Perform prescribed burns (fires) on acquired sites, as needed if weather conditions allow

Environmental Lands Management

IV. Measures:

	Key Obj.	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Workload Indicators:					
# of different site inspections and/or trailhead maintenance	2	379	400	400	400
# of monitoring surveys completed	2	21	5	28	28
# of acres directly managed by the County	3	17,949	17,525	19,000	19,000
# of acres where nature-based recreation opportunities are provided	4	10,515	18,961	10,515	10,515
# of presentations regarding community outreach programs, volunteer workdays, educational tours, and special events	5	200	200	200	200
# of surveys for invasive species	6	54	110	80	80
# of acres managed with prescribed burns	7	1,758	500	1,900	1,900
Effectiveness Indicators:					
% of sites maintained and inspected for site security every 30 days	3	85%	85%	85%	85%
% of sites with nature based recreation open a minimum of 330 days/year	4	75%	90%	90%	90%
% of implemented prescribed burns that met fire management objectives	7	100%	80%	80%	80%
Efficiency Indicators:					
Natural resource management cost/acre	2	\$29	\$21	\$31	\$41
Nature-based recreation management cost/acre	4	\$45	\$25	\$45	\$45
Significant Changes					
A new Recreation Program Educator was approved for FY 23/24 providing additional services in outreach programming, visitation, and maintenance activities at sites, especially Circle B Bar Reserve.					

Personnel:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Full Time Equivalents		9.25	8.30	9.40	9.40
Funding Sources:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund Subsidy		975,049	0	0	0
Land Management Nonexpendable Trust Funds		0	2,153,739	2,672,562	2,268,108
Interest		(78,395)	0	0	0
Interfund Transfer		407,814	104,544	7,000	7,000
Intergovernmental		103,770	140,962	78,520	66,520
Miscellaneous		158,794	4,650	4,650	4,650
Others (Centrl I/D Inkind/Othr)		53,154	72,730	72,730	72,730
	Total Program	1,620,186	2,476,625	2,835,462	2,419,008
Revenue by Fund:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund		1,458,443	0	0	0
Special Revenue Grants		161,743	322,886	162,900	150,900
Land Management Nonexpendable Trust Funds		0	2,153,739	2,672,562	2,268,108
	Total Program	1,620,186	2,476,625	2,835,462	2,419,008
Appropriations:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses		604,447	610,662	655,282	681,075
Operating Expenses		930,327	1,473,689	1,629,450	1,483,203
Capital Expenses		30,308	215,000	471,000	175,000
Debt Service		1,950	0	0	0
Interfund Transfers		0	104,544	7,000	7,000
InKind Expense		53,154	72,730	72,730	72,730
	Total Program	1,620,186	2,476,625	2,835,462	2,419,008

Invasive Plant Management

Program Number:	71
Result Area:	Natural Resources and Environment
Division:	Parks and Natural Resources
Section:	N/A

I. Program Offer Description:

This program safeguards water, reduces pollution, helps the environmental health of lakes and creeks, conserves/promotes native vegetation for wildlife/fish habitats, and provides recreational opportunities for residents. Unwanted invasive weeds grow extremely fast and have no natural enemies to keep them under control without intervention. Without this program, every public access lake would ultimately be covered with undesirable invasive weeds, choking the lake's life and ruining opportunities for recreation. Polk's lakes are a prime attractor for residents, new residents, and tourists to engage in outdoor activities, which keep millions of dollars flowing through the local economy. Water quality is enhanced with long-term invasive plant control. This program also provides a clean and balanced environment by assisting in managing natural lands under the Environmental Lands Program.

II. Contribution to Result:

IPM Program contributes to Natural Resources and Environment results area by:

STRATEGY 1: Maintain and/or Improve clean natural resources of the County.

