TASK 3.1.03

Broward County Coastal Revegetation Plan (BCCRP)

Financial Close-out Package

Executive Summary

Related Reports

FY 93 - 94

Florida Coastal Management Program

Broward Soil & Water Conservation District

TASK 3.1.03

TC224.F6 B54 1994

Broward Soil and Water Conservation District

6191 Orange Drive
Room 6179-O
Davie, FL 33314
305-584-1306

December 8, 1994

Mr. Ralph Cantral, Executive Director
State of Florida - Florida Coastal Management Program
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

Dear Mr. Cantral:

It gives the Broward Soil and Water Conservation District (BSWCD) great pleasure in submitting this Executive Summary to the Florida Department of Community Affairs (FDCA) and the United States Department of Commerce (USDOC) National Oceanic and Atmospheric Administration (NOAA) that the Broward County Coastal Revegetation Plan (BCCRP) 1993-94 has been successfully completed, and find enclosed a list of acknowledgements that made the BCCRP a reality.

With the completion of the BCCRP, BSWCD has a basic plan that will help implement a comprehensive approach to beach stabilization and environmental education to protect our natural resources. The development of BCCRP was a coordinated effort by all parties to create a working inter-agency plan to accomplish the goals and objectives of the various land use plans of different governmental agencies into one countywide approach to help prevent beach erosion and related subjects, such as Nonpoint Source Pollution.

The BCCRP had seven (7) objectives and the following is an outline of their status:

OBJECTIVE 1 The BCCRP has determined the type and approximate amounts of vegetation along the Broward County Coastline. This information will assist in the assessment of the effect that vegetation or the lack of vegetation has on the reduction of erosion.

OBJECTIVE 2 The BCCRP has afforded the BSWCD the opportunity to study the approach of different agencies in preventing beach erosion and has further opened up the debate on how to accomplish this serious problem countywide, also now all the affected agencies have better communication and understanding of the coordinated planning needed to implement a BCCRP.

OBJECTIVE 3 With the preparation of the sand grain size study -- which was submitted in the Fourth Quarter Report (June, July, August '94) -- sand grain size and classification system should help facilitate the design and priority needs of the dune restoration/stabilization projects in Broward County. The study provides information needed to match up different types of sand sources for compatibility for renourishment to stabilization.

OBJECTIVE 4 The creation of a resource list showing different types of innovative recycled materials that can be used for beach stabilization (seaweed, recycled irrigation hose, sludge, woodchips-compost, yard waste, mulch). The use of these materials reduces point and nonpoint source pollution.

OBJECTIVE 5 The BCCRP has provided an educational program which has benefited the people of the state of Florida. Numerous schools, volunteers, government agencies and interested persons who volunteered are now involved with such programs as the USDA-NRCS Earth Team. Also, the coastal slides, photos and videos have provided a planning tool and provides up-to-date pre- and post-storm and seasonal changes in a comprehensive manner. (Please see attached photographs and inventory list.)

OBJECTIVE 6 This objective twice exceeded the required task with the same initial budget through the co-operative efforts of the Cities of:

Cooper City	Dania	Ft. Lauderdale
Hallandale	Hollywood	Pompano Beach

also: USDA-NRCS
BETA
Broward Sheriff's Office Prison Work Team
Earth Team Volunteers
Broward County Public Schools
Civic and Environmental Clubs
and all walks of life.

The BCCRP stabilized/revegetated over 1,000 feet of beach-front (task was 500 feet) of dune restoration. The demonstration projects are in five municipalities within Broward County. These sites have been photographed and are now being monitored. See enclosed list of photos, etc.

OBJECTIVE 7 This objective was fulfilled with the approval of a new BCCRP Conservation Plan (see attached) that was submitted in the fourth (4th) Quarter Report (July-August-September 94) for review and comments from the FDCA.

This new "tool" plan is now being tested by applying it to the U. S. Army Corps of Engineers (USCOE) request for a cost assessment to repair coastal damage from Tropical Storm Gordon. (See attached press notice.) The BSWCD intends to work with all of the coastal cities in putting forth a common financial request, consistent with the USCOE Public Works Program administered by the Florida Department of Environmental Protection (FDEP) (see goals and objectives attached).

The BSWCD's approach to this critical erosion problem has taken an innovative comprehensive approach to reduce erosion and NPS pollution at the same time. The BCCRP total cost of $138,228.00 was a very good investment, as it has already provided tangible results and is moving toward total implementation of the twenty-four miles of Broward County coastline, when completed should serve as a model for the State of Florida and other communities. There were many additional benefits that resulted from the implementation of the BCCRP, such as increased inter-agency cooperation. Further, please find attached Letters of Support that are the result of the acceptance of the BSWCD/USDA-NRCS approach to beach erosion and Watershed Management Planning. The BSWCD appreciates the help and support from the many people who helped make this possible.

The BSWCD would be happy to share this information with anyone who calls (305)-584-1306 or (305)-792-1292 or fax us at (305)-792-4919.

Sincerely,

Russell M. Setti

Russell M. Setti
Project Director/Manager
Broward County Coastal Revegetation Plan

ACKNOWLEDGEMENTS

Thaddeus Hamilton - USDA-Natural Resources Conservation Service
Glenn W. Morris - Chairperson, Broward Soil and Water Conservation District
John Adams - Supervisor, Broward Soil and Water Conservation District
Henry Graham - Supervisor, Broward Soil and Water Conservation District
Linda Yarrish - Supervisor, Broward Soil and Water Conservation District
James Stone - Supervisor, Broward Soil and Water Conservation District
Anthony Russo - District Coordinator, Broward Soil and Water Conservation District
Dorothy Coyle - District Secretary, Broward Soil and Water Conservation District
Carol Burkart - Earth Team Volunteer and Artist
Edward Watson & Class - Earth Team Volunteers and Geologist
Mike Stumpe - Earth Team Volunteer, Geologist, and Science Department Head, Broward Community College Central Campus
Kate Doty and Paul Hall - Earth Team Volunteer Photographers
Abe Chernoff - American Association of Retired Persons (AARP) and Head Photographer
Carol Tappan Tobin - Field Supervisor
American Association of Retired Persons (AARP)
Hollywood Beach Civic Association
Barbara Beggs - Ft. Lauderdale Fingertips Association
Broward Employment & Training Administration (BETA)
Out -Of-School Program
Paxen Group
Summer Youth Program
Broward County Sheriff's Department - Prison Work Team
Coastal Cities - Hallandale, Hollywood, Dania, Fort Lauderdale, Hillsboro Beach, Pompano Beach, Deerfield Beach, Lauderdale-by-the-Sea, and Sea Ranch Lakes
John U. Lloyd State Recreation Area
Broward County
Cooper City and Cooper City Utilities
Hollywood Girl Scout Troop 007
Joe Lindstrom - Nova University Oceanographic Center
Earth Team Volunteer
City of Fort Lauderdale
City of Hollywood
City of Dania
Kensington Condominium, Pompano Beach
Broward County School Board
The children and teachers of the following schools:

Pine Crest School, Ft. Lauderdale
Nova Dwight D. Eisenhower Elementary School, Davie
Dr. Randazzo School, Coconut Creek
Floranada Elementary School, Ft. Lauderdale
Dania Elementary School, Dania
Martin Luther King Elementary School, Hollywood
Stranahan High School, Ft. Lauderdale
Cardinal Gibbons High School, Ft. L'dale
Sea Castle Elementary (PTA), Miramar
Davie Elementary School, Davie
Hollywood Hills High School, Hollywood
McArthur High School, Hollywood

Russell M. Setti, Project Director/Manager - Broward County Coastal Revegetataion Plan

STATE OF FLORIDA
FLORIDA COASTAL MANAGEMENT PROGRAM
DEPARTMENT OF COMMUNITY AFFAIRS
2740 CENTERVIEW DRIVE
TALLAHASSEE, FLORIDA 32399-2100

Financial Close-out Package

General Instructions: This package of close-out forms (Status of Funds and Summary of Expenditures) must be completed and submitted to the Florida Coastal Management Program (FCMP) in accordance with Condition #1B, Acceptance and Agreement Section of the Subgrant. Prior to this close-out, all programmatic reports and project deliverables must be received and approved by the FCMP. No other claims will be processed after this time.

Subgrant Number 94-OS-72-11-16-14-004

Subgrant Recipient BROWARD SOIL AND WATER CONSERVATION DISTRICT

Address 6191 Orange Drive Room 6179-0

Davie, Florida 33314

Beginning Date 10/01/93 Ending Date 09/30/94

FCMP Amount $ 68,728.00

In-Kind Match Amount $ 69,500.00

Cash Match Amount $ 0.00

STATUS OF FUNDS

Subgrantee: BROWARD SOIL AND WATER CONSERVATION DISTRICT

Subgrant Number: 94-OS-72-11-16-14-004

Claim Number	Date Rec'd.	FCMP Funds Received	In-Kind Match Reported	Cash Match Reported
Advance	12/23/93	$ 17,187.24	0.00	0.00
1	03/25/94	$ 10,360.27	18,743.00	0.00
2	05/27/94	$ 12,435.54	21,874.20	0.00
3	10/06/94	$ 19,369.60	26,846.91	0.00
4	NA	$ 8,683.52	69, 867.29	0.00
Final	NA	0.00	0.00	0.00
Totals		$ 68,036.17	137,331.40	0.00

	Total FCMP Funds Received	$ 68,036.17
		$ 68,036.17
Less:	FCMP Funds Expended	(_____)
	Refund Due to FCMP	0.00*

*If a refund is due to FCMP, please submit check along with the Close-Out Package made payable to: Department of Community Affairs.

I hereby certify that the above costs are true and valid costs incurred in accordance with the subgrant agreement.

Chief Financial Officer

CHIEF FINANCIAL OFFICER
Title

DECEMBER 8, 1994
Date

DCA/CZM Form 7a

FLORIDA COASTAL MANAGEMENT PROGRAM
SUMMARY OF EXPENDITURES

SUBGRANTEE: BROWARD SOIL AND WATER CONSERVATION DISTRICT

SUBGRANT NUMBER: 94-OS-72-11-16-14-004

BUDGET CATEGORY	FCMP BUDGET ALLOCATIONS	TOTAL TO DATE FCMP CLAIMS	FCMP BALANCES	IN-KIND MATCH BUDGET ALLOCATIONS	TOTAL TO DATE IN-KIND MATCH CLAIMS	IN-KIND MATCH BALANCES	MATCH BUDGET ALLOCATIONS	TOTAL TO DATE CASH MATCH CLAIMS	CASH MATCH BALANCES
SALARIES	30,500.00	30,497.00	3.00	43,475.00	111,296.35	-67,821.35	0.00	0.00	0.00
FRINGE BENEFITS	7,100.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TRAVEL	900.00	899.98	0.02	1,500.00	2,167.15	- 1,117.15	0.00	0.00	0.00
EQUIPMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPPLIES	9,123.00	8,594.15	528.85	14,575.00	13,727.90	847.10	0.00	0.00	0.00
CONTRACTUAL SERVICES	8,430.00	8,429.51	0.49	0.00	0.00	0.00	0.00	0.00	0.00
CONSTRUCTION (306A)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER	12,675.00	12,516.14	158.86	9,950.00	10,140.00	- 180.00	0.00	0.00	0.00
INDIRECT CHARGES	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
TOTALS	68,728.00	68,036.78	691.22	69,500.00	135,146.25		0.00	0.00	0.00

Broward Soil and Water Conservation District

6191 Orange Drive
Room 6179-O
Davie, FL 33314
305-584-1306

December 8, 1994

Florida Department of Community Affairs
Coastal Management Program
2740 Centerview Drive
Tallahassee, Florida 32399-2100

To whom it may concern:

The Board of Supervisors of the Broward Soil and Water Conservation District (BSWCD) hereby informs you that the Broward County Coastal Revegetation Plan (BCCRP) is complete. The educational benefit to the county was great! We had so many people who wanted to volunteer that we could not accommodate all of them. The idea of a Revegetation Project is now being accepted as one way of increasing the life expectancy of a Renourishment Project, and Limit Point and Non Point Source Pollution.

I would like to thank the DCA for giving us the chance to work with them and help the people of Broward County. Any and all information is available by calling our office at (305) 584-1306 or Fax us at (305) 792-4919.

Sincerely,

Anthony Russo
District Coordinator

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)
NATURAL RESOURCES CONSERVATION SERVICE (NRCS)
UCAP SERVICE CENTER
6191 ORANGE DRIVE
ROOM # 6179-O
DAVIE, FL. 33314

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USDA-NRCS REVIEW & RECOMMENDATION TO IMPLEMENT THE BROWARD SOIL & WATER CONSERVATION DISTRICT (BSWCD) BROWARD COUNTY COASTAL REVEGETATION PLAN (BCCRP).

