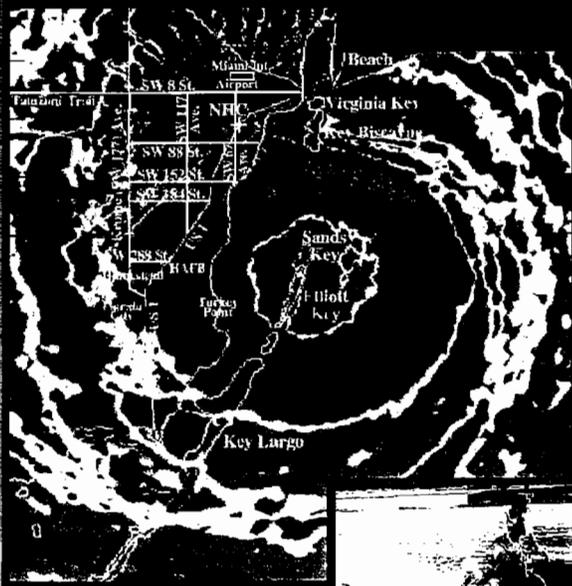




Village of Key Biscayne Floodplain Management Plan

Volume Two Public Involvement; Plan Adoption; and Implementation



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by the
State of Florida
Division of Emergency Management
and the
Village of Key Biscayne, Florida

March 1998



Village of Key Biscayne

Floodplain Management Plan

Volume Two

Public Involvement; Plan Adoption; and Implementation

Village Council

Mayor - John F. Festa
Vice Mayor - Mortimer Fried
Council - Martha Fdez-León Broucek
Council - Gregory C. Han
Council - Hugh T. O'Reilly
Council - Michelle Padovan
Council - Betty Sime

Village Manager

C. Samuel Kissinger

Village Clerk

Conchita H. Alvarez

Working Review Committee

Deborah De Leon, A.I.A. - Chairman
Maribel Balbin
Robert Cuevas, P.E., D.E.E.
Brian Flynn
Gregory C. Han, Ph.D.
Lee A. Niblock, CLP
Ronald White

Village Staff

Assistant to the Village Manager - James DeCocq
Director of Building, Zoning & Planning - John Little
Director of Fire & Rescue - John Gilbert
Building Official - Leo Llanos
Public Works Supervisor - Armando Nunez

KBS Development Associates, Inc.
Williams, Hatfield & Stoner, Inc.

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Exhibit A

- A.1 Survey Form Sent to Vulnerable Homeowners
- A.2 Repetitive Loss Property Inventory and Related Data

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- B.1 Village Council Resolution Adopting the Floodplain Management Plan
- B.2 Village Council Meeting Summaries and Public Notices
- B.3 Letter from Village Manager to Village Council Concerning the Adoption of the Resolution and Floodplain Management Plan
- B.4 Working Review Committee “Recommendations for Decisions”, Meeting Notices and Meeting Summaries

INTRODUCTION TO VOLUME TWO OF THE FLOODPLAIN MANAGEMENT PLAN

Volume One of the Floodplain Management Plan includes:

- PART A, which covers **general introductory material** for the Floodplain Management Plan;
- PART B, which is the “**Floodplain Management Plan Document**” which is the formal text of what is being adopted;
- PART C, which is the “**Floodplain Management Plan Report**” which is the explanatory text and basis for the Plan Document. As such, the Plan Report should be considered part of the plan’s support material generally found in **Volume Three** of the Floodplain Management Plan; and,
- PART D, which is the “**1998/1999 Action Plan**” that describes the On-going Tasks and the Projects approved for initiation during the first two years after adoption of the Floodplain Management Plan.

Volume Two of the Floodplain Management Plan is in effect an extension of PART C and represents Phase IV of the Planning Process. Volume Two covers, more specifically, the remaining three Sections of the Floodplain Management Plan, namely:

Section II: “Involve the Public”
Section IX: “Adopt the Plan”, and
Section X: “Implement, Evaluate and Revise”

Unlike Volume One, where all supporting material is found separately in **Volume Three** as an independent binder, the **support material for Volume Two** has been included as an Exhibit **within the Volume Two binder**.

Section II: Involve the Public.

The process of evolving the Floodplain Management Plan has sought to achieve a reasonable level of public involvement. This aspect of the effort was first contemplated in terms of a sophisticated approach involving several focus group sessions with participants professionally recruited from a cross-section of respondents to a widely distributed questionnaire.

It soon became evident that this approach was far too expensive and that it would tend to produce dubious results while generally diluting the focus of other plan preparation activities.

The fallback was to concentrate on the properties listed on FEMA's repetitive loss properties and on the rest of the properties in the floodplain that are comparably vulnerable to flooding.

A simple survey form and a mailing list of about 70 of the most floodprone properties were prepared with the assistance of the Florida Conflict Resolution Consortium. The purpose of the survey was to solicit the participation of the ownership of these properties in one or more meetings in the course of which various aspects of the Floodplain Management Plan would be presented and discussed.

Concurrently with the survey, telephone contact was made with as many of the owners of the Repetitive Loss Properties as could be reached, to gauge the level of their interest in the Plan and its various components.

The response to the survey, even when backed by the telephone canvass, was less than 4%. Moreover, the telephone contacts suggested that many of the owners of repetitive loss properties had sold their properties and that the successor owners had only limited experience with the flooding events that caused the NFIP claims.

As a result of the above, the Floodplain Management Plan recognizes the importance of public involvement, but accepts the fact that major public participation may be premature until the adoption of the plan endows it with political support and a threshold level of commitment.

More specifically, in order to achieve a meaningful level of public involvement the Floodplain Management Plan needs to be filtered through several levels of review and exposure before, during and after the adoption of the Plan, including:

A. At the first level of participation, a “Working Review Committee”.

The Village Manager has appointed a Citizen Advisory Committee to provide guidance and a combination of “Value” and “Technical” judgement to those involved in the production of the plan.

1. With respect to value judgement, five of the seven-member advisory group, formally called the “Working Review Committee”, are island residents and property owners.
2. With respect to technical judgement, each member brings a relevant professional discipline to the table, including, among others:
 - a. Architecture;
 - b. Oceanography;
 - c. Meteorology;
 - d. Environmental Conservation;
 - e. Civil Engineering.
3. In general, virtually every member could be said to qualify, by virtue of their respective career experiences at senior levels within their fields, as “Elder Statesmen”.

The Working Review Committee has participated intimately in every phase and in every step of the planning process, from its initial organization to the selection of high priority Action Plan projects.

B. At the second level of public involvement is the Floodplain Management Plan adoption process.

Both the legal requirements and the participatory philosophies, with which the Village has typically approached its legislative agenda, mandate extensive public notification of meetings. This will be the case as well when the Floodplain Management Plan is presented, discussed and adopted. In this connection, the notification process, called for in the holding of formal Public Hearings will be followed, together with substantial advance publicity about the hearing in the local newspaper. Moreover, as Village Council meetings are normally aired on the local cable network, the opportunity to hear the proceedings of the meeting will be available to all local resident cable subscribers.

C. The wide distribution of the Floodplain Management Plan forms the basis of the third level of public involvement.

This aspect of public involvement straddles the plan adoption process and the post-adoption period. This activity consists of the distribution and widespread publication of the Floodplain Management Plan and related material, including newsletters, pamphlets and other outreach projects, as well as publicity in local publications such as the "Islander News" and the Miami Herald "Neighbors" section.

D. The fourth level of public involvement occurs through the Action Plan "On-going Tasks and Projects". This is where the emphasis is placed on maximizing the opportunities for the public to participate directly and actively in the implementation of the Action Plans.

Seen in the context of the above four levels of involvement, the first three may be termed as reactionary in nature, wherein the public is invited and encouraged to learn, discuss and otherwise react to the Floodplain Management Plan and its proposals. In contrast, the fourth level elicits actual participation in implementation.

Thus if the first three levels are properly managed, the activation of the fourth level should help evolve a significant coalition and force on Key Biscayne dedicated to advance many of the goals of the Floodplain Management Plan.

Exhibit A hereto includes:

- A. A copy of the survey form that was used and the list of addresses where the survey was mailed.
- B. A copy of "Phase I Report, Part B Repetitive Loss Properties Inventory and Related Data, June, 1997"

Section IX: Adopt the Plan.

Exhibit B hereto includes the following documents related to the adoption of the Floodplain Management Plan:

- A. Village Council Resolution adopting the plan with certification of its passage.
- B. Minutes of Council Meeting and copy of Public Notices.

- C. Letter from Village Manager to Village Council transmitting the adoption Resolution and the Floodplain Management Plan, including his recommendations.
- D. Working Review Committee “Recommendations for Decisions” for each Phase of the Planning Process, including meeting notices and minutes of meetings.

Section X: Implement, Evaluate and Revise.

Implementation

Implementation of the Floodplain Management Plan is reasonably assured by the following factors:

- A. The Floodplain Management Plan sets into motion a process that compels, by force of a Village Resolution, the preparation of bi-annual Action Plans and the definition of On-Going Tasks and Projects.
- B. The Village is staffed on a reliable basis to support the range of on-going tasks that are part of its current inventory of floodplain management activities. It is also well positioned financially and administratively, under the direction of the Village Manager and the CRS Coordinator to expand and enhance this range of on-going activities.
- C. The quasi legislative and administrative mechanisms are in place for the selection of Action Plan Projects and for securing resources for their execution, drawing on the network of public and governmental agencies which have been involved in the preparation of the Floodplain Management Plan.
- D. The Village’s current classification in the NFIP/CRS program, the prospects for maintaining that classification and the incentives to improve beyond a “7”.

The combination of these factors, namely:

- The legislative mandate reflected in the adoption of the Floodplain Management Plan Document;

- The availability of the necessary implementation means, including the agency support network and Key Biscayne's solid financial position; and
- The powerful incentives provided by the CRS program;

provide a reasonable assurance that a diligent implementation of the Floodplain Management Plan will in fact occur.

Evaluation

The preparation of Action Plans, selecting projects from the range Floodplain Management Plan Activities specified in the Plan Document, has been proposed as a bi-annual task. That task includes more specifically:

- A. Review of On-Going Tasks and Projects identified in prior year(s) Action Plans;
- B. Review of Floodplain Management Plan Document to determine whether any changes are required;
- C. Proposals for On-Going Task enhancements and for new Projects.

The preparation of such Action Plans represents a significant task that would place a substantial burden if it were required on an annual basis. Yet, the status and progress of activities under the Floodplain Management Plan needs to be measured with greater frequency. Accordingly, it is proposed that the Village will provide, on an annual basis, instead of an Action Plan, a report limited to an Evaluation of the Progress made in the course of the year with respect to the Tasks, Projects and activities that are underway.

It is further proposed that the preparation of the New Bi-Annual Action Plans and the Annual evaluation and progress reports will follow a process similar to that employed in the preparation of the Floodplain Management Plan including the continued use of the Working Review Committee.

Revisions

Action Plans will be prepared on a bi-annual basis. They represent the dynamic vehicle by which the Floodplain Management Plan Document remains valid and relevant. To the extent that an Action Plan or Action Plan Project conflicts with the Plan Document, either the Document may be formally revised, or the Action Plan would have to be brought into conformance with the Plan Document.

In any case, the Plan Document is subject to change and updating at any time. Such change however, should occur with the involvement of the Working Review

Committee which is expected to maintain a custodial interest in the Plan. Furthermore any contemplated change needs to be evaluated in the context of, and should not conflict with Action Plan projects and tasks under implementation.

Exhibits

EXHIBIT A

**SURVEY FORM & LOCATION OF VULNERABLE
AREAS/PROPERTIES**

VILLAGE OF KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN

SAMPLE SURVEY OF KEY BISCAYNE RESIDENTS
OCCUPYING PROPERTIES THAT ARE PARTICULARLY
VULNERABLE TO FLOODING

**Your attention to this survey is important and
could influence your flood insurance rates.**

Key Biscayne is a barrier island. Because of this, the Village is particularly vulnerable to flooding and other damages resulting from severe rainstorms, hurricanes and storm surges.

In fact, FEMA (the Federal Emergency Management Agency) records indicate that, in the last 10 years, two or more claims have been paid to some 32 Key Biscayne properties. These properties are known to FEMA as Repetitive Loss Properties.

The existence of this large number of repetitive loss properties is of great concern to everyone.

- For FEMA, this concern relates to the fact that out of 2.5 Million or more Buildings insured by the National Flood Insurance Program, **only a tiny 2% fraction (the repetitive loss properties) account for 33% of the flood insurance claims paid!**

In this connection FEMA's payment made to Key Biscayne's 32 Repetitive Loss Properties totaled nearly \$3,000,000 or an average of about \$100,000 per property, or about \$10,000 per property per year over the above ten year period.

- For the Village and its residents, the concern is that **if no action is taken**, flood insurance rates will stay at current levels and may even rise. Moreover, the Village would be ineligible to participate in many State and Federal programs created to:
 - (1) significantly reduce the cost of flood insurance premiums; and,
 - (2) secure grants and other forms of assistance to mitigate flood hazards and generally alleviate the problems caused as a result of these hazards.

The Village of Key Biscayne's response to these concerns has been to actively participate and maintain good standing in the National Flood Insurance Program (NFIP) thereby, assuring the continuing availability of flood insurance.

Collaterally, the Village is also undertaking a wide array of other activities, **beyond the minimum required under Flood Insurance Program.**

These activities are expected not only to significantly lower flood insurance premiums but they will materially improve the ability of the Village and its residents to deal with major flooding events.

The activities are, more specifically, discussed and described at great length in a Document called a "**Floodplain Management Plan**". This Plan is to be adopted by the Village Council and its approval is required as a condition for participation in FEMA's Community Rating System which, in turn, provides the basis for **calculating the extent to which flood insurance premiums may be lowered.**

A part of the Floodplain Management Plan proposed for Key Biscayne is to involve the public. In this connection we would like to **solicit your participation.**

- First we request your answer to the questions listed on the attached survey form; and,
- Second, we would like you to join us and participate in a meeting of other property owners to comment on and discuss the proposals contained in the Floodplain Management Plan.

YOUR RESPONSE TO THE SURVEY, AND YOUR ATTENDANCE AT THE MEETING ARE EXTREMELY IMPORTANT TO THE SUCCESS OF THIS CIVIC EFFORT.

Please mail the completed survey form **before March 2, 1998** to:

**Village of Key Biscayne
Office of the Village Manager
85 West McIntyre Street
Key Biscayne, Florida 33149**

Attention: Mr. Peter Kory

KEY BISCAIYNE FLOODPLAIN MANAGEMENT PLAN
SURVEY FORM

1. Do you currently have flood insurance?: Yes _____ No _____
2. If no, please give us a brief reason (circle the appropriate letter):
- a. No Mortgage;
 - b. Too expensive;
 - c. Rent and do not own;
 - d. Condominium association is the insured;
 - e. Other: _____
3. Was your Key Biscayne home or residence ever flooded? Yes _____ No _____
4. If Yes, what caused the flooding (circle the appropriate letter):
- a. Hurricane Andrew ('92);
 - b. Rainstorm of October ('91);
 - c. Other weather event: _____
 - d. Other reason: _____
5. If your answer to question 3 is Yes, tell us about the damage incurred (circle the appropriate letter[s]):
- a. Water in main living area less than about 6";
 - b. Water in living area from about 7" to 15";
 - c. Water above about 15": _____"(indicate approximate depth in blank space.
 - d. No water in main living area but in garage or elsewhere on the property;
 - e. Dollar amount of damage to building/contents: _____
 - f. Other damage or hardship: _____
6. Have you heard about, and are you familiar with the Village "STORM WARNING SYSTEM", and the Village's "DISASTER PREPAREDNESS and STORM DAMAGE RECOVERY ASSISTANCE PLAN"?

