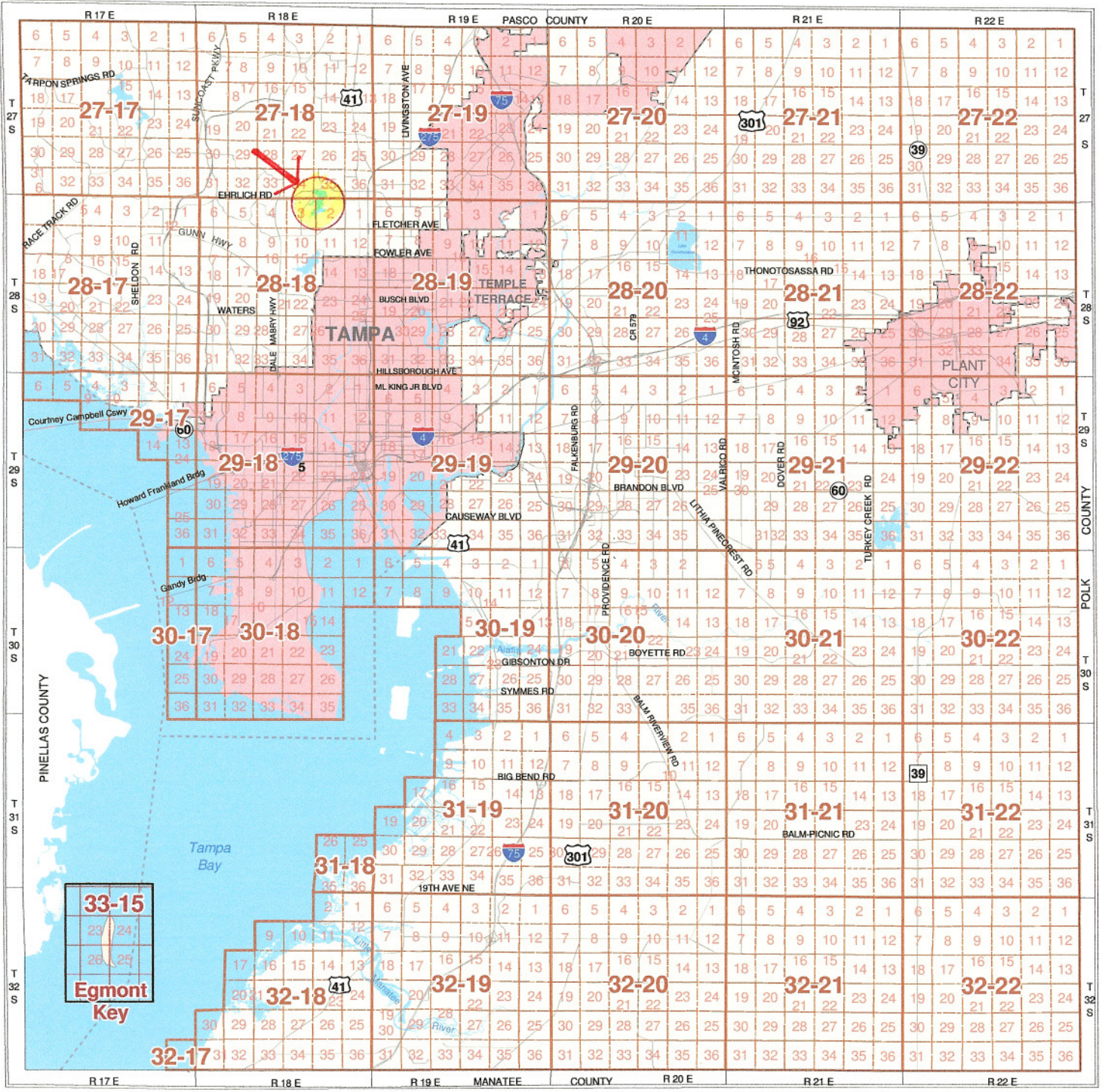


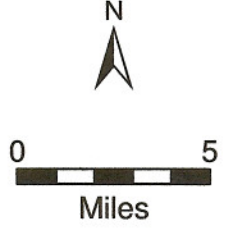
# Hillsborough County Township / Range / Section Index



- Legend**
- Cities
  - County
  - Water
  - townships
  - sections





Planning & Growth Management Department  
Administrative Services Division



December 1, 2003

# Lake Magdalene

Section-Township-Range  
35-27-18 3, 2-28-18

-  Contour Lines  
Expressed in  
2-Foot Intervals
-  Lake Perimeter  
ground level

**EXPLANATION:**  
Survey date August 21, 1998.

**Explanation:**  
Lake water level was 49.3 ft  
above Mean Sea Level when  
the lake was surveyed. Contours  
are expressed in absolute depth  
below this level.

