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APPLICATION FOR POLLUTION RECOVERY FUND ASSISTANCE

DATE OF APPLICATION: August 1, 2005

A. BASIC ASSISTANCE

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

Name: City of Tampa
Organization: Stormwater Department
Address: 306 E. Jackson St., 7E, Tampa Florida 33602

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 Caroline M. Klos
Title Stormwater Environmental Program Manager
Address 306 E. Jackson, 7E, Tampa Florida 33602
Phone Number 813-274-8371
Project Title Tampa Bay Area Floating Debris Removal
Project Time Start: July 2005 End: Feb. '06 (operational)
Total Cost of Project \$ 255,000 (Boat, aux equip, logos)
Total EPC share requested \$ 100,000 (partial capital funding)

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)

The equipment will be owned and maintained by the City of Tampa.

The project location includes the entire Tampa Bay area and its tributaries and may extend beyond the city limits depending on partnership and funding considerations.

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:

This project is directed toward restoring areas polluted by litter and other waste products. Stormwater drains tend to provide a conveyance system not only for rainwater, but also for bottles, cans, and other consumer products carelessly discarded onto streets, medians and lawns. The drainage system offers just one means of conveyance for pollutants. Additional debris in our natural water bodies is caused by direct discharge from boats, cars and pedestrians. Further, litter that didn't even originate in the Tampa area pollutes our waterways as it is carried into our system with heavy winds and rains. Given the variety of sources that contribute to the pollution problem, it is difficult to target it at its source. The City will continue with ongoing efforts to educate and install treatment devices, however this project provides a much needed solution to the waste that slips through despite those efforts.

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?

Trash in the water is unsightly and causes actual harm to aquatic habitat. In Tampa where the rainy season lasts so long and is so powerful, the debris flushing action will be even more frequent and the problem even more severe. During a recent planning and debris monitoring trip in Tampa, floatable debris identified included a variety of water bottles, Gatorade, and film packaging. Palm fronds served as rafts for other soggy vegetative debris. Potato chip bags and polystyrene fast food containers bobbed and drifted along side single serve and family size soda bottles. None of these items are good for a properly functioning ecological system. Many of these items are consumed by unsuspecting habitat and fish and fowl suffer as a result. If Tampa is able to achieve the environmental results realized in comparable communities, the benefits will include not only improved water quality for habitat through sheer tonnage removal, but also health, and aesthetic value-add for humans, award winning recognition, and a substantially raised profile for the problem solvers - those who fund and participate in the boats cleanup efforts.

8. How long has the pollution existed or how long before any harm will be evident?
The harm is already evident, as seen in many of the pictures in the attachment. The problem has never been addressed from the water, only from the land, so the pollutants may have existed for as long as humans have littered and storm systems have conveyed rainfall.
9. Identify and describe how the project proposes to alleviate the pollution (addressing technical, practical, and cost effectiveness issues):

As mentioned, the City of Tampa has attacked the litter and debris problem from land based techniques including street sweeping and the new Clean City Division. The City's Neighborhood Services Division is also in the process of developing a citywide education campaign to address litter.

The Stormwater Department, in addition to operating street sweepers also has and will continue to install pollution treatment devices such as Stormceptors and CDS units. The proposed solution provides a new method that is expected to be cost effective and that will also offer a unique water based vantagepoint to attack litter. The boat, such as the one pictured below, will be equipped with trash skimming screens and rollers and will off-load from conveyor systems into disposal containers. Additionally, staging a debris off-loading site directly at McKay Bay from the water is currently being studied by the City.



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

No EPC enforcement action has been taken against the City due to floatable debris in the River or Bay. Rather than waiting for regulatory pressure to make this an issue, the City is attempting to proactively and voluntarily address the problem.

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?

Pollution does currently exist, and the City of Tampa has already initiated a planning project to document how much and where the recurring pockets of floatable debris accumulate. As noted, this project will enhance other pollution control activities such as Stormceptor and CDS treatment units on pipes, and street sweeping activities.

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

a) what are they? Major milestones of the project include:

- a. Planning and GIS mapping
- b. Development of Operational Plan
- c. Acquisition and customizing of Boat
- d. Promotions and Public Education
- e. Ongoing operation and data collection

b) how would the costs be allocated between them?

The City of Tampa will contribute to all costs to be incurred. Partial funding is being sought for item "c" above, Acquisition of the Boat. The total cost of item c is estimated to be \$255,000. The City is asking the Pollution Recovery Fund to share in that portion of the costs by granting \$100,000 towards the purchase.

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

YES, This is a partial funding request. The City would also be willing to consider other incremental funding options if the PRF has an alternate proposal.