IPM is crucial for maintaining and keeping natural resources clean by improving the quality of lakes and creeks and promoting healthy native plant communities through managing invasive plants. IPM's rapid response to new invasive plant infestations prevents from spreading. Healthy and diverse native plant communities are allowed to thrive following invasive plant control, creating valuable habitat for fish, birds, and other wildlife. IPM also increases environmental health by controlling invasive plant infestations that add to lake bottom muck layers improving water quantity and quality. IPM also prevents the erosion and contamination of soils by using responsible herbicide application methods on shorelines and canals to preserve and enhance native plant populations that help to hold soils in place. IPM has increased effectiveness and efficiency because normal operations are in routine maintenance mode. IPM focuses on prevention rather than dealing with severe problems after they occur. IPM creates swimming opportunities by managing invasive plants that create stagnant conditions that cause growth of slimy green algae and associated potential disease-causing microbes. IPM assists with maintaining lakes and creeks to prevent blockages that may cause home flooding, unsanitary conditions, and stagnant pools that can breed disease-causing microorganisms, as well as reducing mosquito breeding areas therefore reducing threat of mosquito-transmitted diseases to humans. IPM complies with all local regulations and State and Federal guidelines. IPM seeks out and is actively involved in research with UUF, the Army Corps of Engineers, Florida Fish and Wildlife Conservation Commission (FFWCC), and chemical corporations to find new herbicides, innovative application methods, and best management practices including bio-control.

STRATEGY 2: Provide, Maintain, and Restore Plentiful Natural Resources and Environmental Space

IPM's practice of maintaining and restoring natural plant diversity around lakes and on environmental lands through reduction of invasive species allows native plant communities to increase and provides habitat for abundant wildlife. IPM manages involved in management of natural areas for protection of plentiful resources, assists in design, setup, and maintenance of re-vegetation along lakeshores, restores native vegetation on natural lands through invasive plant treatment, assists with prescribed fires, and performs a wide range of environmental land management. As the population of the County grows, stress on the ecology of lakes and natural areas grow as well. IPM strives to meet resident expectations of a clean, healthy environment containing plentiful natural resources. Priorities include reducing invasive plant numbers in the short term, encouraging environmental conditions supporting the recruitment of native plant communities which increase an array of wildlife abundance in the midterm, and promote success of diverse native plant communities and wildlife in the long term.

STRATEGY 3 - Provide Programs That Educate the Public

IPM encourages sense of individual responsibility of one's own effect on the environment by educating the public on understanding the negative role of invasive plants and how they personally can reduce the introduction of new invasive plant species. resident contact is maximized by participation in special events and daily contact with the public. Resident input is obtained through public presentations and from lakeshore neighbors and user groups.

This Program is:	Not Mandated ()	Mandated: Federal ()	State ()	Local (X)
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Invasive Plant Management

III. Performance Objectives:

1	Keep exotic vegetation at desired maintenance control levels; hydrilla control at over 90% and floating plants (water lettuce, water hyacinth) at 90% of the County's 84 public access lakes and provide habitat for native vegetation and associated wildlife
2	Continue to support the Environmental Lands program by providing assistance with invasive plant management, prescribed fires, property maintenance, and other related duties
3	Conduct community outreach program, educational tours, presentations, respond to resident inquiries regarding aquatic ecosystem management, and solicit resident opinion concerning their satisfaction with management of the environment with emphasis on the aquatic ecosystem
4	Allow for opportunities for recreation on lakes and streams and reduce potential home flooding adjacent to lakes and streams

IV. Measures:

	Key Obj.	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Workload Indicators:					
# of public access lakes under maintenance control for water hyacinth, water lettuce, and hydrilla	1	83.8	83.8	83.8	83.8
Miles of lake shore surveyed/treated for invasive aquatic weeds	1	1,721.23	1,600	1,600	1,500
Acres of upland invasive plants treated on Polk County Environmental Lands	2	108.00	120	110	100
# of responses to resident inquiries on invasive aquatic plant program	3	130	125	125	125
Effectiveness Indicators:					
% of public access lakes under maintenance control for water hyacinth and water lettuce	1	98%	95%	95%	95%
% of public access lakes under maintenance control for hydrilla	1	98%	90%	90%	90%
% of resident inquiries responded to within 48 business hours	3	95%	90%	90%	90%
% of lakeshore miles treated/surveyed	1	28%	40%	40%	40%
# special events conducted on public access lakes due to lakes under maintenance control	4	136	150	150	150
Efficiency Indicators:					
Total cost per acre of water hyacinths/water lettuce treated	1	\$135.46	\$300	\$300	\$300
Total cost per acre of hydrilla treated	1	\$628.55	\$1,000	\$1,000	\$1,000

Significant Changes

There are no significant changes for this program.

