

AT WHAT COST.....

WHAT YOU HAVEN'T HEARD!

Sold Out for 60 Cents

ENVIRONMENTAL PROTECTION COMMISSION (EPC) WETLANDS MANAGEMENT DIVISION			
	FY '04	FY '05	FY '06
Actual Cost Wetlands Program	\$ 1,470,026	\$ 1,574,061	\$ 1,900,145*
Less Revenues**	-797,024	-1,124,030	-1,198,574
Net General Fund Expenditure	\$ 673,002	\$ 450,031	\$ 701,571
Hillsborough County Population***	1,108,435	1,131,546	1,164,425
Cost of Wetland Program Per HC Resident	\$.61	\$.40	\$.60

*FY '06 cost reflects an increase of four staff positions.

**Revenues include Delineation/Mitigation /Tampa Port Authority/EPC Development Application fees

***Population based on University of Florida, Bureau of Economic and Business Research (BEBR) actuals as listed in the Hillsborough County Budget Instructions for FY 08 and FY 09 update.

**Commissioner Salary - \$90,000/yr,
BOCC Car Allowance - \$7,200/yr,
EPC Wetlands Protection – 60 CENTS/YR,
Regime Change – Priceless**

WHAT HAVE WE GOT TO LOSE?

A. More stringent regulations for isolated wetlands less than ½ acre in size and a more stringent minimization standard.

- These isolated wetlands play an important role in nutrient retention and recycling.
- They act like sinks – they are biochemically closed systems that retain most of the chemicals entering from surrounding areas.
- Because of these very same properties, artificial wetlands are purposely constructed to treat wastewater of various kinds.
- These small isolated wetlands also act as sediment traps.
- Some wildlife species require isolated systems for reproduction

B. Development design input by EPC up front which decreases the potential for wetland impacts.

- EPC comments upon proposed development plans prior to the expenditure of engineering dollars for site design thereby avoiding or greatly reducing many wetland impacts.

C. Customer service - EPC staff responds to approximately 60 citizen inquiries/complaints per month and has a 24/7 response system in place.

- EPC's organizational structure allows for response to citizen complaints received directly by EPC and to those received by the County (PGMD), the cities of Tampa, Temple Terrace and Plant City, the Tampa Port Authority, the FDEP and the SWFWMD.
- Loss of EPC would result in diminished service to citizens and increased response times and/or delays.
- The sensitive nature of resource protection mandates timely response.
- Inquiries/complaints would have to be referred to FDEP or SWFWMD.

D. Oversight of mitigation for the County and all its municipalities.

- Faulty design and construction of mitigation areas could result in the loss of the function and environmental benefits.
- EPC staff provides oversight of crucial elements such as appropriate water regime, survival of planted species, and nuisance vegetation control.

E. Local control over phosphate mining related wetland impacts.

F. Oversight of Silviculture practices (such as logging) which are not exempt from EPC permitting requirements; they are exempt from state permitting requirements provided they conduct the BMP's adopted by the Florida Dept. of Agriculture and Consumer Services.

- EPC requires applicant to demonstrate that harvestable uplands are not available or that agricultural land does not have use through some other agricultural opportunity.
- Mitigation is required for the lost wetland function associated with the removal of mature wetland forests.
- This regulation has assisted in the preservation of trees in the forested floodplains and tributaries of the major rivers, especially the Hillsborough River.

- G. Oversight of wetland impacts related to agriculture which is not exempt from EPC permitting requirements; they are exempt from state permitting criteria provided BMP's are being followed.**
- Wetlands under the state exemption can be converted to sediment ponds or tailwater ponds without mitigation.
- H. Oversight of the water use regulatory authority and the water supplies utilities.**
- Because Hillsborough County is the major donor county for groundwater and surface water withdrawals for consumptive use to the tri-county area, you could expect to see greater wetland impact due to a loss in oversight.
- I. EPC wetland protection prevents the unintended consequence of flooding caused by rerouting of surface water away from historic flow patterns when there is a lack of oversight.**
- J. EPC input into the Hillsborough County Comprehensive Plan updates regarding policies, goals and objectives that relate to the protection of natural resources.**
- K. EPC input regarding Tampa Port Authority projects occurring in lands/waters subject to Port's jurisdiction.**
- L. EPC's local wetland program provides a distinct advantage in the procurement of federal funds for local water projects.**
- M. Scientific expertise to aid in the codification of rules aimed at the protection of our natural resource.**
- N. Input to Hillsborough County Public Works for capital improvement projects.**
- EPC input aids in preventing drainage of existing wetlands and unintended lowering of water levels in lakes.
 - Provide input into the planning of watershed master plans and the like.
- O. Loss of Pollution Recover Funds (PRF)**
- Pollution Recovery Funds are generated from penalties assessed to violators (example projects provided on following pages)
 - In 2006, the Wetlands Division accounted for approx. 40% (\$130,000) of all PRF dollars.