HALLANDALE BEACH

All the vegetation was planted on the beach between 1985 and 1994. The approximate cost was $200,000.00. The value of the planting is over $6,000,000.00 to this point. The vegetation has extended the life of the renourishment of Hallandale Beach by two years. Tropical Storm Gordon damaged approximately 40% of the vegetation. If the vegetation was not there, we would have lost a large amount of the beach.

The educational value of using schools, scouts, senior citizens, garden clubs, and other volunteers is as important as the vegetation project itself. If we do not educate the public about the importance of the coastal environment, then there is no way to protect the coast.

The result clearly shows the value of using Best Management Practices (BMPs). The use of BMPs have enabled coastal revegetation projects to be established in three months as compared to 3 to 4 years under natural conditions.

HOLLYWOOD BEACH

The 6 sites were well established before Tropical Storm Gordon came through. The plantings trapped approximately 18 inches of sand and held the sand on the beach, reducing pollution and the clean up cost to the city, county, and state.

DANIA BEACH

The Sea Oats were well established when Tropical Storm Gordon came through. Before Tropical Storm Gordon, the Sea Oats measured approximately 5.5 feet. After the storm, there was 2 feet of sand over the plantings. The Sea Oats trapped a large amount of sand and prevented a washout area. In the past, this area would have served as a washout, where thousands of tons of sand would have funneled through the low opening and into the parking lot, and then into the Intercoastal Waterway.

POMPANO BEACH

The 1.2 miles of vegetation is well established. During Tropical Storm Gordon, the vegetation held thousands of tons of sand on the beach which reduced the clean up cost and pollution by approximately 85%.

HILLSBORO BEACH AND DEERFIELD BEACH

The need to revegetate or enhance the existing vegetation is very important. These beaches are losing a great amount of sand due to wind and water erosion.

JOHN U. LLOYD STATE RECREATION AREA

This area is a hot spot. Special attention on and off shore is needed to greatly reduce the erosion.

FORT LAUDERDALE BEACH

Most of the 500 feet that was planted at the end of the fourth quarter was destroyed by Tropical Storm Gordon. The plants were too young and were not established enough to hold the sand in place. This is the reason why the entire beach needs to be revegetated. Approximately $50,000.00 in tax payers dollars was spent to clean up the streets after the storm. At this time, there is no way to measure the pollution damage.

LAUDERDALE-BY THE SEA

Lauderdale-By-the-Sea has approximately 1.5 miles of beach. There is little or no vegetation on the beach, making the need for a vegetation plan self-evident.

The BSWCD is developing a plan for a Demonstration Site Project in Lauderdale-by-the-Sea.

SEA RANCH LAKES AND BROWARD COUNTY BEACH

Sea Ranch Lakes has approximately 1.5 miles of beach, of which 23% is revegetated. Most of the plantings were installed under the supervision of the Broward Soil and Water Conservation District (BSWCD) and the USDA-NRCS. Volunteers installed the project as part of the BSWCD Conservation Education Program. Additional information regarding cities and agencies is on file at the BSWCD office. The vegetation was an effective tool in holding the sand on the beach.

The data was collected through the following methods:

1) Site investigation
2) Area photos
3) Consulting with coastal cities
4) USDA - Soil Conservation Service
5) BSWCD - Staff and Volunteers

SUMMARY

There are approximately 18 miles of coastline in Broward County that need to be revegetated. The estimated cost of revegetating these 18 miles will be $7,000,000.00. The approximate value after revegetation has been completed will be $139,708,800.00. The educational value is of equal importance. Without educating the public and getting them involved in the

installation of the revegetation project, our care and protection for the coastal environment will continue to decline.

From 1976 to 1994, The USDA-Soil Conservation Service, and the Broward Soil and Water Conservation District have developed Best Management Practices (BMPs) that have enabled a coastal vegetation project to have, in three months, the equivalent growth of the same species in 3 to 4 years under natural conditions. These BMPs have been used to establish coastal revegetation projects with a value of approximately $30,000,000.00 to Broward County and the State of Florida. The educational value to the many schools, civic organizations, scouts, clubs, governmental agencies, and other volunteers is of equal value. These organizations, groups, schools, and other volunteers should be used to revegetate the remaining 18 miles of Broward County coast line.

RECOMMENDATIONS

1. Revegetate and/or stabilize 24 miles of Broward County Beaches with innovative techniques to reduce erosion and Nonpoint Source Pollution.

2. Educate the public on the importance of coastal revegetation by getting them involved. Use schools (there are over 350 schools in Broward County), civic groups, clubs, scouts, conservation corps, governmental agencies, cities and other volunteers.

3. Use Best Management Practices (BMPs) developed by the Broward Soil and Water Conservation District and the USDA-Natural Resources Conservation Service.

In the event you need any additional information, please call (305) 792-1292 or (305) 584-1305, or Fax your request to (305) 792-4919.

Sincerely,

Thaddeus Hamilton
Urban Community Assistance Program
Natural Resources Specialist Coordinator
Broward, Dade, Monroe & Palm Beach Counties

8 1/2 X 11

1-7
Broward's beautiful beaches are the foundation of its vital tourism industry, and provide valuable recreational opportunities for residents and visitors alike.

1. (26054-35) FT. LAUDERDALE, October 16, 1994, high tide, .1 mile south of 1140 Seabreeze Blvd., looking South
2. (20432-27) POMPANO BEACH, September 17, 1994, 1430 S. Ocean Blvd, looking North
3. (51876-11) FT. LAUDERDALE, October 16, 1994, high tide, Seville Street, looking North
4. (26058-12) HOLLYWOOD BEACH, October 15, 1994, 1214 N. Broadwalk, looking South
5. (51876-2) FT. LAUDERDALE, October 16, 1994, high tide, 521 N. Atlantic Blvd., looking South
6. (26053-20) FT. LAUDERDALE, October 16, 1994, high tide, 900 N. Birch Road (Bonnet estate), looking North
7. (20435-34) POMPANO BEACH, September 17, 1994, 2203 Bay Drive, looking North

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8-13
Portions of the beach are becoming precariously thin. Man-made structures accelerate erosion of the beaches.

8. (25048-34) HALLANDALE BEACH, October 9, 1994,.7 mile south of Hallandale-Hollywood border, looking North
9. (26052-2) FT. LAUDERDALE, October 16, 1994, high tide, NE 18th Street, looking North
10. (25048-2) HALLANDALE BEACH, October 9, 1994, Hallandale-Hollywood border, looking South
11. (26050-22) HOLLYWOOD BEACH, October 15, 1994, .5 mile north of Hollywood-Hallandale line, looking North
12. (26053-36) FT. LAUDERDALE, October 16, 1994, high tide, 521 N. Atlantic Blvd., looking North
13. (26053-28) FT. LAUDERDALE, October 16, 1994, high tide, 700 N. Atlantic Blvd., looking North

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14-15
Just south of the Port Everglades jetty, interruption of the littoral flow creates the worst erosion in the county. Lloyd State Park beaches are undercut.

14. (20438-33) LLOYD STATE PARK, September, 1994. Lloyd State Park immediately south of Port Everglades
15. (20437-7) LLOYD STATE PARK, September, 1994. Lloyd State Park.

16
Conversely, the area immediately north of the Port receives surplus sand.

16. (26054-26) FT. LAUDERDALE, October 16, 1994, high tide, .2 mile south of 801 Seabreeze Blvd., original entrance to Port Everglades

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17-19
Concrete seawalls actually worsen erosion by disrupting the natural rhythm of the waves breaking on the beach.

17. (26050-18) HOLLYWOOD BEACH, October 15, 1994, .4 mile north of Hollywood-Hallandale line, looking North
18. (26050-6) HOLLYWOOD BEACH, October 15, 1994, .1 mile north of Hollywood-Hallandale line, looking North
19. (20432-36) POMPANO BEACH, September 17, 1994, 1380 S. Ocean Blvd, looking North

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20-23
Attempts to artificially "renourish" the beach by adding sand have proven short-lived. A more permanent solution can be found by studying the natural condition of the beach before development. Vegetation traps and anchors the sand and slows the rate of erosion.

20. (26051-33) HOLLYWOOD BEACH, October 15, 1994. Beach vegetation near Keating Beach.
21. (20432-29) POMPANO BEACH, September 17, 1994, 1430 S. Ocean Blvd, sea oats
22. (20432-28) POMPANO BEACH, September 17, 1994, 1430 S. Ocean Blvd, sea oats
23. (26051-36) HOLLYWOOD BEACH, October 15, 1994. Beach vegetation near Keating Beach.

24-26
Sea oats protect the beach while beautifying it.

24. (26058-29) HOLLYWOOD BEACH, October 15, 1994. Arthur Street, sea oats
25. (26058-22) HOLLYWOOD BEACH, October 15, 1994. Hayes Street, sea oats
26. (26058-21) HOLLYWOOD BEACH, October 15, 1994. Hayes Street, sea oats

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27-28
Revegetation is a cost-effective method of erosion control for both governmental agencies and private interests.

27. (25048-13) HALLANDALE BEACH, October 9, 1994,.3 mile south of Hallandale-Hollywood border, City of Hallandale sea oats planting
28. (25048-23) HALLANDALE BEACH, October 9, 1994, 2000 S. Ocean Drive, private sea oats installation

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29-32
Appropriate intervention is necessary to preserve our natural assets for future generations. Revegetation is effective, inexpensive, and attractive.

29. (26055-31) FT. LAUDERDALE, October 16, 1994, high tide, .2 mile south of 1700 S. Ocean Lane, looking South
30. (26051-18) HOLLYWOOD BEACH, October 15, 1994. New Hampshire Street, looking South
31. (51876-16) FT. LAUDERDALE, October 16, 1994, high tide, Sebastian Street, looking South
32. (26055-34) FT. LAUDERDALE, October 16, 1994, high tide, .3 mile south of 1700 S. Ocean Lane, looking South
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Not used.

(20435-4) POMPANO BEACH, September 17, 1994, 750 N. Ocean Blvd., looking North
(25048-35) HALLANDALE BEACH, October 9, 1994,.7 mile south of Hallandale-Hollywood border, looking South