**DATA SOURCES:**  
Digital orthophotos by United States  
Geological Survey. All contours  
generated by Florida Center for  
Community Design and Research  
based on survey data provided by  
the Hillsborough County Lake  
Management Program.

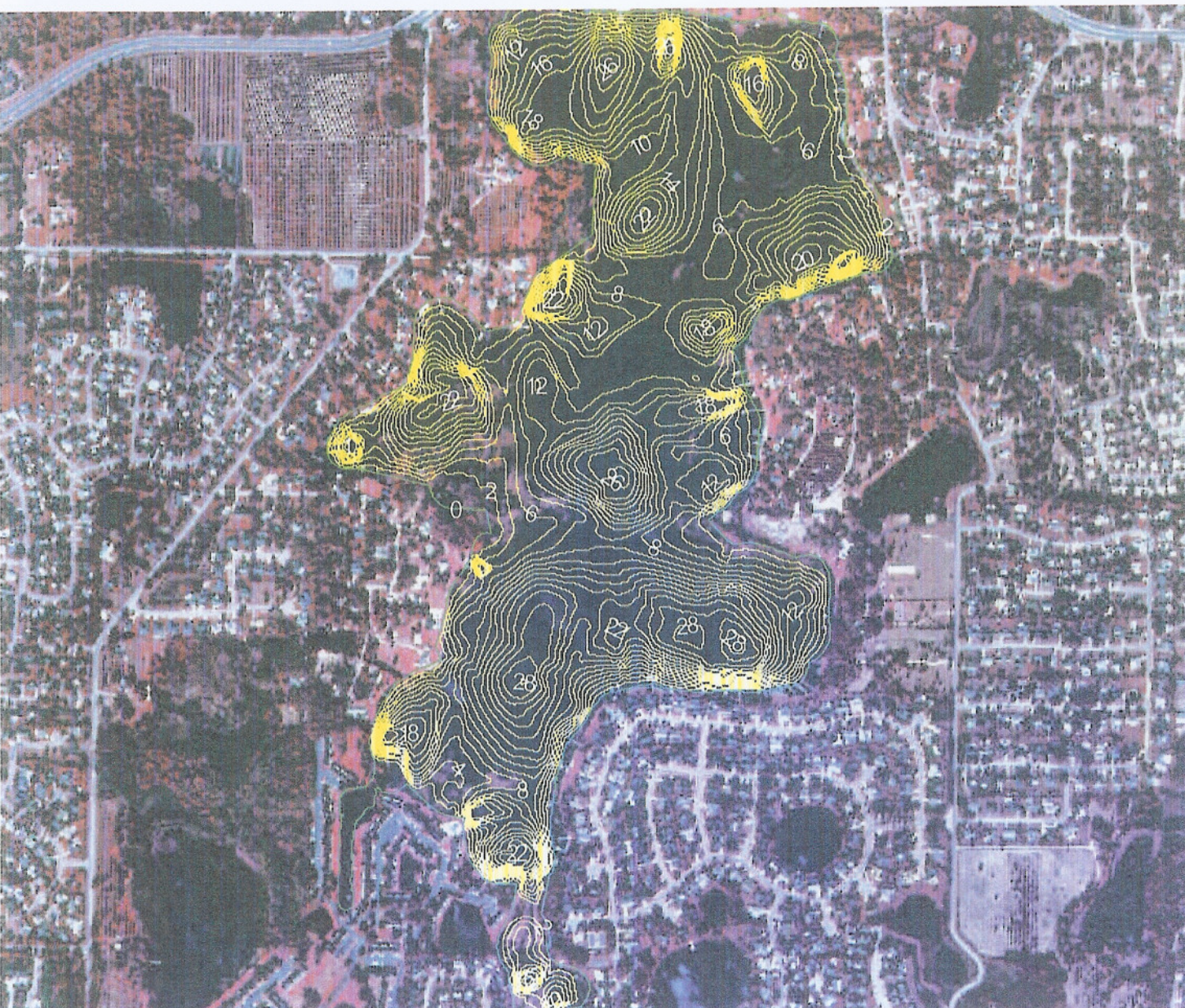
80 0 80 160 Meters



Hillsborough County



University of  
South Florida  
**USF**



## ATTACHMENT NO. 2

### **Principle Investigator:**

Hung T. Mai, P.E.  
H.T. Mai, Inc.  
14031 N. Dale Mabry Highway  
Tampa, FL 33618  
Phone: (813) 969-0600  
Fax: (813) 969-3506  
Cell: (813) 220-6204

Mr. Mai has over 34 years experience in water resources, watershed management and hand-on design experience in stormwater and watershed management project throughout the State of Florida. Mr. Mai serves as a member of Hillsborough River Basin Board of the Southwest Florida Water Management District. The position is appointed by the Governor and confirmed by the Senate.

Mr. Mai is also serving as a member of the Technical Advisory Council of the Hillsborough River Board. Mr. Mai was appointed by the Hillsborough County Commissioner Jim Norman to serve the County Charter Review Board in 2005-2006 term.

Mr. Mai is the principal of H.T. Mai, Inc. a water resource and civil engineering firm located in Tampa for over 14 years. Prior to H.T. Mai, Inc., Mr. Mai employed by PBSJ, Wade-Trim, Inc. and RSH, Inc. serving as their Director of Water Resources and Civil Site Engineering Department.

### **Key Personnel:**

Richard B. Wagner, Vice President  
Lake Magdalene Special Dependent District  
14007 Lake Magdalene Blvd.  
Tampa, FL 33618  
Phone: (813) 695-5490

Rick Wagner has an MSW and MURP (Master in Urban and Regional Planning). As a lake resident for seven years, he was instrumental in creating the special district for Lake Magdalene, i.e. initially meeting with county personnel, participating in the petition drive, keeping residents informed of the special district process, attending the required public meetings, etc.

He is currently the Vice-President of the Board of Trustees of Lake Magdalene Special Dependent District and will serve as the liaison among H.T. Mai, Inc., Hillsborough County EPC, Lake Magdalene Homeowners Restoration Assoc., and the Lake Magdalene Special Dependent District.