POLLUTION RECOVERY FUNDS **WILL BE LOST** **FOR PROJECTS LIKE THESE**

2006

Oyster Reef Shoreline Stabilization and Enhancement

This 2 year project will demonstrate that shoreline erosion can be halted through the installation of concrete oyster domes to create an off-shore oyster reef (to reduce wave energy). The off-shore reef allows the accumulation of sediment behind the reef. As sediment builds up, the area can be planted with marsh grass. Over time, through succession, the marsh area will be replaced by mangroves which further stabilize the shoreline.

Lake Thonotosassa Muck Removal Feasibility Assessment

This 1 year project will assess the costs, benefits and feasibility of removing the nutrient-rich layer of organic muck that is currently present on the lake bottom. It will focus on identifying concentrations and potential sources of lead in lake-bottom sediments. Because the U>S> EPA has recently finalized a Total Maximum Daily Load (TMDL) for lead in Lake Thonotosassa, such an assessment will be an essential first step in the process leading up to the physical removal or chemical inactivation of the muck layer, which may be necessary for a long-term lake restoration.

Erosion Control/Oysterbar Habitat Creation Project, Phase 1

This one year project provides multiple practical benefits; erosion control; water filtration; TSS reduction; restoration of estuarine habitat mosaic; enhancement of essential fishery habitat (EFH); construction of foraging habitat for listed and migratory shorebirds; other taxa; horseshoe crabs nesting habitat; and diamondback terrapin refugia. Oysters occur naturally in Hillsborough Bay and are annually reproductive so that population is not veliger limited; veliger attachment substrate is limited due to the historic removal of oyster shell from Hillsborough Bay; oyster reef construction is practicable, particularly in the shallow water surrounding the Sanctuary. The reef will provide water resource management benefits cost-effectively through ongoing, long-term water quality improvement benefits without future development, operation, maintenance and replacement (DOM&R) costs.

2005

Apollo Beach Speciation Monitoring

This project will allow the purchase of a PM2.5 speciation air monitor that will measure fine particulates in the Apollo Beach area as well as help better define the air quality of the Tampa Bay area as a whole.

Health Advisory Signs for Beaches

This project is to construct permanent signs at nine public beaches in Hillsborough County to ensure the public is properly informed of health advisories.

G. Maynard Underground Storage Tank Closure

This project will take preventative action to terminate potential continual environmental contamination by removing five abandoned underground storage tanks located on the subject property at 402 S. MacDill Ave.

School Bus Diesel Retrofit

This project will partner with Hillsborough County Schools with the Environment Protection Commission to establish a local retrofit program to reduce diesel school bus emissions.

2004

Agriculture Pesticide Collection Day

The Economic Development Dept. and the Solid Waste Department Staff's propose to promote the Agriculture Pesticide Collection Day to the agriculture community through agriculture related publications and through contacts in the industry. The Departments intend to make arrangements for pesticide collection through the current Hazardous Waste Collection Provider under contract with Hillsborough County.

Invasive Plant Removal at E.G. Simmons Park

E.G. Simmons Park is a widely visited Regional County Park. Restoring habitat by removing invasive species, such as Brazilian Pepper and lead trees, will increase both public utilization along the shores and banks, and the visual aesthetics of the park. Invasive removal will also greatly reduce potential reinfestation of SWFWMD's recently restored, 1,300 acre ELAPP Wolfbranch Creek Aquatic Preserve, located directly adjacent to the park.