Yes _____

No _____

7. If your answer above is "Yes", how did you find out about these disaster response systems? (circle the appropriate letter[s])

- a. Visit to Village Hall;
- b. Village Newsletter;
- c. Other publication: _____;
- d. Informational Video broadcast via Adelphia Cable;
- e. Other Media: _____;
- f. Other information source: _____;

8. How can the Village of Key Biscayne and its staff best communicate with you to ensure your concerns are being heard? Circle as many letters as you think are applicable:

- a. Interviews;
- b. Public Meetings/workshops;
- c. Mailings w/request for comment on material sent;
- d. Other: _____

9. To whom would you send this survey (list below or on a separate sheet of paper)

10. If there is a special meeting of particularly affected residents/property owners, would you attend?

a. Yes _____ No _____

b. Is day or evening better for you? (circle one)

VILLAGE OF KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN

SAMPLE SURVEY OF KEY BISCAYNE RESIDENTS
OCCUPYING PROPERTIES THAT ARE PARTICULARLY
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The existence of this large number of repetitive loss properties is of great concern to everyone.

- For FEMA, this concern relates to the fact that out of 2.5 Million or more Buildings insured by the National Flood Insurance Program, **only a tiny 2% fraction (the repetitive loss properties) account for 33% of the flood insurance claims paid!**

In this connection FEMA's payment made to Key Biscayne's 32 Repetitive Loss Properties totaled nearly \$3,000,000 or an average of about \$100,000 per property, or about \$10,000 per property per year over the above ten year period.

- For the Village and its residents, the concern is that **if no action is taken**, flood insurance rates will stay at current levels and may even rise. Moreover, the Village would be ineligible to participate in many State and Federal programs created to:
 - (1) significantly reduce the cost of flood insurance premiums; and,
 - (2) secure grants and other forms of assistance to mitigate flood hazards and generally alleviate the problems caused as a result of these hazards.

The Village of Key Biscayne's response to these concerns has been to actively participate and maintain good standing in the National Flood Insurance Program (NFIP) thereby, assuring the continuing availability of flood insurance.

Michael A. Fini
365 Golf Road
Key Biscayne, FL
-33149-

Collaterally, the Village is also undertaking a wide array of other activities, **beyond the minimum required under Flood Insurance Program.**

These activities are expected not only to significantly lower flood insurance premiums but they will materially improve the ability of the Village and its residents to deal with major flooding events.

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SURVEY FORM

1. Do you currently have flood insurance?: Yes No

2. If no, please give us a brief reason (circle the appropriate letter):

- a. No Mortgage;
- b. Too expensive;
- c. Rent and do not own;
- d. Condominium association is the insured;
- e. Other: _____

3. Was your Key Biscayne home or residence ever flooded? Yes No

4. If Yes, what caused the flooding (circle the appropriate letter):

- a. Hurricane Andrew ('92);
- b. Rainstorm of October ('91);
- c. Other weather event: _____
- d. Other reason: _____

5. If your answer to question 3 is Yes, tell us about the damage incurred (circle the appropriate letter[s]):

- a. Water in main living area less than about 6"; - *Rainstorm of 10/91.*
- b. Water in living area from about 7" to 15"; - *Andrew*
- c. Water above about 15": _____ "(indicate approximate depth in blank space.
- d. No water in main living area but in garage or elsewhere on the property;
- e. Dollar amount of damage to building/contents: *\$70,000 ±*
- f. Other damage or hardship: _____

6. Have you heard about, and are you familiar with the Village "STORM WARNING SYSTEM", and the Village's "DISASTER PREPAREDNESS and STORM DAMAGE RECOVERY ASSISTANCE PLAN"?

Yes _____

No

7. If your answer above is "Yes", how did you find out about these disaster response systems? (circle the appropriate letter[s])

- a. Visit to Village Hall;
- b. Village Newsletter;
- c. Other publication: _____;
- d. Informational Video broadcast via Adelphia Cable;
- e. Other Media: _____;
- f. Other information source: _____;

8. How can the Village of Key Biscayne and its staff best communicate with you to ensure your concerns are being heard? Circle as many letters as you think are applicable:

- a. Interviews;
- b. Public Meetings/workshops;
- c. Mailings w/request for comment on material sent;
- d. Other: _____

9. To whom would you send this survey (list below or on a separate sheet of paper) *PROPERTY OWNERS AND/OR RENTERS.*

10. If there is a special meeting of particularly affected residents/property owners, would you attend?

a. Yes No _____

b. Is day or evening better for you? (circle one)

KEY BISCAIYNE FLOODPLAIN MANAGEMENT PLAN
SURVEY FORM

1. Do you currently have flood insurance?: Yes X No _____

2. If no, please give us a brief reason (circle the appropriate letter):

- a. No Mortgage;
- b. Too expensive;
- c. Rent and do not own;
- d. Condominium association is the insured;
- e. Other: _____

3. Was your Key Biscayne home or residence ever flooded? Yes X No _____

4. If Yes, what caused the flooding (circle the appropriate letter):

- a. Hurricane Andrew ('92);
- b. Rainstorm of October ('91);
- c. Other weather event: _____
- d. Other reason: _____

5. If your answer to question 3 is Yes, tell us about the damage incurred (circle the appropriate letter[s]):

- a. Water in main living area less than about 6";
- b. Water in living area from about 7" to 15";
- c. Water above about 15": 18" (indicate approximate depth in blank space).
- d. No water in main living area but in garage or elsewhere on the property;
- e. Dollar amount of damage to building/contents: \$180,000 -
- f. Other damage or hardship: \$60,000 -

6. Have you heard about, and are you familiar with the Village "STORM WARNING SYSTEM", and the Village's "DISASTER PREPAREDNESS and STORM DAMAGE RECOVERY ASSISTANCE PLAN"?

Yes _____ No X

7. If your answer above is "Yes", how did you find out about these disaster response systems? (circle the appropriate letter[s])

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a. Yes _____ No X

b. Is day or evening better for you? (circle one)

JACKIE ROSE
2000 S BAYSHORE DR # 34
MIAMI, FL 33133-3251

VILLAGE OF KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN

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2. If no, please give us a brief reason (circle the appropriate letter):

- a. No Mortgage;
- b. Too expensive;
- c. Rent and do not own;
- d. Condominium association is the insured;
- e. Other: _____

3. Was your Key Biscayne home or residence ever flooded? Yes No

we now have a drainage system installed after Andrew

4. If Yes, what caused the flooding (circle the appropriate letter):

- a. Hurricane Andrew ('92);
- b. Rainstorm of October ('91);
- c. Other weather event: _____
- d. Other reason: _____

5. If your answer to question 3 is Yes, tell us about the damage incurred (circle the appropriate letter[s]):

- a. Water in main living area less than about 6";
- "Oct 91"*
"Andrew" b. Water in living area from about 7" to 15";
- c. Water above about 15": (indicate approximate depth in blank space.
- d. No water in main living area but in garage or elsewhere on the property;
- e. Dollar amount of damage to building/contents: *do not wish to disclose*
- f. Other damage or hardship: ~~_____~~

6. Have you heard about, and are you familiar with the Village "STORM WARNING SYSTEM", and the Village's "DISASTER PREPAREDNESS and STORM DAMAGE RECOVERY ASSISTANCE PLAN"?

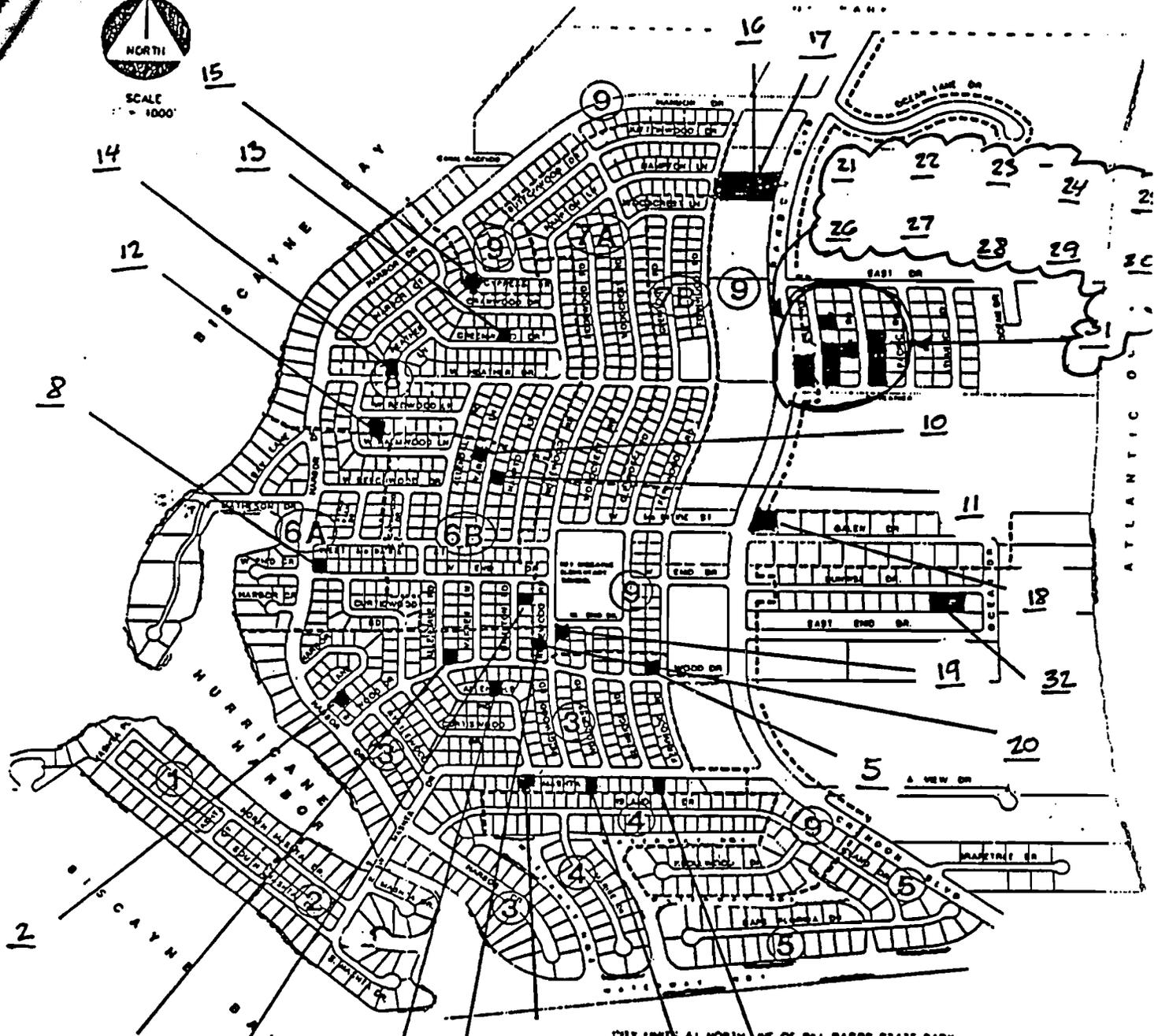
Yes _____ No

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MAP IDENTIFYING REPETITIVE LOSS AREAS & PROPERTIES (SEE TABLE)



SCALE
1" = 1000'



CITY LIMITS AT NORTH LINE OF BAL BADOE STATE PARK

VILLAGE OF K.L. BISCAYNE, FLORIDA



TABLE A

**REPETITIVE LOSS PROPERTIES
COMMUNITY NUMBER 120648
Key Biscayne, Florida**

Listing of Repetitive losses identified on AW-512 Worksheets
organized by drainage basins (DB#)

#	DB#	BFE	Address	CHG.CODE	Dates of Loss	
1.	3	9'	104 W. Mashta Dr	D	08/21/95	08/24/92
2.	3	10'	695 Harbor Lane	A/D/E	10/08/91	08/24/92
					05/29/84	
3.	3	10'	685 Allendale Rd	D/E	10/08/91	08/24/92
4.	3	10'	755 Allendale Rd	D/E	10/08/91	08/24/92
5.	3	9'	698 Fernwood Rd	D/E	10/08/91	08/24/92
6.	3	9'	188 W. Mashta Dr	D/E	10/08/91	08/24/92
7.	3	10'	220 W. Mashta Dr	B/D/E	10/10/91	08/24/92
8.	6A	10'	599 Harbor Dr	E	10/08/91	08/24/92
9.	6B	10'	629 Hampton Lane	E	10/08/91	08/24/92
10.	6B	10'	462 Warren Lane	A/E	10/08/91	08/24/92
11.	6B	10'	489 Warren Lane	NA	07/16/79	03/04/84
12.	8	10'	380 Redwood Lane	E	10/08/91	08/24/92
13.	8	10'	241 Greenwood Lane	NA	05/29/84	08/24/92
14.	8	10'	390 Heather Lane	E	10/08/91	08/24/92
					05/27/84	10/12/87
15.	9	9'	260 Cypress Dr	NA	11/13/95	08/24/92
16.	9	10'	200 Crandon Blvd	C/E	10/09/91	08/24/92
17.	9	10'	200 Crandon Blvd	C/E	10/09/91	08/24/92
18.	9	9'	555 Crandon Blvd	D/E	10/09/91	08/24/92
19.	9	10'	663 Ridgewood Rd	A/E	10/08/91	08/24/92
20.	9	10'	676 Ridgewood Rd	E	10/08/91	08/24/92
21.	9	9'	378 Caribbean Rd	D/E	10/08/91	08/24/92
22.	9	9'	390 Caribbean Rd	D/E	10/08/91	08/24/92
23.	E	9'	335 Caribbean Rd	D/E	10/09/91	08/24/92
24.	E	9'	379 Caribbean Rd	D/E	10/08/91	08/24/92
25.	E	9'	365 Caribbean Rd	D/E	10/08/91	08/24/92
26.	E	9'	395 Caribbean Rd	D/E	10/08/91	08/24/92
27.	E	9'	395 Gulf Rd	D/E	10/08/91	08/24/92
28.	E	9'	365 Gulf Rd	D/E	10/08/91	08/24/92
29.	E	9'	379 Gulf Rd	D/E	10/08/91	08/24/92
30.	E	9'	364 Gulf Rd	D/E	10/07/91	08/24/92
31.	E	9'	345 Gulf Rd	D/E	10/08/91	08/24/92
32.	E	9'	300 Sunrise Dr	D/E	10/09/91	08/24/92

LEGEND:

= number assigned to property for map identification purpose
DB# = Drainage Basin Number per Stormwater Drainage Master Plan
DB#E = East Drainage Basin where, along with DR#3, Work is completed
BFE = Base Flood Elevation as shown on FIRM, dated March 2, 1994
Address = Address of property as shown by FEMA on AW-512
CHG.CODE = See "CHANGE CODE EXPLANATION" on the next page
Dates of Loss = Dates of Loss per FEMA Form AW-512

VILLAGE OF KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN
ASSESSMENT OF FLOOD HAZARD AND PROBLEM
PHASE I REPORT, PART B
REPETITIVE LOSS PROPERTIES INVENTORY
AND RELATED DATA
JUNE, 1997

**DEFINITION OF TERMS
AND
EXPLANATORY COMMENTS**

Each Repetitive loss property on Key Biscayne is identified by FEMA on a FEMA Form AW-502 Worksheet.