26054-35

1

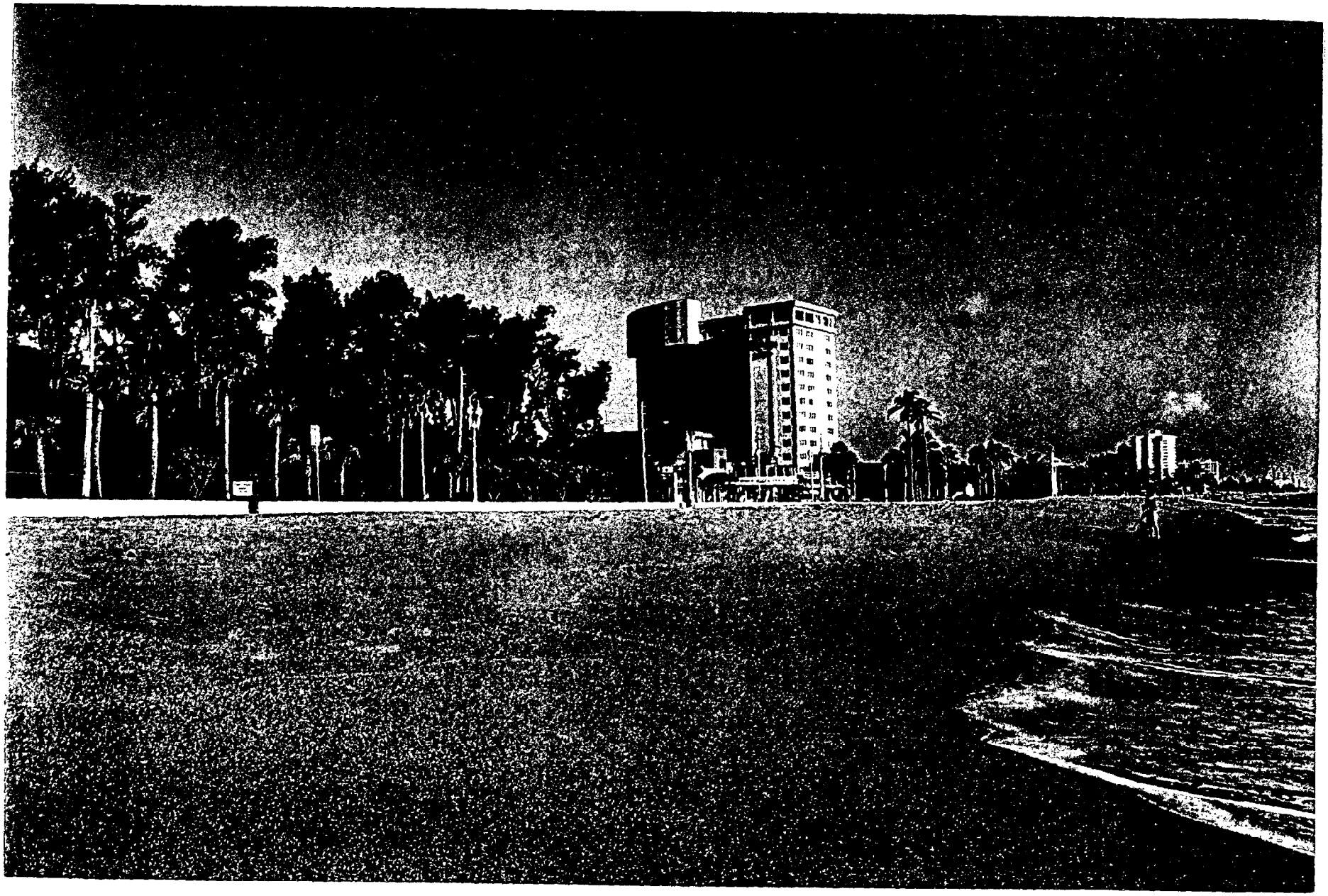
20432-27

51876-11

#3

26058-12

51876-2



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20435-34

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25048-34

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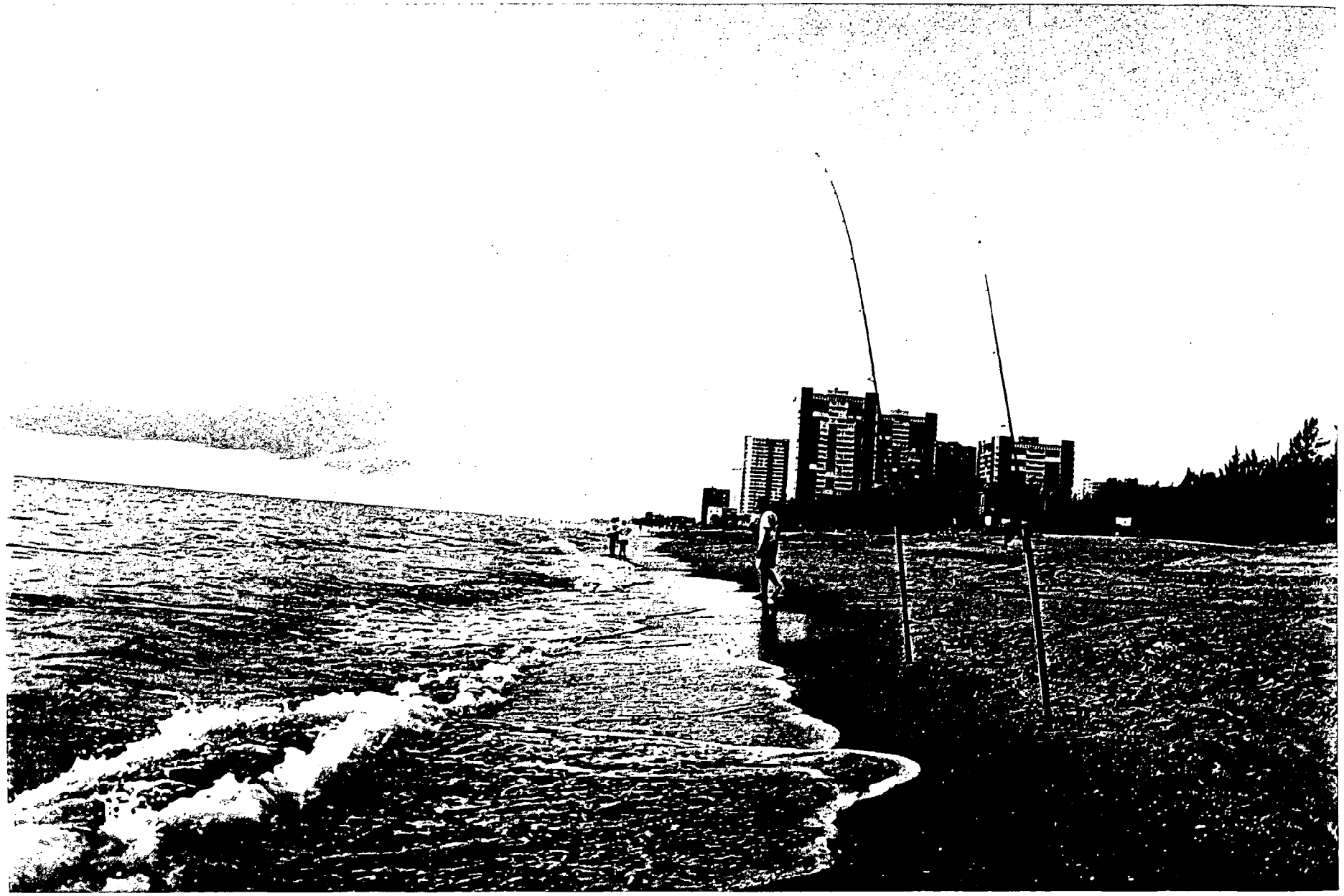
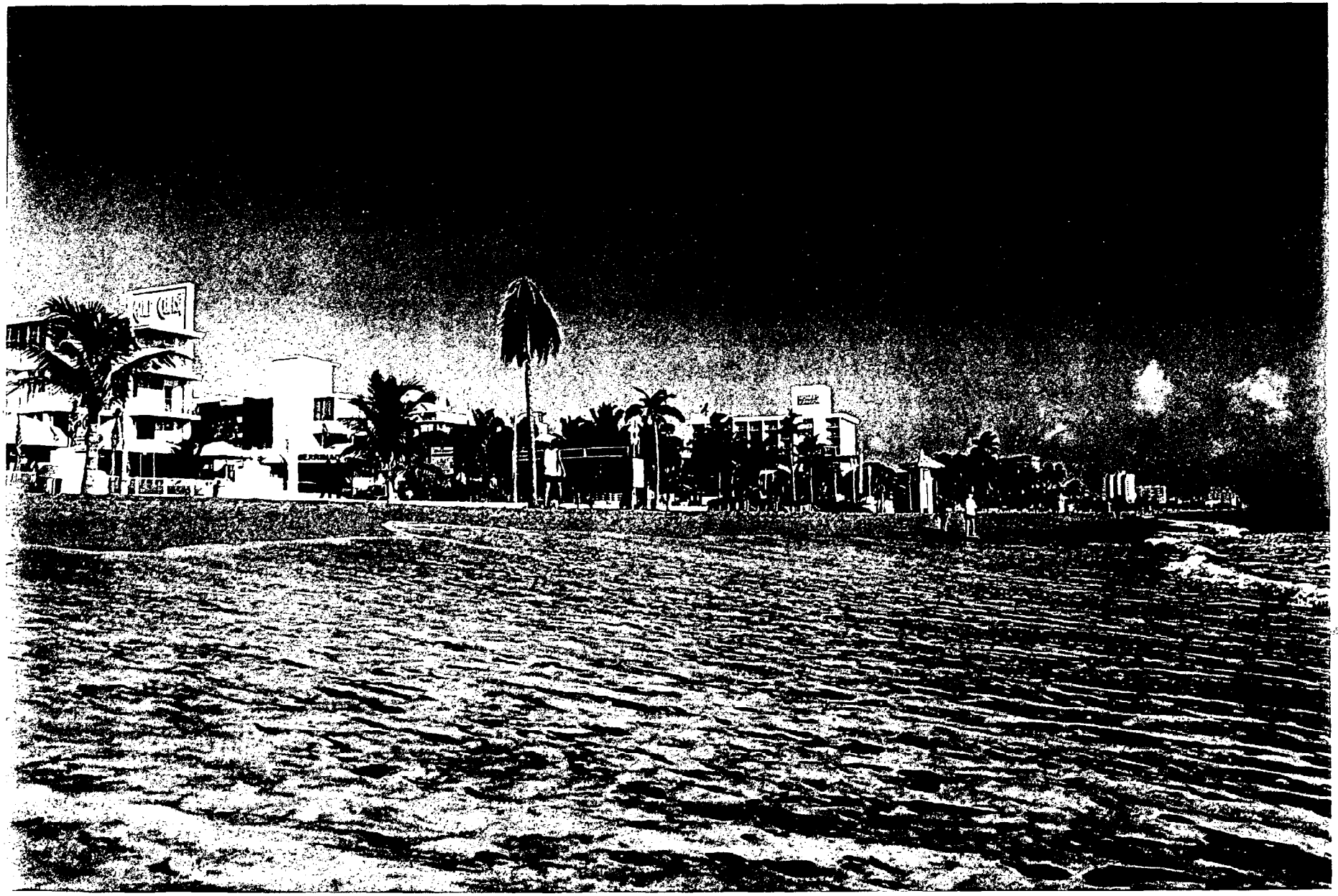
26052-2