WETLAND REGULATION: EPC OR SWFWMD **WHY EPC IS THE BETTER CHOICE**

Areas where EPC already engages in streamlining – taking a proactive approach and assuming responsibilities for SWFWMD:

Delineation Criteria: EPC staff conducts the delineations that are used by applicants for ERP permits.

Complaint Investigations: EPC staff serves as the initial responder/investigator to all wetland related issues. Will notify WMD if activity violates ERP rules. WMD will then take action on any violations of ERP rules.

Wetland Mitigation Compliance: EPC and SWFWMD conduct initial site inspection prior to delegation of monitoring to EPC. EPC provides thorough oversight throughout entire monitoring period.

Enforcement Action: EPC notifies WMD of violations requiring enforcement action by the WMD.

The SWFWMD's Tampa office assumes the responsibility for the wetland permitting and enforcement in two counties; Pinellas and Hillsborough. It is our understanding that there are seven staff members responsible for permitting and enforcement.

EPC employs eleven staff members for permitting and eight staff members for enforcement for Hillsborough County.

If the EPC wetlands division is eliminated, then the WMD would have to assume the responsibilities identified above. The WMD is facing a 3% budget reduction (rollback of millage). If they have to hire additional staff, they would have to increase the millage rate which is based on revenues necessary to cover costs.

Not only do we lose our stricter protections and the ability to respond to citizen complaints we must still pay for it. If they hire additional staff, they would have to recalculate costs resulting in a likely increase in millage. The end result, we pay for less service and less protection.

Areas where EPC employs stricter regulation or has greater oversight:

Jurisdictional Threshold: WMD allows for impacts EPC would not unless they are deemed necessary for reasonable use.

Authority: Rules/Processes: EPC allowed to participate in entire process for the County, Cities of Tampa, Temple Terrace and Plant City and Tampa Port Authority; WMD does not.

Basis of Review for Impact Analysis: EPC does not allow mitigation as justification for impacts, only for reasonable use.

Wetland Impact Analysis: EPC uses pre-emptive review process to avoid impacts. WMD uses design modification to minimize impacts.

Secondary Impacts: WMD rule assumes that secondary impacts do not exist if a 15 ft. minimum, 25 ft. average buffer width is maintained. EPC has no assumption and mitigation is required for secondary impacts.

Cumulative Impacts: EPC employs a more comprehensive review of cumulative impacts than the WMD.

Buffers: EPC has an absolute setback requirement, the WMD has not setback requirement. It is assumed that maintaining a 15 ft. minimum, 25 ft. average wide buffer will offset secondary impacts.

Exemptions: All EPC rules apply to Agriculture, no exemptions. Agriculture is exempt under WMD.

Notice General Permit: EPC has no Notice General process. All proposed impacts are subject to Chapter 1-11 requirement of being allowed only for reasonable use.

Stormwater Review – Quantity: WMD has minimum size criteria for stormwater quantity reviews, EPC does not.

Mangrove Trimming: EPC has sole authority for mangrove trimming in Hillsborough County.

Development Review Process: WMD is not involved in site development review process; EPC has an integral role in the planning and site development review process.

Coastal Permitting: Unlike the WMD, EPC has no size criteria for review.

Site Inspections: EPC conducts site visits early in the process before permits are issued.

**DIFFERENCES BETWEEN
ENVIRONMENTAL PROTECTION COMMISSION (EPC)
and SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) WETLAND PROGRAMS**