Invasive Plant Management

Personnel:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Full Time Equivalents		6.60	7.00	6.90	6.90
Funding Sources:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund Subsidy		490,233	822,743	895,411	735,087
Intergovernmental		203,369	526,200	526,200	526,200
Miscellaneous		157,750	173,000	154,412	154,412
	County Total	851,352	1,521,943	1,576,023	1,415,699
FFWCC Herbicide		1,611,127	1,400,000	1,400,000	1,400,000
	Total Program	2,462,479	2,921,943	2,976,023	2,815,699
Revenue by Fund:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund		851,352	1,521,943	1,576,023	1,415,699
	County Total	851,352	1,521,943	1,576,023	1,415,699
FFWCC Herbicide		1,611,127	1,400,000	1,400,000	1,400,000
	Total Program	2,462,479	2,921,943	2,976,023	2,815,699
Appropriations:		Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses		427,409	526,566	530,636	552,811
Operating Expenses		410,795	827,377	861,387	862,888
Capital Expenses		12,106	168,000	184,000	0
Debt Service		1,042	0	0	0
	County Total	851,352	1,521,943	1,576,023	1,415,699
FFWCC Herbicide		1,611,127	1,400,000	1,400,000	1,400,000
	Total Program	2,462,479	2,921,943	2,976,023	2,815,699

Mosquito Control

Program Number:	69
Result Area:	Natural Resources and Environment
Division:	Parks and Natural Resources
Section:	N/A

I. Program Offer Description:

Since 1958, the mission of Mosquito Control has been to achieve and maintain effective Countywide mosquito control levels in order to protect human health and safety, foster environmental health and quality of life, and facilitate the enjoyment of natural resources and attractions by reducing the number of disease-carrying and nuisance mosquitos. The program accomplishes this by conducting comprehensive and integrated mosquito management program using scientifically-sound practices to reduce the numbers of nuisance and mosquito-borne disease-carrying species. Program services meet local, state, and federal regulations.

II. Contribution to Result:

Strategy #1: The program has maintained and improved the environmental health and safety of the County by:

- A) Integrated Mosquito Management measures are undertaken year-round to ensure that mosquito populations are reduced and mosquito-borne diseases do not become a major public health threat in the County. Polk County has over 45 species of mosquitos, and many are capable of transmitting mosquito-borne diseases such as Zika, Chikungunya, West Nile Virus, Dengue fever, Eastern Equine Encephalitis, St. Louis Encephalitis, etc. These mosquitos require intervention to keep them at a manageable, low level.
- B) Integrated Mosquito Management efforts include the Countywide reduction of mosquito breeding sources and biological or chemical control efforts. All residents and visitors in Polk County receive benefit.
- C) The program educates the public about littering and illegal dumping of materials such as tires, buckets, and containers which can hold water and form breeding habitats for mosquitos.

Strategy #2: The program provides and maintains the natural resources of the County by:

- A) Maintaining and/or improving native wildlife species by reducing mosquito-borne diseases which affect them. Various species of birds and horses are very susceptible to West Nile Virus (WNV) and Eastern Equine Encephalitis (EEE), respectively.
- B) Preserving environmentally-sensitive lands and ecosystems by using environmentally-sustainable pesticides and/or environmental management techniques including breeding source reduction when controlling mosquitos in sensitive areas.

