

Agenda Item #: _____

AGENDA ITEM SUMMARY

I. EXECUTIVE BRIEF

3/12/18
Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

| Fiscal Years | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|-------------------|-------------------|-------------------|-----------|-----------|
| Capital Expenditures | _____ | _____ | _____ | _____ | _____ |
| Operating Costs | <u>72,524</u> | <u>68,923</u> | <u>68,923</u> | _____ | _____ |
| External Revenues | _____ | _____ | _____ | _____ | _____ |
| Program Income (County) | _____ | _____ | _____ | _____ | _____ |
| In-Kind Match (County) | _____ | _____ | _____ | _____ | _____ |
| NET FISCAL IMPACT | <u>72,524</u> | <u>68,923</u> | <u>68,923</u> | _____ | _____ |
| # ADDITIONAL FTE POSITIONS (Cumulative) | _____ 1 _____ | _____ 1 _____ | _____ 1 _____ | _____ | _____ |

Is Item Included in Current Budget? Yes _____ No X
 Budget Account No.: Fund _____ Department _____ Unit _____ Object _____
 Program _____

B. Recommended Sources of Funds/Summary of Fiscal Impact:

Funding for the Environmental Analyst is offset by the Lake Worth Lagoon Partnership Grant Program.

C. Department Fiscal Review:

[Signature]

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Dev. and Control Comments:

Atwillhite 3-13-08 *Jim J. Jones* 3/14/08
 OFMB *VO* Contract Development and Control
03/07 *6:40am 3/14/08*

B. Legal Sufficiency:

Mam Tor
 Assistant County Attorney

C. Other Department Review:

 Department Director

Policy Issues (continued from Page 1).

The 2008 LWL Management Plan Update includes Action Plans that outline new priority projects and proposed studies for initiation, design, acquisition of permits or construction within the next 5 years, contingent upon Board approval and future grant funding. Agency and public feedback listed Public Education/Awareness/Outreach as the top recommendation to effectively launch LWL restoration awareness and support. Public awareness, the establishment of the LWL Initiative and increased stakeholder partnerships are priorities in the 2008 LWL Management Plan Update.

The LWL Initiative is a multi-agency effort that will seek awareness, support and funding assistance for projects to improve and protect the natural resources within the watershed. The formation of the LWL Initiative will facilitate partnerships with other governmental agencies and stakeholders to secure funding and combine outreach efforts and technical expertise. These efforts will build upon the accomplishments and efforts that the County has championed to date.

Creating and coordinating an engaged constituency of citizens and agencies who understand both the economic, environmental value and needs of the LWL will require a dedicated position. Funding for an Environmental Analyst position will be supported through LWL Partnership Grant Program.



**LAKE WORTH LAGOON
MANAGEMENT PLAN REVISION**

March 2008

Prepared by:

**Palm Beach County
Department of Environmental Resources Management
2300 North Jog Road, 4th Floor
West Palm Beach, FL 33411-2743**

EXECUTIVE SUMMARY

Considerable progress has been made since the LWL Management Plan (LWLMP) was adopted in 1998. Tasks and projects originally defined in the plan were and are currently being implemented by various groups and agencies. This first revision of the LWLMP encompasses the 1998-2007 timeframe. It provides a look back at the progress made in implementing the original goals and priorities, and a look ahead at strategies and restoration projects. A current status of the lagoon is included, along with Action Plans for future projects.

The most prominent change to the plan is the format. While still organized by Program, the information has been synthesized with visual aids and specific Action Plans scheduled for the next 5 years. Each Plan summarizes the topic, presents management objectives, and suggests a series of actions with strategies to address those objectives. Anticipated costs and schedules are included, along with the expected benefits. These specific and attainable targets will allow governmental agencies, municipalities, businesses and industry, non-profit groups and concerned citizens to get involved by committing to specific Action Plans. References in the Action Plan to local governments/agencies under the headline "Responsible parties", attempt to identify the leading partner with the best technical knowledge, skill set, or jurisdiction for the implementation of that specific plan.

In the nine years since its completion, many tangible components of the original LWLMP have been implemented under the leadership of the Palm Beach County Department of Environmental Resources Management (PBCERM). Significant progress has been made by construction of stormwater treatment and habitat restoration projects. Through the Lake Worth Lagoon Partnership Grant Program (LWLPG), developed in cooperation with 15 agencies and municipal partners, a total of \$14 million in State funding has been leveraged against \$33 million in local funding to successfully complete 37 projects at a total cost of \$ 47million.

