PHASE II PLAN

MIAMI-DADE COUNTY LAKE BELT PLAN IMPLEMENTATION COMMITTEE

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EXECUTIVE SUMMARY

Future land use and resource management in the 77.5 square mile Lake Belt Area of Miami-Dade County is critical to the State of Florida. A number of complimentary yet often competing interests require careful balance to best respond to the economic, environmental, and social opportunities that the Lake Belt Area offers. The limestone resources of the Lake Belt are among the largest deposits of accessible high quality rock remaining in the State outside of the Everglades that are not constrained by urbanization. Public water supply wells in the Lake Belt Area draw water from the Biscayne Aquifer to supply drinking water to most of the residents of north Miami-Dade County. Movement of water through the Lake Belt Area – once a part of the larger Shark River Slough – is critical to maintaining the hydrologic regime of the Everglades Ecosystem.

Over the next 50 years, significant change will come to the Lake Belt Area through major public and private investments. Mining interests will excavate limestone in accordance with federal, state and local permits, creating the largest network of freshwater lakes in South Florida. Miami-Dade County will implement wellfield protection regulations to protect the public water supply. The South Florida Water Management District (SFWMD) will acquire and restore the Pennsuco wetlands and other wetlands necessary to mitigate for wetland losses that occur due to mining activities. The SFWMD and US Army Corps of Engineers (USACE) will implement the Comprehensive Everglades Restoration Plan (CERP), including several major components which may be located within the Lake Belt Area. These future investments together compose an enormous opportunity to accomplish a number of public benefits related to Everglades restoration, water supply protection, public recreation, and the supply of building materials critical to the Florida economy.

The Florida Legislature recognizes the importance of the Lake Belt Area to the citizens of Florida and has mandated that a plan be prepared to address a number of concerns critical to the State (Chapter 373.4139, F.S.). The Legislature established the Lake Belt Committee and assigned it the task of developing a long-term plan for the Lake Belt Area. Through a cooperative process involving government agencies, mining interests, non-mining interests, and environmental groups the Lake Belt Committee has completed the *Miami-Dade County Lake Belt Plan – Phase I and Phase II.*

The Lake Belt Phase I Plan – completed in 1997 – focused upon balancing limestone mining interests and environmental concerns related to wetland protection, water supply protection and water management needed for Everglades restoration. It established the footprint for future mining, and distinguished areas suitable for mining, areas suitable for environmental mitigation, and areas where further analysis is needed to determine mining suitability. It provided the basis for the Wetland Mitigation Fee, subsequently established in 1999, to fund the purchase and restoration of wetlands, including the Pennsuco wetlands, as mitigation for limestone mining.

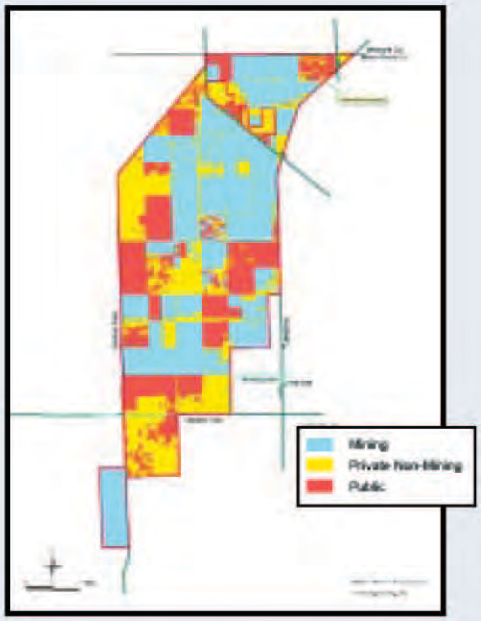
The *Lake Belt Phase II Plan* expands upon the Phase I Plan by providing a more detailed plan to further implement and specifically address a number of additional legislative mandates. The key elements that compose the Plan include:

- The **2050 Vision for the Lake Belt** envisions that public and private investments in the Lake Belt Area over the next fifty years will be coordinated and planned in a mutually supportive and compatible fashion. It recognizes the need to balance priorities for protecting water supply, Everglades restoration and wetland preservation, protecting mining and non-mining interests, and realizing recreation opportunities.
- A set of **Guiding Principles** direct the location, intensity and phasing of land uses related to wellfield protection, water management, Everglades restoration, limestone mining, non-mining land use, environmental enhancements, and recreation opportunities.
- Identification of **Guiding Actions** needed to address specific issues – with timeframes and assigned responsibilities – organized under seven headings:
  - Wellfield Protection
  - Water Management
  - Mining Interests
  - Non-Mining Interests
  - Environmental Enhancements
  - Recreation
  - Land Ownership
- **Recommendations** are presented pertaining to Funding, Implementation, Phasing, and Legislative and Regulatory Revisions

The opportunity for long-term public benefit in the Lake Belt Area is unprecedented. Recommendations of the Phase I Plan have been largely implemented through collaboration and consensus building. Recommendations of the Phase II Plan will require a similarly concentrated and coordinated effort in years to come.

EXISTING CONDITIONS

LAND OWNERSHIP



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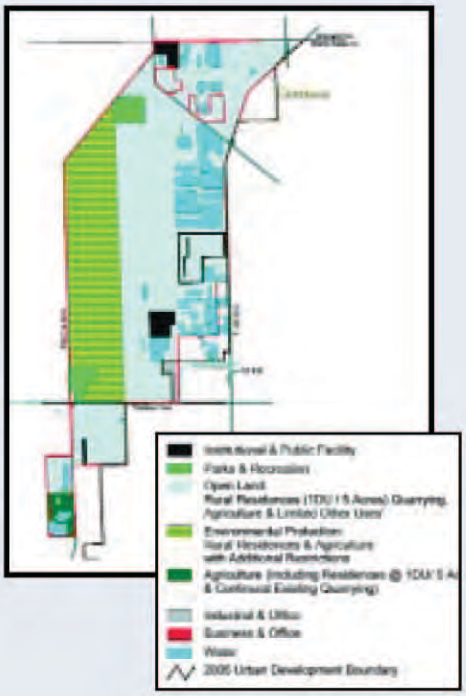
ALLOWABLE DEVELOPMENT



NOTICE: These maps are a conceptual tool for project development only. These maps are not self-executing or binding, and do not otherwise affect the interests of any person, including any vested rights or existing uses of real property.

BACKGROUND

The Lake Belt Area encompasses 77.5 square miles of environmentally sensitive land at the western edge of the Miami-Dade County urban area. The wetlands and lakes of the Lake Belt offer the potential to buffer the Everglades from the potentially adverse impacts of urban development. Rock mined from the Lake Belt supplies one-half of the limestone used annually in Florida. The Northwest Wellfield – located at the eastern edge of the Lake Belt is the largest drinking water wellfield in the State and supplies approximately 40 percent of the potable water for Miami-Dade County. Approximately 50 percent of the land within the Lake Belt Area is owned by the mining industry, 25 percent is owned by government agencies, and the remaining 25 percent is owned by non-mining private landowners.

Non-mining land uses in the Lake Belt Area generally include agriculure, rural residences, and a small number of commercial, industrial, and public service uses. Approximately 8.5 percent of the area is currently used for these purposes, and the majority of this is devoted to agriculture, communities, utilities, and public service uses. Most of the agricultural land use occurs in the C-9 Basin. Agricultural activities are limited by poor soil conditions, and generally include a mix of cattle and goat grazing, horse stables, tree farming, sugarcane farming and container nurseries. Residential development has occurred sparsely north of U.S. 27. This is rural in character, typically composed of small ranchettes and "fincas." Major non-residential uses other than limestone mining, include the South Florida Reception Center, the Metro West Detention Center, a cemetery, the Opa Locka West Airport, M.E. Thompson Park, Trail Glade Range, a radio tower, several FPL transmission facilities, and an outdoor paint-testing facility.

In 1992, the Florida Legislature recognized the importance of the Lake Belt Area's limestone resources to the State as well as the need to sensitively plan for protection of the public drinking water supply (Chapter 373.4149, F.S.). The Legislature created the Northwest Dade County Freshwater Lake Plan Implementation Committee (now officially named the Miami-Dade County Lake Belt Plan Implementation Committee and referred to as the Lake Belt Committee in this document) and directed it to "develop a plan which: (a) enhances the water supply for Dade County and the Everglades; (b) maximizes efficient recovery of limestone while promoting the social and economic welfare of the community and protecting the environment; and (c) educates various groups and the general public of the benefits of the plan." The Lake Belt Committee is composed of representatives from government agencies, the limestone mining industry, environmental organizations, and non-mining landowners.

Phase I of the Lake Belt Planning Process

The Lake Belt Committee completed the Phase I Master Plan in February 1997. The Legislature adopted the plan later that year. The Plan – "Making a Whole, Not Just Holes" – established the overall framework for the Lake Belt Plan.

LAKE BELT PHASE II PLANNING PROCESS

Requirements of the Phase II Plan

In 1999, the Legislature expanded to eight the number of specific mandates for Phase II of the Lake Belt Plan (Chapter 373.4149, F.S.). The Plan must:

1. Include a detailed master plan to further implementation
2. Consider the feasibility of a common mitigation plan for non-mining uses, including a non-mining mitigation fee
3. Further address compatible land uses, opportunities, and potential conflicts
4. Provide for additional wellfield protection
5. Provide measures to prevent the reclassification of the Northwest Miami-Dade County wells as groundwater under the direct influence of surface water;
6. Secure additional funding sources
7. Consider the need to establish a land authority
8. Analyze the hydrological impacts resulting from the future mining included in the Lake Belt Plan and recommend appropriate mitigation measures, if needed to be incorporated into the Lake Belt Mitigation Plan

The Phase II Planning Process

The Lake Belt Phase II Plan is the product of a six-step planning process. Through this process the Lake Belt Committee has sought to achieve consensus and balance among the various interests – complementary as well as competing – in the Lake Belt Area.

Step 1: Project Scoping – with the legislative mandate as a starting point – further clarified the Plan's objectives from the perspectives of the various stakeholders

Step 2: Synthesizing of Inputs brought together the detailed information on the natural and man-made resources of the Lake Belt Area to provide the starting point for the analysis and for crafting more detailed planning concepts

Step 3: Analysis identified the relationships to address, the opportunities to pursue, and the conflicts and constraints to resolve in the Plan

Step 4: Alternatives considered three plan scenarios reflecting different combinations of assumptions pertaining to Wellfield Protection, Water Management, Limestone Mining Lands, Non-Mining Lands, Recreation Opportunities, Environmental Enhancements, and Implementation and Funding Strategies as a basis for narrowing an infinite range of options

Step 5: The Preferred Concept was selected by the Lake Belt Committee following the evaluation of each alternative. Evaluation criteria – derived from the Lake Belt Committee's 1995 "Initial Objectives and Measures of Success" – were used as the basis for the comparison of alternatives

Step 6: Plan Documentation presents the final recommendations of the Lake Belt Committee for the Lake Belt Phase II Plan

Public Involvement in the Phase II Planning Process

The Lake Belt Committee has welcomed public involvement throughout the planning process. At each of its monthly meetings and workshops, the Lake Belt Committee has received and answered questions from the public. The Committee has hosted two major Public Meetings during the Phase II Planning Process. All landowners in the Lake Belt Area received meeting announcements and were encouraged to attend. Approximately 250 individuals attended each public meeting. In addition, the Lake Belt Committee hosted a series of Stakeholders Meetings in the summer and fall of 1999. Through these meetings, the Committee obtained information regarding interests in the Lake Belt Area, perceptions of the ideal outcome of the Plan and the Plan's mission, the "givens" that should direct the Plan, the perceived challenges, and the nature of suitable recreational and non-recreational uses for the Lake Belt area.

PHASE I LAKE BELT PLAN IMPLEMENTATION RECOMMENDATIONS AND STATUS

Recommendation 1: *Identified areas for mining, areas for environmental mitigation, and areas where further analysis was needed to determine mining suitability*

Status: The initial footprint of mining allowable land was accepted by the Legislature in 1997. The final footprint of mining allowable land will be identified upon completion of modeling to determine the hydrologic and water supply impacts of future mining and determination of lands needed for Everglades Restoration.

Recommendation 2: *Outlined a strategy for streamlining the permitting process for limestone mining*

Status: The Final Programmatic Environmental Impact Statement (EIS) for Rock Mining – Freshwater Lake Belt Plan was issued in May 2000. Applications for the issuance of long-term permits for limestone mining are pending with the USACE. Legislation for delegation and streamlining was adopted (373.4415, FS)

Recommendation 3: *Limestone mining mitigation requirement be met by establishing a user fee which would be paid per ton of limerock sold from the Lake Belt Area*

Status: Legislation to enact the Lake Belt Mitigation Plan was approved by the Legislature and signed into law. Collection of the mitigation fee began on October 1, 1999. During the first twelve months, more than $2M in fees were collected.

THE LAKE BELT'S RESOURCE VALUES

Everglades Ecosystem Restoration

Wetlands of the Lake Belt Area are a significant component of the broader Everglades ecosystem. Historically part of Shark River Slough, these wetlands were once part of the broad wetland region that formed the continuous marsh upstream of what is now Everglades National Park. Construction of the Miami Canal, Tamiami Canal, and the Dade-Broward Levee early in the twentieth century lowered the water level and disrupted the hydrology of the Lake Belt Area. Completion of the Central and Southern Florida Flood Control Project by the USACE during the 1950s and the installation of the Northwest Wellfield by Miami-Dade County in the 1980s isolated the remaining wetlands in the area and led to dramatic changes in the hydrology.

Ongoing efforts to preserve and protect the Everglades ecosystem are focused upon restoring the hydrology of the region and preserving viable wetlands that once were part of the broader Everglades. One of the design objectives of the CERP is reestablishing water deliveries from the Lake Belt Area to Shark River Slough.