Strategy # 3: The program continues to educate the public on mosquito control and promote partnerships with private and public organizations by:

- A) Public educational tools, such as Mosquito Awareness Week, press releases, town hall meetings, homeowners association outreach, printed materials, media interviews, and others. These outreach programs educate residents and homeowners on how to protect themselves from mosquitos and how to reduce or eliminate mosquito breeding habitats in their community. The program will continue to reduce potential community risks of mosquito-borne diseases and raise mosquito awareness through speaking engagements, pamphlets, and direct contact with residents.
- B) Offsetting costs and increasing effectiveness by partnering with agencies such as the State of Florida Departments of Health and of Agriculture and Consumer Services (FDACS), from whom the County receives \$41,646 in mosquito control annual grant money. This money is only available to state-approved mosquito control programs. The Polk County Mosquito Control Program collaborates with state and county health departments, the Florida Mosquito Control Association, Florida Department of Agriculture and Consumer Services, the American Mosquito Control Association, and Tampa Virology Laboratory. Mosquitos are submitted to Tampa Virology to be tested for West Nile Virus, Eastern Equine Encephalitis, St. Louis Encephalitis, Highlands J. Virus, and others.
- C) Partnering with the Code Enforcement Division and others so that Polk County will continue to have reduced levels of mosquito breeding sources and diseases. In this way, the program helps to eliminate illegal tire and trash dumping which create poor environmental health conditions. This also reduces the risks of diseases, such as Dengue Fever and Zika Virus, which affects 50,000,000 people per year worldwide.
- D) Mosquito Control ranked in the top ten of property tax-based services in Polk County that residents regard as absolutely critical in an independent study conducted by Dr. Susan MacManus of the University of South Florida's Institute of Government in 2008. This program also implements the Board's Mosquito Control Policy adopted in 2009.

This Program is:	Not Mandated ()	Mandated: Federal () State () Local (X)
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Mosquito Control

III. Performance Objectives:

1	Conduct Countywide control measures by source reduction, biological and chemical controls to reduce mosquito numbers, and protecting public health
2	Quick response time (within seven days) to resident service requests while continuing to answer inspection requests within three days
3	Evaluate effectiveness of control strategies and monitor mosquitos for resistance to pesticides
4	Track mosquito numbers by using mosquito traps and larval mosquito inspections as required by state law (Chapter5E-13036 FAC)
5	Educate the County's residents and visitors by outreach, public education, public events, press releases, and speaking engagements
6	Partner with agencies to optimize collaborative mosquito reduction efforts, thereby leveraging costs and reducing disease outbreaks (Code Enforcement, State Virology Lab, FDACS, and Health Department)

IV. Measures:

	Key Obj.	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Workload Indicators:					
# acres treated for adult mosquitos	1	396,862	700,000	7,000,000	700,000
# acres treated for mosquito larvae	1	5,359	12,000	15,000	15,000
# of citizen service requests	2	400	1,600	1,600	1,500
# traps set and counted	4	3,330	3,400	3,500	3,600
# public educational events/# of people contacted	5	10/1727	8/900	10/1000	12/1500
Effectiveness Indicators:					
% acres treated: mosquito adults	1	53%	90%	90%	90%
% acres treated: mosquito larvae	1	51%	90%	90%	90%
% requests responded to in timely manner	2	80%	100%	100%	100%
% public educational events	5	100%	100%	100%	100%
Efficiency Indicators:					
Aerial adulticide direct cost/acre	1	\$1.44	\$1.80	\$1.80	\$1.80
Aerial larvicide direct cost/acre	1	\$27.34	\$25.00	\$28.00	\$28.00
Ground adulticide direct cost/acre	1	\$0.50	\$0.30	\$0.50	\$0.50
Ground larviciding direct cost/acre	1	\$45.37	\$25.00	\$30.00	\$35.00

Significant Changes

There are no significant changes for this program.