The information on said Worksheet has been transferred to a "Floodplain Management Plan Worksheet" which brings together all currently known information about the property, beyond FEMA Data and seeks to relate said information, as the Plan evolves, to the recommendations proposed for Hazard Mitigation in the Action Plan.

The following includes one worksheet for each Repetitive Loss Property.

Each Worksheet is organized in four (4) sections.

The First Section deals with "Property Identification as follows:

ID#:

This is the number by which the Village of Key Biscayne will identify repetitive loss properties in the Floodplain Management Plan. It is also the order in which the properties are listed for easy retrieval.

NAME AND ADDRESS:

Reflects the name and address for the property as furnished by FEMA on the Form AW-502 Worksheet. In some cases this may not be correct information.

TELEPHONE:

Telephone number for the individual identified on FEMA Form AW-502, if any can be found either via telephone directory or Bell South Information.

COMMENTS:

Reflects initial attempts to establish contact with, and interview the owner/occupant of the property to the end of preliminarily determine the extent, circumstances and nature of damage that resulted in the insurance claim. This box also provides, in some cases, information on possible leads to current, past or successor owners of the property. No attempt has been made however, for the current purposes, to carry on time consuming and in depth investigations to secure

unlisted telephone numbers or to conduct field (on-site) interview. Addresses have been verified, however, as part of a field (windshield) inspection of each of the properties.

The Second Section deals with the property's physical location in relation to the Flood Insurance Rating Map (FIRM) and to other factors relating to its vulnerability to flooding hazards.

DB:

Identifies the "Drainage Basin" as shown in the Key Biscayne Stormwater Drainage Master Plan which formed the basis for the design and construction of the Village's new storm drainage system. The same identification for the basins is used herein in connection with the Floodplain Management Plan.

ZONE:

Reflects the zone (usually "AE") in which the property is located according to the Flood Rate Insurance Map (FIRM). An AE Zone is a "Special Flood Hazard Area" (SFHA) where base flood elevations are provided.

BE (ft):

This represents the Base Flood Elevation as shown on the FIRM and is the elevation of the crest of the base or 100 year flood in feet NGVD.

STREET ELEVATION:

Indicates crown-of-street elevations in feet NGVD per information available to the Village of Key Biscayne Department of Building, Zoning and Planning via a combination of recent surveys and pre-incorporation information.

GARAGE AND FIN. FLOOR ELEVATION.

Indicates the elevation in feet NGVD of, respectively the Garage (or patio, carport or the like) and the "Finished Floor" of the structure as determined by survey and other information available to the Village of Key Biscayne Department of Building, Zoning and Planning. Lacking such information building elevations have been assumed to be in conformance with the old code; i.e. 6" and 13" above street elevation for finished floor levels of garages and main buildings, respectively.

DATE STORM DRAINAGE IN PLACE:

Shows the date of completion of existing storm sewers and related storm drainage facilities, and a projected date for completion of segments to be built under the current program.

The Third Section provides information for each repetitive loss property related to its history of insurance claims, extent of damage and degree to which the property is vulnerable to future floods hazards.

CLAIM DATES.

Indicates the dates of the storm or weather events that led to flooding damages and insurance claims, per FEMA Records as shown on Forms AW-502. As may be seen on the worksheets, virtually all repetitive loss properties were affected by two(2) events: one, a massive rainfall on or about October 8, 1991; the other, Hurricane Andrew on August 24, 1992.

\$ BUILDING/ \$ CONTENT.

Reflects the amounts (Per FEMA records) paid to owners of repetitive loss properties under NFIP insurance settlements in connection with the above claims, in terms of damages to building as well as content.

DEPTH OF WATER.

Shows the "Depth of Water" in accordance with NFIP definition attached hereto based on insurance adjuster's report. (File:" Claim Master (CMF) Actuarial (APOL).

It should be noted that the depth of water is shown in Feet (ft.) using the numbers as shown on the record supplied by NFIP. In some cases, it would appear that the depth of water reported is actually in Inches, rather than feet.

VULNERABILITY INDEX

This index correlates a number of factors for each property, including, among others, the elevation of the street relative to that of the property and the main building, the elevation, soil and other relevant characteristics of the drainage basin in which the property is located, the status of storm drainage improvements, etc..

This information will be used for the purpose of achieving a best professional judgment as to: (1) the property's vulnerability to future flooding damages; and (2) the probability of being able to mitigate the hazard.

As such the Index will be a combination of broad technical value judgments and experience, and factual information based on the field experience with repetitive loss properties that will best make it possible to identify all properties throughout Key Biscayne that are at highest risk of flooding.

The fourth Section contains the general comments with respect to the property including, without limitations the improvements which have been made since the last flooding event, changes in the immediate neighborhood and surrounding properties and whether its position on FEMA's list of repetitive loss properties needs to be reexamined.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
1	Ms. Bertha Fuste 104 Mashta Drive Key Biscayne, Florida 33149		No phone # listed; unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE	9	4.38	4.88	5.46	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
8/24/92	27,401	27,662	55,063	-0-	
8/21/95	<u>699</u>	<u>437</u>	<u>1,136</u>	-0-	
Total	<u>28,100</u>	<u>28,099</u>	<u>56,199</u>		

COMMENTS:

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
2	Mr. & Mrs. John E. Festa 695 Harbor Lane Key Biscayne, Florida 33149		

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE	10	4.20	4.70	5.28	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
5/29/84	1,589	-0-	1,589	1	
10/8/91	1,799	286	2,085	-0-	
8/24/92	<u>93,676</u>	<u>30,000</u>	<u>123,676</u>	4	
Total	<u>97,064</u>	<u>30,286</u>	<u>127,350</u>		

COMMENTS: House has been re-built, elevated at or above base flood elevation. Needs to be removed from repetitive loss property list.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
3	Dr. Carlos E. Alvarez 685 Allendale Road Key Biscayne, Florida 33149	854-2432	Phone interview with Dr. Alvarez on July 2, 1997. Experienced six inches + water in garage on 10/8/91. Garage biggest problem.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE	10	4.08	4.58	6.0	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	-0-	3,032	3,032	-0-	
8/24/92	<u>34,899</u>	<u>60,000</u>	<u>94,899</u>	-0-	
Total	<u>34,899</u>	<u>63,032</u>	<u>97,931</u>		

COMMENTS: New drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
4	Kimrey Newlin 755 Allendale Road Key Biscayne, Florida 33149	361-9362	Interview with Mr. Newlin on July 2, 1997. On 10/8/91, garage was flooded, no water in main building. On 8/24/92, 4 ft. + in main building.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE	10	4.54	5.04	5.62	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91 8/24/92	-0- <u>24,956</u>	3,583 <u>25,935</u>	3,583 <u>50,891</u>	6 24	
Total	<u>24,956</u>	<u>29,518</u>	<u>54,474</u>		

COMMENTS:

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
5	Mr. John I. Keasler 698 Fernwood Road Key Biscayne, Fl 33149-2023		No phone # listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE	9	4.44	4.94	5.52	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	962	450	1412	1	
8/24/92	<u>26,573</u>	<u>5,256</u>	<u>31,829</u>	1	
Total	<u>27,535</u>	<u>5,706</u>	<u>33,241</u>		

COMMENTS: Two new homes in progress; elevation certificates on file. Should probably remove from repetitive loss property list.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
6	Mr. Roberto De Cespedes 188 West Mashta Drive Key Biscayne, Florida 33149	365-9273	Phone accesses a fax. Unable to establish contact with owner. No other phone listed.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE		3.94	4.44	5.02	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	3,840	-0-	3,840	10	
8/24/92	<u>65,063</u>	<u>18,500</u>	<u>83,563</u>	24	
Total	<u>68,903</u>	<u>18,500</u>	<u>87,403</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
7	Mr. Ralph L. Padgett, Jr. 220 West Mashta Drive Key Biscayne, Florida 33149	821-5773	Address not found. Needs correction. Talked with Mr. Padgett; 26 inches in home on 8/24/92. House sold to Chitham (?). Unable to locate new owner.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
3	AE	10	4.25	4.75	5.33	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/10/91	1,300	-0-	1,300	+99	
8/4/92	<u>70,101</u>	<u>-0-</u>	<u>70,101</u>	2	
Total	<u>71,401</u>	<u>0</u>	<u>71,401</u>		

COMMENTS: Only garage was affected by 10/10/91 event.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
8	Ms. Mary Donlan 599 Harbor Drive Key Biscayne, Florida 33149	361-7537	Was unable to reach; no answer, no machine.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
6A	AE	10	3.98	4.48	5.06	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	2,283	473	2,756	-0-	
8/24/92	<u>59,740</u>	<u>10,000</u>	<u>69,740</u>	-0-	
Total	<u>62,023</u>	<u>10,473</u>	<u>72,496</u>		

COMMENTS: New drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
9	Ms. Genevieve P. Koster 629 Hampton Lane Key Biscayne, Florida 33149	361-5952	Talked with owner; 8/24/92 event showed 24 inches of water.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
6B	AE	10	4.20	4.70	5.28	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	4,675	1,906	6,581	1	
8/24/92	<u>39,885</u>	<u>5,000</u>	<u>44,885</u>	1	
Total	<u>44,560</u>	<u>6,906</u>	<u>51,466</u>		

COMMENTS: Owner, in course of interview, indicated that they experienced water in the main building on June 9, 1997. No claim was filed; building served by new storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
10	Mr. Carlos Brizuela 462 Warren Lane Key Biscayne, Florida 33149	361-7673	Phone disconnected.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
6B	AE	10	4.14	4.64	5.22	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	9,207	2,302	11,509	5	
8/24/92	<u>128,361</u>	<u>20,000</u>	<u>148,361</u>	24	
Total	<u>137,568</u>	<u>22,302</u>	<u>159,870</u>		

COMMENTS: New home elevated above BFE on property. Should probably be removed from list of repetitive loss properties.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
11	Fried, Mark E & June 485 Warren Lane Key Biscayne, Florida 33149	371-7079 (b) 361-6813 (h)	

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
6B	AE	10	4.11	4.61	5.19	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
7/16/79	3,427	-0-	3,427	1	
3/4/84	<u>1,134</u>	<u>-0-</u>	<u>1,134</u>	5	
Total	<u>4,561</u>	<u>0</u>	<u>4,561</u>		

COMMENTS:

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
12	Mr. Scott Kunkel 380 Redwood Lane Key Biscayne, Florida 33149	361-1482	Left message on machine. Call not returned.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION	DATE STORM DRAINAGE IN PLACE
8	AE	10	3.70	4.20	4.78	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	1,096	-0-	1,096	-0-	
8/24/92	<u>66,933</u>	<u>40,000</u>	<u>106,933</u>	2	
Total	<u>68,029</u>	<u>40,000</u>	<u>108,029</u>		

COMMENTS: Improved drainage.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
13	Robert J. & Mary Kurau 241 Greenwood Lane		No telephone # listed; unable to contact.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
8	AE	10	4.76	5.26	5.84	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
5/29/84	-0-	1,147	1,147	-0-	
8/24/92	<u>21,132</u>	<u>16,479</u>	<u>37,611</u>		
Total	<u>21,132</u>	<u>17,626</u>	<u>38,758</u>		

COMMENTS:

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
14	Mr. & Mrs. Abe Mensonides 390 Heather Lane Key Biscayne, Florida 33149		No phone # listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
8	AE	10	4.19	4.69	5.27	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
5/27/84	-0-	1,657	1,657	1	
10/12/87	2,593	4,900	7,493	-0-	
10/8/91	2,162	671	2,833	-0-	
8/24/92	<u>62,337</u>	<u>60,000</u>	<u>122,337</u>	-0-	
Total	<u>67,092</u>	<u>67,228</u>	<u>134,320</u>		

COMMENTS: Drainage improvements.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
15	Eduardo Sanchez 260 Cypress Drive Key Biscayne, Florida 33149	361-3493	

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	9	4.80	5.30	7.59	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
8/24/92	27,935	20,000	47,935	12	
11/13/95	<u>9,046</u>	<u>10,752</u>	<u>19,798</u>	1	
Total	<u>36,981</u>	<u>30,752</u>	<u>67,733</u>		

COMMENTS: Improved drainage.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
16/17	200 Palm Corporation 200 Crandon Boulevard (Left) Key Biscayne, Florida 33149		

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	10	5.14	5.64	6.22	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/9/91	18,129	-0-	18,129	1	
8/24/92	<u>89,833</u>	<u>-0-</u>	<u>89,833</u>	4	
Total	<u>107,962</u>	<u>0</u>	<u>107,962</u>		

COMMENTS: Building demolished, land vacant. Future improvements subject to new codes; property should be removed from repetitive loss property list.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
18	Condo Association Crandon Tower C 555 Crandon Boulevard #85 Key Biscayne, Florida 33149		Unable to locate manager, although contact was established with building official.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	9	4.11	4.61	5.19	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/9/91	4,731	-0-	4,731	-0-	
8/24/92	<u>50,396</u>	<u>4,432</u>	<u>54,828</u>	3	
Total	<u>55,127</u>	<u>4,432</u>	<u>59,559</u>		

COMMENTS: Damages probably in lobby and certainly garage area. Garage is 3 ft. below street level.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
19	Mr. & Mrs. Carlos A. Grandos 663 Ridgewood Road Key Biscayne, Florida 33149		No telephone listing; unable to contact.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	10	3.60	4.10	4.68	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	6,071	7,220	13,291	+99	
8/24/92	<u>39,150</u>	<u>19,714</u>	<u>58,864</u>	+99	
Total	<u>45,221</u>	<u>26,934</u>	<u>72,155</u>		

COMMENTS: New building on property complies with BFE. Should be removed from repetitive loss list.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
20	Ms. Barbara J. Stickney 676 Ridgewood Road Key Biscayne, Florida 33149	361-8059	Access through Timothy (son), 265 Woodcrest Road, Key Biscayne, Florida 33149. Mr. Stickney advised that, on 8/24/92, garage had 30 inches of water, main building 24 inches. In 1991, back patio was flooded but not main building. Building sold; new owner is Isabel/Fernando Hildago. Unable to locate.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	10	3.70	4.20	4.78	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	4,195	-0-	4,195	+99	
8/24/92	<u>34,929</u>	<u>11,391</u>	<u>46,320</u>	+99	
Total	<u>39,124</u>	<u>11,391</u>	<u>50,515</u>		

COMMENTS: No improvements

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
21	Mr. Carlos M. Baranano 378 Caribbean Road Key Biscayne, Florida 33149		Phone # not listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	9	4.20	4.70	5.28	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	323	2,578	2,901	1	
8/24/92	<u>34,740</u>	<u>21,758</u>	<u>56,498</u>	1	
Total	<u>35,063</u>	<u>24,336</u>	<u>59,399</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
22	Mr. & Mrs. Al Rose 390 Caribbean Road Key Biscayne, Florida 33149		Phone # not listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
9	AE	9	4.10	4.60	5.18	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	8,484	-0-	8,484	-0-	
8/24/92	<u>43,036</u>	<u>7,500</u>	<u>50,536</u>	3	
Total	<u>51,520</u>	<u>7,500</u>	<u>59,020</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
23	Mr. William A. Power 335 Caribbean Road Key Biscayne, Florida 33149	361-7711	On 8/24/92, water in main house was 7.5 inches deep. House (finish grade) is about 12 inches above grade of property. No water in house during 6/9/97 storm. Estimated 6 inch margin till flood.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	3.98	4.48	5.06	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/9/91	908	1,049	1,957	-0-	
8/24/92	<u>41,937</u>	<u>30,000</u>	<u>71,937</u>	-0-	
Total	<u>42,845</u>	<u>31,049</u>	<u>73,894</u>		

COMMENTS: New storm drainage system (?)