13. Are other funding sources committed to the project?

No commitments other than City funding have been secured, however the City plans to negotiate with SWFWMD to incorporate portions of the project into the currently funded Urban Lake Rescue grant.

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

In addition to grant funding, the City may seek to obtain partner funding from neighboring jurisdictions. These funds however would help underwrite the operational phase of the project.

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

This project addresses a prevalent regional problem that no one has stepped forward to take ownership of, but that has severe environmental, health and safety concerns. It is multi-jurisdictional, has direct public benefit, and high visibility.

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

This project will enhance the value of Tampa's waterways and urban ecology. It will benefit all of our citizens, visitors, and habitat.

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.

Please see Item B.1. attached

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.

Key City of Tampa Personnel Include the following:

Charles "Chuck" Walter, P.G.

Stormwater Department Director, 813-274-8771

306 E. Jackson St. Tampa Florida 33602

Chuck is a Professional Geologist with over 18 years of experience in governmental programs and specifically 12 years experience in waterways management. Chuck came to the City of Tampa from Sarasota where he served as Stormwater Environmental Utility Manager. As Director, Chuck will be the Principal Investigator and oversee all aspects of this project.

Caroline M. Klos, MPA

Stormwater Environmental Program Manager, 813-274-8341

306 E. Jackson St. Tampa Florida 33602

Caroline Klos will be the grants manager and administrator and will serve as the key contact for this grant application. Caroline has a Masters Degree in Public Administration from the University of Kansas and over 15 years of local government environmental program experience.

Yvette Bowman, Civil Engineer
Engineer II, Stormwater Design Division
306 E. Jackson St. Tampa Florida 33602

A USF graduate, Yvette has a Bachelors Degree in Civil Engineering. She has been working with the City of Tampa for four years and in the engineering field for 10. She is taking the lead on monitoring the volume and location of litter accumulation and developing the operational plan to be turned over to the Stormwater Operations and Maintenance Division for implementation.

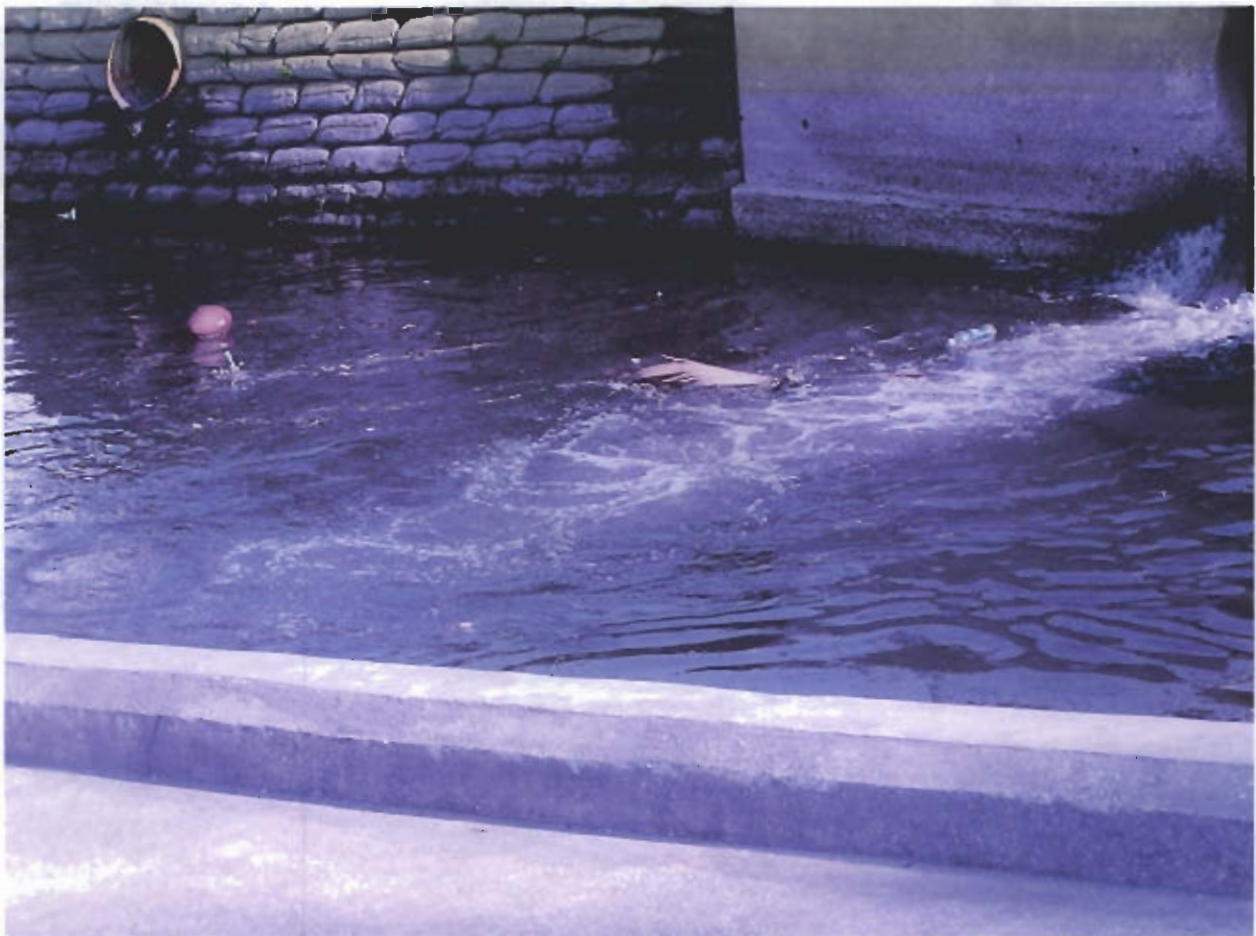
A dedicated operational crew will be assigned to the floating debris clean up boat, however at this time, no personnel selections have been made.