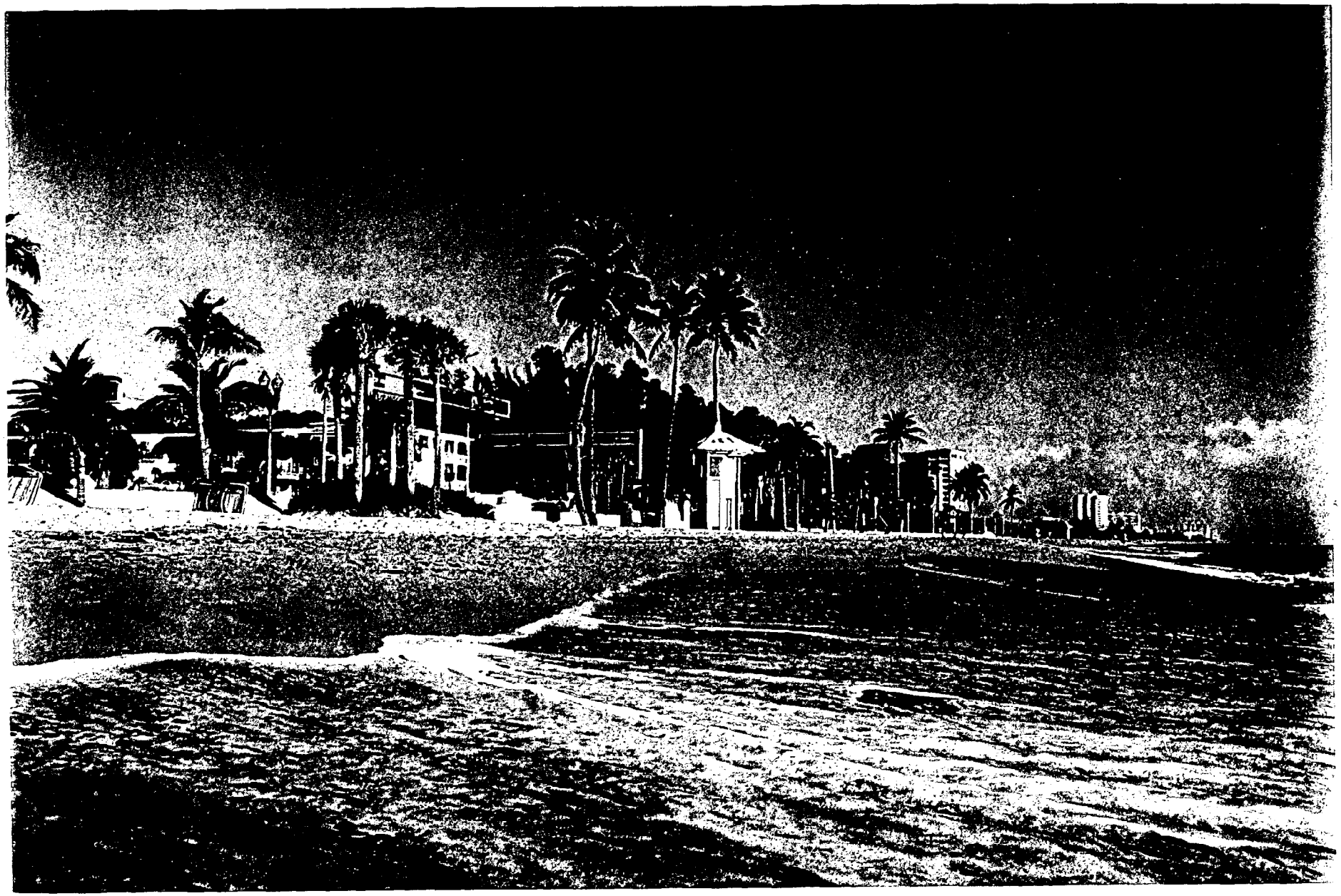


25048-2

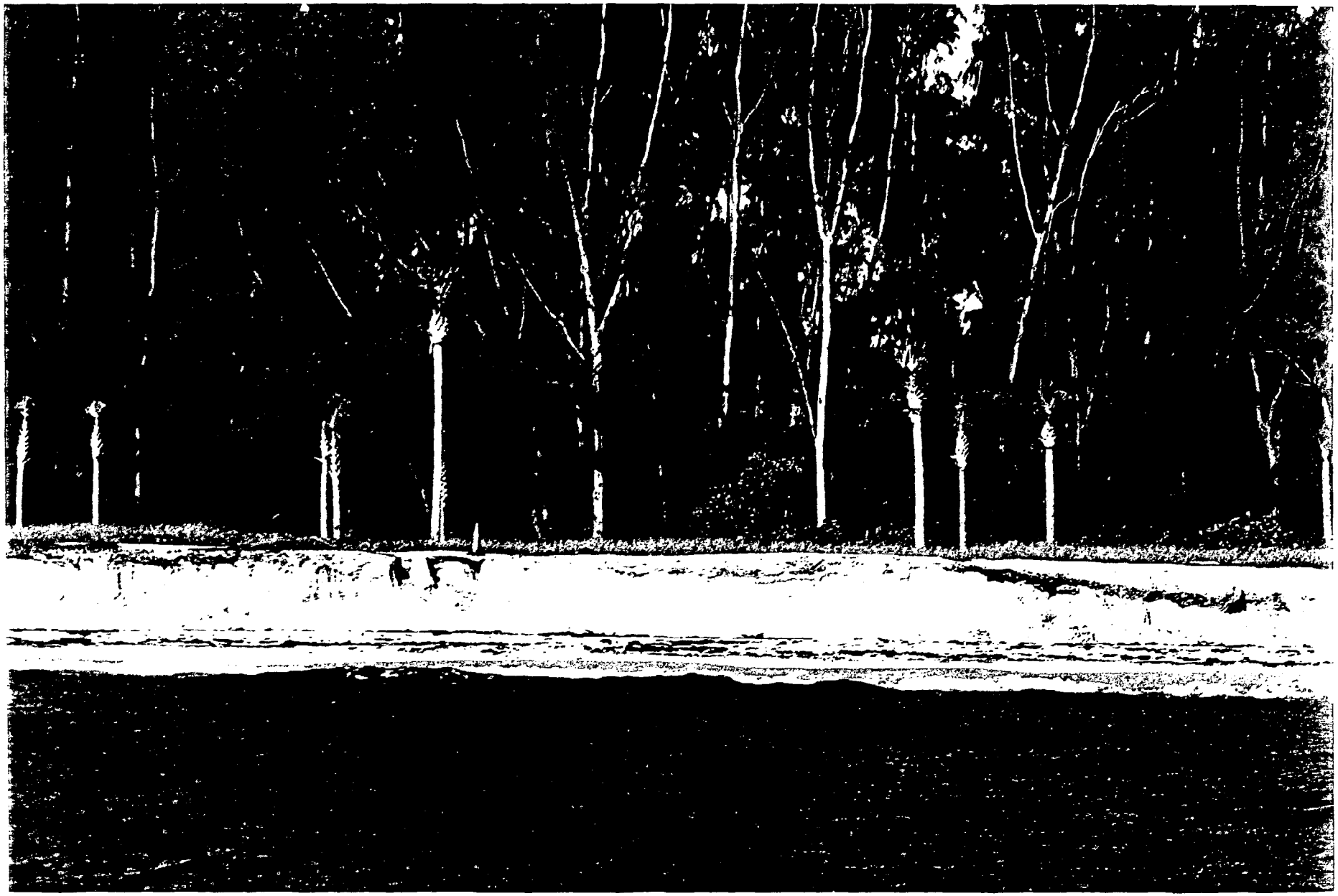
26050-22



26053-36



26 053-28



20438-33

20437-7

15

26054-26

16

2605-0-18

26050-6

18

90432-36

26051-23

26058-29

30

26058-22

25

26

25848-13

25048-23

26051-18

30

26055-34

25048-35

X 5

HOLLYWOOD BEACH
October 15, 1994

Roll 1
26050

1. Storm clouds
2. Hollywood-Hallandale line, looking North
3. Hollywood-Hallandale line, looking North
4. Hollywood-Hallandale line, looking South
5. Hollywood-Hallandale line, looking South
6. .1 mile north of Hollywood-Hallandale line, looking North
7. .1 mile north of Hollywood-Hallandale line, looking North
8. .1 mile north of Hollywood-Hallandale line, looking South
9. .1 mile north of Hollywood-Hallandale line, looking South
10. .2 mile north of Hollywood-Hallandale line, looking North
11. .2 mile north of Hollywood-Hallandale line, looking North (Immediately north of this area is one of the places that loses beach the fastest)
12. .2 mile north of Hollywood-Hallandale line, looking South
13. .2 mile north of Hollywood-Hallandale line, looking South
14. .3 mile north of Hollywood-Hallandale line, looking North
15. .3 mile north of Hollywood-Hallandale line, looking North
16. .3 mile north of Hollywood-Hallandale line, looking South
17. .3 mile north of Hollywood-Hallandale line, looking South
18. .4 mile north of Hollywood-Hallandale line, looking North
19. .4 mile north of Hollywood-Hallandale line, looking North
20. .4 mile north of Hollywood-Hallandale line, looking South
21. .4 mile north of Hollywood-Hallandale line, looking South
22. .5 mile north of Hollywood-Hallandale line, looking North
23. .5 mile north of Hollywood-Hallandale line, looking North
24. .5 mile north of Hollywood-Hallandale line, looking South
25. .5 mile north of Hollywood-Hallandale line, looking South
26. .6 mile north of Hollywood-Hallandale line, looking North
27. .6 mile north of Hollywood-Hallandale line, looking North
28. .6 mile north of Hollywood-Hallandale line, looking South
29. .6 mile north of Hollywood-Hallandale line, looking South
30. .7 mile north of Hollywood-Hallandale line, looking North
31. .7 mile north of Hollywood-Hallandale line, looking North
32. .7 mile north of Hollywood-Hallandale line, looking South
33. .7 mile north of Hollywood-Hallandale line, looking South
34. Greenbriar Street, looking North
35. Greenbriar Street, looking North
36. Greenbriar Street, looking South
37. Greenbriar Street, looking South

Roll 2
26057

1. Eucalyptus Street, looking South
2. Eucalyptus Street, looking North
3. Eucalyptus Street, looking North
4. Azalea Terrace, looking South

5. Azalea Terrace, looking South
6. Azalea Terrace, looking North
7. Azalea Terrace, looking North
8. +.1 mile north of Azalea Terrace, looking South
9. +.1 mile north of Azalea Terrace, looking South
10. +.1 mile north of Azalea Terrace, looking North
11. +.1 mile north of Azalea Terrace, looking North
12. Jefferson Street, looking South
13. Jefferson Street, looking South
14. Jefferson Street, looking North
15. Jefferson Street, looking North
16. Monroe Street, looking South
17. Monroe Street, looking South
18. Monroe Street, looking North
19. Monroe Street, looking North
20. Virginia Street, looking South
21. Virginia Street, looking South
22. Virginia Street, looking North
23. Virginia Street, looking North
24. Harrison Street, looking South
25. Harrison Street, looking South
26. Harrison Street, looking North
27. Harrison Street, looking North
(another high erosion area)
28. Oceanwalk, looking South
29. Oceanwalk, looking South
30. Oceanwalk, looking North
31. Oceanwalk, looking North
32. Arizona Street, looking South
33. Arizona Street, looking South
34. Arizona Street, looking North
35. Arizona Street, looking North
36. New York Street, looking South
37. New York Street, looking South

Roll 3
26058, ISO 200

1. Earth Team volunteer
2. New York Street, looking North
3. New York Street, looking North
4. Indiana Street, looking South
5. Indiana Street, looking South
6. Indiana Street, looking North
7. Indiana Street, looking North
8. Guardshack by Beach Safety Patrol, looking South
9. Guardshack by Beach Safety Patrol, looking South
10. Guardshack by Beach Safety Patrol, looking North
11. Guardshack by Beach Safety Patrol, looking North
12. 1214 N. Broadwalk, looking South
13. 1214 N. Broadwalk, looking South
14. 1214 N. Broadwalk, looking North
15. 1214 N. Broadwalk, looking North
16. Hayes Street, gulls and sea birds

17. Hayes Street, looking South
18. Hayes Street, looking South
19. Hayes Street, looking North
    ayes t ooking North

22. Hayes Street, sea oats
23. Hayes Street, sea oats
24. Arthur Street, looking South
25. Arthur Street, looking South
26. Arthur Street, looking North
27. Arthur Street, looking North
28. Arthur Street, sea oats
29. Arthur Street, sea oats
30. Oklahoma Street, looking South
31. Oklahoma Street, looking South
32. Oklahoma Street, looking North
33. Oklahoma Street, looking North
34. Nebraska Street, looking South
35. Nebraska Street, looking South
35. Nebraska Street, looking South
36. Nebraska Street, looking North

Roll 4, ISO 200

1. Nebraska Street, looking North
2. Roosevelt Street, looking South
3. Roosevelt Street, looking South
4. Roosevelt Street, looking North
5. Roosevelt Street, looking North
6. Carolina Street, looking South
7. Carolina Street, looking South
8. Carolina Street, looking North
9. Carolina Street, looking North
10. Harding Street, looking South
11. Harding Street, looking South
12. Harding Street, looking North
13. Harding Street, looking North
14. Missouri Street, looking South
15. Missouri Street, looking South
16. Missouri Street, looking North
17. Missouri Street, looking North
18. New Hampshire Street, looking South
19. New Hampshire Street, looking South
20. New Hampshire Street, looking North
21. New Hampshire Street, looking North
22. Thomas Street, looking South
23. Thomas Street, looking South
24. Thomas Street, looking North
25. Thomas Street, looking North
26. Keating Beach, looking South
27. Keating Beach, looking South
28. Keating Beach, looking North
29. Keating Beach, looking North
30-36 Beach vegetation

FT. LAUDERDALE
October 16, 1994
high tide

Roll 1
26052

1. NE 18th Street, looking North
2. NE 18th Street, looking North
3. NE 18th Street, looking North
4. NE 18th Street, looking South
5. NE 18th Street, looking South
6. NE 17th Court, looking North
7. NE 17th Court, looking North
8. NE 17th Court, looking South
9. NE 17th Court, looking South
10. NE 16th Place, looking North
11. NE 16th Place, looking North
12. NE 16th Place, looking South
13. NE 16th Place, looking South
14. NE 16th Court, looking North
15. NE 16th Court, looking North
16. NE 16th Court, looking South
17. NE 16th Court, looking South
18. NE 15th Court, looking North
19. NE 15th Court, looking North
20. NE 15th Court, looking South
21. NE 15th Court, looking South
22. NE 14th Court, new sea oats
23. NE 14th Court, new sea oats
24. NE 14th Court, looking North
25. NE 14th Court, looking North
26. NE 14th Court, looking South
27. NE 14th Court, looking South
28. +.1 mile S of NE 14th Court, looking North
29. +.1 mile S of NE 14th Court, looking North
30. +.1 mile S of NE 14th Court, looking South
31. +.1 mile S of NE 14th Court, looking South
32. +.2 mile S of NE 14th Court (Birch State Park), looking North
33. +.2 mile S of NE 14th Court (Birch State Park), looking North
34. +.2 mile S of NE 14th Court (Birch State Park), looking South
35. +.2 mile S of NE 14th Court (Birch State Park), looking South
36. +.3 mile S of NE 14th Court (Birch State Park), looking North
37. +.3 mile S of NE 14th Court (Birch State Park), looking North