Water Supply

The Biscayne Aquifer is the primary source of drinking water for Miami-Dade County. It is a critical source of abundant high quality drinking water that must be protected and managed for present and future generations of South Florida.

The Northwest Wellfield – located in the center of the Lake Belt Area – draws water from the Biscayne Aquifer. It is Miami-Dade County's largest water supply wellfield. Its fifteen wells collectively supply a current demand of 150 million gallons per day (MGD) and have a planned future capacity of 225 MGD.

Limestone Resources

The limestone resources of the Lake Belt Area are Florida's largest source of high quality limestone suitable for production of construction aggregates, cement and road base materials.

Mining of these resources in the Lake Belt Area currently supplies 35 to 40 million tons of rock annually, representing essentially all of Miami-Dade County's rock and half of the rock, sand, and cement used to produce concrete, asphalt and road base in the state.

Potential Recreation Resources

The lakes and waterways of the Lake Belt Area offer opportunities for active and passive recreation in a network of freshwater lakes and wetlands unsurpassed elsewhere in Miami-Dade County now or in the future.

These opportunities are presently underutilized. Miami-Dade County currently operates two parks in the Lake Belt Area. One – the 630-acre M.E. Thompson Park – is leased from the State and is a passive recreation facility, open only during the annual six-month dry season. Trail Glades Range is a 700-acre County-owned park property of which 18 acres are used as a shooting range with the remainder undeveloped, characterized by Melaleuca trees.

Suitability for Other Land Uses

Approximately, 16,000 acres of the Lake Belt Area are owned by approximately 1,800 non-mining private landowners. These lands are predominantly vacant or used for agriculture and rural residences.

The Lake Belt Area is vital to the future of South Florida. This 77.5 square mile area is located within one of the most environmentally sensitive areas of the State. Its future use must strike a proper balance among competing yet complementary values. These include the economic value of continued limestone mining and non-mining land uses, the environmental value of preserving freshwater wetlands and restoring the hydrology of the greater Everglades ecosystem, and the social value of protecting the region's public water supplies and of realizing the Lake Belt Area's opportunities for recreation.

PHASE I LAKE BELT PLAN IMPLEMENTATION RECOMMENDATIONS AND STATUS

Recommendation 4: *Government-industry land exchanges be authorized*

Status: Appraisals have been prepared on all of the land in the Pennsuco wetlands owned by rock mining firms and offers are being made to acquire the lands. Specific state-owned parcels that the rock-mining firms wish to mine on a royalty basis are under consideration by FDEP. Execution of these transactions is pending a determination of the setback required for wellfield protection.

Recommendation 5: *State agencies be authorized to enter into agreements to implement the Plan*

Status: SFWMD and the South Florida Regional Planning Council (SFRPC) entered into an agreement to hire a professional consultant to assist with preparing the Phase II Plan. SFWMD provided financial assistance to Miami-Dade County Department of Environmental Resource Management (DERM) to prepare an updated Northwest Wellfield Watershed Protection Plan.

Recommendation 6: *The Lake Belt Committee prepare a detailed master Phase II Plan to further implementation*

Status: The Lake Belt Committee adopted the Lake Belt Phase II Plan in December 2000 as a recommendation to the legislature with the recognition that this will be subject to further refinement as a result of on-going studies.

2050 VISION FOR THE LAKE BELT

The 2050 Vision for the Lake Belt assumes accomplishment of four basic concepts:

1. Public water supplies for the current and future generations in Miami-Dade County will be protected. As necessary, water management measures must guarantee the continued availability of adequate water volumes in the Biscayne Aquifer. Infrastructure and land use activities in the vicinity of the County's wellfields must not adversely influence the quality of ground water in the Biscayne Aquifer or surface water in the Lake Belt Area as determined by Miami-Dade County to be necessary for the protection of Miami-Dade County's drinking water supplies.

2. Future land uses and resource management actions in the Lake Belt Area will incorporate plans and mitigation measures consistent with Everglades restoration. Components of the CERP – as refined through further study by federal and state agencies – are essential. Limiting the westward expansion of urban development in accordance with the Miami-Dade County Comprehensive Development Master Plan is necessary to preserve a largely undeveloped area to buffer the Everglades, prevent flood damage, and to protect Miami-Dade County's largest wellfield from the detrimental impacts associated with urbanization. High quality wetlands of the Lake Belt Area – largely located in the Pennsuco wetlands – should be permanently protected and restored. Through properly designed and implemented wetland mitigation, future uses in the Lake Belt Area should result in no-net-loss of wetland functions and values.

3. Private property owners – miners and non-miners alike – are entitled to use of their property. Mining interests should have the option to continue mining - in a manner consistent with wetland protection, water supply protection, and Everglades restoration – so as to maintain the vital supply of construction materials to the people of Florida. Non-mining and mining interests should be protected in so far as they are consistent with the greater public need for the protection of public water supplies, wetland protection and Everglades restoration.

4. To the extent that other values of the Lake Belt Area can be maintained, future land use should make optimum use of the recreation opportunities afforded by the wetlands and waterways on public and private land in the Lake Belt Area."

ACCOMPLISHING THE VISION FOR THE LAKE BELT

Guiding Principles that Shape the Plan

The Lake Belt Committee recommends a number of Guiding Principles regarding the future use and management of resources in the Lake Belt Area. These are summarized below and on the following pages.

■ Wellfield Protection

1. Provide for additional wellfield protection by implementing the policies and action steps in the Northwest Wellfield Watershed Protection Plan, including those reasonable recommendations that will reassess and revise, as determined necessary through further studies:

- protection zone boundaries
- limestone mine setback
- wellfield protection strategies for an Inner Lake Protection Zone and an Outer Lake Protection Zone
- measures to prevent the introduction to the water supply of waterborne contaminants in ponded surface water around the wellheads
- an enhanced monitoring program

2. Implement appropriate meaures that will prevent reclassification of the Northwest Wellfield as "groundwater under the direct influence of surface water." Such measures should include an appropriate setback for limestone mining from wellheads, minimizing all potential sources of surface water influence, and implementing applicable U.S. Environmental Protection Agency (EPA) criteria for avoiding additional filtration and disinfection.

■ Water Management

1. Support Everglades restoration and other water-related needs by incorporating components of the CERPs as conceptually defined in the Central & Southern Florida Project Comprehensive Review Study (1999), recognizing that these components are subject to modification pending further studies by federal, state and local agency and recognizing private property rights.

■ Everglades Restoration

1. Support Everglades restoration by preserving, restoring, managing and maintaining the Pennsuco wetlands and other habitat as a key component of the Lake Belt Mitigation Plan.

2. Allow/permit limestone mining within the western half of the FPL Strip only if further studies determine that those lands are not required for Everglades restoration.

■ Limestone Mining

1. Allow/permit mining of land within the Lake Belt Area to the maximum extent consistent with the guiding principles of the plan.

2. Where practical, phase mining so that it is compatible with CERP and reduces potential conflicts with other existing and planned future land uses.

3. Configure future lakes and littoral areas taking into consideration wellfield protection, regional water management needs, ecological productivity, and potential recreational access and use.

■ Non-Mining Interests

1. Explicitly recognize and reserve to Miami-Dade County its authority to establish and implement land use planning and development regulatory authority in keeping with its Home Rule Charter and Florida local government comprehensive planning and land development regulation laws.

2. Protect non-mining interests and property rights consistent with current land use policies of the Miami-Dade County Comprehensive Development Master Plan (1999).

3. Implement a common mitigation plan for non-mining uses.

4. Ensure that non-mining interests are fully compensated for land to be acquired for planned public improvements.

■ Environmental Enhancement

1. Ensure that the net loss of wetland functions and values in the Lake Belt Area is offset by required mitigation. Maximize the environmental value of the Lake Belt Area itself to the extent possible consistent with mining and wellfield protection.

2. Ensure that any anticipated detrimental change to the hydrology in the Lake Belt Area is corrected by CERP, mitigation, and other measures as appropriate.

■ Recreation Opportunities

1. Maximize the potential for recreation uses consistent with access restrictions required for wellfield protection, safe operation of CERP water management facilities and wetland restoration.

Discussion of alternatives for Phase II Plan at Lake Belt Committee meeting.

WELLFIELD PROTECTION

Legislative Direction

In its approval of the Lake Belt Phase I Plan, the Florida Legislature recognized that additional work was needed to protect in perpetuity Miami-Dade County's wellfields located within the Lake Belt Area. Therefore, the Legislature mandated that the following be included in the Phase II Plan:

- Provide for additional wellfield protection
- Provide measures and scientific studies to prevent the reclassification of Northwest Dade County wells as groundwater under the direct influence of surface water.

Current Conditions

Existing Wellfield Protection Program

The Existing Wellfield Protection Areas Map (see page 10) shows the locations of the Northwest and West Wellfields and the existing protection boundaries. The Northwest and West Wellfields are part of a supply system that provides drinking water to most of the residents and businesses in northern Miami-Dade County. The existing program was established primarily to protect the water supply from septic tanks and hazardous materials spillage.

Source Classification

The Florida Department of Environmental Protection (DEP) has recently determined that the Northwest Wellfield is not "groundwater under the direct influence of surface water" (GWUDI). In some cases, the surface water treatment rule promulgated in 1989 by EPA can require that public water supplies derived from GWUDI receive the same treatment as water supplies derived directly from surface water. In other cases EPA has found that even if wells are determined to be GWUDI, additional filtration is not mandatory if certain protection measures such as maintenance of a watershed control program are implemented. While implementation of such measures may assist in minimizing the potential for detections of pathogenic contaminants at the wellhead, they do not guarantee against it. Additional treatment will still be required if there are detections of Cryptosporidium and Giardia at the wellhead in the future.

Initial testing at the Northwest Wellfield revealed one production well exceeding the threshold for GWUDI and several others somewhat below the threshold. The grout around one well has since been repaired in order to preclude the potential for impacts from ponded stormwater around the wellhead. Several production wells were also deepened to reduce pathogen risk. Current test results indicate all of the wells are not GWUDI under current pumping rates and hydrologic conditions.

Miami-Dade County is also investigating measures to prevent the introduction of waterborne contaminants to the water supply from ponded surface water around the wellheads.

Current and Future Concerns

Water withdrawn from the Northwest and West wellfields is fairly pristine and significantly better quality than that of existing wellfields in urban areas. Future proposed conditions, such as increased limestone mining, increased pumpage, and CERP components, have the potential to impact the quality of the wellfields.

Potential for Pathogenic Contamination of Drinking Water Supplies from Encroaching Excavations: Quarry lakes have the potential to contain substantially more disease-causing organisms than groundwater. Organisms such as Cryptosporidium and Giardia, while routinely found in surface water, are rarely found in groundwater. As limestone mining approaches the wellheads, attenuation of biological contaminants by aquifer material is reduced. Fortunately, neither Cryptosporidium nor Giardia have been detected at any County wells in Miami-Dade County.

Potential for Reclassification to GWUDI: While the current test results have determined that the Northwest Wellfield is not GWUDI, changes to the current condition could result in a reclassification to GWUDI. For instance, increased pumping at the wellheads, expanded limestone mining in the vicinity of the wellfields, and encroaching urban development could influence the classification of the source water in the future. Miami-Dade Water and Sewer Department (WASD) has preliminarily estimated that upgrading the water treatment plants to meet treatment requirements for GWUDI could cost $250,000,000.

Travel Time of Contaminants: Mining rock from the Biscayne aquifer in the vicinity of the wellfields will affect the time it takes for a contaminant to travel from the quarry lake to the wells.

Encroaching Development: Encroachment of the wellfield by urban development has been effectively prevented to date by the Northwest Wellfield Protection Plan adopted in November 1985 and by stable land use policy in the County's Comprehensive Development Master Plan since then.

Regulatory Setback for Limestone Mining: As mentioned previously, the existing wellfield protection program was established primarily to protect the water supply from septic tanks and hazardous materials spillage. DERM is now evaluating whether the existing unlimited depth regulatory setbacks for mining are adequate considering the proposed extent of limestone mining in the area. The existing regulatory setback is approximately 1/2 mile (2,600 feet) based on estimated 60 day travel time. For the last 15 years, a very large limestone mining lake has existed within 500 feet of the Northwest Wellfield, well within the current setback with no detection of Cryptosporidium or Giardia.

WELLFIELD PROTECTION MAP

This Map Removed for Security Purposes

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CERP Components: The Comprehensive Everglades Restoration Plan (CERP) proposes significant infrastructure improvements in the vicinity of the wellfields. A subterranean, lined reservoir, conveyance canals, and seepage management components are proposed for location within a couple of miles of the wellfields. DERM is evaluating whether that infrastructure will affect the wellfields and whether the protection program can be improved to offset potential impacts.

Updating the Wellfield Protection Program

DERM recently completed the Northwest Wellfield Watershed Protection Plan which identifies strategies for protecting the wellfields within the Lake Belt Area under future proposed conditions.

Reassess and Delineate Protection Boundaries: Travel-time protection boundaries for the Northwest and West Wellfields were based primarily on groundwater hydrologic assumptions that did not consider the extent of limestone mining occurring or proposed to occur in the area. Therefore, DERM is in the process of delineating an inner and outer wellfield protection zones that consider the influence of the limestone mining excavations. County staff has received technical assistance from the SFWMD and has contracted with an outside consultant to reassess and delineate the revised protection zones asociated with the Northwest Wellfield.

Assess Limestone Mining Setback: As mentioned previously, the existing wellfield protection program was established primarily to protect the water supply from septic tanks and hazardous materials spillage. DERM is evaluating the adequacy of the existing regulatory setbacks between limestone mining and the wellheads for precluding contamination under future conditions.

Revise Wellfield Protection Strategies for Protection Zones: DERM is developing strategies for the new protection zones that would maximize protection. Examples of the protection strategies under consideration are no human access in the inner lake zone, passive recreation in the outer zone, and public ownership of the limestone mining setback around the wellheads.