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.



Floating debris islands are caused by litter and trash that reach the Bay through a

variety of travel options. Nobody owns the problem. Some of the waste is conveyed through storm drains. Some arrives via careless pedestrian and commuter polluters who casually throw their waste "away" into the water. Other debris comes from boaters, marinas, and parks. Gasparilla and other special events contribute litter pollutants to our waterways. Some of the junk pictured above may have even originated in Apollo Beach, Pinellas County or Temple Terrace and becomes deposited here. Multiple jurisdictions, including the City, the County, the Port Authority and various regulatory agencies have a concern about polluted waters. Many departments such as Stormwater, Solid Waste, and Parks provide systems or services that present opportunities for pollutants to reach the water. We cannot eliminate these valued services, such as stormwater conveyance, but we can eliminate the trash.



This stormdrain, which ultimately reaches the River, delivers rainwater and more!

The City of Tampa's stormwater system has 179 outfalls into the Hillsborough Bay,
Page 9, City of Tampa PRF Application, CMK

140 outfalls into the Lower Hillsborough River, and 393 outfalls into the Upper Hillsborough River. Because of that contributing role, the Tampa Stormwater Department is offering to step forward and take the lead on cleaning litter, trash, and other debris from our waterways.

This proposed project involves the acquisition of a waterways management boat to remove floatable debris from the Tampa Bay area. The problem is that litter and trash are abundant in our waterways and there is no system to remove it currently. The physical problem can best be understood visually, as shown in the attached pictures.



The objective is not only to remove debris, and dispose of it properly, but to establish a debris removal program that is sustainable, and that can benefit the entire region. As lead agency on this project, the Stormwater Department can offer long term operational sustainability, but is seeking grant assistance with initial capital costs. Another objective is to bring ownership to this lingering problem. Trash in the water is

unsightly and causes harm to aquatic habitat. But, it does not have an established TMDL, nor is it categorized as a pollutant of concern. That lack of regulatory pressure could lead to lack of action. Floatables are not easily targeted by treatment devices such as Stormceptors which more effectively filter out sediments. It is best targeted through public education and behavior modification, but that is an ongoing task, even with public outcry about the eyesore floating debris causes as well as the harmful environmental effects.



Many citizens don't realize that stormwater reaches Tampa's precious natural waterbodies without being treated at a plant. Even more do not realize that whether they are in East Tampa, West Tampa, Davis Islands, or SoHo anything that falls on the street is likely to make it to the stormdrain - a one way ticket to the Bay. The tidy homeowner who sweeps debris down the stormdrain doesn't associate the action with polluting the Bay any more than the careless tourist who drops their bubblegum wrapper in Ybor believes he'll see it again the next day outside of the convention center. But it all travels downstream, and we need to supplement education and treatment with removal of what gets by these safeguards. In addition to meeting the objective of debris removal, the boat will be an attention getter, educational tool, and constant reminder to the public that litter travels.

Top priority areas for debris removal will be the proposed Riverwalk area, the Convention Center, Port of Tampa and along the Bayshore seawall. Targeting these areas will have a positive impact on proposed economic development activities, tourism, and public satisfaction and attraction to Tampa's waterfront. Tampa wants to open up the waterfront to the people, without putting the people or the water at risk. This project will minimize the risk of increased pollution as more and more people gain access to the water.

- 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.