## ATTACHMENT NO. 3

### Project Narrative:

The Lake Magdalene's Management Plan Development and Restoration Project have, as its goal, to continue controlling, improving, administering and maintaining the quality of water for the third largest lake in Hillsborough County.

### **Objectives:**

- a) Assist the Principal Investigator in identifying current problem areas on the lake
- b) Provide the Principal Investigator with the necessary ecological history of the lake, i.e. water levels, water samples, vegetation (invasive and desirable), etc. for the purpose of establishing a baseline prior to points of entry / outfalls
- c) Identify and update the stormwater points of entry / outfalls.
- d) Monitor the nutrient levels coming from the stormwater points of entry / outfalls.
- e) Promote proper maintenance of stormwater points of entry / outfalls including, if consistent with the lake management plan, the installation of CDS units or other sediment/filtration and/or biological treatment devices to capture debris and retard nutrient and fertilizer invasions.
- j) Create a community education program to reduce general public pollution and that which comes from the past and current development.

Upon the achievement of the above objectives, the following social, economical/ financial and physical benefits will occur respectively:

- 1) Homeowners have proven their willingness to match any resources the County chooses to provide, i.e. the Family Fun Fest in April '02 bringing the lake families together for an educational program on healthy lakes which resulted in businesses donating food/ drink to the cause.
- 2) The economical and financial benefits will be evidenced by a stable or increased tax base by preserving property values which have shown an increase in assessed values over the last five years, and
- 3) Physically, as the hydrilla, cattails and malaleuca are reducing or thinned out, present navigational hazards will be eliminated by increased visibility and submerged malaleuca tree trunks as obstacles will be avoided. The lake ecosystem will benefit wildlife habitats and food chains will be significantly increased.