WETLAND PROGRAM RESPONSIBILITIES	EPC	SWFWMD (WMD)	COMMENT
Delineation			
Methodology for Delineation	<p>EPC Chapter 1-11 and Florida Unified Wetland Delineation Methodology (Ch. 62-340 F.A.C.)</p> <p>Uniform Mitigation Assessment Method (UMAM) (Ch. 62-345 F.A.C.)</p>	<p>Florida Unified Wetland Delineation Methodology (Ch. 62-340 F.A.C.)</p> <p>Unified Mitigation Assessment (UMAM) (Ch. 62-345 F.A.C.)</p>	
Delineation Criteria	<p>Per MOU with WMD EPC conducts formal jurisdictional delineations (binding for five years) for EPC (30 day process) These are considered informal (non binding) by WMD for ERP permit application, then they become formal (binding) after ERP approval</p>	<p>Per MOU with WMD Conducts only formal jurisdictional delineations which are binding on EPC and WMD (90 day process) Accepts EPC delineations as formal through ERP process.</p>	<p>Streamlining EPC staff conducts the delineation so that applicants can avoid the longer formal delineation process of WMD.</p>
Jurisdictional Threshold	<p>Recognizes all wetlands regardless of size, nature or quality.</p> <p>Under State rules, manmade features are consider wetlands if they satisfy specific criteria</p>	<p>Recognizes all wetlands regardless of size, nature of quality.</p> <p>Isolated wetlands of less than 0.5 acres may not require mitigation after elimination or reduction analysis is performed, if good mitigation plan provided and wetland is deemed to be of poor quality analysis is not required and impact is permitted.</p>	<p>Stricter regulation by EPC WMD allows for impacts EPC would not unless they are deemed necessary for reasonable use.</p> <p>EPC requires mitigation for impacts regardless of size.</p>

WETLAND PROGRAM RESPONSIBILITIES	EPC	SWFWMD (WMD)	COMMENT
Permitting: General			
Authority: Rules/Processes	Ch. 1-11, Wetlands; Ch. -14 Mangroves; Ch. 1-5 Water Quality; LDC; Cities of Tampa, Temple Terrace, Plant City; Tampa Port Authority Submerged Lands Management Rules	Individual Environmental Resource Permits (ERP), Ch. 40D-4, 40D-40, 40D-400, F.A.C.	Greater Oversight by EPC EPC allowed to participate in entire process. EPC granted limited authority to address specific issues through LDC and City Codes that WMD does not have.
Permitting: Wetland Impacts			
Basis of Review for Impact Analysis	<p>Avoidance, minimization & justification, mitigation</p> <p>EPC consistently applies review in same order; it is never interchanged. Requires avoidance as primary basis and only authorizes impacts necessary for reasonable use.</p> <p>No mitigation required for de minimus impacts.</p>	<p>Elimination or reduction, mitigation</p> <p>Allows for impacts after elimination and reduction analysis have been considered. WMD does interchange their review criteria; allows mitigation, if sufficient, to serve as justification for impacts</p>	<p>Stricter regulation by EPC EPC does not allow mitigation as justification for impacts, only reasonable use</p> <p>Mitigation is risky and the ecological functions of the impacted wetland are not replaced until the mitigated system is mature.</p>
Wetland Impact Analysis	Provides design guidance avoid impacts from project conception through final construction plan approval. Can make substantive recommendations that the permitting agency can rely on.	Reviews project and can recommend practicable design modifications which cannot affect the nature of the project but can be used to minimize impacts. Modifications are not necessary when it is determined that ecological functions are low or mitigation provides greater ecological value.	Stricter regulation by EPC EPC uses pre-emptive review process to avoid impacts, WMD uses design modification to minimize impacts.

WETLAND PROGRAM RESPONSIBILITIES	EPC	SWFWMD (WMD)	COMMENT
Secondary Impacts	UMAM assessment is performed for wetlands adjacent to the direct wetland impact and mitigation required.	Are not permitted as they relate to wildlife and habitat; include impacts to uplands used by wetland dependant species, impacts to historical and archeological resources and resulting from future activities. There is assumption that they do not exist if a 15 ft. min. or 25 ft. avg. buffer is maintained.	Stricter regulation by EPC
Cumulative Impacts	Too many impacts within the same wetland system can be deemed as not permittable.	Considers the primary and secondary impacts to be cumulative. If impacts are mitigated in the same drainage basin the impact is not considered cumulative.	Stricter regulation by EPC EPC employs a more comprehensive review of cumulative impacts than the WMD.
Buffers	EPC's inclusion in the LDC and the City Codes provides limited authority for EPC regulate proposed encroachments into the standard setback requirements.	No setback required in the Basis of Review. It is assumed that maintaining a 15 ft. minimum or 25 ft. average wide buffer will offset secondary impacts.	Stricter regulation by EPC There is an absolute setback distance required.
Exemptions	Exemptions are authorized through EDA 1996-1 for all upland cut ditches and ponds less than 1.0 acre in size	Statutory exemptions exist through Sec. 373.406 for agriculture silviculture; Sec. 403.813(2) for docks, lake vegetation removal; Sec. 40D4.051	Stricter regulation by EPC All EPC rules apply to Agriculture – no exemptions for Agriculture.
Notice General	No Notice General process. All proposed wetland impacts must be reviewed, authorized and mitigated.	Sec. 40D-400 allows for a simple certification process for individual and cumulative impacts meeting a certain threshold. Sec. 40D-400.475 allows for dredge and fill activities for isolated wetlands <4000 sf.	Stricter regulation by EPC All proposed impacts subject to same Chapter 1-11 requirement of being allowed only as necessary for reasonable use.