The Legislature should instruct the Florida Department of Transportation (FDOT) to incorporate wellfield protection features in the drainage facilities and on the edge of its rights-of-way for all state roads that border or traverse the Lake Belt Area. These protection features should be designed to prevent dumping, uncontrolled access or accidental spills (such as cargo from a tanker truck) from entering area surface waters or groundwater. Local governments are also advised to incorporate similar features in any of their thoroughfares that border or traverse the Lake Belt Area. Consideration should also be given to a comprehensive area-wide safety perimeter including such features as berms and fencing.

Implement Applicable Strategies for West Wellfield: Upon completion of its evaluation in the vicinity of the Northwest Wellfield, DERM will update the protection strategy for the West Wellfield with relevant components from the watershed approach.

Limestone Mining Setback and Wellfield Protection Zones

The master plan recognizes the concept of a limestone mine setback from wellheads and an inner wellfield protection area, as identified in DERM's Northwest Wellfield Watershed Protection Plan. Defining the boundaries of the wellfield protection zones is critical to several aspects of the master planning process. For example, DERM's proposed revised protection program indicates that there will be no access, and therefore no recreational opportunities, for lands and lakes located within the inner wellfield protection zone. While not displayed on the map, DERM's protection program also anticipates an outer wellfield protection zone within which passive recreation, such as non-motorized boating, hiking, and biking, would be supported. Until the boundaries for these protection zones are defined, the recreational aspects of the plan cannot be finalized.

Additionally, DERM's revised protection program is examining the appropriateness of constructing biologicially productive littoral zones within the inner wellfield protection zone due to concerns on pathogenic contamination of lakes from mammals accessing the lake edges. Therefore, the design of excavations and their shorelines within the inner zone cannot be finalized until the boundary is defined. Once the evaluation is complete implementation of applicable components will be applied to the West Wellfield.

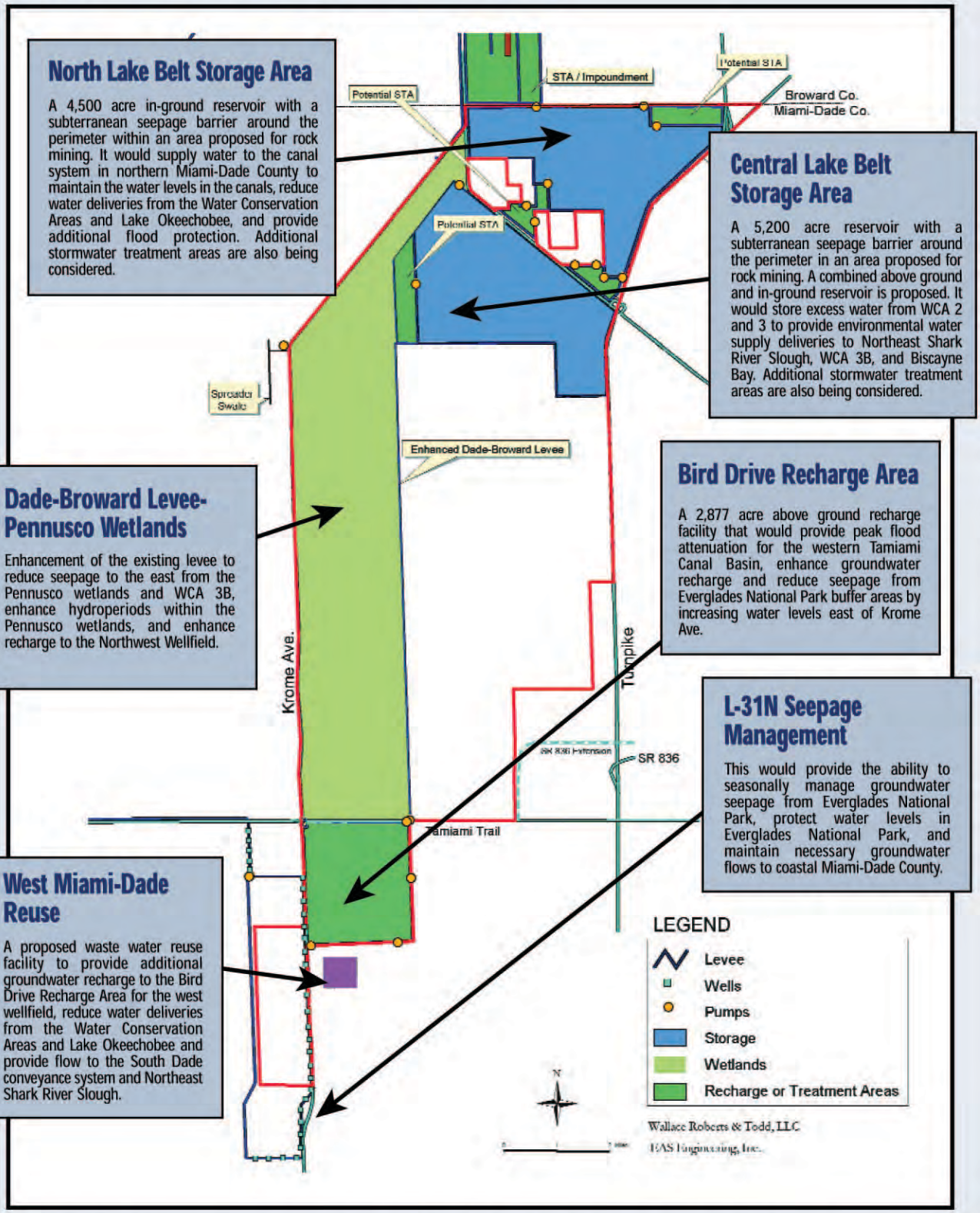
ACTION STEPS

Action 1:	Implement risk assessment study and define wellfield protection boundaries for Northwest Wellfield
Responsibility:	DERM
Timeframe:	Fall 2002

Action 2:	Amend Miami-Dade County Code
Responsibility:	County Commission
Timeframe:	2003

Action 3:	Amend statutes, codes, administrative regulations, and roadway design standards or rules as necessary to enable and require wellfield protection features in Lake Belt Area roadways and their rights-of-way
Responsibility:	FDOT and Miami-Dade County Public Works Department
Timeframe:	2002

CERP COMPONENTS MAP



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WATER MANAGEMENT

Legislative Direction

In 1999 the Legislature amended the Lake Belt Legislation and directed the Lake Belt Committee to "analyze the hydrologic impacts resulting from the future mining included in the Lake Belt Plan and recommend appropriate mitigation measures, if needed, to be incorporated into the Lake Belt Mitigation Plan."

Everglades Restoration

The Central and Southern Florida Project Comprehensive Review Study was presented to the U. S. Congress on July 1, 1999. The Study outlines the overall concept for the Comprehensive Everglades Restoration Plan (CERP). It identifies 68 components to be constructed over the next several decades at a cost of approximately $7.8 billion.

The map on the previous page shows the major CERP components within the Lake Belt Area. Several of the projects shown on the map are part of the Water Preserve Areas (WPA) Feasibility Study that is currently underway. The pilot projects will test various seepage technologies and enable further refinement to the engineering of future CERP components. The USACE and SFWMD will refine the footprint of the components as further studies and the pilot projects are completed.

On December 11, 2000 the Water Resources Development Act of 2000 was signed into law. It authorized the first ten CERP projects and four pilot projects at a cost of over $1.4 billion. Several of the projects, especially the pilot projects concerning the management of seepage from the Water Conservation Areas and underground seepage management technology, directly involve the Lake Belt Area.

Hydrologic Issues

The Lake Belt Area overlays the Biscayne aquifer. The excavation of over 30 square miles of lakes up to 80 feet deep has the potential to affect the hydrology of the area. Considerable computer modeling of the groundwater hydrology in the Lake Belt Area was done previously by the SFWMD to support the Phase I Plan and Federal Issue Advisory Team (see map page 14). During the course of that work it was recognized that the ultimate mining footprint and hydrologic mitigation measures, if necessary, would need to be consistent with the CERP.

Since the completion of the Lake Belt Phase I Plan, the SFWMD has developed an updated version of the North Miami-Dade County Ground Water Flow Model. The refined model is consistent with the modeling efforts for the legislatively mandated Lower East Coast Regional Water Supply Plan and the CERP. The most significant improvements of the model include refinement of the model resolution, extension of the western boundary of the model, more accurate representation of the wetlands and lakes, improvements to the dry season calibration, and improvement to the characterization of the Biscayne aquifer around the Lake Belt Area.

The model compares hydrologic impacts from various mining configurations using performance measures in five categories, including the Everglades, the Pennsuco Wetlands, Water Supply, the Water Preserve Area components, and Groundwater Heads and Flows. Examples of graphics in these five categories are shown on the next page. For each scenario the model simulates an eight-year period of record that includes wet, dry, and average hydrologic conditions. Modeling done to date represents various mining configurations without the addition of measures to mitigate any hydrologic impacts or CERP components. Preliminary findings indicate that for the alternatives studied mining will have the greatest impact on the eastern Pennsuco Wetlands. The western Pennsuco Wetlands will be less affected. The hydroperiod for the east central Pennsuco will be shorter relative to other areas of the Pennsuco Wetlands. The average annual inundation of Lake Belt subareas is significantly less than Everglades target restoration values.

During the next several years information from Miami-Dade County's Wellfield Protection Plan, the pilot projects, and the design and operation of several of the WPA components within the Lake Belt Area will be determined. This will allow the SFWMD to complete the hydrologic modeling of the mining plan, identify the appropriate extent of lands for mining, and recommend hydrologic mitigation measures, as necessary. This work will also help answer questions about the maximum size of future lakes that would be desirable from an environmental perspective.

The Lake Belt Web Site (www.sfwmd.gov/or/pld/proj/lakebelt) presents results of the hydrologic modeling and provides access to all of the simulations associated with the Phase II Lake Belt Plan. Other information, such as model input data, information about the models, and timely status updates, is also available.

ACTION STEPS

Action 1: Complete the design of the CERP Projects in the Lake Belt Area including the WPA Feasibility Study

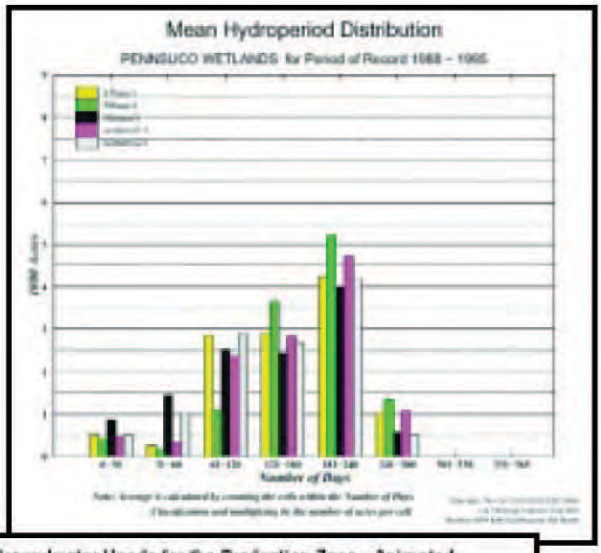
Responsibility: SFWMD and USACE

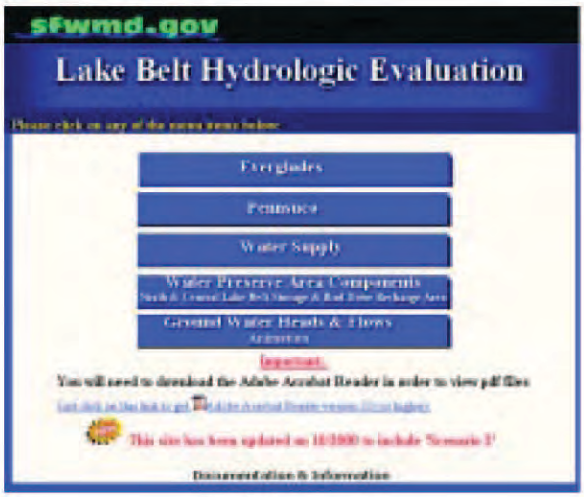
Timeframe: ongoing through 2030

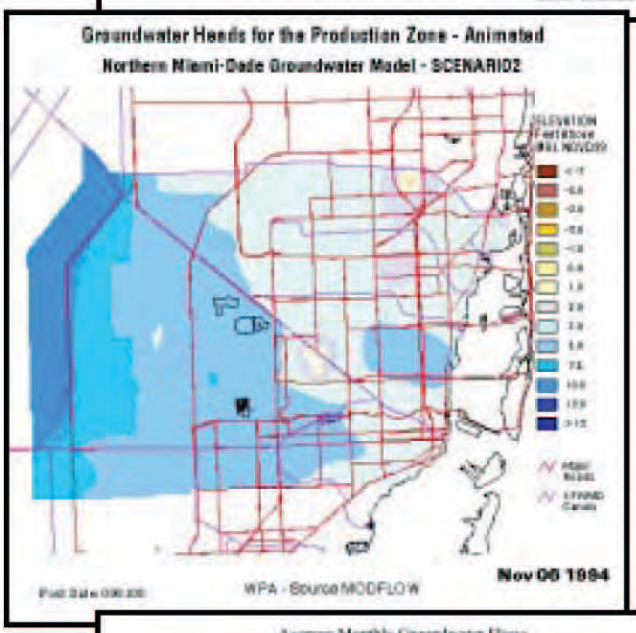
Action 2: Complete the hydrologic modeling of the mining plan and identify full extent of lands environmentally acceptable for mining with recommended hydrologic mitigation measures, including lake size criteria, as appropriate