## **Results and/ or Benefits Expected:**

It is our belief that Lake Magdalene will be ecologically restored to its natural system state prior to the Cherry Creek sub-division (accounting for approximately 3-4 points of entry/outfalls for stormwater runoff), Bearss Avenue (accounting for 1-2 points of entry/outfalls) and the jettisoned growth and development of the North Dale Mabry Corridor (accounting for approximately 2 points of entry/outfalls for stormwater runoff).

## **Specifically, we desire to accomplish:**

- a) Manage stormwater runoff discharging into the lake with water quality treatment mechanism.
- b) control invasive species/plants such as hydrilla, cattail and malaleuca, etc.
- c) preserve the recreational use of the lake by being able to navigate safely within its shorelines without encounters involving submerged roots or stumps
- d) develop a community education plan on how to control fertilizers, pesticides and pouring miscellaneous liquids down storm drains impacts water quality 1-2 miles from the infraction.
- e) mosquito abatement will be possible with proper monitoring.
- f) partner with the appropriate County/State agencies, businesses and EPC to demonstrate how these entities can co-exist by cooperation and education of all concerned parties.
- g) continue to bring back and attract wildlife habitats to the water body which has food chains to support their nets.

## **General project Information: Criteria used for evaluating results**

Since the Special District has no other project and our first year of funds was spent on malaleuca removal, our efforts will be directly focused on the successful awarding of this grant. If the Special District is awarded any grant monies, the efforts of the Trustees will be focused towards the most effective use of those funds as dictated by the lake management plan. We are going to:

- a) Use the Department of Environmental Protection's Quadrant Monitoring Method to help isolate lake areas with the problematic, ecological imbalance we've identified
- b) Utilize, on a quarterly basis, the Overhead Surface Acreage Viewing technique to visually give an overall picture of how the management of how the lake is responding to the implementation of the lake management plan
- c) Documenting the effectiveness in controlling invasive species/plants, growth analysis will be at fixed points on the lake to record bio-mass and linear growth.
- d) continued sampling of water quality will help us to compare how the lake management plan impacted the baseline numbers taken before the plan was implemented

## ATTACHMENT NO. 4

### Scope of Work:

The Lake Magdalene Special Dependent District is prepared to begin its Lake Magdalene's Management Plan Development and Restoration Project upon notification of grant funds from the Pollution Recovery Fund Assistance Program.

The immediate implementation would adhere to the PRF's guidelines for expenditures relating to our project. Chronologically, the scope of work would be performed in the following manner:

1. H.T. Mai, Inc. has worked to develop and complete the Lake Management Plan within six months.
2. Review the Project section for recommendations and select the appropriate corrective action for the point source and non-point source of stormwater system into the lake and invasive species/plants control. (one month)
3. Removal of invasive species/plants mechanically and/or manually treatment. Obviously, this causes minimal disruption to those desirable plants that help balance the lake's PH, are nutrient absorbent, and helps limit algae growth, not to mention the positive effects on the lake's wildlife and its habitat. (3 months)
4. Depending on the results of mechanically removal method, chemical treatment would come next, and as a last resort. The use of which would be consistent with EPC's and DEP's regulatory requirements, and the manufacture's recommendations. Limited applications of these chemicals will be used in such a manner as to not adversely affect the desirable plant species and wildlife within the lake's boundaries. (2 months)
5. There will be a section in the Lake Management Plan that addresses mosquito abatement. It would be at this time, chronologically, that we would dedicate resources to study the possibility and feasibility, given our resources, of developing such a program. Mosquito control is a concern for all the homeowners, not only on the lake, but within the surrounding residential area as well. (3 months)
6. Creation of a community education program will occur in the Lake Management Plan implementation. It will inform all residents, on the lake and surrounding developments, the effects of chemicals and fertilizers has on the lake. We have already asked to the SWFWMD, Florida Cooperative Extension Service, and the appropriate County agencies for any recommendations to assist the Special District in this endeavor. (3 months to develop, then ongoing)
7. Implementation of the on-going maintenance of the lake to protect and preserve the work recently completed by the various vendors. The Special District's annual revenues will

probably be sufficient to maintain the care of the lake. (2 months to review proposals, then ongoing)

It has always been the intent of the Lake Magdalene Special Dependent District to eliminate invasive vegetation and species (which would be the project taking the longest time) restoring to its natural system. Our goal is to bring the Lake Magdalene into a desirable wildlife habitats water body with water quality at its best conditions. This goal will help the County to meet the TLMD in the future as mandated by the State Legislation.