WETLAND PROGRAM RESPONSIBILITIES	EPC	SWFWMD (WMD)	COMMENT
Permitting: Stormwater Review			
Quantity	EPC will review for alterations to wetland hyperpoid. Stormwater quantity reviews are conduction during the site development review process.	Stormwater quantity reviews are conducted as part of the ERP process for any parcel 10 acres of greater with at least 100 sf of impacts.	Stricter regulation by EPC EPC does quantity review for all projects there is no minimum size criteria.
Quality (water quality)	Addressed during the site development review process by the requirement of turbidity control measures, control of stormwater discharge (untreated stormwater and rate of discharge), dewaterng analysis. Compliance is monitored through a dedicated turbidity control inspector	Federal Clean Water Act and State rules require that discharges meet fed/state standards. When ERP issued, the project is certified as complying with federal CWA standards. This is done through the use of approved BMPs and construction practices.	
Permitting: Mangroves			
Mangrove Trimming	Sole authority for mangrove trimming within HC under Ch. 1-14, Mangroves. EPC certifies professional trimmers and conducts site reviews.	Can authorize impacts to mangroves as part of overall ERP. No authority in regards to trimming.	Stricter regulation by EPC
Permitting: Wildlife			
Wildlife	Quantifies impacts to wildlife through the application of the UMAM and EDA 1996-1	Quantifies impacts to wildlife through the application of the UMAM. Permits impacts through the ERP as they relate to Threatened and Endangered species.	

WETLAND PROGRAM RESPONSIBILITIES	EPC	SWFWMD (WMD)	COMMENT
Pre-Emptive Review Process			
Development Review Process	Integral part of the planning and site development review process (cradle to grave) for HC, Cities of Tampa, Plant City, Temple Terrace and Tampa Port Authority		Greater Oversight by EPC WMD is not involved in site development review process.
Coastal Permitting	Pursuant to the Tampa Port Authority's Enabling Act, EPC reviews all permit applications for potential environmental impacts.	Depends upon the size of the impact and whether an ERP is required.	Stricter regulation by EPC No size criteria for EPC review.
Compliance and Enforcement			
Complaint Investigations	Per MOU with WMD Staff investigates all reported wetland impact complaints for EPC and WMD. Serves as initial responder/investigator to all wetland related issues. Coordinates with District if activity violates pertinent ERP rules.	Per MOU with WMD EPC investigates all reported wetland impact complaints for WMD. WMD will take action on any violations of ERP rules as identified by EPC.	Streamlining EPC staff investigates all reported wetland impacts.
Wetland Mitigation Compliance	Per MOU with WMD (2005) EPC staff conducts all wetland mitigation permit compliance. Conducts site inspection to verify all initial, interim and final mitigation reports.	Per MOU with WMD (2005) EPC staff conducts all wetland mitigation permit compliance. WMD conducts initial site inspection w/EPC prior to delegation of monitoring to EPC. Conducts final inspection prior to acceptance of successful mitigation.	Streamlining Through oversight by EPC throughout entire monitoring period.