Personnel:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Full Time Equivalent	14.00	16.00	16.00	16.00
Funding Sources:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund Subsidy	1,595,925	2,131,120	2,528,159	2,427,524
Intergovernmental	50,520	50,688	50,688	50,688
Miscellaneous	0	9,500	9,500	9,500
Others (Centrl I/D Inkind/Othr)	50,520	50,688	50,688	50,688
Total Program	1,696,965	2,241,996	2,639,035	2,538,400
Revenue by Fund:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund	1,595,925	2,140,620	2,537,659	2,437,024
Special Revenue Grants	101,040	101,376	101,376	101,376
Total Program	1,696,965	2,241,996	2,639,035	2,538,400
Appropriations:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses	925,500	1,094,795	1,357,496	1,411,877
Operating Expenses	681,536	1,030,963	1,058,851	1,075,835
Capital Expenses	38,367	65,550	172,000	0
Debt Service	1,042	0	0	0
InKind Expense	50,520	50,688	50,688	50,688
Total Program	1,696,965	2,241,996	2,639,035	2,538,400

Water Resources

Program Number:	1162
Result Area:	Natural Resources and Environment
Division:	Parks and Natural Resources
Section:	N/A

I. Program Offer Description:

The Water Resources Program enhances quality of life and protects human health and safety by protecting, restoring, and monitoring the water quality of lakes and streams. Water quality conditions are assessed through chemical analysis of lake and stream samples on a quarterly basis. Results are used to identify trends which can be used to assist in prioritizing projects to improve water quality through restoration and the completion of stormwater treatment projects. The continuing monitoring program is essential to tracking lake and stream conditions.

Good water quality supports a diversity of wildlife, plants, and fish. The Water Resources Program protects and improves water quality through pollution abatement by responding to reports of illicit discharges of potentially toxic chemicals. Pollution prevention is emphasized by inspecting point source facilities and stormwater treatment systems to confirm that they are operating properly. Public education on the value of water resources is accomplished through public events and multi-media presentations. The Water Resources Program also operates and maintains several water quality treatment facilities across the County and conducts scientific studies to better understand surface water resources.

II. Contribution to Result:

The Program tracks annual activities through the development of an annual report for the County's National Pollutant Discharge Elimination System (NPDES) Stormwater permit.

Strategy #1: MAINTAIN / IMPROVE NATURAL RESOURCES

Protecting water quality is accomplished by inspecting wastewater treatment and industrial facilities for discharge of pollutants in stormwater runoff. Maintaining stormwater treatment best management practices (BMPs) ensures pollutant removal occurs prior to discharging to lakes or streams. Reports of poor water quality are investigated, and any illicit discharges that are discovered are eliminated through enforcement of County and State regulations. Brochures distributed at public events and stormwater public presentations are used to educate the public on the problems associated with illegal discharge and dumping.

Water quality is monitored at over 145 sites quarterly by analyzing water samples from lakes and streams to identify pollution sources. Results are evaluated annually for the DEP NPDES MS4 permit annual report. This is used to prioritize those with declining water quality for restoration. Water quality is improved through implementation of stormwater BMPs and completion of lake restoration and stormwater treatment projects. Native vegetation that is planted to provide habitat for fish and wildlife helps filter nutrients to improve water quality and limits the growth of invasive exotic plants. Completed projects sites are accessible to the public and provide an opportunity for educational signage to encourage personal responsibility to reduce the pollution.

Strategy #2: PROVIDE / MAINTAIN / RESTORE NATURAL RESOURCES

Purchasing land for stormwater treatment projects protects the quality of natural areas that may otherwise be lost to development and provides buffers to adjacent surface waterbodies. This promotes native vegetation and provides habitat to improve wildlife diversity. Restoration activities are conducted to comply with state and federally-mandated Total Maximum Daily Loads (TMDLs) which require monitoring to show improvement in water quality. The Water Resources Laboratory is staffed with competent, cross-trained staff for sampling, analysis, and reporting which is vital to project success.

Strategy #3: EDUCATE THE PUBLIC

Public education encourages citizens to be good stewards of water resources. This is accomplished through multi-media presentations, such as the Polk Water Atlas and participation at public events. Kiosks constructed at the stormwater treatment and restoration project sites provide signage with educational information on water quality and the impact of pollutants from stormwater runoff. Erosion and sediment control certification and illicit discharge training is provided to contractors and construction site inspectors to educate them on how to reduce contamination of soil, groundwater, and surface waters during construction.