Roll 2

1. Beach Patrol

2. +.3 mile S of NE 14th Court (Birch State Park), looking South
3. +.4 mile S of NE 14th Court (Birch State Park), looking North
4. +.4 mile S of NE 14th Court (Birch State Park), looking North
5. +.4 mile S of NE 14th Court (Birch State Park), looking South
6. +.4 mile S of NE 14th Court (Birch State Park), looking South
7. +.5 mile S of NE 14th Court (Birch State Park), looking North
8. +.5 mile S of NE 14th Court (Birch State Park), looking North
9. +.5 mile S of NE 14th Court (Birch State Park), looking South
10. +.5 mile S of NE 14th Court (Birch State Park), looking South
11. Sunrise Boulevard, looking North
12. Sunrise Boulevard, looking North
13. Sunrise Boulevard, looking South
14. Sunrise Boulevard, looking South
15. NE 9th Street, looking North
16. NE 9th Street, looking North
17. NE 9th Street, looking South
18. NE 9th Street, looking South
19. 900 N. Birch Road (Bonnet House), looking North
20. 900 N. Birch Road (Bonnet House), looking North
21. 900 N. Birch Road (Bonnet House), looking South
22. 900 N. Birch Road (Bonnet House), looking South
23. 735 N. Ocean Drive, looking North
24. 735 N. Ocean Drive, looking North
25. 735 N. Ocean Drive, looking South
26. 735 N. Ocean Drive, looking South
27. 700 N. Atlantic Blvd., looking North
28. 700 N. Atlantic Blvd., looking North
29. 700 N. Atlantic Blvd., looking South
30. 700 N. Atlantic Blvd., looking South
31. Terramar Street, looking North
32. Terramar Street, looking North
33. Terramar Street, looking South
34. Terramar Street, looking South
35. 521 N. Atlantic Blvd., looking North
36. 521 N. Atlantic Blvd., looking North
37. 521 N. Atlantic Blvd., looking South

Roll 3
51876

1. throwaway
2. 521 N. Atlantic Blvd., looking South
3. 435 N. Atlantic Blvd., looking North
4. 435 N. Atlantic Blvd., looking North
5. 435 N. Atlantic Blvd., looking South

6. 435 N. Atlantic Blvd., looking South
7. 303 N. Atlantic Blvd., looking North
8. 303 N. Atlantic Blvd., looking North
9. 303 N. Atlantic Blvd., looking South
10. 303 N. Atlantic Blvd., looking South
11. Seville Street, looking North
12. Seville Street, looking North
13. Seville Street, looking South
14. Seville Street, looking South
15. Sebastian Street, looking North
16. Sebastian Street, looking North
17. Sebastian Street, looking South
18. Sebastian Street, looking South
19. .1 mile south of Sebastian Street, looking North
20. .1 mile south of Sebastian Street, looking North
21. .1 mile south of Sebastian Street, looking South
22. .1 mile south of Sebastian Street, looking South
23. Cortez Street, looking North
24. Cortez Street, looking North
25. Cortez Street, looking South
26. Cortez Street, looking South
27. Cortez Street, sea oats
28. Poinciana Street, looking North
29. Poinciana Street, looking North
30. Poinciana Street, looking South
31. Poinciana Street, looking South
32. Las Olas Blvd, looking North
33. Las Olas Blvd, looking North
34. Las Olas Blvd.
35. Las Olas Blvd, looking South
36. Las Olas Blvd, looking South
37. Las Olas Blvd.

Roll 4
26054

1. Throwaway shot of jeep
2. 225 S. Atlantic Blvd., looking North
3. 225 S. Atlantic Blvd., looking South
4. 225 S. Atlantic Blvd., looking South
5. 225 S. Atlantic Blvd., looking South
6. SE 5th Street, looking North
7. SE 5th Street, looking North
8. SE 5th Street, looking South
9. SE 5th Street, looking South
10. 545 Seabreeze, looking North
11. 545 Seabreeze, looking North
12. 545 Seabreeze, looking South
13. 545 Seabreeze, looking South
14. 801 Seabreeze Blvd., looking North
15. 801 Seabreeze Blvd., looking North
16. 801 Seabreeze Blvd., looking South
17. 801 Seabreeze Blvd., looking South
18. .1 mile south of 801 Seabreeze Blvd., looking North

19. .1 mile south of 801 Seabreeze Blvd., looking North
20. .1 mile south of 801 Seabreeze Blvd., looking South
21. .1 mile south of 801 Seabreeze Blvd., looking South
22. .2 mile south of 801 Seabreeze Blvd., looking North
23. .2 mile south of 801 Seabreeze Blvd., looking North
24. .2 mile south of 801 Seabreeze Blvd., original entrance to Port Everglades (destroyed in 1929(?) hurricane)
25. .2 mile south of 801 Seabreeze Blvd., looking South
26. .2 mile south of 801 Seabreeze Blvd., looking South
27. .2 mile south of 801 Seabreeze Blvd., original entrance to Port Everglades
28. 1140 Seabreeze Blvd., looking North
29. 1140 Seabreeze Blvd., looking North
30. 1140 Seabreeze Blvd., looking South
31. 1140 Seabreeze Blvd., looking South
32. .1 mile south of 1140 Seabreeze Blvd.(end of public beach), looking North
33. .1 mile south of 1140 Seabreeze Blvd., looking North
34. .1 mile south of 1140 Seabreeze Blvd., looking South
35. .1 mile south of 1140 Seabreeze Blvd., looking South
36. .2 mile south of 1140 Seabreeze Blvd. (Marriott), looking North
37. .2 mile south of 1140 Seabreeze Blvd. (Marriott), looking North

Roll 5
26055

1. Marriott
2. .2 mile south of 1140 Seabreeze Blvd. (Marriott), looking South
3. .2 mile south of 1140 Seabreeze Blvd. (Marriott), looking South
4. .3 mile south of 1140 Seabreeze Blvd. (Marriott), looking North
5. .3 mile south of 1140 Seabreeze Blvd. (Marriott), looking North
6. .3 mile south of 1140 Seabreeze Blvd. (Marriott), looking South
7. .3 mile south of 1140 Seabreeze Blvd. (Marriott), looking South
8. .4 mile south of 1140 Seabreeze Blvd. (Marriott), looking North
9. .4 mile south of 1140 Seabreeze Blvd. (Marriott), looking North
10. .4 mile south of 1140 Seabreeze Blvd. (Marriott), looking South
11. .4 mile south of 1140 Seabreeze Blvd. (Marriott), looking South
12. .4 mile south of 1140 Seabreeze Blvd., pines. (The whole beach used to look like this.)
13. .5 mile south of 1140 Seabreeze Blvd., looking North
14. .5 mile south of 1140 Seabreeze Blvd., looking North
15. .5 mile south of 1140 Seabreeze Blvd., looking South

16. .5 mile south of 1140 Seabreeze Blvd., looking South
17. .6 mile south of 1140 Seabreeze Blvd., looking North
18. .6 mile south of 1140 Seabreeze Blvd., looking North
19. .6 mile south of 1140 Seabreeze Blvd., looking South
20. .6 mile south of 1140 Seabreeze Blvd., looking South
21. 1700 S. Ocean Lane, looking North
22. 1700 S. Ocean Lane, looking North
23. 1700 S. Ocean Lane, looking South
24. 1700 S. Ocean Lane, looking South
25. .1 mile south of 1700 S. Ocean Lane, looking North
26. .1 mile south of 1700 S. Ocean Lane, looking North
27. .1 mile south of 1700 S. Ocean Lane, looking South
28. .1 mile south of 1700 S. Ocean Lane, looking South
29. .2 mile south of 1700 S. Ocean Lane, looking North
30. .2 mile south of 1700 S. Ocean Lane, looking North
31. .2 mile south of 1700 S. Ocean Lane, looking South
32. .2 mile south of 1700 S. Ocean Lane, looking South
33. .3 mile south of 1700 S. Ocean Lane, looking North
34. .3 mile south of 1700 S. Ocean Lane, looking North
35. .3 mile south of 1700 S. Ocean Lane, looking South
36. .3 mile south of 1700 S. Ocean Lane, looking South
37. north jetty of Port Everglades

Roll 6
26056

1-14 north jetty, Port Everglades
15-17 beach scenes
18-20 Marriott resort grounds
21-37 Port Everglades from 17th Street Causeway

HALLANDALE BEACH
October 9, 1994

Roll 1, 100 ISO
25048

1. northmost end of Hallandale Beach, looking South
2. northmost end of Hallandale Beach, looking South
3. northmost end of Hallandale Beach, looking South
4. + .1 mile south of start, looking North
5. + .1 mile south of start, looking North
6. + .1 mile south of start, looking South
7. + .1 mile south of start, looking South
8. + .2 mile south of start, looking North
9. + .2 mile south of start, looking North
10. + .2 mile south of start, looking South
11. + .2 mile south of start, looking South
12. + .3 mile south of start, Sea Oats
13. + .3 mile south of start, Sea Oats
14. + .3 mile south of start, looking North
15. + .3 mile south of start, looking North
16. + .3 mile south of start, looking South
17. + .3 mile south of start, looking South
18. + .4 mile south of start, looking North
19. + .4 mile south of start, looking North
20. + .4 mile south of start, looking South
21. + .4 mile south of start, looking South
22. 2000 S. Ocean Drive, Sea Oats
23. 2000 S. Ocean Drive, Sea Oats
24. 2000 S. Ocean Drive, looking North
25. 2000 S. Ocean Drive, looking North
26. 2000 S. Ocean Drive, looking South
27. 2000 S. Ocean Drive, looking South
28. 2080 S. Ocean Drive, looking North
29. 2080 S. Ocean Drive, looking North
30. 2080 S. Ocean Drive, looking South
31. 2080 S. Ocean Drive, looking South
32. +.7 mile south of start, looking North
33. +.7 mile south of start, looking North
34. +.7 mile south of start, looking South
35. +.7 mile south of start, looking South
36. +.8 mile south of start, looking North

POMPANO BEACH
September 17, 1994

Roll 1, 200 ISO
20432

1. 1950 S. Ocean Blvd, looking South
2. 1950 S. Ocean Blvd, looking South
3. 1950 S. Ocean Blvd, looking South
4. 1950 S. Ocean Blvd, looking North
5. 1950 S. Ocean Blvd, looking North
6. 1950 S. Ocean Blvd, raft
7. 1950 S. Ocean Blvd, raft
8. 1950 S. Ocean Blvd, raft
9. 1950 S. Ocean Blvd, raft
10. 1950 S. Ocean Blvd, raft
11. .2 mi north of 1950 S. Ocean Blvd., looking South
12. .2 mi north of 1950 S. Ocean Blvd., looking South
13. .2 mi north of 1950 S. Ocean Blvd., looking North
12. .2 mi north of 1950 S. Ocean Blvd., vacant lot
15. 1530 S. Ocean Blvd, looking South
16. 1530 S. Ocean Blvd, looking South
17. 1530 S. Ocean Blvd, looking North
18. 1530 S. Ocean Blvd, looking North
19. 1470 S. Ocean Blvd, looking South
20. 1470 S. Ocean Blvd, looking South
21. 1470 S. Ocean Blvd, looking North
22. 1470 S. Ocean Blvd, raft
23. 1470 S. Ocean Blvd, raft
24. 1430 S. Ocean Blvd, looking South
25. 1430 S. Ocean Blvd, looking South
26. 1430 S. Ocean Blvd, looking North
27. 1430 S. Ocean Blvd, looking North
28. 1430 S. Ocean Blvd, sea oats
29. 1430 S. Ocean Blvd, sea oats
30. 1398 S. Ocean Blvd, looking South
31. 1398 S. Ocean Blvd, looking South
32. 1398 S. Ocean Blvd, looking North
33. 1398 S. Ocean Blvd, looking North
34. 1380 S. Ocean Blvd, looking South
35. 1380 S. Ocean Blvd, looking South
36. 1380 S. Ocean Blvd, looking North
37. 1380 S. Ocean Blvd, looking North

Roll 2, 100 ISO
20433

1. 1360 S. Ocean Blvd, looking South
2. 1360 S. Ocean Blvd, looking South
3. 1360 S. Ocean Blvd, looking South
4. 1360 S. Ocean Blvd, looking North
5. 1360 S. Ocean Blvd, looking North
6. birds in flight
7. 1340 S. Ocean Blvd, looking South

8. 1340 S. Ocean Blvd, looking South
9. 1340 S. Ocean Blvd, looking North
10. 1340 S. Ocean Blvd, looking North
11. 1200 S. Ocean Blvd, looking South
12 1200 S. Ocean Blvd, looking South
13. 1200 S. Ocean Blvd, looking North
14. 1200 S. Ocean Blvd, looking North
15. 1100 S. Ocean Blvd, looking South
16. 1100 S. Ocean Blvd, looking South
17. 1100 S. Ocean Blvd, looking North
18. 1100 S. Ocean Blvd, looking North
19. 800 Briny, looking South
20. 800 Briny, looking South
21. 800 Briny, looking North
22. 800 Briny, looking North
23. 800 Briny, natural dune
24. 600 Briny, looking South
25. 600 Briny, looking South
26. 600 Briny, looking North
27. 600 Briny, looking North
28. 400 Briny, looking South
29. 400 Briny, looking South
30. 400 Briny, looking North
31. 400 Briny, looking North
32. 200 Briny, looking South
33. 200 Briny, looking South
34. 200 Briny, looking North
35. 200 Briny, looking North
36. Atlantic Boulevard, looking South