Projects using a variety of non-LWLPG funding sources were also implemented by Palm Beach County in cooperation with the Florida Inland Navigation District (FIND), the Port of Palm Beach, the United States Army Corps of Engineers (USACE), the Florida Department of Environmental Protection (FDEP), the LWLPG, Florida Fish and Wildlife Conservation Commission (FWC), South Florida Water Management District (SFWMD), the Palm Beach County School Board and municipalities including Lake Park, West Palm Beach, Palm Beach, Lantana, Hypoluxo, Boynton Beach and Ocean Ridge.

Combined with the LWLPG projects, approximately 184 acres of habitat have been created or restored: 67 acres of mangroves, 64 acres of potential submerged aquatic vegetation (SAV), 14 acres of artificial reef, and 39 acres of maritime hammock. More than 1,700 acres of runoff that previously discharged directly to the LWL are now being

treated.

Despite the success of these endeavors, there are many challenges still facing the lagoon. The challenge to improve or maintain water quality while accommodating future growth will have to be balanced with competing social and economic needs of local communities. Another challenge is altered hydrology and the large-scale freshwater releases from regional canals. Although changes to water management strategies for the LWL are included in the Comprehensive Everglades Restoration Plan (CERP), their direct or indirect affect to the health of the ecosystem is yet to be studied. The input of contaminants and toxins from urban and agricultural runoff, along with elevated loads of nutrients and suspended and dissolved organic matter, are all contributing factors to the environmental distress of this estuary.

PROGRAMS AND GOALS

Five broad areas within the system are used in this revised management plan to identify specific goals and objectives for restoring the lagoon. Goals identified in the original 1998 LWLMP have been revised according to this new effort and are summarized below.

Water and Sediment Quality Program

Improving water and sediment quality will require continuous effort to compensate for the increased pollution associated with the growth of our community. Recent water quality gains have been attributed in part to wastewater treatment technologies, which have significantly reduced municipal sewage discharges in the lagoon. Action Plans targeted specifically to improve and monitor Water Quality, and to reduce Wastewater, Stormwater and Sediments are outlined in Chapter 4. Goals for this program are:

- Expand and implement a long term water quality ambient monitoring program in the LWL for baseline purposes and trend analysis.
- Increase focus on decreasing inputs of suspended materials, nutrients, and toxic substances from point and nonpoint sources.
- Identify and reduce anthropogenic loadings of fecal contaminants in the LWL.

Habitat Restoration and Enhancement and Restoration Program

The restoration and protection of the diverse habitats within the LWL is crucial to the lagoon's health. The overall targets within the next five years are to restore approximately 125 acres of tidal marsh habitat, add a minimum of 16 acres of oyster reef habitat, continue development of artificial reefs, protection of land through acquisition, protect and enhance the lagoon's existing mangrove and seagrass areas. These goals will be accomplished through 29 specific capital projects (Appendix C) and monitored as outlined in a series of specific Action Plans. Goals for this program are:

- Restore, enhance, and create seagrass beds, oyster habitat, emergent mangrove wetlands, coastal hammock habitat, and protective upland buffer zones.
- Add riprap to vertical seawalls to reduce wave-generated sediment resuspension and provide additional hardbottom habitat.
- Construct artificial reefs that provide juvenile, intermediate and adult habitats required by the life cycle of estuarine and marine dependent fish and invertebrate species.
- Evaluate the status and protect sea turtles, manatees, and other endangered, threatened, and rare species, and species of special concern using the LWL.

Public Use and Outreach Program

Interested, informed citizens are the lagoon's best hope for the future. The *Public Outreach Program* is committed to creating an engaged constituency of citizens who understand both the environmental, recreational and economic value of the LWL, and actively participate in restoring and protecting it. Though approximately 16 of the 26 outreach projects originally identified in the 1998 LWLMP have been implemented, more needs to be done to raise public awareness. Goals for this program are:

- Develop a Lake Worth Lagoon Initiative (LWLI) to facilitate stakeholder partnerships and to seek funding assistance for projects that would improve and protect the natural resources within the LWL and its watershed.
- Develop public awareness programs to involve and inform the residents, visitors, and decision makers about the LWL ecosystem.
- Develop new school education programs within the PBC science curriculum that emphasize the ecology of LWL ecosystem and ways to help to preserve it.
- Identify and construct areas around the LWL for public access features.