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
24	Mr. & Mrs. Juan F. Casas 379 Caribbean Road Key Biscayne, Florida 33149	361-2942	Mrs. Casas indicated no flood on 6/9/97; about 6 inches during the 10/8/91 storm and 3 ft. on 8/24/92.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	4.20	4.70	5.28	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	707	2,460	3,167	-0-	
8/24/92	<u>73,227</u>	<u>29,389</u>	<u>102,616</u>	-0-	
Total	<u>73,934</u>	<u>31,849</u>	<u>105,783</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
25	Mr. Andrew Conte 365 Caribbean Road Key Biscayne, Florida 33149	361-6311	Left message on machine. No return call.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	4.20	4.70	5.28	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	2,380	903	3,283	9	
8/24/92	<u>36,121</u>	<u>13,400</u>	<u>49,521</u>	18	
Total	<u>38,501</u>	<u>14,303</u>	<u>52,804</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
26	Mr. John Petersen 395 Caribbean Road Key Biscayne, Florida 33149	361-2890	Indicates 14 inches in building during 8/24/92 storm and 3 inches in 10/8/91 storm. Garage, approximately 6-7 inches below main building, had no flooding during 6/9/97 storm.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	4.10	4.60	5.18	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	4,998	6,185	11,183	1	
8/24/92	<u>75,000</u>	<u>14,800</u>	<u>89,800</u>	3	
Total	<u>79,998</u>	<u>20,985</u>	<u>100,983</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
27	Ms. Lottie Danelczyk 395 Gulf Road Key Biscayne, Florida 33149		Phone # not listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	3.95	4.45	5.03	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	2,460	-0-	2,460	1	
8/24/92	<u>26,912</u>	<u>39,387</u>	<u>66,299</u>	-0-	
Total	<u>29,372</u>	<u>39,387</u>	<u>68,759</u>		

COMMENTS: New storm drainage system. Property being re-built at BFE. Should be removed from repetitive loss list.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
28	Mr. & Mrs. Michael A. Smithies 365 Gulf Road Key Biscayne, Florida 33149	361-1083	Unable to access. No answer or machine.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	3.88	4.38	4.96	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	1,028	2,332	3,360	+99	
8/24/92	<u>48,291</u>	<u>35,887</u>	<u>84,178</u>	1	
Total	<u>49,319</u>	<u>38,219</u>	<u>87,538</u>		

COMMENTS: New drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
29	Trois Bois Ltd. 379 Gulf Road Key Biscayne, Florida 33149		Phone # not listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	3.82	4.32	4.90	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	0	4,164	4,164	-0-	
10/8/91	3,345	0	3,345	1	
8/24/92	0	28,505	28,505	2	
8/24/92	<u>16,013</u>	<u>0</u>	<u>16,013</u>	2	
Total	<u>19,358</u>	<u>32,669</u>	<u>52,027</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
30	John A & Alice John A & Alice 364 Gulf Road Key Biscayne, Florida 33149		Unable to locate phone # or understand name on FEMA list.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	3.88	4.38	4.96	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/7/91	1,888	5,135	7,023	1	
8/24/92	<u>11,819</u>	<u>12,740</u>	<u>24,559</u>	2	
Total	<u>13,707</u>	<u>17,875</u>	<u>31,582</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
31	Mr. & Mrs. Pierre Nafilyan 345 Gulf Road Key Biscayne, Florida 33149	666-1613	House sold to Phillipe Gaillard (365-0769). Indicates Florida room flooded in 1991, water up to steps. No flooding in 6/9/97 storm.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	3.88	4.38	4.96	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/8/91	8,747	6,780	15,527	1	
8/24/92	<u>137,564</u>	<u>60,000</u>	<u>197,564</u>	2	
Total	<u>146,311</u>	<u>66,780</u>	<u>213,091</u>		

COMMENTS: New storm drainage system.

REPETITIVE LOSS PROPERTIES

INVENTORY

PROPERTY IDENTIFICATION

ID #	NAME AND ADDRESS	TELEPHONE	COMMENTS
32	Ms. Connie L. Molinari 300 Sunrise Drive Key Biscayne, Florida 33149		Phone # not listed. Unable to access.

FIRM AND RELATED INFORMATION

DB	ZONE	BFE (FT.)	STREET ELEVATION (FT.)	GARAGE ELEVATION (FT.)	FIN. FLOOR ELEVATION (FT.)	DATE STORM DRAINAGE IN PLACE
E	AE	9	4.74	5.24	5.82	

DAMAGE/CLAIMS

CLAIM DATES	\$ BUILDING	\$ CONTENT	\$ TOTAL	DEPTH OF WATER (FT.)	VULNERABILITY INDEX
10/9/91	7,741	-0-	7,741	-0-	
8/24/92	<u>178,763</u>	<u>3,957</u>	<u>182,720</u>	1	
Total	<u>186,504</u>	<u>3,957</u>	<u>190,461</u>		

COMMENTS: No improvements.

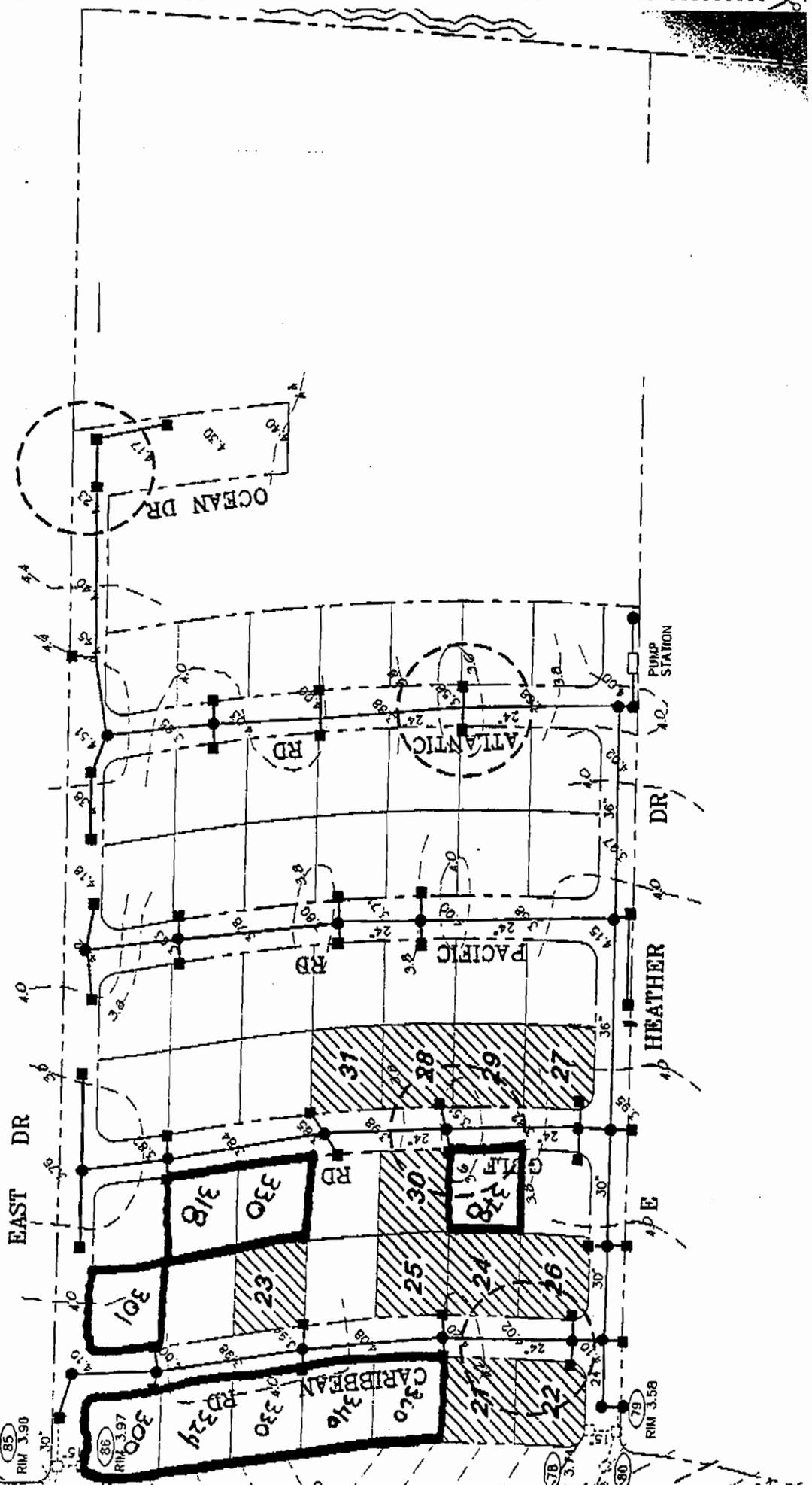
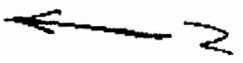
**Address of Properties With Similar Vulnerability to
Flooding as Repetitive Loss Properties**

Street No.	Street	City	State	Zip+Four
665	Allendale Road	Key Biscayne	FL	33149-2010
765	Allendale Road	Key Biscayne	FL	33149-2402
769	Allendale Road	Key Biscayne	FL	33149-2402
775	Allendale Road	Key Biscayne	FL	33149-2402
781	Allendale Road	Key Biscayne	FL	33149-2402
300	Caribbean Road	Key Biscayne	FL	33149-1604
301	Caribbean Road	Key Biscayne	FL	33149-1603
324	Caribbean Road	Key Biscayne	FL	33149-1604
330	Caribbean Road	Key Biscayne	FL	33149-1604
340	Caribbean Road	Key Biscayne	FL	33149-1604
360	Caribbean Road	Key Biscayne	FL	33149-1604
318	Gulf Road	Key Biscayne	FL	33149-1606
330	Gulf Road	Key Biscayne	FL	33149-1606
378	Gulf Road	Key Biscayne	FL	33149-1606
230	Greenwood Drive	Key Biscayne	FL	33149-1212
251	Greenwood Drive	Key Biscayne	FL	33149-1211
641	Hampton Road	Key Biscayne	FL	33149-2016
380	Heather Lane	Key Biscayne	FL	33149-1222
610	Ridgewood Road	Key Biscayne	FL	33149-2019
628	Ridgewood Road	Key Biscayne	FL	33149-2019
640	Ridgewood Road	Key Biscayne	FL	33149-2019
652	Ridgewood Road	Key Biscayne	FL	33149-2019
664	Ridgewood Road	Key Biscayne	FL	33149-2019
690	Ridgewood Road	Key Biscayne	FL	33149-2019
455	Warren Lane	Key Biscayne	FL	33149-1824
515	Warren Lane	Key Biscayne	FL	33149-1826
116	West Mashta Drive	Key Biscayne	FL	33149-2418
128	West Mashta Drive	Key Biscayne	FL	33149-2418
140	West Mashta Drive	Key Biscayne	FL	33149-2418
152	West Mashta Drive	Key Biscayne	FL	33149-2418
212	West Mashta Drive	Key Biscayne	FL	33149-2420

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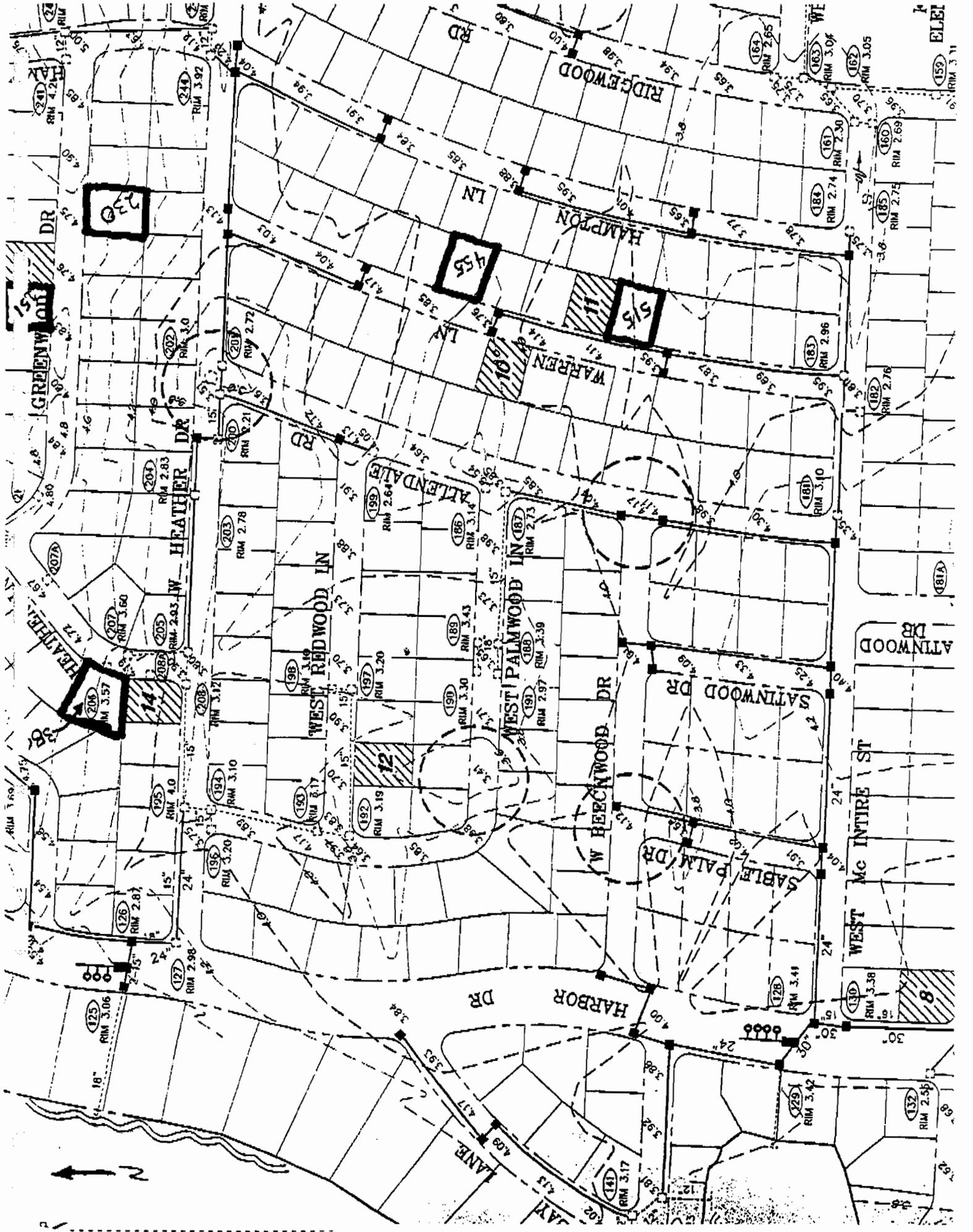


EXHIBIT B

**FLOODPLAIN MANAGEMENT PLAN ADOPTION AND
REVIEW DOCUMENTATION, INCLUDING ACTIONS BY
WORKING REVIEW COMMITTEE**



VILLAGE OF KEY BISCAYNE

Office of the Village Manager

Village Council
John F. Festa, *Mayor*
Mortimer Fried, *Vice Mayor*
Martha Fdez-León Broucek
Gregory C. Han
Hugh T. O'Reilly
Michele Padovan
Betty Sime

Village Manager
C. Samuel Kissinger

March 30, 1998

MEMORANDUM

TO: The Honorable Mayor and Councilmen

FROM: C. Samuel Kissinger, Village Manager

RE: Adoption of Floodplain Management Plan for Key Biscayne.