Cooperative partnerships with state and local governments provide funding for projects and public education. Non-profit organizations that have public education programs with similar goals, such as the Lakes Education Action Drive, Institute of Food and Agricultural Sciences (IFAS), and Keep Polk County Beautiful (KPCB), allows Water Resources to partner and reach more people in raising public awareness.

This Program is: **Not Mandated ()** **Mandated: Federal (X) State (X) Local (X)**

III. Performance Objectives:

- 1 Collect water quality samples from lakes and streams or project sites as needed
- 2 Analyze samples to measure pollutant levels and report water quality data to federal and state databases
- 3 Educate the public about water quality and safety of lakes, streams, and stormwater through presentations and literature distributions at schools, public events, training sessions, and kiosks at stormwater management and restoration projects/sites
- 4 Inspect industrial sites for compliance with NPDES stormwater quality regulations and County ordinances with regard to illicit discharges
- 5 Inspect and maintain stormwater treatment facilities to improve water quality to the maximum extent practicable as required by the US Environmental Protection Agency and the County's NPDES MS4 permit issued by the Florida Department of Environmental Protection
- 6 Conduct stormwater sampling to assess representative surface water runoff quality
- 7 Update and submit an annual report to the Florida Department of Environmental Protection for the NPDES Program

Water Resources

IV. Measures:

	Key Obj.	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Workload Indicators:					
# water quality samples collected/received	1	1,071	1,000	1,020	1,020
# water quality analyses performed and reported	2	17,941	15,330	15,650	15,650
# education events and stormwater presentations conducted (County only)	3	1	2	2	2
# priority industrial facility inspections conducted	4	12	16	16	16
# structural controls and outfalls inspected and maintained	5	718	700	700	700
# training classes for illicit discharge and erosion control	3	9	8	8	8
# citizen water quality complaints	N/A	34	40	30	30
# storm event samples collected	6	0%	0%	0%	0%
Effectiveness Indicators:					
% analyses completed within holding time	2	100.00%	95%	100%	100%
% industrial facility inspections conducted	4	75%	100%	100%	100%
% stormwater facilities inspections completed	5	100%	100%	100%	100%
% lakes maintaining or improving water quality (from NPDES annual report)	6	87%	N/A	85%	85%
NPDES annual report submitted	7	Yes	Yes	Yes	Yes
% storm event samples collected	6	0%	0%	0%	0%
Efficiency Indicators:					
average direct cost per sample collection	1	\$137.01	\$181.42	\$170.63	\$170.63
average direct cost per sample analysis	2	\$11.64	\$13.70	\$14.82	\$14.82
average direct cost of industrial inspection	4	\$250.00	\$170.89	\$200.00	\$200.00
average direct cost for inspection/maintenance of stormwater management facilities	5	\$101.00	\$99.23	\$101.00	\$101.00
average direct cost of storm event sampling	6	N/A	\$837.90	N/A	N/A
Significant Changes					
There are no significant changes to this program.					

Personnel:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Full Time Equivalents	11.15	11.70	12.70	12.70

Funding Sources:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund Subsidy	979,025	1,251,130	1,305,287	1,326,677
Stormwater MSTU	0	1,805,650	2,505,946	1,842,308
Charges For Services	0	669	669	669
Interest	(576,557)	136,070	317,723	165,735
Interfund Transfer	0	552,000	0	0
Intergovernmental	0	355,000	300,000	0
Miscellaneous	15,165	13,786	13,786	13,786
Others (Centrl I/D Inkind/Othr)	0	0	355,000	0
Taxes	2,506,043	0	0	0
Total Program	2,923,676	4,114,305	4,798,411	3,349,175

Revenue by Fund:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
General Fund	984,190	1,256,085	1,310,242	1,331,632
Special Revenue Grants	0	707,000	655,000	0
Stormwater MSTU	1,939,486	2,151,220	2,833,169	2,017,543
Total Program	2,923,676	4,114,305	4,798,411	3,349,175