Waterway management boats such as trash skimmers or water vacuums are well established Best Management Practices among Cities who have rivers, bays, harbors and lakes that are a significant asset in the community. Examples of locations where vessels such as that proposed in this application have been put to good use include the City of Baltimore, the City of Houston, the Lower Colorado River Authority (Austin), Fort Lauderdale, and Onondaga Lake in Syracuse, New York. If Tampa is able to achieve the environmental results realized in these communities, the benefits will include not only improved water quality for habitat through sheer tonnage removal, but also health, and aesthetic value-add for humans, award winning recognition, and a substantially raised profile for the problem solvers - those who fund and participate in the boats cleanup efforts.

Below is a picture of Houston's "Mighty Tidy" floatable trash skimmer. This boat operates in a 16 mile stretch of the Buffalo Bayou. Another other vessel is dedicated to the Port of Houston.



Last year the EPA awarded the City of Houston and the Buffalo Bayou Partnership the prestigious EPA Gulf Guardian Award. This award recognizes environmental stewardship and excellence in the five contouring states of the Gulf of Mexico. The award was received after the boat delivered strong results in just an 8 month operating period. The vessel, during that period, removed 650 cubic yards of litter, enough to fill up the infield of a professional baseball stadium more than 2 feet deep with debris.



Pictured above is the trash skimmer that operates in the Baltimore Harbor, where tourist attractions line the waterfront much like what is in development for Tampa, 317 tons of debris were removed the first year a vessel was put into operation, 442 tons the second year, 364 tons the third year,, 372 tons and counting this year.

In Tampa where the rainy season lasts so long and is so powerful, the debris flushing action will be even more frequent and possibly lead to greater removal figures. During a recent planning and debris monitoring trip in Tampa, floatable debris identified included a variety of water bottles, Gatorade, and film packaging. Palm fronds served as rafts for other soggy vegetative debris. Potato chip bags and polystyrene fast food containers bobbed and drifted along side single serve and family size soda bottles. None of these items are good for a properly functioning ecological system. Many of these items are consumed by unsuspecting habitat and fish and fowl suffer as a result.

Foremost, removal of the debris via the waterways management boat produces cleaner water, reduces harm to fish, game and wildlife, and improves aesthetics. Secondly, floatable debris removal improves our image to tourists, it benefits navigation, helps alleviate flood risks and clogged outfalls, and removes vegetation before it decomposes and negatively affects dissolved oxygen. Tertiary benefits include increased public awareness, and improved economic development opportunities. Overriding all these benefits is increased public awareness that occurs when debris removal boats are put into the water. These large vessels have often been the recipient of public art funds so that they can be painted in a manner that attracts attention and educates the public. This proposal may include painting sponsor logos on the vessel and could possibly include a boat naming contest to get the community involved and further increase the public education and promotional benefits achieved.

- 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.

Regional participation will be a success measure for two reasons. It will mean the City has made enough progress to branch out and offer the service to various partners, and also that others recognize the value of the operation and are seeking partnership to address their contribution to a common problem.

Waste composition analysis and tonnage removed will be another measure of success. All waste disposed of will be weighed in and logged, and visual audits of the waste will help determine which sources continue to be significant contributors of waste. In addition to floatables, the crew will attempt to remove other debris, such as mattresses, bikes, and chairs that may have partially sank but can be retrieved with special equipment. Recurrence of this type of waste will help assess illegal dumping problems.

In terms of other work planned to address the problem of floatable debris, the City has undertaken an aggressive clean up initiative on land that will be headed up by the new Clean City Division. The proposed solution to floatables in the water will complement that effort, and will also be one of a three pronged approach to managing our waterways, which also includes installation of treatment devices for sediments and some floatables, and street sweeping operations both of which will continue to be a priority for the City.

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.

Major milestones of the project include:

1. Planning and GIS mapping
2. Development of Operational Plan
3. Acquisition and customizing of Boat
4. Promotions and Public Education
5. Ongoing operation and data collection

5. Budget Information – Please itemize expenditures necessary to perform project using the following format:

BUDGET CATEGORIES

	PRF Funds	Federal	Applicant	State	Other
a. Personnel	0	0	*\$500,000	0	0
1.					
2.					
b. Administrative	0	0	\$5,000	0	0
c. Materials	\$100,000		\$150,000		
d. Contractual					
e. Construction					
f. Other fuel, maintenance	0	0	*\$100,000	0	0
g. Total Direct Charges (Sum of a. to f.)	\$100,000	0	\$755,000	0	0

Material costs reflect Boat and auxillary equipment purchase and do not include operational personnel or ongoing operations. Personnel and operational costs are estimated for a five year period. Funding for operations will be guaranteed by the City, however may include contributions from various partners.

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

E-Mail: 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
- 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.

