

## South Florida Water Management District

Fort Myers Service Center • 2301 McGregor Boulevard • Fort Myers, FL 33901 (941) 338-2929 • Fax (941) 338-2936 • 1-800-248-1201 • Suncom 748-2929

CON 24-06

Regulation Department
Application No.: 971210-21

December 31, 1997

Revco/Ge Joint Venture 255 Lely Beach Blvd Suite #204 Bonita Springs, FL 33923

Dear Permittee:

SUBJECT: PERMIT MODIFICATION NO.: 11-01535-P

Project: GLEN EDEN

Location: Collier County, S9/T48S/R25E

District staff has reviewed the information submitted on December 10, 1997, for modification of Special Condition No. 22 of the original permit.

Special Condition 22 is modified to read:

NO LATER THAN APRIL 1, 1998, THE APPLICANT SHALL PROVIDE PROOF THAT 5.44 HERBACEOUS FRESHWATER CREDITS AND .44 FORESTED FRESHWATER CREDITS HAVE BEEN DEBITED FROM THE LITTLE PINE ISLAND MITIGATION BANK.

Based on that information, District staff has determined that the proposed activities are in compliance with the original environmental resource permit and appropriate provisions of FAC Rule 40E-4.331(2)(b). Therefore, these changes have been recorded in our files. Please understand that your permit remains subject to the General Conditions and all other Special Conditions not modified and as originally issued.

Sincerely.

Karen M. Johnson

Sr Supv Environmental Analyst

Ft Myers Service Center

KJ/hh

c: Collier County Engineer

Governing Board: Frank Williamson, Jr., Chairman Eugene K. Pettis, Vice Chairman Mitchell W. Berger

Vera M. Carter William E. Graham William Hammond

Richard A. Machek Michael D. Minton Miriam Singer Samuel E. Poole III, Executive Director Michael Slayton, Deputy Executive Director GLEN EDEN Subject: Permit Modification No. 11-01535-P December 31, 1997 Page 2

bc: Back-Up
Ben Pratt
Chip Merriam
Day File
Enforcement
Field Engineering
Permit File
Reviewer File

## GLEN EDEN WETLAND IMPACT FUNCTIONAL ASSESSMENT FOR LITTLE PINE ISLAND MITIGATION BANK

COE PERMIT NO. 199230202 (IP-MN) Revised November 24, 1997

The following outlines the functional assessment of the proposed wetland impacts, the assessment of the number of credits generated by the on-site mitigation activities and the credit balance required to be offset by the purchase of credits from the Little Pine Island Mitigation Bank. The assessment procedure outlined below follows the functional assessment procedure attached as part of the Mitigation Banking Instrument for the Little Pine Island Mitigation Bank.

Step 1. Wetland Impact Acreage Summary

FLUCECS Code	Description	HGM Type	Impact Acreage	Enhanced Acreage	Total Acreage
4151	Pine Flatwoods, hydric	Forested Freshwater	0.1	3.4	3.5
4159	Pine Flatwoods, hydric, disturbed	Forested Freshwater	3.5	0.9	4.4
4221	Brazilian Pepper/Wax Myrtle, hydric	Herbaceous Freshwater	6.5	0.1	6.6
4241	Melaleuca, hydric	Herbaceous Freshwater	4.5	0.3	4.8
514	Drainage ditches	Herbaceous Freshwater	0.8	0.4	1.2
621	Cypress	Forested Freshwater		1.0	1.0
6219	Cypress, disturbed	Forested Freshwater	0.2	0.3	0.5
6439	Wet Prairie, disturbed	Herbaceous Freshwater	7.0	1.1	8.1
7421	Borrow area, hydric	Herbaceous Freshwater	0.3		0,3
8141	Former Road, right-of-way, hydric	Forested Freshwater		3.4	3.4
	TOTA	LS	22.9	10.9	33.8