Appropriations:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses	807,766	1,023,622	1,235,419	1,290,524
Operating Expenses	478,647	2,610,370	2,609,386	2,004,729
Capital Expenses	70,220	427,000	545,000	0
Debt Service	2,146	0	0	0
Grants And Aids	15,016	21,019	21,023	21,026
Interfund Transfers	31,902	32,294	32,583	32,896
InKind Expense	0	0	355,000	0
Total Program	1,405,697	4,114,305	4,798,411	3,349,175

Landfill Operations

Program Number:	1187
Result Area:	Natural Resources and Environment
Division:	Waste and Recycling
Section:	N/A

I. Program Offer Description:

Manage County-owned landfill operations while maintaining compliance with State-regulated operating permits. This program is mandated at the Local, State, and Federal levels. State: 403.706 & 403.7265. Local: Polk County Ordinances 82-20 & 13-069.

II. Contribution to Result:

Provides County residents a facility which provides for solid waste disposal in a safe, efficient, and environmentally-responsible manner.

This Program is: **Not Mandated ()** **Mandated: Federal (X) State (X) Local (X)**

III. Performance Objectives:

- 1 Provide landfill operations that meet state-mandated waste disposal capacity for all solid waste generated in Polk County
- 2 Maintain 100% compliance with operating permits and all state agencies
- 3 Divert 100% of household hazardous waste from entering landfills

IV. Measures:

	Key Obj.	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Workload Indicators:					
Tons of solid waste processed (gross)	1	676,920	641,677	751,551	751,551
Lbs of hazardous waste sent for proper disposal	3	605,892	810,035	614,889	614,889
Total # of active facility permits	2	1	1	1	1
Effectiveness Indicators:					
Tons of waste processed per employee	1	12,307	11,774	13,790	13,790
# of citizens using Haz Waste Fac./Mobile Collection Events	3	7,580	8,577	4,940	4,940
Notice of violations or consent orders from State	2	0	0	0	0
Efficiency Indicators:					
Compaction efficiency (lbs/cubic yd)	1	1,450	1,500	1,500	1,500
Operating cost per ton processed	1	\$ 22.23	\$ 25.55	\$ 17.98	\$ 17.98
Outside cost per lb for hazardous waste disposal	3	\$ -	\$ -	\$ -	\$ -

Significant Changes

There are no significant changes in this program.

Landfill Operations

Personnel:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Full Time Equivalents	44.00	44.00	44.00	44.00
Funding Sources:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Solid Waste Funds	1,321,609	1,550,910	6,115,796	6,780,810
Landfill Closure Funds	115,276	237,784	247,201	257,176
Enterprise Funds	20,445,347	0	0	0
Fines And Forfeitures	2,278	0	0	0
Interfund Transfer	0	3,251,986	0	0
Miscellaneous	62,755	38,000	38,000	40,000
Others (Centrl I/D Inkind/Othr)	90	0	0	0
Special Assessment/Impact Fees	15,360	0	0	0
Total Program	21,962,715	5,078,680	6,400,997	7,077,986
Revenue by Fund:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Solid Waste Funds	21,847,439	4,840,896	6,153,796	6,820,810
Landfill Closure Funds	115,276	237,784	247,201	257,176
Total Program	21,962,715	5,078,680	6,400,997	7,077,986
Appropriations:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses	(599,220)	1,578,894	1,865,254	2,028,268
Operating Expenses	3,730,476	1,326,453	1,979,238	2,424,281
Capital Expenses	18,175,128	1,515,600	1,841,068	1,910,000
Interfund Transfers	119,166	120,000	170,793	170,793
Indirect Expense	537,165	537,733	544,644	544,644
Total Program	21,962,715	5,078,680	6,400,997	7,077,986

Residential Waste Management Collection

Program Number:	1188
Result Area:	Natural Resources and Environment
Division:	Waste and Recycling
Section:	N/A

I. Program Offer Description:

Monitor the performance of contracted trash vendors while maintaining the solid waste assessment database for the County's taxing authority. This program is mandated by Florida Statute 403.7049 & 403.706 and Local- Polk Ordinances: 82-20 & 13-069.