Roll 3, 100 ISO
20434

1. Atlantic Boulevard, looking South
2. Atlantic Boulevard, looking South
3. Atlantic Boulevard, looking North
4. Atlantic Boulevard, looking North
5. Atlantic Boulevard, beach clean-up
6. Atlantic Boulevard, beach clean-up
7. Life Guard Station, looking South
8. Life Guard Station, looking South
9. Life Guard Station, wave
10. Life Guard Station, looking North
11. Life Guard Station, looking North
12. 133 Pompano Beach Blvd., rip current sign
13. 133 Pompano Beach Blvd., looking South
14. 133 Pompano Beach Blvd., looking South
15. 133 Pompano Beach Blvd., looking North
16. 133 Pompano Beach Blvd., looking North
17. NE 3rd Street, looking South
18. NE 3rd Street, looking South
19. NE 3rd Street, looking North
20. NE 3rd Street, looking North
21. 405 N. Ocean Blvd., looking South

22. 405 N. Ocean Blvd., looking South
23. 405 N. Ocean Blvd., looking North
24. 405 N. Ocean Blvd., looking North
25. NE 5th Street, looking South
26. NE 5th Street, looking South
27. NE 5th Street, looking North
28. NE 5th Street, looking North
29. 531 N. Ocean Blvd., looking South
30. 531 N. Ocean Blvd., looking South
31. 531 N. Ocean Blvd., looking North
32. 531 N. Ocean Blvd., looking North
33. 615 N. Ocean Blvd., looking South
34. 615 N. Ocean Blvd., looking South
35. 615 N. Ocean Blvd., looking North
36. 615 N. Ocean Blvd., looking North

Roll 4, 100 ISO
20435

1. 750 N. Ocean Blvd., looking South
2. 750 N. Ocean Blvd., looking South
3. 750 N. Ocean Blvd., looking North
4. 750 N. Ocean Blvd., looking North
5. NE 10th Street, looking South
6. NE 10th Street, looking South
7. NE 10th Street, looking North
8. NE 10th Street, looking North
9. 1112 N. Ocean Blvd., looking South
10. 1112 N. Ocean Blvd., looking South
11. 1112 N. Ocean Blvd., looking North
12. 1112 N. Ocean Blvd., looking North
13. 1300 N. Ocean Blvd., looking South
14. 1300 N. Ocean Blvd., looking South
15. 1300 N. Ocean Blvd., looking North
16. 1300 N. Ocean Blvd., looking North
17. NE 14th Street, looking South
18. NE 14th Street, looking South
19. NE 14th Street, looking South
20. NE 14th Street, looking South
21. 1600 N. Ocean Blvd., looking South
22. 1600 N. Ocean Blvd., looking South
23. 1600 N. Ocean Blvd., looking North
24. 1600 N. Ocean Blvd., looking North
25. 1704 N. Ocean Blvd., looking South
26. 1704 N. Ocean Blvd., looking South
27. 1704 N. Ocean Blvd., looking North
28. 1704 N. Ocean Blvd., looking North
29. 1906 Bay Drive, looking South
30. 1906 Bay Drive, looking South
31. 1906 Bay Drive, looking North
32. 1906 Bay Drive, looking North
33. 2203 Bay Drive, looking South
34. 2203 Bay Drive, looking North
35. 2203 Bay Drive, looking North

36. 2203 Bay Drive, looking North

LLOYD STATE PARK
September, 1994

Roll 1
20438

1-6 Hollywood Public Works on Intracoastal Waterway
7-18 Miscellaneous shots on Intracoastal near Oak Street
19-27 Port Everglades channel
28-36 Lloyd State Park immediately south of Port Everglades

Roll 2
20437

1-36 Lloyd State Park proceeding south
(Good examples of severe beach erosion)

Roll 3
20436

1-8 Lloyd State Park proceeding south
9-11 Plane taking off over LLoyd State Park
12-15 Lloyd State Park proceeding south
16-17 Plane taking off over LLoyd State Park
18-22 Lloyd State Park proceeding south
23-37 Port Everglades

BROWARD COUNTY
COASTAL STABILIZATION
DUNE RESTORATION PLAN (96-97)
&
5 YEAR PLAN

FLORIDA PUBLIC WORKS PROGRAM
FY 96
FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PROPOSED

BROWARD SOIL AND WATER
CONSERVATION DISTRICT

VOLUME 1 OF 2

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Exhibit 1 - United States Department of Agriculture-Soil Conservation Service Benefit-Cost Ratio Letter

Exhibit 2 - Broward County Costal Revegetation Plan (BCCRP 93-94)

Volume Two

Exhibit 3 - Broward County Watershed Management Plan (BCWMP 94-95)

Exhibit 4 - United States Department of Agriculture-Soil Conservation Service Southeast Florida Urban Community Assistance Program

Exhibit 5A - 8½ x 11 Site Map

Exhibit 5B - Aerial Map

Exhibit 5C - Ground Level Photos

Exhibit 5D - Camera-ready Drawings

This application is contained in two (2) volumes.

For further information please contact:

Broward Soil and Water Conservation District
6191 Orange Drive, Room 6179-0
Davie, FL 33314-3451
(305) 584-1306

Florida Public Works Program
Application for Fiscal Year 1996

The Florida Public Works Program (FPWP) administered by the Florida Department of Environmental Protection (FDEP) with Federal funding ' ing provided through the US Army Corps of Engineers (USCOE). The BCSWD submitted the initial application to FDEP and USCOE on January 31, 1994 in a timely manner. The following contains the attachments, additions, corrections, and related documents requested by FDEP, which are hereby enclosed and attached herein.

1. Project Name: Broward County Coastal Stabilization - Dune Restoration Plan (96-97)
&
Five Year Plan

2. Phase of Project: First Year (FY-96)
__Reconnaissance Study
__Feasibility Study
__General Design Memorandum
_x_Prel. Eng & Design
_x_Construction (Demonstration)

3. Name and Address of Local Sponsor:
Broward Soil and Water Conservation District (BSWCD)
6191 Orange Drive, Room 6179-0
Davie, FL 33314-3451

4. Name, Title, and phone # of Contact for More Information:
Russell M. Setti, Project Director
(305) 584-1306

5. Category of Proposal:

_x_Flood Damage Prevention
_x_Shore Protection
_x_Environmental Restoration and Enhancement
__Navigation
_x_Other
(Recycling/Water Quality)

6. Authorization Type: _x_ Not yet authorized
___ Study
__Construction

7. Authorization Status:
__Pending Before Congress
__Currently Being Drafted
__Existing Authorization (attach a copy)
_x_Authorization currently in formulation

8. Project Status:

__Active __Previously requested but not funded

__Requires reactivation by Corps or Congress

_x_N/A

9. Funding:

Estimated Total Costs		Estimated Corps Capability
Federal	$5,000,000 (5 -Year Plan)	for FY 1996 $1,000,000
State	$1,000,000 (5 -Year Plan)	Funding Request
Local	$1,000,000 (5 -Year Plan)	for FY 1996 $1,000,000

10. Benefit-Cost Ratio:

32:1.0 at ___% discount rate

Source: ***Use Hallandale as Model*** (see attached Exhibit #1)

11. Project Description:

A. Provide a general description of the project. Include historical information, issues to be addressed, specific objectives, proposed actions, and a description of the project site. Indicate specifically what will be accomplished if requested funds are appropriated. Reports and other technical documents may be referenced and included as an attachment.

Implementation of the Broward County Coastal Revegetation Plan 93-94 (see attached Exhibit #2) and the Broward County Watershed Management Plan 94-95 (see attached BCCWMP 94-95, Exhibit #3)

Historically, renourishment without other technologies being utilized to reduce the rate of erosion has indicated a need to the improve and enhance the present renourishment program. The use of technologies such as Compost, Xeriscape, Best Management Projects (BMPs), and Recycling with innovative approaches on Stabilization Projects can increase the life of the beach. A combination of these innovative technologies should prevent or slow the rate of erosion, thereby gaining greater benefits from renourishment projects as well as helping to reconstruct the dune system. With this comprehensive approach, the results should provide a better return on the investment of renourishment dollars by including innovative stabilization techniques into the initial planning and construction of renourishment projects and maintenance of existing shoreline.

The multiple stabilization demonstration project sites will provide environmental education opportunities for the school system, volunteers, and participants of the Community Oriented Policing Enforcement (COPE) as previously experienced in the most recent Hallandale Beach Revegetation

Recycling Xeriscape Project. This project set new standards for BMPs that the BSWCD would be able to teach to the local coastal communities.

A massive amount of volunteer labor is required to get these stabilization projects accomplished and accepted by the general public. There is an ongoing need to involve and educate, right from the beginning, as many people as possible. To fulfill this project, the public will be educated on the use of Compost, Xeriscape, Recycling, Sea Oats, and other coastal vegetation, and how they effect the ecosystem. Also, how these technologies and techniques help with dune restoration, which provides protection from Flood Damage, Shore Protection, Environmental Restoration and Enhancement. This will also have the effect of reconstructing Wildlife Habitats.

I) Specific Objectives

Ia. To have under construction in the fiscal year of 1996 a Demonstration Stabilization project in each of the following participating jurisdictions to prevent beach erosion:

Broward County
Dania
Deerfield Beach
Florida Park Service - John Lloyd State Park
Fort Lauderdale
Hallandale
Hollywood
Pompano Beach
Town of Hillsboro Beach
Town of Lauderdale by the Sea
Village of Sea Ranch Lakes

The initial FY 96 locations (beach sites) will be developed as Educational Centers while at the same time become functioning dune systems. Each site will be from 500 feet to 2000 feet in length and approximately 10 to 20 feet in width.

Ib. The ultimate goal and objective is to stabilize the twenty-four miles of coastline in Broward County, thereby providing a working urban coastal model for coastal stabilization to extend the life of the renourished beach.

2. Property value protection up to $139,708,800.00 (see attached Exhibit #4 the SFUCAP).

3. To adopt a 5-year plan that will be properly funded to coordinate and construct stabilization projects that have been renourished or have erosion related problems.

This interagency cooperation between federal, state, and local agencies as well as the assistance of profit or non-profit organizations will enable the BSWCD to implement the model construction of the Twenty-Four mile Broward County Coast Stabilization Plan in the approximate amount of Seven million ($7,000,000) Dollars over 5 years. These funds will be used for dune restoration, beach erosion, fish habitats, stabilization, hot spot modeling, and the development and use of innovative technologies.

B. Provide a description of benefits that will result from implementation of the project.

1. Stabilization will increase the life of the twenty-four miles of shoreline. This will reduce the amount of dollars expended to keep renourishing the beach as presently authorized.

2. This type of public works project will provide numerous jobs to lower skilled workers. This is due to the nature of the projects need for manual labor. This project will also make available On the Job Training (OJT) programs for "At Risk Youths."

3. Environmental Education that will be given with hands on experience. The educational value is limitless. We have approximately 280 public and private schools with approximately 252,000 students. The schools will be able to use the project to educate hundreds of thousands of students and adults. Maintaining these projects will greatly enhance Environmental Education on the Ecosystem, Recycling, Xeriscape, and the values related to their uses in saving the watershed from pollution.

4. Develop a historical record consisting of videos, documentation, slide shows, and workbooks that will further promote the need for Beach Stabilization, Xeriscape, Recycling, Compost and Restoration of the Natural Resources. These training materials can be used to educate the public, train volunteers, and develop a work force with uniform standards.

5. A successful Stabilization Program that will prevent or reduce the rate of soil erosion which causes the loss of hundreds of thousands of dollars and tons of soil annually.

6. Enhance renourishment with the use of Best Management Practices (BMPs). Revegetation and other innovative approaches should extend the life of a renourished beach.

7. The success of Stabilization Projects with Revegetation should increase from 25%- 50% to 95% to 98% in 3 to 6 months using BMPs. We can get the equivalent of 5 years of growth in about 3 months.

C. Provide a description of any special problems historically associated with the project, such as environmental impacts, permitting difficulties, public opposition, etc. Indicate how such problems are being addressed.

1. Use of compost and recycling materials is still not yet fully accepted. The BSWCD promotes school and public education on the value of these techniques to the project. Thereby, this project provides outdoor classroom and work experiences, while at the same time rebuilding the dune system.

2. Limited Public Opposition - Plants, sea oats and dunes grow to over six (6) feet and may block the view of the ocean from the ground floor level. The BSWCD will be teaching the public that the importance of saving the beach exceeds the loss of the ground floor views.