WETLAND PROGRAM RESPONSIBILITIES	EPC	SWFWMD (WMD)	COMMENT
Construction			
Site Inspections	Conducts site visits for all zoning petitions and site development applications. Conducts on-site reviews of the as built construction drawings	Notified in writing at beginning and end of construction for all permitted projects. Will conduct At least one site inspection during construction. All as-builts are transferred into the operation phase of the ERP permit with a site review.	Greater oversight by EPC EPC conducts site visits early in process before permits are issued.
Enforcement Action	Per MOU with WMD (2005) EPC notifies WMD of violations requiring enforcement action by the WMD.	Per MOU with WMD (2005) When notified by EPC, WMD will become involved in enforcement of ERP rules.	Streamlining

Wetlands Mitigation Bank -- What You Should Know

Wetlands mitigation banking as it is currently practiced in Florida has failed to protect wetlands.

- **Wetland mitigation banks have gone bankrupt** -- Lake Louisa's owner, a company called Ecobank, founded by a politically-connected developer, went bankrupt in 2004. But state regulators didn't notice for two months, and federal regulators remained in the dark for more than a year. "**When dry is wet**" How Billions are made 'restoring' Florida's wetlands Experimenting with mitigation banking, By Craig Pittman and Matthew Waite; Published December 17, 2006 by [St. Petersburg Times](#), Part of Vanishing Wetlands Series
- **Upland credits sold to replace pristine wetlands** -- Florida has allowed 10 mitigation banks to claim a third or more of their credits for saving dry land. Those 10 banks were granted a total of 5,386 wetland credits for dry land — credits that can be sold as if they were the equivalent of saving 5,386 acres of pristine swamps and marshes. See "**When dry is wet**" How Billions are made 'restoring' Florida's wetlands Experimenting with mitigation banking, By Craig Pittman and Matthew Waite; Published December 17, 2006 by [St. Petersburg Times](#), Part of Vanishing Wetlands Series
- **Inadequate monitoring of the land trusts which are supposed to maintain the wetlands** -- No state or federal government agency checked on Sundew — though their offices are all of 16 miles away. GAO investigators searched through 15 mitigation bank files in Jacksonville: 10 contained no evidence the corps ever inspected them. See "**When dry is wet**" How Billions are made 'restoring' Florida's wetlands Experimenting with mitigation banking, By Craig Pittman and Matthew Waite; Published December 17, 2006 by [St. Petersburg Times](#), Part of Vanishing Wetlands Series.

If it takes decades to replicated the fully functioning of a mangrove stand, how long will it take to recreate wetlands which are an even more complex ecosystem? See study by Proffitt, C.E., and Devlin, D.J., 2005, Long-term growth and succession in restored and natural mangrove forests in southwestern Florida: [Wetlands Ecology and Management](#), v. 13, no. 5, p. 531-551, DOI:10.1007/s11273-004-2411-9.

"Banking facilities redistribute the wetlands resources from urban to rural areas reallocating the important ecosystem services wetlands provide human communities." See "The Effects of Wetland Mitigation Banking on People," by J.B. Ruhl & James Salzman National Wetlands Newsletter, Vol 28, No. 2 --><http://www.law.fsu.edu/faculty/profiles/ruhl/2006-effectsofBankingNWNL.pdf>

The success of a wetland mitigation project is measured using the state's Uniform Mitigation Assessment Method (UMAM). Just because a wetland mitigation passes the UMAM evaluation and is deemed a "success" does not mean that it is "the same" or of equal quality as the wetland that was impacted by the development. See analysis of the Regulatory Effectiveness of the Peace River Watershed, PP46-47 --> ftp://ftp.dep.state.fl.us/pub/minirec/peacriver/FinalPeaceRiverCumulativeImpactStudy/FinalPeaceRiverCISReport/Chapter5/CIS_Chapter_5.pdf

Regulatory effectiveness is effected by politics. See analysis of the Regulatory Effectiveness of the Peace River Watershed --> ftp://ftp.dep.state.fl.us/pub/minirec/peacriver/FinalPeaceRiverCumulativeImpactStudy/FinalPeaceRiverCISReport/Chapter5/CIS_Chapter_5.pdf

Scientific knowledge and our understanding of the natural world is constantly evolving. For example: Compare the theories on dinosaur extinction today versus 50 years ago.

It costs more to fix man made damage to the environment than to leave it alone.