Interagency Planning and Coordination

When the 1998 LWLMP was initiated, key policy leaders representing state, local and federal government, members of the scientific community, businesses and other stakeholders actively participated in the development of the plan. It is both a goal and a necessity that the revised management plan and its programmatic activities coordinate with other agency and local government plans or programs. Goals are:

- Build partnerships with government agencies, municipalities and stakeholders for the implementation of the management plan.

Funding

Based on very preliminary estimates, the cost to implement all of the Action Plans is estimated to be in excess of \$37 million over the next five years. Since 1989, the partners have provided over \$47 million for projects that benefit the lagoon. Since funding is limited, recommended actions will have to focus on cost-effective use of existing

resources and a clear return on investment. The following approach for funding the management plan for LWL should be considered:

- Aggressively pursue state and federal partnerships for lagoon improvement, including efforts to secure funding in State agencies' budget through the establishment of a Lake Worth Lagoon Initiative;
- Maintain existing levels of expenditures for cost-effective projects contributing to the lagoon restoration goals;
- Evaluate programs and investigate opportunities to redirect resources to accomplish more with public dollars;
- Promote public-private partnerships with the potential for bottom-line benefits for the LWL and businesses;
- Evaluate the feasibility of a local option sales tax, when deemed essential for the implementation of action plans.

The key strategy for the successful implementation of the LWLMP is partnerships. The restoration efforts should include consideration for best current and future uses of the lagoon, and must be supported by clearly defined funding and sound management strategies to implement the Action Plans. To achieve that, local governments and agency partners are encouraged to adopt by Resolution a commitment to undertake specific Action Plans outlined within this document, and to support and promote the LWLMP. This commitment will confirm that partners are willing to work together cooperatively and commit funding and resources to the Plan. Broad community support and a united effort by environmental managers in government and industry will assure attainable and realistic goals within the next five years.

A call to action:

The LWL has been drastically altered and degraded throughout the years. By the 1970's, water quality and resources had become severely impacted, which got public and governmental attention. Interagency action in the form of a management plan, changes in stormwater/sewering practices and successful restoration projects have resulted in improved conditions within the lagoon. The LWL has important resources that need to be protected and restored. With the implementation of the proposed projects and Action Plans we will have an estuarine system that is nationally recognized, regionally significant, and on the road toward restoration and protection for future generations.

8

RESOLUTION NO. 2008-_____

**A RESOLUTION OF THE BOARD OF COUNTY
COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA
SUPPORTING THE ESTABLISHMENT OF A
LAKE WORTH LAGOON INITIATIVE**

WHEREAS, the 2008 Lake Worth Lagoon (LWL) Management Plan Update is a revision to the 1998 LWL Management Plan; and

WHEREAS, the 2008 LWL Management Plan Update includes an Action Plan to establish a LWL Initiative; and

WHEREAS, an "Initiative" is an interagency effort with the purpose of seeking awareness, support and funding assistance for projects that will improve and protect the natural resources within the watershed; and

WHEREAS similar efforts have been successful for other systems such as the Loxahatchee River, Biscayne Bay, Florida Keys and Indian River Lagoon; and

WHEREAS the establishment of a LWL Initiative, in cooperation with the South Florida Water Management District (SFWMD), will help forge partnerships with other governmental agencies and stakeholders, to incorporate and combine funding acquisition support, outreach and technical expertise, and increase stakeholder and public awareness; and

WHEREAS, the SFWMD Governing Board is scheduled to approve the 2008 LWL Management Plan Update and support the establishment of a LWL Initiative by Resolution on April 10, 2008; and

WHEREAS, the Board of County Commissioners desires to support the establishment of a LWL Initiative, incorporated herein, which provides for the following elements:
construction of priority environmental enhancement and restoration projects, increase stakeholder participation, increase partnering efforts for funding acquisition, increase public awareness and outreach efforts, and prioritize and combine data collection efforts to assess project successes and guide future management decisions.