II. Contribution to Result:

Provides the residents of unincorporated Polk County safe and efficient waste collection and disposal. Processes solid waste assessments on the tax bills for the residents of unincorporated Polk County.

This Program is: Not Mandated () **Mandated:** Federal (X) State (X) Local (X)

III. Performance Objectives:

- 1 Monitor performance of contracted haulers
- 2 Maintain the data base for solid waste assessment for taxing authority of Polk County
- 3 Provide weekly collection services for garbage (1), yard waste (1), and recyclables (1) for residential customers

IV. Measures:

	Key Obj.	Actual FY 21/22	Adopted FY 22/23	Budget FY 23/24	Plan FY 24/25
Workload Indicators:					
# of residential units receiving curbside collection services	1,2,3	151,147	155,054	156,056	158,000
# of tons of waste transported by contracted haulers	1,2,3	272,064.60	279,097.20	280,900.80	316,000.00
generation of solid waste per household unit (lb./day)	1,2,3	9.86	9.86	9.86	9.86
collection cost per scheduled residential pick-up *	1,2,3	\$0.93	\$0.93	\$0.93	\$1.50
Effectiveness Indicators:					
annual garbage disposal cost	1,2,3	\$52.16	\$62.00	\$62.00	\$72.00
weekly garbage disposal cost	1,2,3	\$1.00	\$1.19	\$1.19	\$1.38
annual yardwaste disposal cost	1,2,3	\$9.86	\$9.86	\$9.86	\$9.86
weekly yardwaste disposal cost	1,2,3	\$0.19	\$0.19	\$0.19	\$0.19
% of diverted dry waste	1,2,3	9%	9%	9%	9%
% of diverted dry waste and organics	1,2,3	30%	30%	30%	30%
Efficiency Indicators:					
# of inbound calls	1,2,3	235,041	235,041	240,000	222,000
average number of agents	1,2,3	9	9	9	9
average number of calls by agent	1,2,3	26,115	26,115	26,667	24,667
average call duration	1,2,3	2:50:00	2:50:00	2:50:00	2:50:00
% of calls answered	1,2,3	90%	90%	90%	90%
% of calls abandoned	1,2,3	10%	10%	10%	10%
% of calls associated to missed collections	1,2,3	25%	25%	25%	25%

Significant Changes

Twelve new positions were added to this program due to a new initiative to begin a pilot program to collect all residential curbside solid waste in Southwest Polk County. Beginning in FY 23/24 this expands to over 13,000 residents south of Highway 60.

Personnel:	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Full Time Equivalents	12.00	15.00	27.00	27.00
Funding Sources:				
	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Solid Waste Funds	0	26,754	33,087	34,333
Universal Solid Waste Collection Funds	505,756	24,531,789	26,014,821	27,306,686
Enterprise Funds	21,215,123	256,962	182,305	0
Interest	2,148	0	0	0
Miscellaneous	570,761	0	0	0
Special Assessment/Impact Fees	9,730,192	9,151,441	10,367,650	10,520,151
Total Program	32,023,980	33,966,946	36,597,863	37,861,170
Revenue by Fund:				
	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Solid Waste Funds	0	26,754	33,087	34,333
Universal Solid Waste Collection Funds	32,023,980	33,940,192	36,564,776	37,826,837
Total Program	32,023,980	33,966,946	36,597,863	37,861,170
Appropriations:				
	Actual FY 21/22	Budget FY 22/23	Adopted FY 23/24	Plan FY 24/25
Personal Services Expenses	3,419,279	3,597,820	4,815,545	4,917,186
Operating Expenses	28,477,239	30,233,202	31,692,717	32,854,383
Indirect Expense	127,462	135,924	89,601	89,601
Total Program	32,023,980	33,966,946	36,597,863	37,861,170