D. Provide a description of anticipated impacts on natural resources at the site and in the general vicinity of the site. This description must include an assessment of short and long term impacts, and must address impacts to air, land, and water resources. Reports and other technical documents may be referenced and included as an attachment.

The BSWCD approach to reestablish the dune system should not have any negative short or long term impacts on natural resources. Instead this approach should reduce the rate of Soil (Beach) Erosion by slowing it down. Further reduce toxins by converting sludge into grade A compost to be used on project thereby using recycling to save Natural Resources.

12. Project Schedule:

1996-1997 1st Year - Engineering, design, and construction of Demonstration Projects
1997-1998 2nd Year - Evaluate previous year and 25% of Coastline Stabilization Projects
1998-1999 3rd Year - Evaluate previous year and 25% of Coastline Stabilization Projects
1999-2000 4th Year - Evaluate previous year and 25% of Coastline Stabilization Projects
2000-2001 5th Year - Evaluate previous year and 25% of Coastline Stabilization Projects

13. Describe Progress made with previous years funding:

No previous years funding. However, most recent experience is as follows:

1. Hallandale Beach Revegetation Recycling Xeriscape Project (93-94). (See attached Exhibit #2)

14. Describe interagency coordination that will be required:

The BSWCD will continue to implement the Broward County Coastal Revegetation Plan (BCCRP 93-94) with inter-agency coordination with the following local, state, and federal agencies per Chapter 582 Florida Statutes (see attached Exhibit #3). Further, the development and approval

of the newly established USDA-SCS Southeast Florida Urban Community Assistance Program (SFUCAP) (see attached Exhibit #4) effective January 1, 1994, which is to be physically located in Broward County to serve the newly formed USDA-SCS-UCAP Region Consisting of Broward, Dade, Monroe and Palm Beach Counties. One of SFUCAP goals and objectives is to address Erosion, Sedimentation, and water quality. The BSWCD plan to implement the BCCRP plan is consistent with the same goals and objectives of the USDA-SCS-UCAP work plan and will further implement Chapter 582 Florida Statutes in coordination with the following local, state, and federal agencies and any other applicable organizations.

Educational Institutions
Schools (K-12) &
Community Colleges
(assist in construction outdoor environmental education centers)
Universities
(Modeling/Develop Educational Sites)

Local
Multiple Cities
(Formulate a uniform plan of action to involve their communities and provide local funding)
Broward County
(to coordinate with existing programs and plans and provide funding assistance)

State
State of Florida
DACS
(provide technical assistance)
DCA
(incorporate into state planning)
DEP
(permits)
BSWCD
(lead agency)

Federal
USDA-SCS
(provide technical assistance)
US Army COE
(provide overall project review, permits and oversight)
USDOC-NOAA
(provide technical assistance)
USDOL-BETA
(provide labor)
USEPA
(provide technical assistance)

15. Permits
    DEP - Coastal Construction permit
    DEP - State Lands Consent or Easement and applicable Local Governmental Agencies

16. Economic Assessment
    A. Describe the economic benefits and/or costs that will result from implementing the project.

        See attached Exhibits #1 & 4 from USDA-SCS, SFUCAP.

    B. Identify any individuals or groups that may be adversely impacted if the project is implemented.

        Ground floor view of ocean may be blocked.

    C. Indicate the status of required local cooperation for the project (cash contributions, land easements, etc.).

        It is the intent to have an adopted BCCRP by Oct 1, 1994 with a 5 year proposed budget with goals and objectives

17. Recent Reports: Identify recent reports pertaining to the proposed project, enclose copies of the reports, and indicate where copies may be obtained.

Please see enclosed attached Exhibits #1,2,3, and 4.

The proposed project model is Hallandale Beach Revegetation Recycling Xeriscape Project and others within Broward County. The above exhibits contain background information.

18. Provide the following items (see attached Exhibits #5A, B, C, D):

A. An 8 1/2 x 11 camera-ready site map with:

1. State of Florida location map in the upper right hand corner;
2. North arrow;
3. One inch border; and
4. Clearly depicted boundaries of the project area and relevant features in the general vicinity.

B. A recent aerial photo of the project area-Project area is the entire 24 mile coastline of Broward County.

C. Ground level photos of the project area. Submit photos of erosion spots.

D. Camera-ready drawings which clearly identify the proposed activities. Hallandale Project Sample Drawings.

19. Do you anticipate sending a representative to the Annual Water Resource Development Conference to present your proposal?

__yes __no

This application and associated documents should be submitted to:

Jim Marx, Environmental Administrator
Department of Environmental Protection
3900 Commonwealth Blvd., Mail Station 20
Tallahassee, Florida 32399-3000

Broward County Coastal Revegetation/Conservation Plan (BCCRCP)

Proposed By - Broward Soil and Water Conservation District *(BSWCD)*

Goal 1.00

1. Encourage the preservation and restoration of sand dune systems within the Coastal Zone.

2. The Broward Soil and Water Conservation District (BSWCD) should serve as an important coordinating link between the State and the municipalities in terms of implementing the Coastal Construction Control Line legislation (Chapter 161.035, F.S.).

3. Proposals for future beach nourishment and renourishment projects should be evaluated in light of cost benefit analysis of current projects.

4. Prior to local government approval of future nourishment and renourishment projects, the impact of past and current dredging projects on reef systems and associated marine life inhabiting Broward County must be thoroughly examined.

Objective 1.01 Develop and implement land use controls to increase the protection of, and enhance Broward County's beaches, rivers and marine resources identified on the Natural Resource Map Series of the Future Broward County Land Use Plan Map Series.

> **Policy 1.02 Land development codes and regulations shall require the protection and/or restoration of beaches, particularly dunes and vegetation, through techniques such as conservation easements, revegetation, elevated walkways, and clustering of development.**
>
> **Policy 1.03 In addressing beachfront property, land development regulation shall establish special districts of standards sufficiently flexible to give priority to implementation of the coastal construction control line of the State of Florida.**
>
> **Policy 1.04 The BSWCD shall encourage inter-governmental coordination among coastal Municipalities to protect beaches, promote beach restoration, minimize the impacts of man-made structures on beach systems and increase public access to beaches and marine resources.**
>
> **Policy 1.05 Local government entities should provide for the protection of marine habitat and water quality of Broward County's coastal waters.**
>
> **Policy 1.06 The BSWCD and local government entities should mitigate the impacts of beach renourishment projects on near shore hard bottom areas through the creation of similar near shore habitat.**

Policy 1.07 To minimize soil erosion on new construction sites, the land development codes and regulations of all local government entities should require treatments and other measures consistent with the Best Management Practices of the U.S.D.A. Soil Conservation Service.

Policy 1.08 The recommendations of the U.S.D.A. Soil Conservation Service (USDA-SCS) and the BSWCD should be utilized in Broward County's plat review process and the plan Amendment review process for the 1989 Broward County Land Use Plan.

Goal 2.00 To protect, enhance and effectively manage the natural resources of the County in order to achieve a high environmental quality.

Objective 2.01 The County and municipalities of Broward County shall have adequate soil erosion controls in force by 1995.

Policy 2.02 Municipalities, County and applicable agencies regulations shall require shoreline and slope stabilization during and after all development activity, including vegetative stabilization after development.

Policy 2.03 The Municipalities, County and applicable agencies shall work with the U.S. Soil Conservation Service in their soil erosion control programs.

Policy 2.04 The Municipalities, County and applicable agencies shall require that fisheries, wildlife habitat, lakes, floodplain, estuarine marshes and marine habitats are preserved and conserved in compliance with applicable County, State and Federal regulation.

Policy 2.05 The Municipalities, County, and applicable agencies shall coordinate intergovernmentally when opportunities for the preservation or conservation of unique vegetative communities are located within multiple governmental jurisdictions.

Policy 2.06 The Municipalities, County, and applicable agencies shall develop standards for the beach sand dunes to assure proper location, vegetation walkovers, etc.

Policy 2.07 The Municipalities, County, and applicable agencies shall work with the County Beach Erosion Control Board to assure that any beachfront construction obtains a Coastal Construction Permit.

Goal 3.00 To protect, enhance and effectively manage the Broward County Coastal Zone.

Objective 3.01 The Municipalities, County, and applicable agencies shall protect and enhance Broward County's remaining coastal wetlands, living marine resources and wildlife habitat.

Policy 3.02 The Municipalities, County, and applicable agencies shall use a combination of public education and ordinances to protect, or provide for mitigation of, the remaining natural wildlife habitats.

Objective 3.03 By 2000 The BSWCD will actively work toward stabilizing and or decreasing the amount of erosion taking place along the shoreline.

Policy 3.04 The Municipalities, County, and applicable agencies may not allow the construction of any groins on any portion of the beach within the municipal and county boundaries.

Policy 3.05 Where practical as an alternative to seawalls, other methods of shoreline stabilization such as rip-rap and the use of native vegetation in conjunction with geotextiles and geogrids will be encouraged.

Objective 3.06 The Municipalities, County, and applicable agencies shall continue to protect, conserve, and enhance existing coastal resources under its jurisdiction to include beachfront and living marine resources in an ongoing basis.

Policy 3.07 The Municipalities, County, and applicable agencies shall increase protection of natural resources and be more responsive to the potential for dune and vegetative destruction. Standards to protect beach dune and vegetation systems shall be incorporated into land development regulations by 1995 in accordance with S.163.3203(1), F.S.

Objective 3.08 The Municipalities, County, and applicable agencies shall continue to protect, conserve, and enhance existing coastal resources under its jurisdiction to include beach front and living marine resources in an ongoing basis.

Objective 3.09 Reduce as much as possible the rate of beach erosion.

Policy 3.10 Continue dune maintenance preservation, and planting programs in Broward County.

Policy 3.11 Develop programs to restore dunes in Broward County.

Policy 3.12 Work with applicable agencies to remove groins along Broward County shoreline that are not functional.

Objective 4.00 Preserve, protect, conserve, enhance estuarine and marine environment quality, coastal wetlands, marine resources, beaches and dunes, coastal barriers and wildlife habitats.

Objective 5.00 To maintain the amount of beach that presently exists from Dade County to Palm Beach County.

Objective 6.00 Participation in the Erosion Prevention programs including the Beach Renourishment Program, the Sea Turtle Conservation Program and the Artificial Reef Program as a means to protect and conserve Broward County coastal resources as well as adjacent municipalities' coastal resources which may affect the County.

Policy 6.01 The beach front shall be monitored for unnatural changes in the erosion/accretion process.

Goal 7.00 Conserve, appropriately use and protect the minerals, soils and vegetative communities in Broward County.

Goal 8.00 Maintain or improve the existing beaches and dunes.

Objective 8.01 Develop a County program to maintain, improve and preserve Broward County's coastal dune system.

Policy 8.02 Prohibit the destruction of the remaining undeveloped dune communities in Broward County.

Policy 8.03 Within one year of Plan submission, modify land development regulations to incorporate best management techniques for maintenance of the dune systems on developed properties.

Objective 9.00 Protect the beach area, participate in beach restoration projects and ensure adequate public access to the beach.

Objective 10.00 By 2000, a sand dune system should be developed along the Broward County beach front.

Policy 10.01 The BSWCD/USDA-SCS will continue to participate in the Broward County Beach Renourishment Program. The projects shall be designed to have a life of at least ten years.

Objective 10.02 The Municipalities, County, and applicable agencies will protect and renourish its beaches and dunes through beach renourishment programs.

Objective 10.03 The Municipalities, County, and applicable agencies shall participate in Federal, State and County Beach Renourishment Programs to replace beach sand deposits lost to erosion.

Policy 10.04 Develop a program for rebuilding and revegetating dunes along Broward County coastline.

Policy 10.05 Limit the impacts of development and redevelopment by working toward restoring the dune systems.

Policy 10.06 Consider means to recreate a vegetated dune system on those parcels where none currently exist.

Goal 11.00 The Municipalities, County, and applicable agencies shall reestablish a beach dune and vegetation system for beaches within the county by 2000.

Policy 11.01 When reviewing development proposals for park projects within the coastal zone, efforts will be made to preserve native vegetation as much as possible.

Policy 11.02 The Municipalities, County, and applicable agencies will require the planting of sand dune vegetation coupled with the construction of dune walkovers at all beach access points. The Municipalities, County, and applicable agencies shall encourage the planting of vegetation such as sea oats (*Uniola paniculata*).

Policy 11.03 The Municipalities, County, and applicable agencies shall require beach dune and vegetative protection regulations be implemented by 1994 in accordance with S.163.3202(1), F.S.