1 THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS
2 OF PALM BEACH COUNTY, FLORIDA, THAT:

3 Section 1: The foregoing recitals are hereby adopted and ratified.

4 Section 2: This Resolution shall become effective upon its adoption by the Palm
5 Beach County Board of County Commissioners.

6 The foregoing Resolution was offered by Commissioner _____, who
7 moved its adoption. The motion was seconded by Commissioner _____,
8 and upon being put to a vote, the vote was as follows:

9 Commissioner Addie L. Greene, Chairperson _____

10 Commissioner John F. Koons, Vice Chair _____

11 Commissioner Karen T. Marcus _____

12 Commissioner Robert J. Kanjian _____

13 Commissioner Mary McCarty _____

14 Commissioner Burt Aaronson _____

15 Commissioner Jess R. Santamaria _____

16 The Chairperson thereupon declared the Resolution duly passed and adopted this
17 _____ day of _____, 20__.

18

19 APPROVED AS TO FORM AND
20 LEGAL SUFFICIENCY

**PALM BEACH COUNTY, FLORIDA BY ITS
BOARD OF COUNTY COMMISSIONERS**

21

22

23

24

25

26

By _____
Assistant County Attorney

By _____
Deputy Clerk

2008 - 0571

BGEX - 380-03040800000000002314

BOARD OF COUNTY COMMISSIONERS
PALM BEACH COUNTY, FLORIDA

BUDGET TRANSFER
Fund 1229 FDEP Lake Worth Lagoon Fund

| ACCOUNT NAME AND NUMBER | | ORIGINAL BUDGET | CURRENT BUDGET | INCREASE | DECREASE | ADJUSTED BUDGET | ENC/EXP 3/11/2008 | REMAINING BALANCE |
|-------------------------|-----------------------------------|--------------------|-------------------|----------|----------|--------------------|----------------------|----------------------|
| <u>Appropriations</u> | | | | | | | | |
| 380-3057 LWL Monitoring | 3401-Other Contractual Services * | 200,000 | 564,952 | 0 | 72,524 | 492,428 | 49,951 | 442,477 |
| 380-3057 LWL Monitoring | 9515-Administrative Charge Off | 0 | 0 | 72,524 | 0 | 72,524 | 0 | 72,524 |
| | | | | 72,524 | 72,524 0 | | | |

Environmental Resources
Management

INITIATING DEPARTMENT/DIVISION

Administration/Budget Department Approval

OFMB Department - Posted

Signatures & Dates

Richard E. Walrley 3/13/08
atwillhite 3.13.08

BY BOARD OF COUNTY COMMISSIONERS
AT MEETING OF

April 1, 2008

Deputy Clerk to the

Board of County Commissioners

ATT.# 3

11

BOARD OF COUNTY COMMISSIONERS
PALM BEACH COUNTY, FLORIDA

BUDGET TRANSFER
Fund 0001 General Fund

| ACCOUNT NAME AND NUMBER | | ORIGINAL BUDGET | CURRENT BUDGET | INCREASE | DECREASE | ADJUSTED BUDGET | ENC/EXP 11/19/2007 | REMAINING BALANCE |
|-------------------------|--------------------------|--------------------|-------------------|----------|----------|--------------------|-----------------------|----------------------|
| <u>Appropriations</u> | | | | | | | | |
| 380-3057 LWL Monitoring | 1201-Salaries | 0 | 0 | 61,203 | | 61,203 | 0 | 61,203 |
| 380-3057 LWL Monitoring | 2101-FICA | | | 3,794 | | 3,794 | | 3,794 |
| 380-3057 LWL Monitoring | 2105- Medicare | | | 887 | | 887 | | 887 |
| 380-3057 LWL Monitoring | 2201- Retirement | | | 6,640 | | 6,640 | | 6,640 |
| 380-3057 LWL Monitoring | 9516-Admin Costs-chg off | 0 | 0 | | 72,524 | -72,524 | 0 | -72,524 |
| | | | | 72,524 | 72,524 0 | | | |

Environmental Resources
Management

INITIATING DEPARTMENT/DIVISION
Administration/Budget Department Approval
OFMB Department - Posted

Signatures & Dates

Richard E. Uschuly 3/4/08
atwillwhite 3.13.08

BY BOARD OF COUNTY COMMISSIONERS

AT MEETING OF

April 1, 2008

Deputy Clerk to the
Board of County Commissioners

ATTN 4

(12)