## APPLICATION FOR POLLUTION RECOVERY FUND ASSISTANCE

### DATE OF APPLICATION:

May 01, 2007

### A. BASIC ASSISTANCE

1. Applicant: The legal name of the applicant/organization, the organizational unit and the complete mailing address of the applicant.

Name: Lake Magdalene Special Dependent District  
Organization: Dependent District of Hillsborough Co.  
Address: P. O. Box 270065, Tampa, FL 33688

2. Project Manager Information: Give name and title of the representative of the applicant who will be the Environmental Protection Commission's principle contact concerning this application

Name Rick Wagner  
Title Vice President, Lake Magdalene Special Dependent District  
Address 14007 Lake Magdalene Blvd. Tampa, FL 33618  
Phone Number (813)695-5490

Project Title Lake Magdalene's Management Plan Development and Restoration Project  
Project Time Start: September 1, 2007 End: On-going  
Total Cost of Project \$ 77,954  
Total EPC share requested \$ 66,954

3. Assistance Type: **New or Renewal** (check one)

New - Award of funds for initial request within the project period.

Renewal - Award of funds for a project beyond the current project period.

4. Project Location: The specific location(s) of the project. (Attach Site Map)

**Lake Magdalene, Section 02 & 03, Township 28 South and Section  
34 & 35, Township 27 South, Range 18 East, Hillsborough County**

5. Is the Project for:

Restoration of a polluted area

Mitigation of the effects of pollution

Pollution Control Activity to prevent or minimize pollution

Educational

6. Is the Project directed toward restoring an identified "polluted area" (a geographic area destroyed or altered by dredging or filling or contaminated by an emission or discharge), or toward terminating an identified pollution source? Identify and explain:

**Both. The project will restore the lake by controlling/managing and reducing the pollutant runoff of storm water from seven (7) large inflow culverts and**

**Eight (8) small size culverts discharge untreated runoff stormwater into the lake.**

7. Is the harm or potential harm to health, safety or welfare of the public or wildlife actual or potential? Does the project seek to alleviate actual or potential harm and what is the severity of the harm and the causal relationship between the "pollution" and the harm?

Identify and explain:

**Actual. Lake Magdalene is currently suffering a mesotrophic to eutrophic water body due to high phosphorous and nitrogen content. In addition, the lake is**

**Suffering the continuous increasing density of invasive species/plants**

---

**that kills the lake natural ecosystem and reduces significant food sources to support wildlife habitats. Hydrilla, malalueca and cattails are spreading significantly in the lake.**

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8. How long has the pollution existed or how long before any harm will be evident?

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**Lake Magdalene has been highly polluted for over a decades due to excessive nutrient loadings from a combination of point and non-point sources in its watershed. The high nutrient content continues to increase from untreated stormwater runoff from fifteen culverts into the lake.**

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9. Identify and describe how the project proposes to alleviate the pollution (addressing technical, practical, and cost effectiveness issues):

**The project will assess the costs, benefits and feasibility of long-term improving water quality and natural system as well as ecosystem of the lake.**

**The essential first step in the process is to produce a lake management plan which is a bible for long-term management the lake ecosystem. In conjunction with the lake management plan, controlling and removing of invasive species/plants are pressing.**

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**The second step of the project is to identify the point sources and non-point sources discharging into the lake, collect more water quality data, rank and prioritize the improvements, assess the cost/benefit of the retrofit measures (ie. CDS units and/or natural/biological treatment system), seeking funding sources (EPC, SWFWMD, FDEP and other agencies), design and permit for the improvements.**

**Education component of the Lake Management Plan will be an on-going task.**

---

10. Is the polluted area one which has previously been subject to commission enforcement and, if so, when and what was the result?