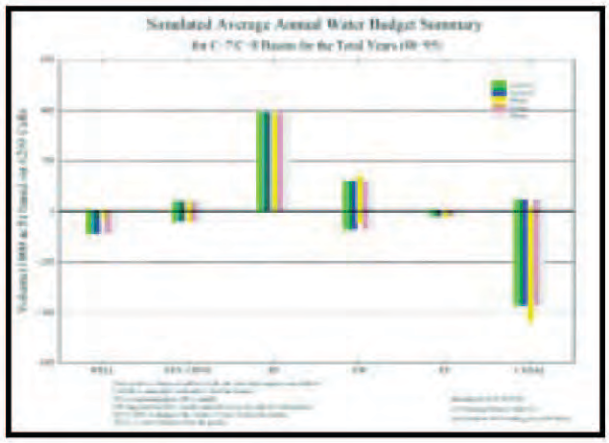
Responsibility: SFWMD and USACE

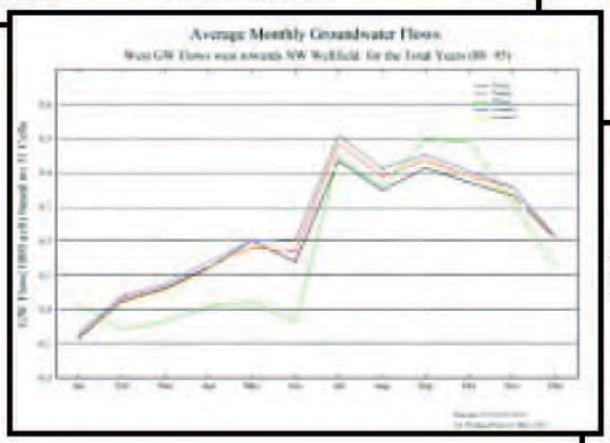
Timeframe: 2003

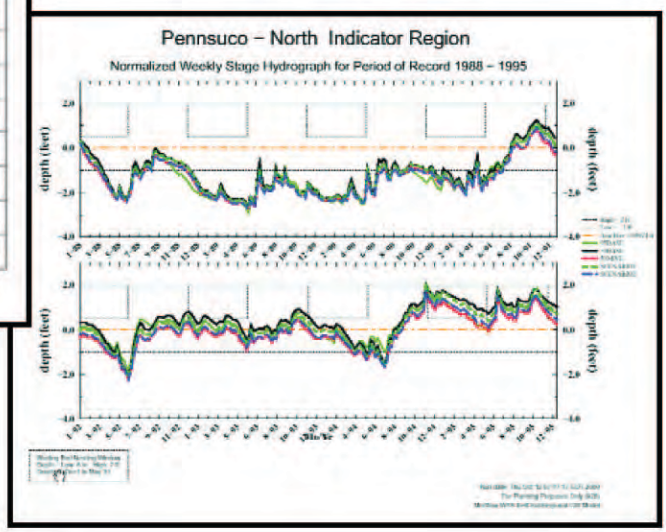

Mean Hydroperiod Distribution
PENNSUCO WETLANDS for Period of Record 1988 – 1995
Number of Days


sfwmd.gov
Lake Belt Hydrologic Evaluation
Everglades
Pennsuco
Water Supply
Water Preserve Area Components
Ground Water Heads & Flows
Documentation & Information

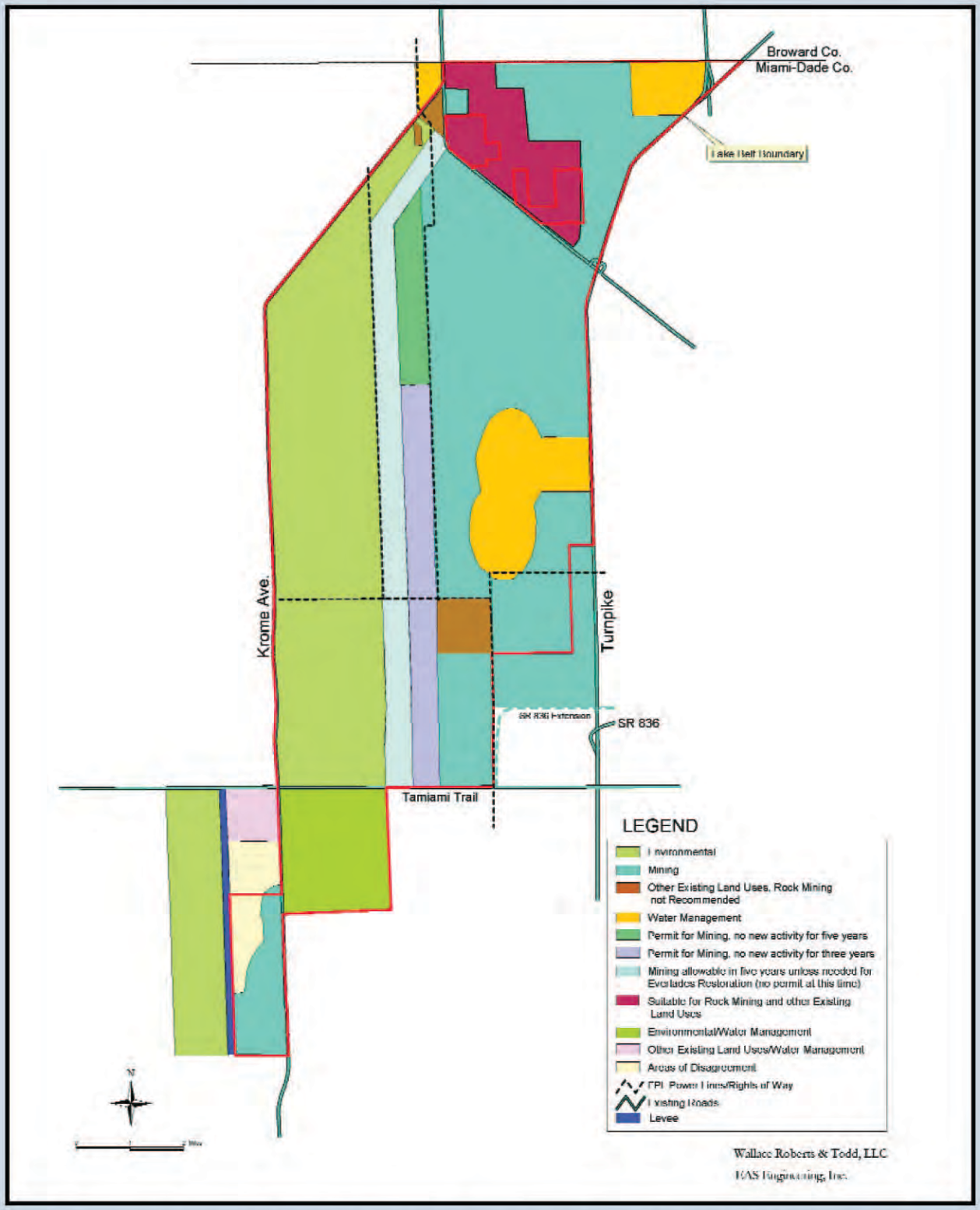

Groundwater Heads for the Production Zone - Animated
Northern Miami-Dade Groundwater Model - SCENARIO2
Nov 06 1994
WPA - Source MODFLOW


Simulated Average Annual Water Budget Summary


Average Monthly Groundwater Flows


Pennsuco – North Indicator Region
Normalized Weekly Stage Hydrograph for Period of Record 1988 – 1995
depth (feet)
depth (feet)

FEDERAL ISSUE ADVISORY TEAM MAP



NOTICE: This map is a conceptual tool for project development only. This map is not self-executing or binding, and does not otherwise affect the interests of any person, including any vested rights or existing uses of real property.

LIMESTONE MINING INTERESTS

Legislative Direction

The 1992 Lake Belt Legislation established the importance of limestone mining to the State of Florida. It mandated that the Lake Belt Plan accomplish three primary goals. One goal is "maximizing efficient recovery of limestone while promoting the social and economic welfare of the community and protecting the environment."

The Lake Belt Phase I Plan fulfilled the initial legislative mandate and made several additional recommendations related to limestone mining. The Plan:

- Identified areas for mining, areas for environmental mitigation, and areas where further analysis is needed to determine mining suitability
- Recommended that limestone mining mitigation requirements be met by establishing a user fee
- Outlined a strategy for streamlining the permitting process for limestone mining
- Recommended that mining and wetland preservation be facilitated in the most appropriate locations through land exchanges or leases between the limestone mining industry and government agencies
- Recommended that the Phase II Plan further address compatible land uses and conflicts

Final Identification of Areas for Mining

The Phase I Plan identified areas within the FPL Strip where further analysis is needed to determine mining suitability and the need for structures or other measures to address hydrologic mitigation. The final footprint for mining allowable land within the FPL Strip requires completion of hydrologic modeling that will determine the land area needed and structures required for Everglades restoration. The USACE Programmatic EIS identified that mining through unnecessary road rights-of-way, canal easements and section lines, where possible, will add to the maximization of the efficient recovery of limestone. Modeling is underway, but will not be completed until 2002 at the earliest in order to integrate potential hydrologic mitigation measures with CERP efforts.

Mining User Fee

To offset the impacts of mining on wetlands, the Legislature has established a mitigation fee per ton on all commercially mined limestone that is mined and sold from the Lake Belt Area (373.4195, FS). The fee began on October 1, 1999 at 5 cents per ton and will increase annually by 2.1% plus a cost growth index. Monies collected under the mitigation fee are deposited in a separate Trust Fund overseen by an interagency committee.

Ownership of Mined Lands

A variety of public purposes are planned for lands that have been or will be mined in the Lake Belt Area, as well as land now used for mining company facilities such as cement mills. To accomplish the intended public purposes, alternatives should be explored to accomplish the goal of bringing these lands into public ownership once mining has been completed.

Mining and the FPL Rights-of-Way

The FPL rights-of way in the Lake Belt Area are critical to the current and future electric power supply of southeast Florida. These areas and facilities must be protected from potential impacts from adjacent land uses. Any mining in proximity to FPL rights-of-way should be coordinated with FPL to ensure that there is an opportunity to minimize potential impacts with regard to blasting, access, equipment movement, slope stability, and other potential issues.

Status of Permitting

The USACE is currently considering applications for long-term permits for limestone mining in the Lake Belt Area to issue long-term permits. The USACE has received requests to renew permits encompassing 5,900 acres of mining, and applications for an additional 8,400 acres of land for mining. A Final Programmatic EIS has been issued for the proposed action. Compensatory mitigation for the ecological impacts related to the removal of plant communities will be provided by acquiring, restoring and managing lands within the Pennsuco and other locations. Issues that must be addressed as part of the permitting process will include mitigation for the hydrological impacts related to increases in groundwater seepage attributed to future mining, protection of the Northwest wellfield, and final design of the post-mining landscape, including littoral zone design and protection and preservation of the post-mining landscape.

Permits for future mining are also required from FDEP and Miami-Dade County DERM. The USACE, State, and County are working jointly with the industry to resolve outstanding permitting issues with the goal of issuing consistent permits that meet the requirements of all the regulatory agencies.

ACTION STEPS

Action 1: Take final agency action on the pending permit applications
Responsibility: USACE, FDEP, DERM
Timeframe: Spring 2001

Action 2: Streamline the permitting process, including federal and state delegation
Responsibility: USACE, FDEP, DERM
Timeframe: 2001

Action 3: Develop mitigation and enhancement plans for areas other than the Pennsuco wetlands and incorporate design changes in overall mitigation plan including any needed revision of mitigation formula
Responsibility: Lake Belt Mitigation Committee
Timeframe: Ongoing

NON-MINING INTERESTS

Compatibility of Land Uses, Opportunities and Potential Conflicts

Legislative Direction

In 1999 the Legislature added a requirement to the Lake Belt Legislation – as recommended by the Lake Belt Committee in the Phase I Plan – that the Lake Belt Phase II Plan "shall further address compatible land uses, opportunities, and potential conflicts."

Non-Mining Interests in the Lake Belt Area

Private non-mining landowners own approximately 15,760 acres within the Lake Belt Area and within the "Stair Step Area" along U.S. 27 (as excluded from the Lake Belt Area by the Legislature in 1999). Most of this land is presently undeveloped. Developed uses generally include low density rural residences and agriculture.

Miami-Dade County establishes and implements public policy regarding the allowable land uses and provision of public facilities and services on these lands. The Miami-Dade County Comprehensive Development Master Plan (CDMP) generally designates the land within the Lake Belt Area as outside of the planned year 2005 Urban Development Boundary (UDB) and all - except for approximately 3 square miles - is outside the plan-designated year 2015 Urban Expansion Area (UEA). The vast majority of land within the Lake Belt Study Area is zoned for agriculture (AG) or general use (GU). New land uses that may be approved are generally limited to rural residences at a density of one unit per five acres, limestone mining and ancillary uses where environmentally acceptable, agriculture that requires no additional off-site drainage, necessary institutions and public facilities, utility and communication facilities, and recreational uses.

Major Issues Related to the Future Use of Non-Mining Lands

■ Small landowners claim that Miami-Dade County has established limitations on the use of their land that make it impossible to sell their property or to sell it for a satisfactory price. They have requested that the current county plan and zoning regulations be changed to allow a residential density of one unit per acre and to allow nodes of commercial development.

■ Blasting in the Lake Belt Area has resulted in conflicts between mining interests and residents where it has occurred near suburban residential development. This problem has grown in recent years as suburban development within the UDB has moved closer to the Lake Belt Area. Rural residential densities in the Lake Belt Area – outside of the UDB – serve to reduce this potential conflict on lands closest to potential mining sites by reducing the potential number of people living near active mining locations.

Appropriateness of Intensifying Non-Mining Land Uses

The Miami-Dade County CDMP establishes public policy regarding the physical development and expansion of the urban area. The County manages growth so that it occurs in a contiguous pattern centered around a network of high intensity urban centers and in locations which optimize efficiency in public service delivery and conservation of valuable natural resources. This policy has been in place since 1975 and has shaped the urban development area since that time, providing the basis for locating the UDB and for all zoning and land development regulations.