Transmitted herewith please find a Resolution adopting a Floodplain Management Plan for Key Biscayne and calling for its implementation.

The Plan was evolved over a period of approximately one-year during which a "Working Review Committee" appointed by the Village Manager met six times and made recommendations with respect to the substance of the Plan. The Committee and the technical disciplines it represents, is expected to remain active and continue to advise the Village Manager on flood management matters after adoption of the Plan.

The preparation of the Floodplain Management Plan was funded with a \$45,000 State Department of Community Affairs Grant that the Village was able to secure on a competitive basis.

The compelling need for the Floodplain Management Plan surfaced when the number of "Repetitive Loss Properties" recorded by FEMA for Key Biscayne, threatened the Village's eligibility for participation in the National Flood Insurance Program Community Rating System.

More specifically:

- A Floodplain Management Plan is a Community Rating System pre-requisite for participation, in cases where more than 9 repetitive loss properties exist in the community. For Key Biscayne that number was 32.
- Such a Plan is also a prerequisite for many State and Federal Grant programs involving emergency management and hazard mitigation.
- Finally, the Plan provides an effective support structure and framework within which a wide range of possible floodplain management activities and agencies can be selected and coordinated.

Since the start of this effort, a number of its goals have already been advanced, including, notably, FEMA's informal acceptance of the Village's position with respect the repetitive loss property count and its rating of Key Biscayne as a "Class-7 Community" under the NFIP/Community Rating System.

This classification provides Key Biscayne with the best ranking in Dade County. More significantly, it provides residents and Village property owners with a 15% discount on their flood insurance premiums, effective April 1998.

The following material is transmitted herewith to document the Village Manager's recommendation to adopt the Floodplain Management Plan:

1. A copy of Volume One of the Plan which includes:
 - a. The "Floodplain Management Plan Document" i.e. the actual document being adopted;
 - b. The "Floodplain Management Plan Report" including Sections: I, III, IV, V, VI, & VII of the Report. This is the explanatory text and rationale of the Plan; and
 - c. The 1998/1999 Action Plan (Section VIII of the Plan Report) which presents the tasks and projects to be initiated during the next two years as part of the implementation of the Floodplain Management Plan.
2. A copy of Volume Two of the Plan which includes:
 - a. Section IX of the Floodplain Management Plan Report, covering all matters related to the adoption of the Plan, including the actions to be taken by the Village Council and those already taken by the Working Review Committee;

- b. Sections II and X of the Floodplain Management Plan Report dealing, respectively, with the involvement of the public and with the implementation and review of progress in the management of plan activities.
3. Volume Three of the Floodplain Management Plan includes all of the material, studies and exhibits, which support and document the findings in the Plan. As such, Volume Three may be considered the reference library for the Plan.

However the large amount of material in Volume Three makes its wide distribution impractical. For this reason the material has been compressed into a more manageable form to be found in the attached copy of Volume Three.

The distribution of all of the Volume Three material has been limited to five copies:

- a. Two for the State Department of Community Affairs, as the sponsor of this project;
- b. One copy available at all time in the office of the Village Manager;
- c. A fourth copy available at the Key Biscayne Library; and
- d. A fifth copy to be kept as a working copy for use by Village staff and consultants for working purposes. Reproduction of portions or all of the material will also be possible upon request.

The Village Manager thanks the Working Review Committee for its good work and recommends approval of the Resolution adopting the Floodplain Management Plan.



RESOLUTION NO: 98-

A RESOLUTION OF THE VILLAGE OF KEY BISCAYNE,
FLORIDA; ADOPTING A FLOODPLAIN MANAGEMENT PLAN;
PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Village of Key is located in a floodplain and has been identified under the National Flood Insurance Program as a Special Flood Hazard Area; and

WHEREAS, the floodplain is subject to repetitive flooding conditions, resulting in hazards to public health and safety and serious property damage; and

WHEREAS, a Floodplain Management Plan has been prepared to address these hazards and qualify the Village for participation in the National Flood Insurance Program Community Rating System; and

WHEREAS, the Floodplain Management Plan identifies a wide range of activities that will keep repetitive flooding problem from getting worse and will help residents and property owners protect their property; and

WHEREAS, the Village Manager, has recommended adoption of the Floodplain Management Plan in accordance with the recommendations of the Working Review Committee, a technically qualified citizen advisory group appointed to advise the Manager on the Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE VILLAGE COUNCIL OF KEY BISCAYNE, FLORIDA AS FOLLOWS:

Section 1. The Key Biscayne Floodplain Management Plan Document is hereby adopted.

Section 2. The Village Manager is hereby directed to implement the Floodplain Management Plan, including the performance of the on-going tasks and projects identified in the 1998/1999 Action Plan.

Section 3. The Village Manager is further directed to provide:

- a.) An annual progress report with respect to the implementation of the Floodplain Management Plan beginning on the first anniversary of its adoption; and
- b.) On a biennial basis, a new or updated Action Plan beginning with the second

anniversary of the Floodplain Management Plan's adoption.

Section 4. This resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED this __ day of _____, 1998.

MAYOR JOHN F. FESTA

ATTEST:

CONCHITA H. ALVAREZ, VILLAGE CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

RICHARD J. WEISS, VILLAGE ATTORNEY



Village of Key Biscayne

Office of the Village Clerk

PUBLIC NOTICE

Notice is hereby given that the following resolution will be considered by the Key Biscayne Village Council at a meeting to be held on Tuesday, April 28, 1998, at 7:00 p.m., in the Council Chamber, located at 85 West McIntyre Street, Second Floor, Key Biscayne, Florida:

**A RESOLUTION OF THE VILLAGE OF KEY BISCAYNE, FLORIDA; ADOPTING
A FLOODPLAIN MANAGEMENT PLAN; PROVIDING FOR AN EFFECTIVE
DATE.**

Interested parties are invited to appear and be heard. A copy of the proposed resolution may be obtained at Village Hall, Office of the Village Clerk, 91 West McIntyre Street, Suite 201, Key Biscayne, Florida 33149. Interested parties may appear at the Council Meeting and be heard with respect to the proposed resolution.

In accordance with the Americans With Disabilities Act of 1990, all persons who are disabled and who need special accommodations to participate in this proceeding because of that disability should contact the Office of the Village Clerk, 91 West McIntyre Street, Suite 201, Key Biscayne, Florida 33149, telephone number (305) 365-5506, not later than two business days prior to such proceeding.

Should any person desire to appeal any decision of the Village Council with respect to any matter to be considered at this meeting, that person shall insure that a verbatim record of the proceedings is made including all testimony and evidence upon which any appeal may be based (F.S. 286.0105).

Conchita H. Alvarez
Village Clerk



VILLAGE OF KEY BISCAIYNE

Office of the Village Manager

Village Council

John F. Festa, *Mayor*
Michele Padovan, *Vice Mayor*
Mortimer Fried
Gregory C. Han
Hugh T. O'Reilly
Christina Dearing Reed
Betty Sime

Village Manager

C. Samuel Kissinger

June 23, 1997

Mr. Gregory Han, Ph.D., President
Han and Associates, Inc.
685 Curtiswood Drive
Key Biscayne, Florida 33149

Re: Floodplain Management Plan
Working Review Committee
Notice of Meeting

Dear Gregory:

This letter is to advise you that the first meeting of the Working Review Committee has been set for Friday, July 18, 1997, 10:00 AM in the Village Hall Council Chambers at 85 West McIntyre Street, Second floor.

Among other matters and general briefings, the meeting will focus on a presentation by Williams, Hatfield and Stoner, Inc. on the "Assessment of Flood Hazards and Problems" on Key Biscayne. As such, this meeting is identified in the overall planning process as The Phase I Presentation Meeting

Committee members will be furnished, at the meeting with a preliminary report on the above subject and with a "Check List of Recommendations For Decisions" relative the initial findings of the preliminary report.

Committee members will then be asked to vote or otherwise express themselves on these Recommendations at a follow-up Phase I Decision Meeting, tentatively scheduled for July 25, 1997.

Enclosed herewith is an Agenda for the July 18, 1997 meeting. Every effort will be made to distribute copies of the preliminary report in advance of the meeting.

Please advise me as soon as possible whether you will be able make this meeting or, if not, whether you will be able to send a substitute to represent you. You can reach me at (305) 361-9414.

Public awareness of this effort is encouraged. Accordingly, this meeting, like all Working Review Committee meetings is open to the public. The degree and nature of participation in the course of the meetings, however, will be determined at the discretion of the Committee's chairman and its membership.

Sincerely,

A handwritten signature in black ink, appearing to be 'P. Kory', written in a cursive style.

Peter Kory
Project Coordinator

**KEY BISCAIYNE
FLOODPLAIN MANAGEMENT PLAN**

WORKING REVIEW COMMITTEE

Phase I "Presentation Meeting"

July 18, 1997 10:00 AM

**Village Hall Council Chambers
85 West McIntyre Street
Second Floor**

A G E N D A

- | | |
|---|------------------------|
| I. Welcome, Introductions, Meeting Protocol: | Deborah DeLeon |
| II. Organization, Mission, Planning Process,
Coordination w/ Governmental Organizations: | Peter Kory |
| III. Assessment of Flood Hazards & Problems: | Carroll Sanders |
| IV. Recommendations for Decisions (Phase I): | Peter Kory |
| V. Questions and Discussion: | Deborah DeLeon |
| VI. Adjournment. | |

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN
WORKING REVIEW COMMITTEE**

Minutes, meeting of July 18,1997

Members present: Deborah De Leon, Maribel Balbin, Robert Cuevas, Brian Flynn, Lee Niblock, Ronald White.

Absent: Gregory Han

Others Present: C. Samuel Kissinger, Chief John Gilbert, John Little, Leo Llanos, Carroll Sanders, Tracy Ward, Peter Kory.

Deborah De Leon open the meeting at 10:15 AM, indicating the general purpose of the committee and the meeting. She next had members introduce themselves, indicating that while meetings would be informal, the Committee is required to operate under the Sunshine Law.

After the introductions, a video prepared by the Florida Department of Community Affairs dated May 30,1996, entitled "Breaking The Cycle" was shown to warm up to the subject.

Next, the Project Coordinator (Peter Kory) described the context of the floodplain management planning process as one of 18 activities in the NFIP/ISO Community Rating System designed to mitigate flood hazards and reduce flood insurance rates. The current effort is funded through a State DCA Emergency Management, Preparedness, Assistance Grant Program. The present meeting is to present the consultants preliminary findings and recommendations with respect to: (1) organization of the planning process; (2) relationship with government agencies; and (3) assessment of the flood hazards and problems on Key Biscayne.

Carroll Sanders and Tracy Ward of Williams, Hatfield and Stoner, Inc. discussed, at some length the extent and nature of flood hazards on Key Biscayne emphasizing the fact that, as a barrier island, the Key is threaten by both major rainfalls and storm surges. While storm drainage systems are effective in varying degrees with respect to the mitigation of rainfalls, mitigation of storm surges represent a far more daunting challenge.

With reference to storm drainage systems, it was noted that a field (windshield) survey of repetitive loss properties made on June 8th, when between 8" and 9" inches of rain fell in a 24 hour period, showed that the system functioned at a high

degree of effectiveness with no properties apparently sustaining any flooding of the main structure.

Discussed, was the fact that the vulnerability of structures in the floodplain is assessed by determining the prevalence of such structures with finished floor elevations below the base flood elevation in relation to street elevations. To this end, the consultants presented a map relating land contours to street contours. The map also shows the various elements of the storm drainage system, local depressional areas and the location of repetitive loss properties per FEMA records.

In connection with this aspect of the presentation WHS showed and discussed the Flood Insurance Rate Map (FIRM) and its use as part of this project.

In the course of the discussion which followed the presentation, the question was raised asking why some properties were flooded as of record (i.e. the repetitive loss properties) while others, in seemingly similar circumstances, were not, during the October 8, 1991 storm. As the answer lay in the probability that many of these properties were either not insured or not insurable, the issue returned to the need for further investigation of the most vulnerable properties on Key Biscayne. To establish that, would require more detailed information than what is currently available with respect finished floor elevations.

Since the properties involved were permitted under the old code, the only source of said information is with the county. Leo Llanos will follow up and determine feasibility.

All members of the Working Review Committee were provided with a Checklist of "Recommendations for Decisions". Committee action on these recommendations will be the principal Agenda item for the next meeting of the Committee set for Friday July 25, 1997 at 10:0 AM in the Key Biscayne Council Chambers.

After confirming the time and place for the next meeting, the chairman adjourned the meeting at 11:40 AM.

Prepared and submitted:



Peter Kory
Acting Secretary

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN**

WORKING REVIEW COMMITTEE

Phase I "Decision Meeting"

July 25, 1997 10:00 AM

**Village Hall Council Chambers
85 West McIntyre Street
Key Biscayne, Florida
Second Floor**

A G E N D A

I. Committee Action on Recommendations for Decisions:

Discussion and vote chaired by Deborah DeLeon with explanations by Peter Kory, Carroll Sanders and Tracy Ward as necessary.