**The proposed project will present a logical and necessary next step to support regulatory and non-regulatory efforts to reduce nutrient loadings to the lake.**

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**Special measures for the lake front owners to reduce the pollutant runoff will also be assessed in both education and retrofitting as required.**

---

11. If no actual pollution exists and no prior commission enforcement action has occurred, does the project otherwise enhance pollution control activities within the County?

**It will. The Lake Management Plan will provide a regulatory and non-regulatory (via education component) efforts and controlling/reducing nutrient loadings by**

---

**Installing CDS units and/or biological treatment system where is appropriate in costs/benefits manner.**

---

12. Can this Project be divided into separate and independent parts, and if so,

a) what are they? **Yes. It could potentially be divided into two parts:**

**1.a) Developing the Lake Management Plan and controlling/removing the invasive species/plants. Education component of the Lake Management Plan will be an on-going task.**

**2.a) Identifying the point sources and non-point sources discharging into the lake, collect more water quality data, rank and prioritize the improvements, assess the cost/benefit of the retrofit measures (ie. CDS units and/or natural/biological treatment system), seeking funding sources (EPC, SWFWMD, FDEP and other agencies), design and permit for the improvements.**

---

b) how would the costs be allocated between them? \_\_\_\_\_

**1.a) Cost \$66,954.00**

**2.a) Cost \$11,000.00 and to be determined.**

---

c) would the applicant be willing to accept only partial funding? **Yes**

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13. Are other funding sources committed to the project? **Yes**

How much and for what? **Approx. \$11,000 less the District required**

**line item expenditures to the County and our lease agreements.**

---

14. What other funding sources may be available and how much? \_\_\_\_\_

**We will apply funding from Southwest Florida Water Management District Cooperative Funding via Hillsborough County Public Works Department.**

**We will apply funding from Florida Department of Environmental Protection and Tampa Bay Estuary Program.**

**We will hold various fund raising events and apply for Hillsborough Community Grant. The funding amount will vary depending the sources and availability.**

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15. Why do you believe that this Project is of sufficient importance to justify the expenditure of Pollution Recovery Funds? We firmly believe.

**Lake Magdalene is the third largest natural lake in Hillsborough County. The lake has 205 acres of surface area. This lake is considered as the headwater of Sweetwater Creek and the first "chain" of lakes to receive runoff, filter it, equalize it then flowing south emptying into the bay. The lake water quality is degraded over the years and in the state of becoming a eutrophic water body.**

**Controlling water quality at the beginning of the source will be benefit the County in the long-term for TMDL in the Tampa Bay which will be mandated by the legislation in the very near future. The timing is perfect for this project to meet to goal and objective of the County Comprehensive Plan of the Water Quality and Natural System elements.**

---

16. Will the project enhance the value of private property, and if so, whose? \_\_\_\_\_

**The project will help maintain current property values and preserve the rate of appreciation instead of lowering property values due to a eutrophic water body, choked with uncontrolled invasive species/plants growth. The project will stabilize the present tax base at the very least, and/or produce more revenue for the County because of increased appreciation of property values throughout the lake community. The past five years of real estate transactions clearly indicate how recreational lakes impact our tax base.**

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## **B. ATTACHMENTS**

**All applicants must submit responses to the following as attachments corresponding to the indicated numbers:**

1. Please provide a detailed map of the project site.
2. Principal Investigator and Key Personnel - Present a biographical sketch of the principal Investigator incorporating the following information: Name, Address, Phone Number, Education, Background and other qualifying experience for the project.
3. Project Narrative - Please provide a narrative statement describing the project that includes the following:
  - a) Objectives of this Project - Describe the principal and subordinate environmental objectives of the project. Pinpoint any relevant physical, economic, social, financial, institutional or other problems requiring solution.