The Lake Belt Area has been designated by the CDMP as Open Land and outside the UDB since 1975. A number of considerations support this designation. The Lake Belt Area is predominantly low-lying, lacks drainage, is prone to extended flooding, is overlain by organic soils and, therefore, is not intrinsically suited for urban development. As required by Florida Law, the area is identified as having accessible commercially valuable mineral resources and important water resources. Accordingly, the CDMP has limited allowable uses to open land uses reliant on the natural resources of the area such as limestone mining, water resource development, and compatible agriculture. Residential uses are limited as necessary to be compatible with these primary uses and the environmental limitations of the area. Allowable residential densities are set at no more than 1 unit per five acres.

Some non-mining landowners have requested that the Lake Belt Plan recommend that higher residential densities be permitted in the Lake Belt Area and that additional commercial development be permitted in the Stair Step Area and along Tamiami Trail. The Lake Belt Committee recognizes that land use decisions related to the location of the UDB – that would permit the land use changes requested by the non-mining landowners – are decisions that have broad public policy implications. Changes to 25-year-old growth management policy of the County are most appropriately handled within the context of periodic updates and amendments to the CDMP. If and when Miami-Dade County considers a potential amendment to the CDMP that would allow an intensification of non-mining interests in the Lake Belt Area, such action should be considered only if it is found compatible with the Guiding Principles for the Lake Belt as expressed in this Plan.

ACTION STEPS

Action 1: Provide incentives to expedite limestone mining on land within two miles of the UDB as designated in the CDMP (December 2000).

Responsibility: Miami-Dade County and DEP

Timeframe: Summer 2002

Action 2: Provide notice to landowners regarding consideration of pending changes in land use.

Responsibility: Miami-Dade County

Timeframe: Ongoing

NON-MINING INTERESTS

Feasibility of a Common Mitigation Plan

Legislative Direction

The legislature directed the Committee to consider the feasibility of a common mitigation plan for non-mining uses, including a non-rock mining mitigation fee.

Current Permitting of Non-Mining Uses

Private, non-mining land use in the Lake Belt Area includes residential mixed with commercial and agricultural. Single family ranchettes or "fincas" are common, consisting of a residence or building with varying intensities of agriculture, silviculture, or floriculture operations.

Given the predominantly wetland nature of the property, activities are currently regulated by the USACE, the South Florida Water Management District or FDEP, and Miami-Dade County DERM. To date, the need for mitigation for wetland impacts has been evaluated and mitigation provided on a case-by case basis. Unpermitted activities have also occurred, creating compliance and enforcement challenges for the agencies.

Landowner Perception of the Problem

Private non-mining landowners feel that mitigation costs imposed by the existing federal, state and county regulations are too costly given the value of the property and the nature of the activities undertaken. Unlike the mining land owners, the non-mining landowners are unable to pass the cost of mitigation through to customers. The non-mining landowners desire some type of relief from these requirements, either through regulation changes to eliminate mitigation requirements, or a streamlined mitigation program that is simpler and more affordable.

Possible Solutions

While the committee does not recommend changes to existing agency regulations to eliminate mitigation requirements, a common mitigation plan for non-mining landowners would provide relief to the property owners while providing a more efficient and effective permitting process.

Consistent with legislative direction, the Committee has considered possible locations for a regional offsite mitigation area (ROMA) to be used for non-mining wetland impacts. The Committee has focused its efforts on publicly owned property within or near the Lake Belt area that is in need of wetland enhancement or restoration. If a mitigation plan consistent with applicable federal and state law can be developed, mitigation assessments paid by landowners will be used by a public entity to implement the plan. The key to reaching consensus will be development of a mitigation plan that is both capable of offsetting the expected wetland impacts, that is affordable to the non-mining landowners and equitable to mitigation requirements throughout the State.

Full Cost Accounting Requirements

State law requires that when money is accepted by an agency for mitigation, the amount received must be the full amount needed to conduct the mitigation, including land costs, and agency overhead. Section 373.4135(7), F.S., passed in 1999, provided an exception to this "full cost accounting" provision for single family homeowners. While the majority of non-mining activity in the Lake Belt would not be expected to qualify for this exception, the approach may be appropriate to consider for successful resolution of the non-rock miner mitigation issue. A legislative exception to the full cost accounting provision should be considered for non-rock miner landowners in the Lake Belt Area provided that such an exception could provide affordable and effective mitigation and further the implementation of the Lake Belt plan as a whole.

ACTION STEPS

Action 1:	Identify potential non-mining mitigation sites on public land within or near the Lake Belt Area including the public entity capable of implementing the mitigation plan
Responsibility:	DERM, FDEP, USACE, SFWMD
Timeframe:	January 2001
Action 2:	Evaluate the feasibility of each site and the amount of mitigation available
Responsibility:	DERM, FDEP, USACE, SFWMD
Timeframe:	March 2001
Action 3:	Estimate the cost to conduct the mitigation and the required assessment on landowners per acre of impact
Responsibility:	DERM, FDEP, USACE, SFWMD
Timeframe:	March 2001
Action 4:	Select mitigation sites that best offset anticipated impacts at reasonable cost
Responsibility:	DERM, FDEP, USACE, SFWMD
Timeframe:	May 2001
Action 5:	Develop Memorandum of Agreement with SFWMD or FDEP, as appropriate, to operate the ROMA as required by 373.413(6), FS
Responsibility:	DERM, FDEP, USACE, SFWMD
Timeframe:	August 2001
Action 6:	Obtain permits, if required, to conduct the necessary work at the ROMA
Responsibility:	DERM, FDEP, USACE, SFWMD
Timeframe:	August 2001

ENVIRONMENTAL ENHANCEMENTS

Legislative Direction

The Lake Belt Phase I Plan followed the mandate of "protecting the environment" while maximizing the efficient recovery of limestone (Ch. 373.4149, F.S.) by endorsing the principle of "no net loss of wetland functions and values from mining in the Lake Belt Area."

- In 1999 the legislature approved the Phase I Plan's recommendations to establish a dedicated funding mechanism for mitigation of the biological impacts of limestone mining.

Wetland Mitigation Status

Mitigation for Mining Impacts

Acquisition and enhancement of wetlands within the Pennsuco is the primary focus for current off-site mitigation efforts supported by the mining mitigation fee. It is anticipated that additional acreage, beyond the acres available in the Pennsuco, will need to be identified as sites for future mitigation work. In the Phase I Plan, the Lake Belt Committee identified the following priority ranking for locations of off-site mitigation related to mining:

1. Within the Pennsuco
2. Elsewhere within the Lake Belt
3. Elsewhere in northwestern Miami-Dade County
4. Elsewhere in Miami-Dade County

In addition, on-site mitigation for each mining area is "built in" to the mitigation plan, in the form of littoral zone development totaling approximately 8.03% of the area of deep cut. The typical form for these enhancements has been a 100-foot wide littoral shelf encircling a 1-mile square lake. Variations on this design approach (below) present important opportunities for increased biological value and enrichment.

Issues Related to Littoral Zone Design and Other Enhancements

Littoral Edge Types

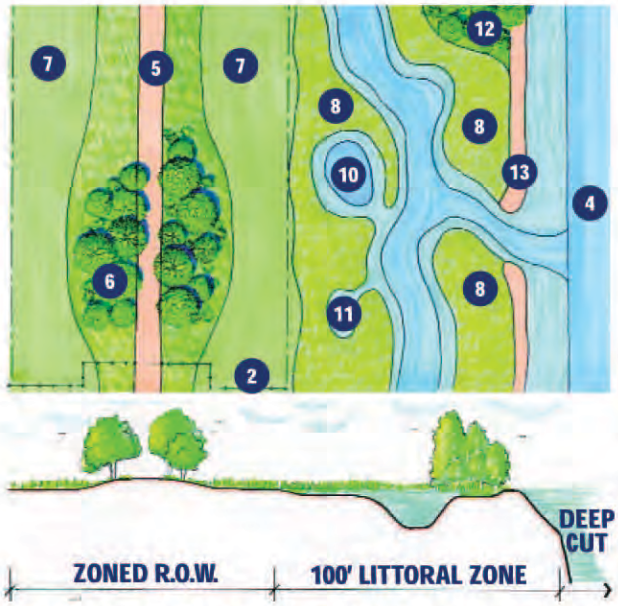
Lake edge littoral zones will take a variety of forms throughout the Lake Belt. These will range from minimal "quarry-only" or safety edges; to baseline designs providing on-site mitigation, required as a condition of permits issued, and potentially, to enhanced designs that boost habitat value by providing larger or more diversified wetland zones [see illustrations].

Littoral wetland design will ultimately be determined by each landowner, with review and approval by the applicable permitting agencies, and with successful implementation made a condition of the permit. General principles that should guide the design of littoral zones include:

- Coordinate with site hydrology to ensure proper water depths for plant and animal life cycles
- Support a wide variety of species, including but not limited to state and federally listed species (such as Wood Storks), or species of economic value (such as Black Bass)
- Cost-effectiveness of construction and maintenance
- Design for an aesthetically pleasing appearance, especially in areas accessible or visible to the public

Locations for Implementation

Several factors will affect the locations chosen for various littoral treatments. Wellfield protection requirements may be determined to preclude or limit littoral zone development within certain distances of the Northwest Wellfield. Lakes incorporated into CERP reservoirs may not be feasible locations for littoral development due to great fluctuation of managed water levels. Given an 8% baseline requirement for on-site littoral development, each mining landowner should be encouraged to develop a mitigation plan that provides timely and biologically effective littoral zone construction, in locations that work well with both mining operations and habitat enhancement goals.



DIVERSIFIED LITTORAL AREA

The biological value of a 100-foot wide littoral area can be further enhanced by sculpting a variety of elevations, ranging from upland tree islands and bay and willow heads for bird nesting, to marshes of varying depth which will serve for fish spawning and bird foraging areas; deeper cuts serve as fish refugia in periods of greatest dry-down. In this example, an adjacent right-of-way, not used for mining, is enhanced to provide a mix of seasonally wet, transitional and upland habitats, with a central berm providing maintenance and (where appropriate) recreational access.

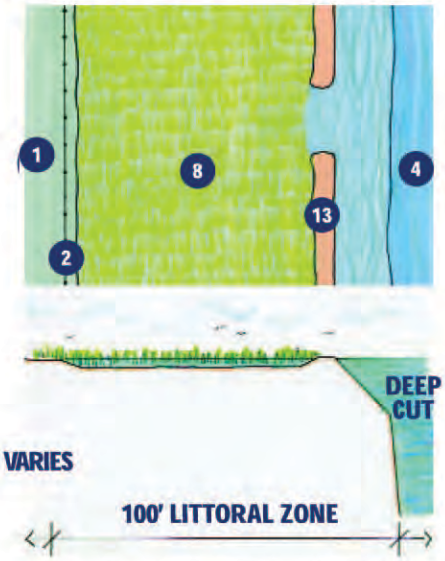
KEY

1. Adjacent Property or Right-of-Way (conditions vary)
2. Fence (if required)
3. Minimum Safety Slope
4. Deep Borrow Pit
5. Maintenance Road / Berm / Potential Greenway
6. Upland Planting
7. Natural Elev. Seasonal Wetland
8. Littoral Marsh
9. Deep Cut (10'-20')
10. Fish Refugia
11. Forage Pocket
12. Tree Island
13. Protective Berm
14. Observation Area

■ **Other Opportunities for Enhancement**

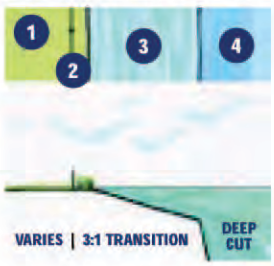
Uplands and transitional areas can make a critical contribution to habitat diversity. Such areas along roads, levees, trails and the edges of developed sites should be incorporated into the network of spaces usable by wildlife, through design practices that use native plants, replicate natural landscape structure, and provide connectivity between habitat "patches."

TYPICAL LITTORAL AREA



The typical on-site enhancement included in most current permit applications is a 100-foot wide littoral "shelf" encircling each one-mile-square lake.

QUARRY-ONLY EDGE



Littoral enhancements may be omitted from certain locations, either to allow concentration into larger littoral zones elsewhere; to comply with possible [future] wellfield protection regulations; or to coordinate with reservoir designs of the Comprehensive Everglades Restoration Plan. In such cases, a minimum "safety" transition will be as prescribed by County regulations.

ACTION STEPS

Action 1:	Determine acceptability and extent of potential littoral development within Wellfield Protection zones.
Responsibility:	Miami-Dade County DERM
Timeframe:	Spring 2002
Action 2:	Determine optimum pattern for retention or removal of lands along section lines based on modeling of hydrologic impacts of mining and wellfield protection requirements
Responsibility:	SFWMD and Miami-Dade County DERM
Timeframe:	Spring 2002
Action 3:	Determine feasibility and potential for permitting littoral zone development within areas potentially included in CERP reservoirs
Responsibility:	SFWMD and USACE
Timeframe:	2003
Action 4:	Develop mitigation and enhancement plans for each mining application based on agreed mitigation levels and coordination with results of above Actions
Responsibility:	Lake Belt Mitigation Committee
Timeframe:	Ongoing

EXPANDED LITTORAL AREA

Expanding the width of littoral areas, along with a diversified design approach, would provide even greater productivity of lakes and adjacent habitats. In this example, a 400-foot wide zone between two deep cuts contains extensive and diverse marshes, deeper refugia, seasonal wetlands, and upland islands. A berm for access can provide observation and fishing stops at selected locations. Such expanded width may be achieved by "doubling up" littoral zones required for on-site mitigation at certain locations, while utilizing "quarry-only" edges at others; by allowing use of zoned rights-of-way for environmental enhancement; and/or by other arrangements. Note that this example also includes a stepped pattern for the alignment of the deep cut, to provide greater variation in the created landscape.

RECREATION OPPORTUNITIES

Legislative Direction

The Lake Belt Phase I Plan as approved by the Legislature (Ch. 373.4149, F.S.) recommends that the Master Plan "enable compatible recreational use of appropriate areas."