II. Advice of next meeting, re: Phase II (goals & Objectives-October 1997)

Peter Kory

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN
WORKING REVIEW COMMITTEE**

Minutes, meeting of July 25, 1997

Members present: Deborah De Leon, Maribel Balbin, Robert Cuevas, Ronald White.

Absent: Brian Flynn, Gregory Han, Lee Niblock.

Others present: C. Samuel Kissinger, Tracy Ward, Peter Kory, James DeCocq, Lilian Flank.

Deborah De Leon opened the meeting at 10:15 a.m., asking for a consensus on the approval of the minutes from the July 18 meeting.

Project Coordinator Peter Kory explained that all members were to vote on the Phase I Part C of the report, and pointed out that these were only recommendations to decisions, not decisions themselves.

The discussion and vote were chaired by Deborah De Leon with explanations by P. Kory and T. Ward.

I-A; Alternatives A & B were discussed. The issue is whether a Floodplain Management Plan (FPMP) is necessary or whether the question of repetitive loss properties should be addressed as a separate effort to reduce the number of Repetitive loss Properties to a point where a Class A or B designation for Key Biscayne is possible, thus enabling the Village to participate in the CRS Program without a FPMP. As alternative B would be very difficult and time consuming, the WRC voted to pursue the preparation of a FPMP.

IV-B raised a few doubts, and it was suggested that the following language be added to Alternative A in order not to raise any uncertainties: "The principle of focusing the Floodplain Management Plan on, but not to the exclusion of, Repetitive Loss Properties, ..."

VI-D Floor Elevation Assumption raised a few doubts. Peter Kory explained that this refers to not spending a lot of time on properties that have been raised above the Base Flood Elevation. Mrs. De Leon asked about the validity of the base flood elevation and if this should be raised or lowered by FEMA. Sam Kissinger suggested inviting a FEMA representative to the next meeting.

VI-E Vulnerability or Risk Index: Tracy Ward explained that the Risk Index is a numeric scoring used to identify classes of properties to develop measures to protect against flooding. The bottom line is that the index should either be based on an analysis of relative elevations or on this plus the storm drainage system. It was decided that it is important to consider the drainage system as well as the relative elevations.

The next meeting was scheduled tentatively for October 17, 1997. The meeting adjourned at 12:15PM.

Submitted on 7/30/97, by



Lilian Flank

	BALBIN	QUEVAS	FLYNN (BY PHONE)	ZHAH	HISLOCK	WHITE	DELEON
I-A (ALTA)	Y	Y	Y			Y	Y
I-A (ALTB)	N	N	N			N	N
II-B1. (ALTA)	Y	Y	Y			Y	Y
II-B1. (ALTB)	N	N	N			N	N
II-B2.	Y	Y	Y			Y	Y
II-B	Y	Y	Y			Y	Y
II-B1.	Y	Y	Y			Y	Y
II-B2.	Y	Y	Y			Y	Y
II-B3.	Y	Y	Y			Y	Y
II-D	Y	Y	Y			Y	X
IV-B (ALTA)	Y	X	Y			X	X
V-B (ALTB)	N	N	N			N	N
V-C.1	Y	Y	Y			X	Y
V-C.2 (ALTA)	Y	Y	Y			Y	X
V-C.2 (ALTB)	N	N	N			N	N
VI-A	Y	Y	Y			Y	Y
VI-C	Y	Y	Y			Y	X
VI-D (ALTA)	Y	Y	Y			X	Y
VI-D (ALTB)	N	N	N			N	N
VI-E (ALTA)	N	N	N			N	N
VI-E (ALTB)	Y	Y	Y			X	X

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN**

**PHASE I REPORT
PART C**

Recommendations for Decisions

**Sponsored by the State of Florida, Division of Emergency Management and
the Village of Key Biscayne**

July, 1997

I-A PROBLEM AND NEED

ALTERNATIVE A

A Floodplain Management Plan should be prepared, not only to satisfy NFIP/ISO Community Rating System (CRS) requirements for "Category C" communities, but is justified on its own merit to affirmatively address the Problem of Repetitive Loss Properties:

Yes _____ No _____

ALTERNATIVE B

Only the problem of Repetitive Loss Properties should be addressed at this time by challenging FEMA's list of these properties. Accordingly, the preparation of a Floodplain Management Plan should be held in abeyance and ultimately prepared as a last resort in the event the Village fails to reduce the number of repetitive loss properties from 32 to 3:

Yes _____ No _____

RATIONALE FOR STAFF RECOMMENDATION

ALTERNATIVE A is recommended by staff because it deems the probability of success in timely reducing the number of properties on FEMA's list of repetitive losses to be not only low, but slow. Failure to achieve success, in turn, could substantially delay the classification of Key Biscayne under the Community Rating System since, under such circumstances, a Floodplain Management Plan would have to be prepared in any event. Most importantly, the preparation of such a Plan should substantially enhance the Village's flood hazard mitigation capacity and its ability to secure State or Federal assistance for such purposes.

I-B 1. Organization of Scope

ALTERNATIVE A

The structure of the Flood Management Plan should follow the ten (10) Step Process recommended in FEMA's July 1966 publication entitled: "Example Plans":

Yes _____ No _____

ALTERNATIVE B

The Plan should be organized in accordance with the language in the scope of work called for in the Agreement with State DCA:

Yes _____ No _____

RATIONALE FOR STAFF RECOMMENDATIONS

ALTERNATIVE A is recommended because:

1. Scope is easier to follow, more explicit and comprehensive.
2. There appear no substantive conflicts between the two structures
3. Close adherence to the NFIP/ISO structure improves the probability for additional CRS credits.

I-B 2. Organization of Scope

The four (4) Phase process, as discussed in Part A of the Phase I report is confirmed as a basis for proceeding with the rest of the Floodplain Management work program:

Yes _____ No _____

II-B. Working Review Committee

The Working Review Committee, as described in Part A of the Phase I report is generally accepted as a reasonable concept and basis for floodplain management planning and decision making:

Yes _____ No _____

II-B 1. Concur with Committee Membership as currently constituted:

Yes _____ No _____

II-B 2. Concur with Committee Relationship to Village Government and level of authority:

Yes _____ No _____

II-B 3. Concur with meeting pattern and procedures:

Yes _____ No _____

II-D. Later duties. Concur with intent to preserve the organization for this effort for, among other things, monitoring performance on the implementation of the Floodplain Management Plan.

Yes _____ No _____

IV-B Focus of Floodplain Management Plan

ALTERNATIVE A

but not to the exclusion of
The principle of focusing the Floodplain Management Plan on Repetitive Loss Properties and other matters related to that particular problem is accepted as a working premise for planning purposes:

Yes _____ No _____

ALTERNATIVE B

Rather than focusing the present effort on Repetitive Loss Properties, the plan should address all properties on Key Biscayne, including large scale developments and commercial properties:

Yes _____ No _____

RATIONALE FOR STAFF RECOMMENDATION

Alternative A is recommended because:

1. The Repetitive Loss Properties identified by FEMA are of the highest concern to both: that Agency and the Village. According to FEMA, "...only a tiny fraction (less than 2% of the insured properties) account for 33% of all insurance claims paid." For Village residents and property owners the continued existence, or worse still, potential growth in the number of repetitive loss properties can have a material impact on flood insurance rates.
2. Resources available under the current State Grant arrangement are insufficient to broaden the scope of the effort. Beyond funding considerations, time and manageability factors would emerge as major concerns as well..
3. Floodplain Management Planning has been assumed as an evolutionary process wherein priority items that can be dealt with effectively within the current state of resources and administrative capacity, are tackled first. As such, the opportunity to later expand the areas of concern, in manageable increments, to additional areas of concern, to ultimately cover all properties in the Floodplain, will continue to exist and will be considered at the conclusion of, or even in the course of this initial effort.

V-C 1. Hazard Assessment

The assumption that the two major flooding hazards affecting Key Biscayne involve severe rainstorms and storm surges is confirmed as a basis for floodplain Management Planning:

Yes _____ No _____

V-C 2. Hazard Assessment; Storm Surges

ALTERNATIVE A

Methods to mitigate or inhibit storm surges involve a scale of activities beyond this current effort. For this reason, the current effort shall

emphasize and shall be focused (but not exclusively so) on the assessment and mitigation of rainstorms, which tend to produce weather events of lesser than 100 year frequency.

Yes _____ No _____

ALTERNATIVE B

Despite the scale and cost implications, every effort must be made to give equal attention to, and emphasis on the hazard of storm surges:

Yes _____ No _____

RATIONALE FOR STAFF RECOMMENDATION

While **ALTERNATIVE A** is recommended as the basis for proceeding with the current effort, it should be clear that this decision in no way implies:

1. Any limitation on further pursuit of storm surge mitigation actions as new resources and technology are acquired; and
2. The relaxation of an ongoing effort to coordinate floodplain management planning and implementation with such related programs as beach re-nourishments, dune development and other coastal management projects.

VI-A. Assess the Problem; Problem Statement

The problem statement as written in the Phase I report-Part A, is accepted for inclusion in the Floodplain Management Plan.

Yes _____ No _____

VI-C. Assess the Problem; Areas of Concern

Recommendation for Decision V-C2 focuses the Floodplain Management Plan on rainstorms. In addressing this problem, the Plan, in its Action Program shall, more specifically, give special emphasis and priority on the mitigation of problems related to weather events of recurrence of less than 100 years:

Yes _____ No _____

VI-D. Floor Elevation Assumption

ALTERNATIVE A

In determining the relative vulnerability of existing structures to flood hazards, the **finished floor elevation (NGVD) of the main building and garage/carport/patio**, in relation to the crown of the abutting street and the BFE as established on the Flood Insurance Rate Map (FIRM) by FEMA is a key determining factor. Existing records with respect to such finished floor elevation, however, is extremely limited. Accordingly finished floor elevations for older buildings have been assumed at the **old code requirements**.

Yes _____

No _____

ALTERNATIVE B

In view of the importance of this information, the elevations should be obtained wherever necessary by field survey of the properties involved.

Yes _____

No _____

RATIONALE FOR STAFF RECOMMENDATION

Alternative A is recommended for the following reasons:

1. Extensive field work required to survey the 32 repetitive loss properties is incompatible with both the timeline and the budget available for the project.
2. The probability is high that, the assumption is a valid one, based in part on a sample review of a few cases where survey information was available.
3. The level of reconstruction and major renovation on Key Biscayne is uncommonly dynamic. A field survey of existing floor elevations in

older buildings is likely to become obsolete in too short a time to justify the costs and the delays that would be involved.

VI-E. Vulnerability or Risk Index

ALTERNATIVE A

In developing the vulnerability index, the consultants shall limit the factors involved to finished floor elevations and street elevations:

Yes _____

No _____

ALTERNATIVE B

In addition to building and street elevations, the development of the vulnerability index shall also take into consideration ~~the type (gravity or pump assisted)~~ of storm drainage currently available. *gravity*

Yes _____

No _____

RATIONALE FOR STAFF RECOMMENDATION

Alternative A is recommended as a starting point. If after a consensus with respect to the Goals of the Floodplain Management Plan is achieved during Phase II, it appears that the type of storm drainage system is a major factor or determinant in assessing the relative vulnerability of any given property, then this information will be added to the data base and made a part of the index.

August 27, 1997

**KBS Development
Associates, Inc.**

55 Ocean Lane Dr.
1035
Key Biscayne,
Florida 33149

Tel. 305-361-9414

Fax 305-361-1341

«Title» «FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«City», «State» «PostalCode»

Re: Floodplain Management Plan
Transmittal of Phase II Report &
Recommendations for Decisions.

Dear «FirstName»:

Enclosed herewith, please find a copy of the subject Phase II report including Part A (the Report); Part B (documentation and supporting material...as yet incomplete); and Part C (Recommendations for Decisions).

The next Working Review Committee meeting is scheduled for Friday October 17, 1997. At that time the Goals for the Floodplain Management Plan, as discussed in the enclosed material, will be presented for consideration by the WRC.

The expectation is to be able to secure a vote on the Recommendations for Decision the following week at a time and place agreed upon by the Committee.

As there is a little more than normal lead time before the meeting this time, the opportunity is available to secure your comments (verbal or written at your convenience) on the Phase II Report early enough to perfect the report prior to the meeting.

As I will be out of the country (actually waaaay out...in the jungles of Zimbabwe!) from August 28 to September 20 or so, I hope to chat with you after that date but, in any event, before the meeting.

Peter Kory
President

The goals, as proposed, may for the most part reflect the values of motherhood and other similar worthy undertakings. Their adoption, however, particularly through a consensus process, will represent an enormous step forward in completing the Floodplain Management Plan and an Agenda around which the activities of the plan can be organized.

In other words, it should be clear that while the Goals are generally not controversial, they each imply programs of activities, policies and action that might well be.

Sincerely,

Peter Kory
Project Coordinator

cc: C. Samuel Kissinger
Village Manager

October 15, 1997

Ms. Deborah De Leon
AIA
Village Architects
2800 Biscayne Boulevard, Suite 303
Miami, Florida 33137

Re: Key Biscayne Floodplain Management Plan
Working Review Committee Meeting Notice

Dear Deborah:

This letter is to advise you that the Phase II Working Review Committee meeting has now been scheduled for **Friday October 24, 1997 at 10:00 AM in the Council Chambers at the Key Biscayne Village Hall, 85 West McIntyre Street, Key Biscayne.**

This date supersedes the one cited in my letter of August 27, which, as you will recall, transmitted the draft of the Phase II Report and related information.

The forthcoming October 24 meeting will be a "presentation meeting". The principal topic will be a discussion of the Goals for the Floodplain Management Plan. This meeting will be followed with a "decision meeting" to be held on October 31 or another date to be determined by the Committee.

Enclosed herewith, is a copy of an Agenda for the October 24 meeting and some material to be added to "Part B" of the Phase II report.

This will be an important meeting in the planning process in that it will form the basis for evaluating the floodplain management activities to be considered for implementation during Phase III of the process.

Your participation will be invaluable.

Sincerely

Peter Kory

Enclosures: Agenda
Proposed Survey Form
Raingauge readings
Phase I Decision Meeting Minutes & Votes.

**VILLAGE OF KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN GOALS**

Key Biscayne is a barrier island. Because of this, the Village is particularly vulnerable to flooding and other damages resulting from severe rainstorms, hurricanes and storm surges.

The Village is responding to these hazards by: A. increasing public awareness; B. reducing flood damages; and, C. improving preparedness.

As an important part of these efforts, we are asking your help and participation by requesting your answer to the following questions:

1. Do you currently have flood insurance?: Yes _____ No _____

2. If No, please give us a brief reason: _____

3. Was your Key Biscayne home or residence ever flooded? Yes _____ No _____

4. If Yes, please give us a brief description of:

a. The reason or cause for the flooding (i.e.: hurricane Andrew '92; rainstorm of October '91; other weather event; other reason, etc.)

b. The flood damage incurred: (i.e.: depth of water; where in home; dollar amount of damage to building/contents; special hardships, etc.)

c. Your experience with the storm warning system, disaster preparedness program and storm damage recovery assistance: (i.e.: good, bad, in what way, ideas for improvement, etc.)