Step 2(a). Functional Assessment of Impacts to Herbaceous Freshwater Wetlands

	Wetland Functional Capacity Score				
Wetland Function	4221	4241	514	6439	7421
Habitat for Wetland Dependent Species	0.2	0.2	0.3	0.5	0.3
Support of Food Chains	0.2	0.2	0.4	0.6	0.4
Support of Native Plant Populations	0.1	0.1	0.1	0.6	0.1
Maintenance of Biological Integrity	0.2	0.2	0.3	0.5	0.3
Provision of Landscape of Heterogeneity	0.2	0.2	0.2	0.4	0.2
Access to Aquatic Refugia	0.2	0.2	0.5	0.4	0.6
Maintenance of Natural Hydrologic Regimes	0.3	0.3	0.1	0.3	0.0
Maintenance of Water Quality	0.8	.0.8	0.1	0.5	0.1
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	op sjelje i principal (i saki)	Wetland F	unctional Ca	pacity Score	
Wetland Function	4221	4241	514	6439	7421
Support of Soil Processes	0.3	0.3	0.1	0.3	0.1
Total	2.5	2.5	2.1	4.4	2.2
Wetland Functional Capacity	0.3	0.3	0.2	0.4	0.2

Step 2(b). Functional Assessment of Impacts to Forested Freshwater Wetlands

Wetland Runctional Capacity Score					
Wetland Function	4151	4159	6219		
Habitat for Wetland Dependent Species	0.9	0.5	0.8		
Support of Food Chains	0.8	0.4	0.7		
Support of Native Plant Populations	0.9	0.4	0.6		
Maintenance of Biological Integrity	0.8	0.4	0.7		
Provision of Landscape Heterogenity	0.8	0.2	0.7		
Access to Aquatic Refugia	0.7	0.3	0.7		
Maintenance of Natural Hydrologic Regimes	0.7	0.3	0.6		
Maintenance of Water Quality	0.8	0.3	0.8		
Support of Soil Processes	1.0	0.3	1.0		
Wetland Functional Capacity	0.7	0.3	0.7		

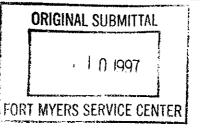
Step 3(a). Calculation of Herbaceous Freshwater Credits Required

Wetland Funci	ional Capacity	- Acreage Impacted	Credits Required
Habitat	STOCKED TO THE REAL PROPERTY OF THE PROPERTY O		
4221	0.3	6.5	1.95
4241	0.3	4.5	1.35
514	0.2	0.8	0.16
6439	0.4	7.0	2.80
7421	0.2	0.3	0.06
TOT.	ALS	19.1	6.32

Step 3(b). Calculation of Forested Freshwater Credits Required

Welland Sund	ional Capacity	Acreage Impacted	Credits Required
Habitat	Canada	and the second section of the section of th	
4151	0.7	0.1	0.07
4159	0.3	3.5	1.05
6219	0.7	0.2	0.14
TOT	ALS	3.8	1.26

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Step 4(a) Calculation of On-site Herbaceous Freshwater Mitigation Credit

Wetlandigun	Chotal Capacity:	Rost Mitigation	asaLiftees	Enhanced :	
Habitat	Score	Score	$I(\mathbb{Z}_{+}(\Delta))$	Acreage	Credit
4221	0.3	0.8	0.5	0.1	0.05
4241	0.3	0.8	0.5	0.3	0.15
514	0.2	0.8	0.6	0.4	0.24
6439	0.4	0.8	0.4	1.1	0.44
	TO	TALS	·	1.9	0.88

Step 4(b). Calculation of On-Site Forested Freshwater Mitigation Credit

Wetland Fu	nctional Capacity	Post Mitigation	e spile Life of the	Enhanced	
Habitat	N. Harris and Company of the Company	22-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2	(Δ)	Acreage	Credit
4151	0.7	0.8	0.1	3.4	0.34
4159	0.3	0.8	0.5	0.9	0.45
621	0.8	0.8	0.0	1.0	0.00
6219	0.7	0.8	0.1	0.3	0.03
8141	0.8	0.8	0.0	3.4	0.00
	TOTAL	S		9.0	0.82

Step 5. Calculation of Credit Balance Required for Purchase at Little Pine Island

нем туре	Credits Needed	4On-site Credits	Balance Required at Bank
Herbaceous Freshwater	6.32	0.88	5.44
Forested Freshwater	1.26	0.82	0.44
TOTALS	7.58	1.70	5.88

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