Recreational Facilities and Needs

Existing Facilities

Miami-Dade County's two existing parks offer a limited but important menu of recreational uses. The 34 acres of upland at M.E Thompson Park include RV and tent camping sites, trails, parking, support facilities and a boat launch. Trail Glades range is the County's only publicly managed gun range. Both facilities use only a small fraction of the properties they occupy, the rest remaining as wetland. Other public recreational use of the region includes boating and fishing in major canals and limited fishing access to private (mined) lakes. Greenway systems are under development by the County in adjoining regions.

Opportunities for Recreation

As southern Florida continues to grow in population, with especially rapid development in the western sections, the Lake Belt area is an opportunity to provide a wide range of water-based and nature-oriented recreation. Two or more metropolitan-level parks in this area could provide a regional balance to the County's existing major parks, most of which are coastal.

While compatibility with other major public interests – wellfield protection, water management, Everglades restoration and limestone extraction – must be respected, the Lake Belt can clearly serve a great deal of community recreational needs that are currently not met. These include freshwater fishing, group and family camping, swimming, biking, hiking, nature viewing and all types of boating. In addition, many opportunities will be created for privately developed and managed recreational facilities, ranging from fishing and boating venues to airboat tours, eco-tourism sites and other specialized attractions.

Recreation Concept Plan

The extensive waterways created in the Lake Belt will be controlled for access according to the requirements for wellfield protection, as well as coordination with CERP improvements. The recommended conceptual plan for area-wide recreation includes the following major elements:

Access Management

Lakes outside the outer Wellfield Protection Zone may be fully accessible for both passive and active recreational uses. Lakes within specified distances of the Northwest Wellfield, to be determined by the County, will be completely off limits for public access, possibly protected by perimeter fencing as well as berms and other measures. This inaccessible zone is shown conceptually at approximately 1 mile beyond the 60-day groundwater travel time line, but may be expanded. Lakes between these two parameters may be accessible for non-motorized uses such as canoeing, sailing and shoreline hiking or fishing.

Northern Pennsuco Regional Park

Expansion of this existing site, readily accessible from Krome Avenue, will serve as a regional park offering day uses including hiking, fishing, non-motorized boating, picnicking, and trailhead access for area greenways. Overnight uses will include RV camping, tent camping and group (cabin) camping, in both primitive and more developed settings.

Trail Glades Range North Trail Basin Park

This facility will be retained, including its generous buffer area.

North Trail Basin Park

Government Lot 4 in the southern Lake Belt offers an opportunity to develop a rich variety of day uses, serving the urbanizing communities just to the east. Access may be via future extensions of NW 12th or NW 25th Streets. Motorized and non-motorized water uses can include sailing, swimming, boating, fishing, water- and jet-skiing, all appropriately separated. Trail connections can be provided both to urban and natural areas.

Krome Avenue Park

Another potential regional or sub-regional park location is shown along Krome Avenue south of the Bird Drive Recharge Area. This location would serve the rapidly growing southwest Miami-Dade communities and could provide non-motorized boating and fishing and nature interpretation, and potentially diverse facilities on existing uplands. As these lands are not now in public ownership, acquisition would be required.

Lake Belt Greenways

Lake Belt Greenways, comprising bicycle / pedestrian routes, should provide linkages to all of the adjacent greenway systems presently in development. In addition, internal routes should provide access to natural areas, such as the Pennsuco (via the Dade-Broward Levee), as well as connections to all park sites and future residential areas.

ACTION STEPS

Action 1:	Determine access restrictions necessary for protection of the Northwest Wellfield, including usage limitations and area extent.
Responsibility:	Miami-Dade County
Timeframe:	Fall 2002
Action 2:	Develop recreational needs analysis and detailed facility programming for two to three regional parks, including upgraded M.E. Thompson Park and other(s) at sites to be selected
Responsibility:	Miami-Dade County
Timeframe:	2001-2006
Action 3:	Determine feasibility of recreational uses within CERP reservoirs, based on CERP design refinements
Responsibility:	SFWMD/USACOE
Timeframe:	2001-2006
Action 4:	Develop master plan for improvements at M.E. Thompson Park; coordinate with potential mining activities on remainder of property to provide enhanced recreational-use lakes
Responsibility:	Miami-Dade County
Timeframe:	2005
Action 5:	Develop master plan for Lake Belt Greenways Network
Responsibility:	Miami-Dade County ; coordinate with SFWMD, USACE and FDOT
Timeframe:	2005 (update every 10 years)
Action 6:	Develop master plan for additional regional park sites
Responsibility:	Miami-Dade County
Timeframe:	2010 (update every 10 years)
Action 7:	Identify funding and begin implementation of park and greenway improvements
Responsibility:	Miami-Dade County
Timeframe:	2005 – ongoing

CONCEPTUAL PLAN - NORTHERN PENNSUCO PARK

KEY

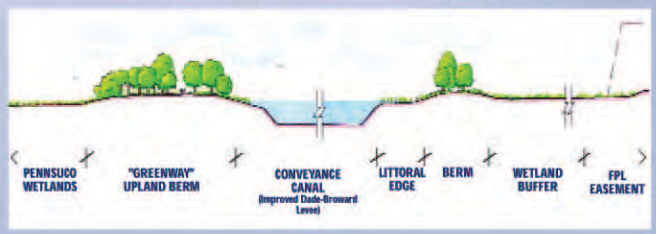
1. Existing Thompson Park (RV Camping)
2. Expanded Park Facilities / Office
3. Expanded RV Camping
4. Other Use "Islands" (Tent & Cabin Camping, Picnic, Wildlife Observation, etc.)
5. Trailhead / Greenways Connection
6. Boat Launch (Non motorized craft only)
7. Enhanced Lake
8. Potential Future Alignment – Enhanced Dade-Broward Levee Canal

CONCEPTUAL PLAN - NORTH TRAIL BASIN PARK

KEY

1. Park Entrance
2. Lake – Non motorized craft only (Environmentally enhanced)
3. Lake – Motorized craft allowed
4. Lake – Jet skis allowed
5. Water Access / Boat Launch (Typical)
6. Central Facilities & Office
7. Parking & Infrastructure Areas (Typical)
8. Park Maintenance / Support Area
9. Picnic & Passive Use Area
10. Greenway / Trail Connections to Natural Areas
11. Greenway & Roadway Access to Community

CONCEPTUAL PLAN AND SECTION- PENNSUCO GREENWAY



LAND OWNERSHIP

Legislative Direction

■ The Lake Belt Phase I Plan authorizes government-industry land exchanges or leases as a means of facilitating mining and wetland preservation in the most appropriate locations.

■ In 1998 the Legislature added a requirement to the Lake Belt Legislation – as recommended by the Lake Belt Committee in the Phase I Plan – that the Lake Belt Phase II Plan "shall consider the need to establish a land authority."

Acquisition of Land for Everglades Restoration and Limestone Mining Mitigation

■ Land Purchases for Wetland Restoration

The Lake Belt Phase I Plan determined that limestone mining is not suitable in the Pennsuco wetlands and that mitigation for limestone mining should occur within the Pennsuco wetlands, the Northwest Bird Drive Basin and other areas of the Lake Belt determined necessary for Everglades restoration. The SFWMD is currently acquiring land within the Pennsuco wetlands and other areas of the Lake Belt in a willing seller program, using funds from the U.S. Congress, the Florida Legislature, non-mining impact mitigation fees, and other sources. Approximately 1,462 acres have been acquired for mitigation of non-mining impacts.

■ Land for CERP Components

The CERP components – many of which are years away from implementation – are perceived to be adversely affecting land value and land marketability. Landowners complain that they cannot sell their land, that the value of real estate has declined, and that they are discouraged from improving their properties because of an uncertain future due to USACE and SFWMD planning activities.

Small landowners are concerned that land acquired for CERP will never be used for water management. They have requested that land acquired by the government must be used for the intended public use or it will revert to the original owner (or his heirs) for a price equal to the government's original purchase price.

■ Land Exchanges

Several mining companies have expressed interest in mining state-owned land in exchange for preservation of lands held as mining reserves in the Pennsuco wetlands. The Florida Department of Environmental Protection is presently considering the feasibility of issuing leases for mining on a royalty basis on state-owned land. The lands owned by mining companies would be acquired by the SFWMD at appraised value. These transactions are on hold pending the outcome of Miami-Dade County's wellfield protection studies.

■ Consideration of a Land Authority

Adequate authority currently exists to enable the SFWMD and Metro-Dade County to acquire land within the Lake Belt Area needed for environmental purposes. A land authority would be necessary to acquire and consolidate lands primarily intended for mining. The mining companies have indicated that they can accomplish this function more efficiently and do not support the creation of a land authority.

ACTION STEPS

Action 1: Adjust acquisition program for establishing appraised values for land to be acquired for public use. Any increase or decrease in property value solely due to project knowledge and planning considerations by committees and agencies shall not be considered in arriving at the property value

Responsibility: SFWMD, Dade County, Trustees of the Internal Improvement Trust Fund

Timeframe: Spring 2001

Action 2: Grant a right-of-first refusal to sellers whose properties have been purchased by the government that will enable the original seller to repurchase the property at original price plus cost of living inflation factor should it be divested as surplus property

Responsibility: SFWMD, Dade County, Trustees of the Internal Improvement Trust Fund

Timeframe: Spring 2001

Action 3: Acquire all land within the Pennsuco wetlands

Responsibility: SFWMD under the direction of the Interagency Mitigation Committee

Timeframe: 2010

Action 4: Complete the issuance of long-term leases to mining interests for mining selected state-owned lands and the acquisition of miner owned property in the Pennsuco wetlands once wellfield protection studies are completed

Responsibility: FDEP, SFWMD, and Mining Companies

Timeframe: 2003

FUNDING

Funding Mitigation

The Legislature found that the impact of mining within the Lake Belt Area will best be offset by the implementation of a comprehensive mitigation plan as recommended in the Lake Belt Committee's 1998 Progress Report. The most significant aspect of the mitigation plan is the establishment by the Legislature of a mitigation fee per ton on all limestone sold from the Lake Belt Area. The fee began on October 1, 1999 at 5 cents per ton and will increase annually by 2.1% plus a cost growth index. The fee is charged on all materials that are commercially mined. Monies collected under the mitigation fee are deposited in a Trust Fund. An interagency committee composed of representatives of federal, state and local agencies determines disbursements.

Proceeds from the mitigation fee are used to perform mitigation activities as required and appropriate to offset the environmental impacts due to mining including acquiring environmentally sensitive lands and restoring, managing, and maintaining their natural functions. Mitigation must be consistent with the requirement that there will be no net loss of wetland functions and values from mining in the Lake Belt Area.

On January 31, 2010, and every ten years thereafter, the interagency committee responsible for overseeing the mitigation shall submit a report to the Legislature recommending any needed adjustments to the mitigation fee to ensure that the revenue generated reflects the actual costs of mitigation.

Funding Land Acquisition

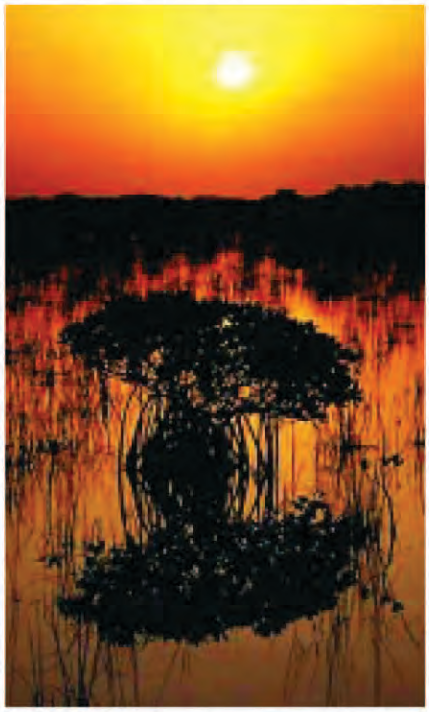
The SFWMD is currently acquiring land within the Pennsuco wetlands and other areas of the Lake Belt in a willing seller program. Funding is from the U.S. Congress, the Florida Legislature, and other sources. Monies collected through the Lake Belt Area User Fee are to be used to reimburse these funding sources for lands that are acquired for rock limestone mining mitigation. During the first twelve months, $2,000,000+ has been received from fees which will be applied towards the reimbursement for agency funds used to purchase Pennsuco lands for limestone mining mitiagation.

Funding Further Studies and Planning Activities

Funding for studies to further implementation of the Lake Belt Phase II Plan will be sought and obtained from a variety of sources.

Funding Recreation Facilities

A variety of sources will fund future recreation facilities in the Lake Belt Area. Further planning for these facilities and development of strategies to implement recreation plans are the responsibility of the Miami-Dade County Park and Recreation Department. Funding sources for restoration



of wetlands on future parkland will include the Dade County Wetlands Trust Fund as well as other county departments – as is currently the case with the M.E. Thompson Park whose restoration is funded by the Miami-Dade County Solid Waste Department. Potential funding for new facilities will come from development impact fees, County General Funds, and existing and future state funds.