FLOODPLAIN MANAGEMENT PLAN OVERALL GOALS

The following are proposed "Overall Goals" for a FLOODPLAIN MANAGEMENT PLAN to be adopted by the Village as part of its hazard mitigation program. Please provide us with any comments you might have with respect to these Goals (i.e.: agree, disagree & why, additional Goal(s) you might recommend, etc.):

GOAL STATEMENT

COMMENTS

1. The Floodplain Management Plan shall be consistent with the goals and intents of the Village Master Plan, its codes and ordinances, as well as other official Village documents and endeavors reflecting its aspirations for the welfare, safety and quality of life of its Citizens.

2. A primary goal of the Floodplain Management Plan is to reduce vulnerability to flooding hazards from major rainfalls, hurricanes and related severe weather events. This Goal applies to all Key Biscayne structures, their content and appurtenant assets and facilities.

3. Related to the above is the goal to mitigate the extent and severity of the problems created by these hazards and to, collaterally, secure the necessary commitments and, to the maximum feasible extent, the necessary resources to implement mitigation Floodplain Management Activities in annual Action Plans to achieve these goals.

4. A key goal of the Floodplain Management Plan is to do all in the power of the public and the civic sectors, at all levels, to prevent any additions to the list of "Repetitive Loss Properties" published annually by FEMA, and,

5. As a companion goal, to reduce the number of Repetitive Loss properties, to a point where Key Biscayne can qualify as a category A or B Community (i.e. a community containing no more than nine (9) repetitive loss properties.)

6. An important goal of the Floodplain Management Plan is to assure incremental improvements in Key Biscayne's standing and classification in the Community Rating System (CRS), with the related consequences of making flood insurance under the NFIP more affordable and reachable, while improving Key Biscayne's effectiveness in coping with flood hazards, problems and emergencies.

7. An overall Goal of the Floodplain Management Plan is to increase the continual dissemination of information on a repetitive basis with respect to the existence of flood hazards and the availability of measures to mitigate the problems presented by such hazards.

8. Another important overall Goal of the Floodplain Management Plan is to continually improve and maintain cutting-edge, state-of-the art, effectiveness of Key Biscayne's emergency preparedness and disaster response capacity.

9. A further overall Goal of the Floodplain Management Plan is to increase the level of coordination of Floodplain management concerns, plans and activities at the Municipal, County, State and Federal levels of Government.

10. The last, but critically important overall Floodplain Management Plan Goal, without which all other Goals are in danger of academic oblivion, is the Goal to secure an enforceable commitment for their implementation.

**KEY BISCAIYNE
FLOODPLAIN MANAGEMENT PLAN**

WORKING REVIEW COMMITTEE

Phase II "Presentation Meeting"

October 24, 1997 10:00 AM

**Village Hall Council Chambers
65 West McIntyre Street
Key Biscayne, Florida
Second Floor**

A G E N D A

- I. Review of Phase I; Context of Phase II; Update of Community Rating System Application (Deborah DeLeon & Peter Kory)**
- II. Discussion of Opinion Survey. (to be identified)**
- III. Beach Nourishment Plan presentation. (James DeCocq)**
- IV. Presentation and Review of proposed Goals. (Williams, Hatfield & Stoner)**
- V. Date for "Decision Meeting" & Adjournment. (Deborah DeLeon)**

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN
WORKING REVIEW COMMITTEE**

Minutes, Meeting of October 24, 1997

Present: Deborah DeLeon, Robert Quevas, Ronald White, Brian Flynn, Gregory Han.
Absent: Lee Niblock, Maribel Balbin; Others present: C. Samuel Kissinger, John Gilbert,
James DeCocq, Carroll Sanders, Tracy Ward, Peter Kory.

Deborah De Leon Opened the meeting, at 10:10 AM stating its primary purpose. Goals for the Floodplain Management Plan will be presented, in terms of the flood hazards and problems covered during Phase I of the planning process and said goals, once agreed upon, will form the basis (during Phase III) for selecting the appropriate floodplain management activities to be undertaken in connection with annual action plans.

Peter Kory gave a progress report on the Village's Community Rating System Application which had been submitted to FEMA during October 1996, indicating that the Insurance Service Organization (ISO) agent had visited Key Biscayne during the prior week to verify the representations in the application and to submit his recommendations for a Rating to FEMA. While all went well, this matter should not be pre-judged.

A preliminary discussion took place with respect to alternative approaches for involving the public in the incremental preparation of the Floodplain Management Plan. Peter Kory indicated some early discussions with Pam Kirkpatrick and Susan Lupien on this matter. They will be invited to the Committee's next meeting.

Deborah DeLeon and Peter Kory then proceeded with a review of the proposed Goals.

1. ONLY THE GOALS, NOT THE ACTIVITIES THEY IMPLIED SHOULD BE THE FOCUS AT THIS TIME; and,
2. The following three evaluation criteria are suggested as a basis for judgment:
 - a. Desirability of the proposed Goal;
 - b. Relevance to floodplain management; and,
 - c. Legal, Economic and Political Feasibility of the proposed Goal

In the review of the "Working Goals" discussion took place with respect to, among other matters, the need and function of swales as part of the Village's storm drainage system and the language linking land and building values to the reconstruction of properties to levels consistent with NFIP Standards.

The next meeting was scheduled for Thursday October 30. The meeting was adjourned at 12:15 PM.

October 25, 1997

«Title» «FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«City», «State» «PostalCode»

Re: Key Biscayne Floodplain Management Plan
Working Review Committee Notice

Dear «Address2»:

This letter is to advise you that the Phase II "Decision" Meeting of the Working Review Committee is scheduled for next **Thursday, October 30, 1997, at 9:00 AM, in the Council Chambers at the Key Biscayne Village Hall, 85 West McIntyre Street, Key Biscayne.**

An agenda for the meeting is enclosed herewith, together with summary minutes of the October 24th meeting.

The following are the recommendations for changes in the Phase II Report (Part A) based on discussions at the meeting:

1. Working Goal 2a: At the end of the Paragraph, after the word "disaster", add: "of greater than 500 year recurring frequency".
2. Working Goal 3c: At the end of Paragraph c, add the following sentence: "In this connection, the critical importance of swales in channeling stormwaters is recognized to a point that, as a goal, they must be considered an integral element of Key Biscayne's storm drainage system. Swales should be expanded, wherever possible, for ultimate performance as a system rather than as isolated topographical features."

3. Working Goal 6: Add a new Paragraph c: “Reduce or minimize the amount of ‘muck’ and other soil and subsurface materials characterized by limited filtration capacity and permeability, in connection with all construction, site improvement and landscaping projects.”
4. Working Goal 7c: Strike the first part of the sentence up to: “...incentive systems to...” and modify the remaining language of Goal 7c to read as follows: “Encourage the redevelopment of old law properties (built below the base flood elevation) to meet current code requirements, if not in their entirety, then at least for major portions of the structure.”
5. Working Goal 9a: Strike first part of the sentence up to the word: “creating”, and modify the remaining language to read as follows: “Encourage the use of market-driven, economic incentives rather than regulatory constraints in stimulating floodproofing activities and rebuilding projects. (The goal is to gradually achieve an appropriate balance that maximizes the value of the total real estate by bringing building values into proper proportion with that of the underlying land. This will create a system of incentives to improve real estate to levels requiring adherence to current codes.)”

As a reminder, please bear in mind that the vote next Thursday will be on the STATEMENT OF GOALS and not on the “Possible Floodplain Management Activities” they imply (i.e.: the right column of the summary sheet handed out at the last meeting). Please consider that part to be a preview of Phase III which, based on the discussions last Friday, may prove to be a lot more lively than Phases I and II.

I look forward to seeing you next Thursday. In the meantime, if you have any questions, please do not hesitate to call me.

Sincerely,

Peter Kory

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN**

WORKING REVIEW COMMITTEE

Phase II "Decision Meeting"

October 30, 1997, 9:00 AM

**Village Hall Council Chambers
65 West McIntyre Street
Key Biscayne, Florida
Second Floor**

A G E N D A

- I. Discussion on public participation approach and recommendations for decision. (Pam Kirkpatrick & Susan Lupien)**
- II. Review of proposed changes to the Phase II Report (Peter Kory & Tracy Ward)**
- III. Action (vote) on Phase II recommendations for Decisions (Deborah DeLeon & Peter Kory)**
- IV. Date for Phase III Meetings (Deborah DeLeon)**

**KEY BISCAIYNE
FLOODPLAIN MANAGEMENT PLAN
WORKING REVIEW COMMITTEE**

Minutes, Meeting of October 30, 1997

Members present: Deborah DeLeon, Robert Quevas, Gregory Han, Ronald White, Nestor Garrigo (for Maribel Balbin).

Absent: Brian Flynn, Lee Niblock

Others present: C. Samuel Kissinger, Tracy Ward, Peter Kory, Susan Lupien

Deborah DeLeon opened the meeting at 9:15 AM indicating that its primary purpose was to make recommendations for the Phase II Decisions which focus on developing a consensus with respect to Goals.

In connection with the first item of the agenda, Susan Lupien presented alternative directions for involving the public. Recognizing that both statistical validation as well as participatory involvement are important considerations in structuring this aspect of the planning process, a general consensus appeared to exist whereby the process would be best served by first using focus group analysis in conjunction with the preparation and review of the plan and to subsequently use a public hearing or a related process in conjunction with the adoption of the plan. This dual or "sandwich" approach will next be refined and submitted to the WRC for final consideration.

Adjustments to the language of the recommendations for decisions were discussed next and approved by the Committee.

Voting on the recommendations for decisions, as adjusted, took place by each committee member present marking up tally sheets, which are now part of the official WRC records. The result of the tally showed that all goals were unanimously approved.

While not specifically scheduled, Peter Kory estimated that the next pair of WRC Committee meetings would probably occur in February 1998 to meet the deadline for completing the Floodplain Management Plan in April 1998.

The meeting was adjourned at 11:20 AM.

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN**

**PHASE II REPORT
PART C**

Recommendations for Decisions
(As approved by the Working Review Committee at its meeting of 10/30/97)

**Sponsored by the State of Florida, Division of Emergency Management and
the Village of Key Biscayne**

October, 1997

KEY BISCAVNE FLOOD PLAIN MANAGEMENT PLAN

PHASE II RECOMMENDATIONS FOR DECISIONS

OCTOBER 30, 1997

GOALS	DELEON	BALBIN GARDINO	CUEVAS	FLYNN	HAN	NIBLOCK	WHITE
OVERALL							
1	✓	✓	✓		✓		✓
2	✓	✓	✓		✓		✓
3	✓	✓	✓		✓		✓
4	✓	✓	✓		✓		✓
5	✓	✓	✓		✓		✓
6	✓	✓	✓		✓		✓
7	✓	✓	✓		✓		✓
8	✓	✓	✓		✓		✓
9	✓	✓	✓		✓		✓
10	✓	✓	✓		✓		✓
					✓		✓
WORKING							
1a	✓	✓	✓		✓		✓
1b	✓	✓	✓		✓		✓
2a	✓	✓	✓		✓		✓
2b	✓	✓	✓		✓		✓
3a	✓	✓	✓		✓		✓
3b	✓	✓	✓		✓		✓
3c	✓	✓	✓		✓		✓

7

GOALS	DELEON	BALBIN	CUEVAS	FLYNN	HAN	NIBLOCK	WHITE
WORKING, CONT.							
4a	✓	✓	✓		✓		✓
4b	✓	✓	✓		✓		✓
5a	✓	✓	✓		✓		✓
5b	✓	✓	✓		✓		✓
5c	✓	✓	✓		✓		✓
5d	✓	✓	✓		✓		✓
5e	✓	✓	✓		✓		✓
5f	✓	✓	✓		✓		✓
6a	✓	✓	✓		✓		✓
6b	✓	✓	✓		✓		✓
7a	✓	✓	✓		✓		✓
7b	✓	✓	✓		✓		✓
7c	✓	✓	✓		✓		✓
8a	✓	✓	✓		✓		✓
8b	✓	✓	✓		✓		✓
8c	✓	✓	✓		✓		✓
9a	✓	✓	✓		✓		✓
9b	✓	✓	✓		✓		✓
9c	✓	✓	✓		✓		✓
10	✓	✓	✓		✓		✓
11a	✓	✓	✓		✓		✓
11b	✓	✓	✓		✓		✓
11c	✓	✓	✓		✓		✓

Overall Goals

1. The Floodplain Management Plan shall be consistent with the goals and intents of the Village Master Plan, its codes and ordinances, as well as other official Village documents and endeavors reflecting its aspirations for the welfare, safety and quality of life of its Citizens.

YES _____ NO _____

2. A primary goal of the Floodplain Management Plan is to reduce vulnerability to flooding hazards from major rainfalls, hurricanes and related severe weather events. This Goal applies to all Key Biscayne structures, their content and appurtenant assets and facilities.

YES _____ NO _____

3. Related to the above is the goal to mitigate the extent and severity of the problems created by these hazards and to, collaterally, secure the necessary commitments and, to the maximum feasible extent, the necessary resources to implement mitigation Floodplain Management Activities in annual Action Plans to achieve these goals.

YES _____ NO _____

4. A key goal of the Floodplain Management Plan is to do all in the power of the public and the civic sectors, at all levels, to prevent any additions to the list of "Repetitive Loss Properties" published annually by FEMA,

YES _____ NO _____

5. As a companion goal, to reduce the number of Repetitive Loss properties, to a point where Key Biscayne can qualify as a category A or B Community (i.e. a community containing no more than nine (9) repetitive loss properties.)

YES _____ NO _____

6. An important goal of the Floodplain Management Plan is to assure incremental improvements in Key Biscayne's standing and classification in the Community Rating System (CRS), with the related consequences of making flood insurance under the NFIP more affordable and reachable, while improving Key Biscayne's effectiveness in coping with flood hazards, problems and emergencies.

YES _____ NO _____

7. An overall Goal of the Floodplain Management Plan is to increase the continual dissemination of information on a repetitive basis with respect to the existence of flood hazards and the availability of measures to mitigate the problems presented by such hazards.

YES _____ NO _____

8. Another important overall Goal of the Floodplain Management Plan is to continually improve and maintain cutting-edge, state-of-the art, effectiveness of Key Biscayne's emergency preparedness and disaster response capacity.

YES _____ NO _____

9. A further overall Goal of the Floodplain Management Plan is to increase the level of coordination of Floodplain management concerns, plans and activities at the Municipal, County, State and Federal levels of Government.

YES _____ NO _____

10. The last, but critically important overall Floodplain Management Plan Goal, without which all other Goals are in danger of academic oblivion, is the Goal to secure an enforceable commitment for their implementation.

YES _____ NO _____

Working Goals

1. ACCESS

- a. The Goal is to protect the ability to use the Rickenbacker Causeway in times of disaster and provide for continuous, free flowing traffic and circulation as needed for the effective and unencumbered provision of emergency services and evacuation operations.