Goal 12.00 The Municipalities, County, and applicable agencies shall require restoration and protection of native coastal vegetation by 2000.

Policy 12.01 The Municipalities, County, and applicable agencies shall protect native coastal vegetation and encourage restoration, through performance incentives. The performance incentives shall be incorporated into land development regulations by 1995 in accordance with s.163.3202(1), F.S.

Goal 13.00 The Municipalities, County, and applicable agencies shall protect, by regulation, acquisition and/or restoration, existing natural areas.

Objective 13.01 The Municipalities, County, and applicable agencies shall identify and restore degraded natural systems by 1996.

> **Policy 13.02 Develop a program for rebuilding and revegetating dunes along the Broward County coastline.**
>
> **Policy 13.03 Devise a program for rebuilding and revegetating (with native vegetation) dunes along the Broward County coastline.**

Goal 14.00 The Municipalities, County, and applicable agencies shall have by the year 2000 to have a vegetated dune system.

Objective 14.01 Increase vegetation on Broward County's sandy beach as a means to protect the beach system and to enhance the aesthetic quality of Broward County's coastal area by 2000.

> **Policy 14.02 Utilize landscape techniques as means of mitigating the impacts of development and redevelopment on the beach system.**
>
> **Policy 14.03 Work with the Broward Soil and Water Conservation District (BSWCD) to appropriately vegetate, maintain and create sand dunes.**

Goal 15.00 The Municipalities, County, and applicable agencies shall reestablish a beach dune and vegetation system for beaches within the County by 2000.

Objective 15.01 The BSWCD shall participate in Federal, State and County Beach Renourishment Programs to replace beach sand deposits lost to erosion.

> **Policy 15.02 The Municipalities, County, and applicable agencies shall encourage the development of sand dunes along the beach.**
>
> **Policy 15.03 The BSWCD may require beach dune and vegetative protection regulations be implemented by 1995 in accordance with S.163.3202(1), F.S.**
>
> **Policy 15.04 Devise a program for rebuilding and revegetating (with native vegetation) dunes along Broward County coastline.**
>
> **Policy 15.05 Limit the impacts of development and redevelopment by working toward restoring the dune systems.**
>
> **Policy 15.06 Investigate reestablishment of a coastal dune system along Broward County's beachfront.**
>
> **Policy 15.07 Work with the BSWCD, USDA-SCS, and other Agencies to identify County, State and Federal Grants available for establishing a local dune construction program.**
>
> **Policy 15.08 If deemed cost feasible, develop a test program to install dune vegetation, and provide funding in the applicable capital improvement programs or annual capital budgets.**

Education

GOAL 16.00 The BSWCD and USDA-SCS will assist in the development of Educational programs on Coastal Zone management to all coastal communities.

Objective 16.01 The Municipalities, County, and applicable agencies will take steps to improve the environment of the beach by cleaning it up, providing educational areas and planning general improvements.

> **Policy 16.02 The Municipalities, County, and applicable agencies will encourage greater use of the beach through maintenance providing educational areas and planning general improvements such as sitting and observation areas, and were feasible, additional parking.**
>
> **Policy 16.03 The Municipalities, County, and applicable agencies shall attempt to set aside locations along the beach to be used as environmental education areas/centers.**
>
> **Policy 16.04 The Municipalities, County, and applicable agencies shall attempt to prepare a coastal zone educational sites. The areas will be available for public education purposes and will be offered to organizations such as the United States Department of Agriculture, Soils Conservation Service and Broward Soil and Water Conservation District.**

Grants

GOAL 17.00 To encourage interagency cooperation and submission of request for grants on a comprehensive long term program.

Policy 17.01 The BSWCD/USDA-SCS shall pursue grant programs which become available for full or partial payment on costs associated with dune reconstruction.

Policy 17.02 Apply for state funding through applicable agencies to plan and create the dunes.

Policy 17.03 Work with the Broward Soil and Water Conservation District to establish a local dune construction program.

Approved on September 22, 1994 by Broward Soil & Water Conservation District Board of Supervisors.

Glenn W. Morris
Chairperson, BSWCD

Attessted to by Anthony Russo
Anthony Russo
BSWCD District Coordinator

Sept 22, 1994
Date

Media Advisory

US Army Corps
of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, FL
32232-0019

For Release:
Nov. 21, 1994

Contact:
Jacqueline Griffin
Phone (904) 232-2235
(904) 232-2237 (FAX)

PUBLIC NOTICE
21 NOVEMBER 1994

REHABILITATION ASSISTANCE FOR FLOOD CONTROL WORK AVAILABLE

As provided in the Flood and Coastal Storm Emergencies (33 U.S.C. 701n) (69 Stat. 186) (P.L. 84-99) Act, as amended, the U.S. Army Corps of Engineers (USACE) advises state and local agencies and local officials of assistance available under Public Law 84-99 to rehabilitate non-Federal or local flood control works damaged or destroyed by Tropical Storm GORDON during the period 14 - 17 November 1994. Notice is hereby given to non-Federal interests that Effective 21 November 1994 a 30-day initial deadline is in effect for submission of requests to the USACE for assistance to repair damages under PL 84-99.

The USACE is also empowered to rehabilitate Federally authorized and constructed hurricane or shore protection structures damaged or destroyed by winds, waves, or water actions.

Rehabilitation assistance must be requested by a public sponsor who will execute a cooperation and participation agreement. Assistance to other than a political subdivision such as private organizations, groups, or individual owners will require a public sponsor to sign the agreement. Rehabilitation projects which are approved are repaired to pre-storm condition with Federal funds. Also, federally authorized and constructed shore protection structures specifically designed and built to protect the beach or waterfront areas from erosion are eligible for assistance.

Non-Federal flood control works eligible for rehabilitation assistance are specifically defined by regulations to mean structures designed and constructed to have dependable effects in preventing damage by irregular and unusual rises in water level. They may include levees, channels and dams. This rehabilitation work will be cost shared at 80% Federal and 20% local funds. Other criteria and conditions for assistance are as follows;

- Proposed rehabilitation must have a favorable benefit-to-cost ratio.

- Rehabilitation is limited to repair or restoration to the project pre-disaster condition.

- Proposed rehabilitation will not be used to modify or increase the degree of protection or correct project deficiencies.

- Betterment or improvements to protection level may be accommodated if paid by the sponsor and can be accommodated in the basic construction rehabilitation.

- Rehabilitation will not be provided to projects which as a result of poor maintenance have deteriorated to the point of requiring substantial reconstruction.

- The definition of flood control works does not include: structures built for channel alignment, navigation, recreation, fish and wildlife, land reclamation, drainage, or to protect against land erosion.

Local officials and persons interested in the flood control works assistance are encouraged to contact the Jacksonville District at the following address:

U.S. Army Corps of Engineers, Jacksonville District
ATTN: CESAJ-CO-M
P.O. Box 4970
Jacksonville, Florida 32232-0019

Any inquiry regarding this notice should be directed to Jim Seta or Steve deKruif, Emergency Management Branch at (904) 232-3625 or via facsimile (904) 232 3430.

The letter of interest should be submitted by 24 December 1994 and provide information on whom to contact, telephone number, address, description and location of damages, site maps or drawings (if available) and a statement of urgency to repair the structure.

Terry L. Rice
Colonel, U.S. Army
District Engineer

NOV 21 1994

LAWRENCE McNERNEY
City Manager
P.O. Drawer 1300
100 West Atlantic Blvd.
Pompano Beach, FL 33061

Phone: (305) 786-4601
FAX: (305) 786-4504

City of Pompano Beach, Florida

November 15, 1994

Mr. Russell M. Setti, Project Director/Manager
Broward Soil and Water Conservation District
6191 Orange Drive, Rm. 6179-0
Davie, Florida 33314

RE: 1995-96 Florida Coastal Management Program

Dear Mr. Setti:

The City of Pompano Beach supports the Broward Soil and Water Conservation District's Application to the Florida Department of Affairs Coastal Management Program for funding to develop the Broward County Comprehensive Watershed Management Plan (BCCWMP).

Further, the City of Pompano Beach will provide $30,000 of "In-Kind" contributions to the BCCWMP subgrant application. The In-Kind contributions will be in the form of engineering assistance, clerical support, photocopies, use of equipment and environmental classroom facilities.

The BWCD approach to develop a comprehensive Watershed Management Plan for Broward County affords the City of Pompano Beach and the residents and other governmental agencies the opportunity to create interagency cooperative relationships.

Thank you for inviting the City's participation in this year's grant application.

Sincerely,

Lawrence M McNerney

Lawrence M. McNerney
City Manager

City of Hallandale

R. J. Intindola
City Manager

300 S. Dixie Highway
Hallandale, Florida 33009
Broward: (305) 458-3251
Dade: (305) 949-9912
FAX: (305) 457-1342

November 29, 1994

Mr. Russell M. Setti
Project Director/Manager
Broward Soil and Water Conservation District
6191 Orange Drive
Davie, Florida 33314

Re: 1995-96 Florida Coastal Management Program
Grant Application

Dear Mr. Setti:

The City of Hallandale enthusiastically accepts your invitation to participate in the District's grant application for the 1995-96 Florida Coastal Management Program. The City's participation is contingent upon Commission approval, scheduled for December 6, 1994.

The City of Hallandale's primary interest in the grant is in the study of erosion control techniques, more specifically, in the computer modeling of the impact of the various erosion control techniques available to determine the most effective measures to utilize for Hallandale Beach.

The City's participation in the grant will be through "in-kind" services totalling $26,000.00 and a cash match totalling $4,000.00 for a total commitment of $30,000.00. The City's matching contribution will provide assistance in implementing the grant for the period from October 1, 1995 through September 30, 1996. The line item match provided by the City of Hallandale is as follows:

City of Hallandale In-Kind Services

Secretarial Support	$4,500.00
City Engineering Assistance	6,500.00
Other Services (e.g. City equipment use)	3,000.00
Use of Restroom Facilities	5,000.00*
Use of Environmental/Educational Pavilion (400 sf.)	7,000.00**
In-Kind Total	$26,000.00

* To be constructed during FY 1994-95.
** Open air Pavilion for Hallandale Beach included in FY 1994-95 City budget.

City of Hallandale Cash Match

Publication/Copying	$4,000.00*

* To be included in the FY 1995-96 City Budget.

City of Hallandale In-Kind and Cash Match Total

Total In-Kind Services	$26,000.00
Total Cash Match	4,000.00
Total All	$30,000.00

Thank you for inviting the City of Hallandale to participate in this year's grant application. Please provide E. Dent McGough, Director, Central Services Department, with copies of the grant application and all related information.

Sincerely,

RJ. Intindola
City Manager

RJI/EDM/sk

cc: E. Dent McGough, Director, Central Services Dept.
John Depp, Director, DPW/Util./Engineering Depts.
David M. Pritchard, Deputy Director, City Engineer
Marcia Berkley, Acting Director, Growth Management
Sandra K. Kichler, Administrative Coordinator

United States Department of Agriculture
Natural Resources Conservation Service
6191 Orange Drive
Room 6179-0
Davie, FL 33314

November 29, 1994

Mr. Ralph Cantral
State of Florida, Department of Community Affairs
Florida Coastal Management Program
2740 Centerview Drive
Tallahassee, Florida 32399-2100

RE: Broward Soil and Water Conservation District (BSWCD)
Proposed Broward County Nonpoint Source Pollution
Watershed Management Plan (BCNPSWMP)

Dear Mr. Cantral:

As the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) District Coordinator for South Florida Urban Community Assistance Program, we are hereby recommending approval of the BSWCD proposed BCNPSWMP. We have reviewed their BCNPSWMP application to the Coastal Management Program of 95-96 and find it consistent with the goals and objectives of our agency.

The USDA-NRCS will be assisting the BSWCD in the implementation of the BSWCD's proposed BCNPSWMP. The USDA-NRCS works very closely with the BSWCD, providing technical assistance in carrying out its goals in soil, water and natural resource conservation.

This interagency cooperative effort also involves EPA 319 Program, State of Florida Agriculture and Consumer Services, Florida Department of Environmental Protection, local governments, non-profit agencies, volunteers and interested persons.

We further believe the State of Florida Department of Agriculture and Consumer Services Water Quality Nonpoint contact person, Mr. Dwight Smith, is correct in his opinion in which he states, "SWCDs can be Florida's lead NPS Pollution Management Agency on the local level". If you need additional information, please call me at (305)792-1292.

Sincerely,

Thaddeus Hamilton

Thaddeus Hamilton
USDA-NRCS District Coordinator
usr/thad/word/bcnpswmp.dcx

NOAA COASTAL SERVICES CTR LIBRARY
3 6668 14111969 5