IMPLEMENTATION

Action		Completion Date: 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Wellfield Protection											
WP Action 1	Wellfield Protection Plan		■								
WP Action 2	Miami-Dade County Code Amendments			■							
WP Action 3	Actions to Protect Surface & Groundwater from Accidental Spills on State/Local Roads	■									
Water Management											
WM Action 1	Completion of CERP Projects in Lake Belt Area	■	■	■	■	■	■	■	■	■	■
WM Action 2	Final Identification of Mining Lakes and Hydrologic Mitigation			■							
Limestone Mining Interests											
LM Action 1	Consideration of Permit Application	■			■						■
LM Action 2	Streamline Permitting Process	■									
LM Action 3	Mitigation Plan for Areas Outside Pennusco	■	■	■	■	■	■	■	■	■	■
Non-Mining Interests - Land Use											
LU Action 1	Expediting Mining Within Two Miles of UDB		■								
LU Action 2	Notice to Landowners Regarding Pending Changes	■	■	■	■	■	■	■	■	■	■
Non-Mining Interests - Common Mitigation Plan											
CMP Action 1	Potential Non-Mining Mitigation Sites	■									
CMP Action 2	Feasibility Study of Non-Mitigation Sites	■									
CMP Action 3	Mitigation Cost Estimates	■									
CMP Action 4	Selection of Preferred Mitigation Sites	■									
CMP Action 5	MOA to Operate ROMA	■									
CMP Action 6	Permits for ROMA	■									
Enivornmental Enhancement											
EE Action 1	Littoral Development Within Wellfield		■								
EE Action 2	Impacts of Mining Section Lines		■								
EE Action 3	Littoral Development Within CERP Reservoirs			■							
EE Action 4	Mitigation/Enhancement Plans for Mining Operations	■	■	■	■	■	■	■	■	■	■
Recreation Opportunities											
RO Action 1	Access Restrictions for Wellfield Protection		■								
RO Action 2	Recreational Needs Analysis/ Facility Programming	■	■	■	■	■	■				
RO Action 3	Feasibility of Recreational Uses at CERP Reservoirs	■	■	■	■	■	■				
RO Action 4	M.E. Thompson Park Master Plan					■					
RO Action 5	Lake Belt Greenways Network Master Plan					■					
RO Action 6	Master Plans for Additional Regional Parks										■
RO Action 7	Implementation of Park/Greenway Improvements					■	■	■	■	■	■
Land Ownership											
LO Action 1	Options for Establishing Appraised Values	■									
LO Action 2	Rights of First Refusal	■									
LO Action 3	Acquisition of Pennusco Wetlands										■
LO Action 4	Long-Term Leases for Mining State Lands			■							

PHASING

In future years considerable economic, environmental and social value will accrue to the region through careful phasing of public and private investment in the Lake Belt Area. A complex set of factors influence how these investments should be coordinated in terms of their physical design and timing. Considerable study remains to be accomplished before a detailed phasing plan can be developed. Pending completion of these studies, a number of recommendations will help to guide decision making and investment in the Lake Belt Area:

Public Projects

■ Major projects of overriding public interest, such as the Northwest Wellfield Watershed Protection program, Lower East Coast Regional Water Supply Plan (LECRWSP) and CERP, will be phased according to each project's requirements. Mining and non-mining private endeavors, as well as other public projects, should defer to and coordinate with these projects to the greatest possible extent.

Limestone Mining

■ Through the permit streamlining process, limit mining within an appropriate setback from the Northwest Wellfield until DERM completes its risk assessment study and defines wellfield protection boundaries.

■ Seek to accelerate mining in critical areas (consistent with wellfield protection):

- within 1 mile of the Urban Development Boundary (UDB)
- between one to two miles of existing suburban and urban residential communities
- between one to two miles of likely near-term (10 to 15 years) suburban or urban development

■ Defer until 2003 any mining within the areas identified in the Phase 1 Plan as "allowable in five years unless needed for Everglades Restoration."

■ Coordinate mining to accomplish reservoir excavation as needed for LECRWSP or CERP to provide for approximately 50 percent of designed storage by 2020.

Other Private Land Uses

■ Miami-Dade County should carefully evaluate any actions that would increase development adjacent to approved mining areas, such as the 2015 expansion of the Urban Development Boundary currently identified for consideration in the North Trail Basin.

Recreation Investments

■ Recreation components should defer significant planning until after completion of the Northwest Wellfield Protection Study, but should then be identified and programmed quickly to allow coordination with other activities.

■ Phase design and construction of recreation components to accommodate increasing demand as western Miami-Dade develops, and to coordinate with the phasing of mining.

■ Mitigation and other environmental enhancement projects should be ongoing throughout the mining time-frame, with early concentrations in areas deemed desirable for either critical species support, or passive recreation use.

RECOMMENDATIONS FOR LEGISLATIVE AND REGULATORY REVISIONS

■ A legislative exception to the full cost accounting provision should be considered for non-rock miner landowners in the Lake Belt Area provided that such an exception could provide affordable and effective mitigation and further the implementation of the Lake Belt Plan as a whole.

■ The Legislature should instruct the Department of Transportation to incorporate wellfield protection features in the drainage facilities and on the edge of its rights-of-way for all state roads that border or traverse the Lake Belt Area.

COMPANION DOCUMENTS

■ The SFWMD is supporting a website for the Lake Belt as part of its website at www.sfwmd.gov. The SFWMD website contains extensive information about the SFWMD and its on-going activities. The Lake Belt website is www.sfwmd.gov/org/pld/proj/lakebelt The Lake Belt website provides information on the Lake Belt Plan and Committee activities.

■ *Lake Belt Phase II Plan – Process* (Wallace Roberts & Todd, LLC, January 2001)

■ *Lake Belt Phase II Plan – Comments* (Wallace Roberts & Todd, LLC, January 2001)

■ *Northwest Wellfield Watershed Protection Plan* (Miami-Dade County Department of Environmental Resources Management, August 16, 2000)

■ *Groundwater Simulations for the Miami-Dade County Lake Belt Plan* (South Florida Water Management District, January 2001)

COMMITTEE VOTE

On December 15, 2000, the Lake Belt Committee voted to adopt the Phase II Plan. The following listing reflects the vote of the individual Committee members.

Gerard Fernandez, Chairman - YES
Bill Brant – Absent
Jose Calas (alt. for Melissa Meeker) - YES
Debra Corkhill – Absent
Jaime DeLoach – Absent
Carlos Espinosa - YES
Andrew Gonzalez – Absent
Juanita Green – Absent
Jim Hurley (alt. for Leo Veccellio) – YES
Rod Jude (alt. For Barbara Lange) – NO
Stephen Lau – YES
Janet Llewellyn - YES
Peter Mestre – Absent
Bob O'Brien – YES
Bill Payne (alt. for Karl Watson) - YES
Karsten Rist – YES
Mike McDaniel – Absent
Domingo Rodriguez – YES
Jacqueline Rose – YES
Al Townsend (alt. for Hardy Johnson) – YES
Bob Usherson (alt. for Guillermo Olmedillo) – YES

CREDITS

Environmental Enhancement Drawings
Wallace, Roberts and Todd L.L.C.
EAS Engineering, Inc.

With acknowledgements to the following: Everglades Research Group (1996/99); Florida Fish & Wildlife Conservation Commission; Larsen & Associates; Miami-Dade County DERM; US Fish & Wildlife Service/Carter Associates (1999).

Phase II Plan Graphic Design/ Layout
New Leaf Graphics, Inc.

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PHASE II PLAN

This Map Removed for Security Purposes

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CURRENTLY ENACTED LAKE BELT LEGISLATION

373.4149 Dade County Lake Belt Plan.–

(1) The Legislature hereby accepts and adopts the recommendations contained in the Phase I Lake Belt Report and Plan, known as the "Miami-Dade County Lake Plan," dated February 1997 and submitted by the Miami-Dade County Lake Belt Plan Implementation Committee.

(2)(a) The Legislature recognizes that deposits of limestone and sand suitable for production of construction aggregates, cement, and road base materials are located in limited areas of the state.

(b) The Legislature recognizes that the deposit of limestone available in South Florida is limited due to urbanization to the east and the Everglades to the west.

(3) The Miami-Dade County Lake Belt Area is that area bounded by the Ronald Reagan Turnpike to the east, the Miami-Dade-Broward County line to the north, Krome Avenue to the west and Tamiami Trail to the south together with the land south of Tamiami Trail in sections 5, 6, 7, 8, 17, and 18, Township 54 South, Range 39 East, sections 24, 25, and 36, Township 54 South, Range 38 East less those portions of section 10, except the west one-half, section 11, except the northeast one-quarter and the east one-half of the northwest one-quarter, and tracts 38 through 41, and tracts 49 through 64 inclusive, section 13, except tracts 17 through 35 and tracts 46 through 48, of Florida Fruit Lands Company Subdivision No. 1 according to the plat thereof as recorded in plat book 2, page 17, public records of Miami-Dade County, and section 14, except the west three quarters, Township 52 South, Range 39 East, lying north of the Miami Canal, sections 35 and 36 and the east one-half of sections 24 and 25, Township 53 South, Range 39 East and Government Lots 1 and 2, lying between Townships 53 and 54 South, Range 39 East and those portions of sections 1 and 2, Township 54 South, Range 39 East, lying north of Tamiami Trail.

(4) The identification of the Miami-Dade County Lake Belt Area shall not preempt local land use jurisdiction, planning, or regulatory authority in regard to the use of land by private land owners. When amending local comprehensive plans, or implementing zoning regulations, development regulations, or other local regulations, Miami-Dade County shall strongly consider limestone mining activities and ancillary operations, such as lake excavation, including use of explosives, rock processing, cement, concrete and asphalt products manufacturing, and ancillary activities, within the rock mining supported and allowable areas of the Miami-Dade County Lake Plan adopted by subsection (1); provided, however, that limerock mining activities are consistent with wellfield protection. Rezonings or amendments to local comprehensive plans concerning properties that are located within 1 mile of the Miami-Dade Lake Belt Area shall be compatible with limestone mining activities. No rezonings, variances, or amendments to local comprehensive plans for any residential purpose may be approved for any property located in sections 35 and 36 and the east one-half of sections 24 and 25, Township 53 South, Range 39 East until such time as there is no active mining within 2 miles of the property. This section does not preclude residential development that complies with current regulations.

(5) The Miami-Dade County Lake Belt Plan Implementation Committee shall be appointed by the governing board of the South Florida Water Management District to develop a strategy for the design and implementation of the Miami-Dade County Lake Belt Plan. The committee shall consist of the chair of the governing board of the South Florida Water Management District, who shall serve as chair of the committee, the policy director of Environmental and Growth Management in the office of the Governor, the secretary of the Department of Environmental Protection, the director of the Division of Water Facilities or its successor division within the Department of Environmental Protection, the director of the Office of Tourism, Trade, and Economic Development within the office of the Governor, the secretary of the Department of Community Affairs, the executive director of the Fish and Wildlife Conservation Commission, the director of the Department of Environmental Resource Management of Miami-Dade County, the director of the Miami-Dade County Water and Sewer Department, the Director of Planning in Miami-Dade County, a representative of the Friends of the Everglades, a representative of the Florida Audubon Society, a representative of the Florida chapter of the Sierra Club, four representatives of the nonmining private landowners within the Miami-Dade County Lake Belt Area, and four representatives from the limestone mining industry to be appointed by the governing board of the South Florida Water Management District. Two ex officio seats on the committee will be filled by one member of the Florida House of Representatives to be selected by the Speaker of the House of Representatives from among representatives whose districts, or some portion of whose districts, are included within the geographical scope of the committee as described in subsection (3), and one member of the Florida Senate to be selected by the President of the Senate from among senators whose districts, or some portion of whose districts, are included within the geographical scope of the committee as described in subsection (3). The committee may appoint other ex officio members, as needed, by a majority vote of all committee members. A committee member may designate in writing an alternate member who, in the member's absence, may participate and vote in committee meetings.

(6) The committee shall develop Phase II of the Lake Belt Plan which shall:

(a) Include a detailed master plan to further implementation;

(b) Consider the feasibility of a common mitigation plan for nonrock mining uses, including a nonrock mining mitigation fee. Any mitigation fee shall be for the limited purpose of offsetting the loss of wetland functions and values and not as a revenue source for other purposes.

(c) Further address compatible land uses, opportunities, and potential conflicts;

(d) Provide for additional wellfield protection;

(e) Provide measures to prevent the reclassification of the Northwest Miami-Dade County wells as groundwater under the direct influence of surface water;

(f) Secure additional funding sources;

(g) Consider the need to establish a land authority; and

(h) Analyze the hydrological impacts resulting from the future mining included in the Lake Belt Plan and recommend appropriate mitigation measures, if needed, to be incorporated into the Lake Belt Mitigation Plan.

(7) The committee shall remain in effect until January 1, 2002, and shall meet as deemed necessary by the chair. The committee shall monitor and direct progress toward developing and implementing the plan. The committee shall submit progress reports to the governing board of the South Florida Water Management District and the Legislature by December 31 of each year. These reports shall include a summary of the activities of the committee, updates on all ongoing studies, any other relevant information gathered during the calendar year, and the committee recommendations for legislative and regulatory revisions. The committee shall submit a Phase II report and plan to the governing board of the South Florida Water Management District and the Legislature by December 31, 2000, to supplement the Phase I report submitted on February 28, 1997. The Phase II report must include the detailed master plan for the Miami-Dade County Lake Belt Area together with the final reports on all studies, the final recommendations of the committee, the status of implementation of Phase I recommendations and other relevant information, and the committee's recommendation for legislative and regulatory revisions.

(8) The committee shall report to the governing board of the South Florida Water Management District semiannually.

(9) In carrying out its work, the committee shall solicit comments from scientific and economic advisors and governmental, public, and private interests. The committee shall provide meeting notes, reports, and the strategy document in a timely manner for public comment.

(10) The committee is authorized to seek from the agencies or entities represented on the committee any grants or funds necessary to enable it to carry out its charge.

(11) The secretary of the Department of Environmental Protection, the secretary of the Department of Community Affairs, the secretary of the Department of Transportation, the Commissioner of Agriculture, the executive director of the Fish and Wildlife Conservation Commission, and the executive director of the South Florida Water Management District may enter into agreements with landowners, developers, businesses, industries, individuals, and governmental agencies as necessary to effectuate the provisions of this section.

(12)(a) All agencies of the state shall review the status of their landholdings within the boundaries of the Miami-Dade County Lake Belt. Those lands for which no present or future use is identified must be made available, together with other suitable lands, to the committee for its use in carrying out the objectives of this act.

(b) It is the intent of the Legislature that lands provided to the committee be used for land exchanges to further the objectives of this act.