- b) Results and/or Benefits Expected - Identify specific environmental results and/or benefits to be derived from the project. Include all primary and secondary benefits accruing to the grantee, to the pollution served, and in general, to the public and environment.
- c) General Project Information - Discuss the criteria that will be used to evaluate the results and successes of the project as well its relationship to other work planned, anticipated or underway.
4. Scope of Work – Provide a detailed scope of work for the proposed project. List in chronological order a schedule of accomplishments, progress, or milestones that are anticipated over the length of the project.
5. Budget Information – Please itemize expenditures necessary to perform project using the following format:

**BUDGET CATEGORIES**

	<b>PRF Funds</b>	<b>Federal</b>	<b>Applicant</b>	<b>State</b>	<b>Other</b>
<b>a. Personnel(*)</b>	-0-	-0-	In-kind	-0-	-0-
1. Distr. Trustees	-0-	-0-	In-kind	-0-	-0-
2. H.T. Mai, Inc.	-0-	-0-	In-kind & \$3,000 (cost only)	-0-	-0-
<b>b. Administrative</b>	-0-	-0-	In-kind	-0-	-0-
<b>c. Materials(**)</b>	21,017	-0-	2,713	-0-	-0-
<b>d. Contractual</b>	44,500	-0-	2,713	-0-	-0-
<b>e. Construction</b>	-0-	-0-	1,374	-0-	-0-
<b>f. Other— postage, printing,</b>	1,437	-0-	1,200	-0-	-0-
<b>g. Total Direct Charges (Sum of a. to f.)</b>	\$66,954	-0-	11,000	Apply for and TBD	Apply for and TBD

\* Any Personnel/Administrative work required as a result of receiving any grant monies would be administered by the Lake Magdalene Special District Trustees. H.T. Mai, Inc. actual cost is much higher but agreed to recover for cost only.

\*\*Material costs were based on estimates discussed at our trustee meetings and may change after we have a lake management plan.

### **C. SUBMITTAL OF APPLICATION**

Please submit a total of five (5) applications (one original and four (4) copies / one of which can be in electronic format as a CD) to:

Environmental Protection Commission of Hillsborough County  
Environmental Resources Management Division  
Attn: Tom Ash / Pollution Recovery Fund  
3629 Queen Palm Dr., Tampa, Florida 33619

***Completed applications must be received at the above address by  
5:00pm (EDT), August 1, 2005.***

***Late applications and email applications will not be considered.***

[www.epchc.org](http://www.epchc.org)

E-Mail: [epcinfo@epchc.org](mailto:epcinfo@epchc.org)

AN AFFIRMATIVE ACTION – EQUAL OPPORTUNITY EMPLOYER

# **PRF APPLICATION PROCESS**

## Instructions

The Hillsborough County Environmental Protection Act (Chapter 84-446, Laws of Florida) has created a pollution recovery fund which is to be supervised and used by the commission to restore polluted areas of the county, as defined by the commission, to the condition they were in before pollution occurred, to mitigate the effects of pollution, or to otherwise enhance pollution control activities within the county.

### **Application Forms must be submitted on or before the August 1, 2005 deadline.**

- There will be a newspaper advertisement, and possibly press releases, specifying the deadline for submitting applications.
- Application forms and instructions can be obtained from Tom Ash, phone 813-272-5960x1011 or from our website at: [www.epchc.org](http://www.epchc.org)
- Except under special circumstances, applications submitted earlier than the deadline will be held until the next processing period, and then processed with the others.

### **Following the deadline, applications will be distributed to staff appropriate to the project for review and recommendation to the Executive Director.**

- Staff may contact the applicant upon beginning review, and if a meeting to discuss details is requested or advisable, will schedule it.
- Staff will meet with the Executive Director to discuss all applications in the group and to prioritize and determine recommendations.

### **A summary of the Executive Director's recommendations will be forwarded to CEAC along with copies of all applications.**

- Staff will send a copy of the Executive Director's recommendations to each applicant along with a notice of the meeting date at which CEAC will discuss the applications and its recommendations to the EPC Board.
- Applicants are invited to attend the CEAC meeting and make a brief presentation in support of their Project.

### **Staff and CEAC recommendations will be presented to the Commission for decision.**

- The EPC meeting will likely be the second meeting following the CEAC meeting so that the information can be properly placed on the agenda.
- The Applicant may attend the EPC meeting and request to speak.

### **If the project is approved, the applicant must sign a contract before monies will be available.**

- EPC Legal will draft the contract with standard terms and conditions, and provide it to the applicant for review and execution.
- EPC Legal will arrange for execution of the contract by the EPC Chair after it is executed by the applicant, and will then forward final copies to the Applicant's Project Director and the EPC Administrative Contact.
- The EPC Administrative Contact will be responsible for ensuring the applicant's compliance with the contract.