History.–s. 21, ch. 92-132; s. 5, ch. 94-122; s. 1010, ch. 95-148; s. 10, ch. 97-222; s. 1, ch. 99-298; s. 22, ch. 2000-197; ss. 1, 2, ch. 2000-285.

[1]Note.–Section 2, ch. 2000-285, provides that "[a]ny rights a person may have acquired pursuant to [former] subsection (5) of s. 373.4149, shall be extinguished [December 14, 2000]; unless, prior to such date, that person has filed an action in a court of competent jurisdiction to enforce such alleged rights and has recorded a notice of lis pendens."

373.41492 Miami-Dade County Lake Belt Mitigation Plan; mitigation for mining activities within the Miami-Dade County Lake Belt.–

(1) The Legislature finds that the impact of mining within the rock mining supported and allowable areas of the Miami-Dade County Lake Plan adopted by s. 373.4149(1) can best be offset by the implementation of a comprehensive mitigation plan as recommended in the 1998 Progress Report to the Florida Legislature by the Miami-Dade County Lake Belt Plan Implementation Committee. The Lake Belt Mitigation Plan consists of those provisions contained in subsections (2)-(9). The per-

ton mitigation fee assessed on limestone sold from the Miami-Dade County Lake Belt Area and sections 10, 11, 13, 14, Township 52 South, Range 39 East, and sections 24, 25, 35, and 36, Township 53 South, Range 39 East, shall be used for acquiring environmentally sensitive lands and for restoration, maintenance, and other environmental purposes. It is the intent of the Legislature that the per-ton mitigation fee shall not be a revenue source for purposes other than enumerated herein. Further, the Legislature finds that the public benefit of a sustainable supply of limestone construction materials for public and private projects requires a coordinated approach to permitting activities on wetlands within Miami-Dade County in order to provide the certainty necessary to encourage substantial and continued investment in the limestone processing plant and equipment required to efficiently extract the limestone resource. It is the intent of the Legislature that the Lake Belt Mitigation Plan satisfy all local, state, and federal requirements for mining activity within the rock mining supported and allowable areas.

(2) To provide for the mitigation of wetland resources lost to mining activities within the Miami-Dade County Lake Belt Plan, effective October 1, 1999, a mitigation fee is imposed on each ton of limerock and sand extracted by any person who engages in the business of extracting limerock or sand from within the Miami-Dade County Lake Belt Area and sections 10, 11, 13, 14, Township 52 South, Range 39 East, and sections 24, 25, 35, and 36, Township 53 South, Range 39 East. The mitigation fee is at the rate of 5 cents for each ton of limerock and sand sold from within the properties where the fee applies in raw, processed, or manufactured form, including, but not limited to, sized aggregate, asphalt, cement, concrete, and other limerock and concrete products. Any limerock or sand that is used within the mine from which the limerock or sand is extracted is exempt from the fee. The amount of the mitigation fee imposed under this section must be stated separately on the invoice provided to the purchaser of the limerock or sand product from the limerock or sand miner, or its subsidiary or affiliate, for which the mitigation fee applies. The limerock or sand miner, or its subsidiary or affiliate, who sells the limerock or sand product shall collect the mitigation fee and forward the proceeds of the fee to the Department of Revenue on or before the 20th day of the month following the calendar month in which the sale occurs.

(3) The mitigation fee imposed by this section must be reported to the Department of Revenue. Payment of the mitigation fee must be accompanied by a form prescribed by the Department of Revenue. The proceeds of the fee, less administrative costs, must be transferred by the Department of Revenue to the South Florida Water Management District and deposited into the Lake Belt Mitigation Trust Fund. As used in this section, the term "proceeds of the fee" means all funds collected and received by the Department of Revenue under this section, including interest and penalties on delinquent mitigation fees. The amount deducted for administrative costs may not exceed 3 percent of the total revenues collected under this section and may equal only those administrative costs reasonably attributable to the mitigation fee.

(4)(a) The Department of Revenue shall administer, collect, and enforce the mitigation fee authorized under this section in accordance with the procedures used to administer, collect, and enforce the general sales tax imposed under chapter 212. The provisions of chapter 212 with respect to the authority of the Department of Revenue to audit and make assessments, the keeping of books and records, and the interest and penalties imposed on delinquent fees apply to this section. The fee may not be included in computing estimated taxes under s. 212.11, and the dealer's credit for collecting taxes or fees provided for in s. 212.12 does not apply to the mitigation fee imposed by this section.

(b) In administering this section, the Department of Revenue may employ persons and incur expenses for which funds are appropriated by the Legislature. The Department of Revenue shall adopt rules and prescribe and publish forms necessary to administer this section. The Department of Revenue shall establish audit procedures and may assess delinquent fees.

(5) Beginning January 1, 2001, and each January 1 thereafter, the per-ton mitigation fee shall be increased by 2.1 percentage points, plus a cost growth index. The cost growth index shall be the percentage change in the weighted average of the Employment Cost Index for All Civilian Workers (ecu 10001I), issued by the United States Department of Labor for the most recent 12-month period ending on September 30, and the percentage change in the Producer Price Index for All Commodities (WPU 00000000), issued by the United States Department of Labor for the most recent 12-month period ending on September 30, compared to the weighted average of these indices for the previous year. The weighted average shall be calculated as 0.6 times the percentage change in the Employment Cost Index for All Civilian Workers (ecu 10001I), plus 0.4 times the percentage change in the Producer Price Index for All Commodities (WPU 00000000). If either index is discontinued, it shall be replaced by its successor index, as identified by the United States Department of Labor.

(6)(a) The proceeds of the mitigation fee must be used to conduct mitigation activities that are appropriate to offset the loss of the value and functions of wetlands as a result of mining activities and must be used in a manner consistent with the recommendations contained in the reports submitted to the Legislature by the Miami-Dade County Lake Belt Plan Implementation Committee and adopted under s. 373.4149. Such mitigation may include the purchase, enhancement, restoration, and management of wetlands and uplands, the purchase of mitigation credit from a permitted mitigation bank, and any structural modifications to the existing drainage system to enhance the hydrology of the Miami-Dade County Lake Belt Area. Funds may also be used to reimburse other funding sources, including the Save Our Rivers Land Acquisition Program and the Internal Improvement Trust Fund, for the purchase of lands that were acquired in areas appropriate for mitigation due to rock mining and to reimburse governmental agencies that exchanged land under s. 373.4149 for mitigation due to rockmining.

(b) Expenditures must be approved by an interagency committee consisting of representatives from each of the following: the Miami-Dade County Department of Environmental Resource Management, the Department of Environmental Protection, the South Florida Water Management District, and the Fish and Wildlife Conservation Commission. In addition, the limerock mining industry shall select a representative to serve as a nonvoting member of the interagency committee. At the discretion of the committee, additional members may be added to represent federal regulatory, environmental, and fish and wildlife agencies.

(7) Payment of the fee imposed by this section satisfies the mitigation requirements imposed under ss. 373.403-373.439 and any applicable county ordinance for loss of the value and functions from mining of the wetlands identified as rockmining supported and allowable areas of the Miami-Dade County Lake Plan adopted by s. 373.4149(1). In addition, it is the intent of the Legislature that the payment of the mitigation fee imposed by this section satisfy all federal mitigation requirements for the wetlands mined.

(8) If a general permit by the United States Army Corps of Engineers, or an appropriate long-term permit for mining, consistent with the Miami-Dade County Lake Belt Plan, this section, and ss. 373.4149, 373.4415, and 378.4115 is not issued on or before September 30, 2000, the fee imposed by this section is suspended until revived by the Legislature.

(9)(a) The interagency committee established in this section shall annually prepare and submit to the governing board of the South Florida Water Management District a report evaluating the mitigation costs and revenues generated by the mitigation fee.

(b) No sooner than January 31, 2010, and no more frequently than every 10 years thereafter, the interagency committee shall submit to the Legislature a report recommending any needed adjustments to the mitigation fee to ensure that the revenue generated reflects the actual costs of the mitigation.

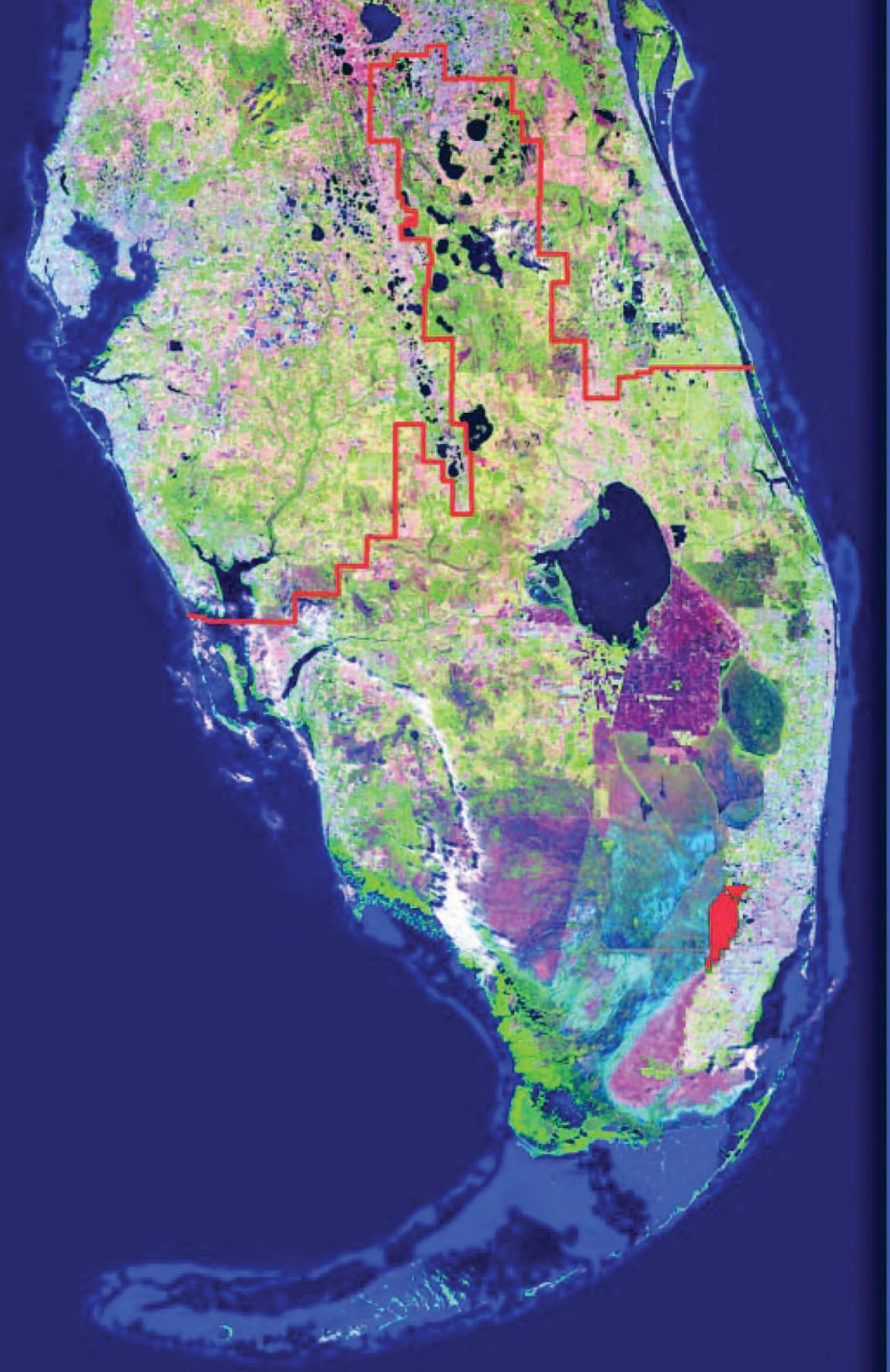
History.–s. 2, ch. 99-298; s. 23, ch. 2000-197.

373.4415 Role of Miami-Dade County in processing permits for limerock mining in Miami-Dade County Lake Belt.–

The department and Miami-Dade County shall cooperate to establish and fulfill reasonable requirements for the departmental delegation to the Miami-Dade County Department of Environmental Resource Management of authority to implement the permitting program under ss. 373.403-373.439 for limerock mining activities within the geographic area of the Miami-Dade County Lake Belt which was recommended for mining in the report submitted to the Legislature in February 1997 by the Miami-Dade County Lake Belt Plan Implementation Committee under s. 373.4149. The delegation of authority must be consistent with s. 373.441 and chapter 62-344, Florida Administrative Code. To further streamline permitting within the Miami-Dade County Lake Belt, the department and Miami-Dade County are encouraged to work with the United States Army Corps of Engineers to establish a general permit under s. 404 of the Clean Water Act for limerock mining activities within the geographic area of the Miami-Dade County Lake Belt consistent with the report submitted in February 1997. Miami-Dade County is further encouraged to seek delegation from the United States Army Corps of Engineers for the implementation of any such general permit. This section does not limit the authority of the department to delegate other responsibilities to Miami-Dade County under this part.

History.–s. 3, ch. 97-222; s. 3, ch. 99-298.

378.4115 County certification for limerock mining in the Miami-Dade County Lake Belt.–

The department and Miami-Dade County shall cooperate to establish and fulfill reasonable requirements for the departmental certification of the Miami-Dade County Department of Environmental Resource Management to implement the reclamation program under ss. 378.401-378.503 for limerock mining activities within the geographic area of the Miami-Dade County Lake Belt which was recommended for mining in the report submitted to the Legislature in February 1997 by the Miami-Dade County Lake Belt Plan Implementation Committee under s. 373.4149. The delegation of implementing authority must be consistent with s. 378.411 and chapter 62C-36, Florida Administrative Code. Further, the reclamation program shall maximize the efficient mining of limestone, and the littoral area surrounding the lake excavations shall not be required to be greater than 100 feet average in width.

History.–s. 4, ch. 97-222; s. 4, ch. 99-298.