YES _____ NO _____

- b. A related Goal, beyond the ability to use the Causeway, is the Goal to increase its roadway capacity and facilities to deal with (1) traffic peaking; (2) lane blockages for any and all reasons; (3) accidents or other road stoppages; (4) the operational requirements of service and emergency vehicles and equipment.

YES _____ NO _____

2. CRITICAL FACILITIES

- a. The goal is to protect all critical facilities vital to disaster response, including the structures occupied by the fire and police headquarters, fire fighting and rescue equipment stations and all other emergency-related equipment and facilities involved with the transportation, communication, and energy requirements for an effective response to a major rainstorm, hurricane or similar disaster... *of greater than 500 year recurring frequency.*

YES _____ NO _____

- b. A related goal is to explore the feasibility of a new municipal building complex, built to NFIP standards with particular emphasis on the Village's capacity to provide a comprehensive state-of-the art response to disaster and emergencies.

YES _____ NO _____

7. If your answer above is "Yes", how did you find out about these disaster response systems? (circle the appropriate letter[s])

- a. Visit to Village Hall;
- b. Village Newsletter;
- c. Other publication: _____;
- d. Informational Video broadcast via Adelphia Cable;
- e. Other Media: _____;
- f. Other information source: _____;

8. How can the Village of Key Biscayne and its staff best communicate with you to ensure your concerns are being heard? Circle as many letters as you think are applicable:

- a. Interviews;
- b. Public Meetings/workshops;
- c. Mailings w/request for comment on material sent;
- d. Other: _____

9. To whom would you send this survey (list below or on a separate sheet of paper)

10. If there is a special meeting of particularly affected residents/property owners, would you attend?

a. Yes No _____

b. Is day or evening better for you? (circle one)

3. TOPOGRAPHY

- a. The Goal is: (1) to reduce the low points of Key Biscayne's topography in each of the drainage basins in order to encourage the flow of stormwater away from structures and toward streets where storm drainage system facilities are concentrated; and, (2) to eliminate or modify surfaces that would otherwise drain towards these low points.

YES _____ NO _____

- b. In the short run, the Goal is to address, on a priority basis, the topography of those drainage basins containing the most vulnerable properties, including greatest number of repetitive loss properties i.e. Drainage Basins: 3, 9, and E, which contain about 80% (25 of the 32) of the repetitive loss properties.

YES _____ NO _____

- c. In the longer run, the goal is to address the remaining drainage basins and seek modifications of the topography of Key Biscayne, within manageable parameters, with the intent of eliminating, insofar as possible, features which impede the proper flow, channelization and absorption of storm water in ALL parts of the island. In, this connection, the critical importance of swales in channeling stormwaters is recognized to a point that, as a goal, they must be considered an integral element of Key Biscayne' storm drainage system. Swales should be expanded, wherever possible, for ultimate performance as a system rather than as isolated topographical features.

YES _____ NO _____

4. RAINSTORMS

One of the important goals of the Floodplain Management Plan is to achieve positive and effective flood protection for all Key Biscayne Properties against:

- a. In the shorter run (about five (5) years), this Goal would apply to major rainstorms and similar weather events (except hurricanes and storm surges) of a greater than 25 year recurring frequency (i.e. a rainfall of about 10 inches in a 24 hour period).

YES _____ NO _____

- b. In the longer run (about twenty (20) years), this Goal would apply to major rainstorms and similar weather events (except hurricanes and storm surges) of a greater than 100 year recurring frequency (i.e. a rainfall of about 13.5 inches in a 24 hour period).

YES _____ NO _____

5. STORM SURGES

A goal of the Floodplain Management Plan is to reduce the severity of impact of storm surges and to, correspondingly:

- a. identify action programs as necessary and projects with the potential of mitigating the hazard.

YES _____ NO _____

- b. develop the means to fund such action programs and projects over-time

YES _____ NO _____

- c. secure additional research into the behavior of storm surges

YES _____ NO _____

A second set of goals of the Floodplain Management Plan, related to storm surges, includes the development of expanded policies and regulations, beyond current minimum code requirements:

- d. to encourage greater setbacks from shorelines for new developments of both beach-front and bay-front properties;

YES _____ NO _____

- e. to encourage retrofitting and elevation of structures throughout the Floodplain with high priority consideration for those built on beach and bay-front properties;

YES _____ NO _____

- f. to seek opportunities to acquire, exchange or otherwise secure limited control of beach and ocean-front real estate in conjunction with large scale venture where public involvement is a factor.

YES _____ NO _____

6. SOIL CONDITION

- a. The Goal is to increase the drainage characteristics of the soils on Key Biscayne.

YES _____ NO _____

- b. A related Goal is to preserve and expand the open areas in the Village.

YES _____ NO _____

7. “OLD LAW” BUILDINGS (i.e. constructed under the older Dade County Building Code which only required the finished floor elevation of a structure to be 13” above the crown of the road.)

- a. The Goal of the Floodplain Management Plan is to reduce the number of structures built with finished floor elevations below the Base Flood Elevation.

YES _____ NO _____

- b. A related Goal of the Floodplain Management Plan is to eliminate the use of garages for other than parking purposes unless the finished elevation of such garages is in conformance, at least with the older Dade County Code requirements for the main floor of structures.

YES _____ NO _____

- c. Encourage the redevelopment of Old Law properties, (built below the base flood elevation) to meet current code requirements, if not in their entirety, then at least for major portions of the structure.

YES _____ NO _____

8. FLOOD DATA, INFORMATION AND ANALYSIS

- a. An important Goal of the Floodplain Management Plan is to reach the targets projected for the completion of the data-base project initiated by the Village Building, Zoning and Planning Department, incorporating, among other elements, a wider range of property data, topographical data, storm drainage data, rainfalls as measured by the Bill Baggs rain gauge, building permit data, data on insurance, history of flooding, existing and changes in finished floor elevations, and the like.

YES _____ NO _____

- b. An equally important Goal of the Floodplain Management Plan is to Catalogue, Organize (in a user-friendly manner) and make accessible, (through education and other means) at a Central Location, the wide and fast growing range of existing Floodplain Management Information, including NFIP information, State of Florida and Dade County Information, Village Information and ad-hoc information made available

through the media; government Agencies such as NOAA, SFWMD; Universities, and the like.

YES _____ NO _____

c. A further Goal in the area of data and information is to promote analysis and research to improve, and continue to evolve, the capacity and knowledge for state-of-the-art management of Floodplain Management Plan Activities. Specific areas of research and analyses will include among others:

- (1) Definitions of flooding and weather events in relation to the Flood Insurance Rate Map information;
- (2) Implication on Insurance Premiums (beyond CRS) resulting from the achievement of various levels of Floodplain Hazard Mitigation, including impact of such Mitigation on the Base Flood Elevation;
- (3) Measurement of Floodplain Vulnerability factors;
- (4) Measurement Storm Drainage System Effectiveness;
- (5) Evaluation of Beach Nourishment, Dunes and related improvements as Storm Surge Mitigation Measure;
- (6) Benefit-Cost Analysis methodology.

YES _____ NO _____

9. ECONOMIC GOALS

a. Encourage the use of market-driven, economic incentives rather than regulatory constraints in stimulating floodproofing activities and rebuilding projects. The goal is to gradually achieve an appropriate balance that maximizes the value of the TOTAL REAL ESTATE by bringing building values into proper proportion with that of the underlying land. This will create a market-driven system of incentives to improve real estate to levels which, as a by-product will require adherence to current codes.

YES _____ NO _____

- b. Another important economic Goal is to manage and execute the activities the Floodplain Management Plan as cost-efficiently as possible with a minimum of financial burden on Village Residents and Property Owners, capitalizing where possible on the availability of grant-in-aid programs and on the Village's ability to secure same.

YES _____ NO _____

- c. The fundamental economic Goal of the Floodplain Management Plan is reduce the vulnerability of Key Biscayne to Floodplain Hazards, and to the costs resulting from such hazards, whether in the form of loss of building or content, flood insurance premiums, or other economic hardship.

10. PUBLIC INFORMATION AND INVOLVEMENT

An important Goal of the Floodplain Management Plan is to increase the public awareness of floodplain hazards and problems and to educate the public through a widespread program of general information, media coverage and participatory involvement about the Floodplain Management Plan and the Action Programs to be undertaken therewith.

YES _____ NO _____

11. ORGANIZATIONAL, MANAGERIAL AND ADMINISTRATIVE GOALS

- a. The Goal is to make Floodplain Management a mainstream function in the organization, management and administration of Key Biscayne's municipal affairs.

YES _____ NO _____

- b. The collateral Goal is to spread (rather than concentrate in a separate department) the allocation of Floodplain Management responsibilities as broadly as possible within the Village of Key Biscayne Administrative structure in order to assure longer term continuity and full integration of Floodplain management functions into the operations of the Village.

YES _____ NO _____

- c. A Working Goal is to accept the National Flood Insurance Program/Community Rating System as the administrative framework within which to: (1) budget and plan Floodplain Management activities; and (2) monitor, evaluate and report progress on the implementation of the Floodplain Management Plan.

YES _____ NO _____

Key Biscayne Floodplain Management Plan Phase II - Set Goals

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>I. Access</p> <p>a. Protect the ability to use the Rickenbacker Causeway in times of disaster and provide for continuous, free flowing traffic and circulation as needed for the effective and unencumbered provision of emergency services and evacuation operations</p> <p>b. Increase Causeway capacity and facilities to deal with:</p> <ol style="list-style-type: none"> 1) traffic peaking 2) lane blockages for any and all reasons 3) accidents or other road stoppages 4) the operational requirements of service and emergency vehicles and equipment. 	<ul style="list-style-type: none"> • Key Biscayne's dependence on the Rickenbacker Causeway as the only means of access and egress to and from the Key • Key Biscayne's complete dependence on the availability, in good operating order, of the three bridges (i.e. the "toll plaza", "William Powell", and "Bear Cut" bridges) that separate the Key from the mainland • The impact, on the Causeway's passability, of major rainstorm and storm surges which carry the potential of flooding and pavement washouts • The fact that the Causeway is limited to two lanes in each direction with marginal berms and turn-off space and that, at times, outbound traffic volumes tend to exceed roadway capacities, particularly as traffic tends to accumulate as it nears the mainland 	<ul style="list-style-type: none"> • Elevate roadway • Widen Roadway <ul style="list-style-type: none"> - add shoulders - add extra lanes • Create reversible lanes

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>2. Critical Facilities</p> <p>a. Protect all critical facilities vital to disaster response, including the structures occupied by the fire and police headquarters, fire fighting and rescue equipment stations and all other emergency-related equipment and facilities involved with the transportation, communication, and energy requirements for an effective response to a major rainstorm, hurricane or similar disaster of greater than 500 year recurring frequency</p> <p>b. Explore the feasibility of a new municipal building complex, built to NFIP standards with particular emphasis on the Village's capacity to provide a comprehensive state-of-the-art response to disaster and emergencies</p>	<p>No specific floodplain hazard or problem addressed.</p>	<ul style="list-style-type: none"> • Elevate structures • Relocate structures • Construct berms around structures

Key Biscayne Floodplain Management Plan Phase II - Set Goals (cont.)

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>3. Topography</p> <p>a. Reduce the low points of Key Biscayne's topography in each of the drainage basins in order to encourage the flow of stormwater away from structures and toward streets where storm drainage system facilities are concentrated and eliminate or modify surfaces that would otherwise drain towards these low points</p> <p>b. Address, on a priority basis, the topography of those drainage basins containing the most vulnerable properties, including the greatest number of repetitive loss properties i.e. Drainage Basins:3, 9 and E, which contain about 80% (25 of the 32) of the repetitive loss properties</p> <p>c. Address the remaining drainage basins and seek modifications of the topography of Key Biscayne, within manageable parameters, with the intent of eliminating, insofar as possible, features which impede the proper flow, channelization and absorption of stormwater in all parts of the island. In this connection, the critical importance of swales in channeling stormwaters is recognized to a point that, as a goal, they must be considered an integral element of Key Biscayne's storm drainage system. Swales should be expanded, wherever possible, for ultimate performance as a system rather than as isolated topographical features.</p>	<ul style="list-style-type: none"> • The land surface within the Village is relatively low and flat, with road crown elevations ranging between 3.4' and 6.0' NGVD. While the land surface generally slopes away from Crandon Boulevard towards the two coastlines, this natural advantage has been offset with the progression of developments which have created depressional areas that tend to collect water during storms. Most of the repetitive loss properties are located in the vicinity of these low spots. 	<ul style="list-style-type: none"> • Construct drainage facilities • Re-grade streets/swales to drain away from low points • Construct swales/retention areas • Preserve green/open space through ordinances • Regularly perform maintenance on stormwater management systems

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>4. Rainstorms Achieve positive and effective flood protection for all Key Biscayne properties against:</p> <ol style="list-style-type: none"> a. Shorter Term - rainstorms and similar weather events (except hurricanes and storm surges) of a greater than 25-year recurrence frequency (i.e. a rainfall of about 10 inches in a 24 hour period) Provide flood protection for a 25-year storm b. Longer Term - major rainstorms and similar weather events (except hurricanes and storm surges) of a greater than 100-year recurrence frequency (i.e. a rainfall of about 13.5 inches in a 24-hour period) 	<ul style="list-style-type: none"> • Severe rainstorms will generate massive runoffs which, but for Key Biscayne's new storm drainage system, would flood low lying areas. The drainage system provides a positive means for the runoff to dissipate from the surface, providing effective protection from flooding for the 5 year design rainfall event (i.e. a 7" rainfall in a 24 hour period). For larger storm events, there will still be localized flooding but the duration and extent of flooding will be reduced. 	<ul style="list-style-type: none"> • Construct additional drainage wells • Increase the conveyance of the drainage system by increasing the pipe sizes • Construct add'l pump stations • Construct add'l storm sewers • Construct retention areas • Construct swales between houses on the perimeter of the island to reduce the "saucer" storage effect

Key Biscayne Floodplain Management Plan Phase II - Set Goals (cont.)

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>5. Storm Surges</p> <ol style="list-style-type: none"> a. Reduce the severity of storm surges b. Identify action programs as necessary and projects with the potential of mitigating the hazard c. Develop the means to fund such action programs and projects over time d. Secure additional research into the behavior of storm surges e. Encourage greater setbacks from shorelines for new developments of both beach-front and bay-front properties f. Encourage retrofitting and elevation of structures throughout the floodplain with high priority consideration for those built on beach and bay-front properties g. Seek opportunities to acquire, exchange or otherwise secure limited control of beach and ocean-front real estate in conjunction with large scale venture where public involvement is a factor 	<ul style="list-style-type: none"> • Storm surges occur as strong winds, such as from a hurricane, force water levels in the Ocean or Biscayne Bay to rise and wash over Key Biscayne. Unlike rainstorms, this type of hazard tends to be of a greater than 100 year recurrence interval. As such, a storm surge will tend to cause waters to reach the FEMA-established Base Flood Elevation or above, i.e. a range of between 8 feet and 12 feet NGVD, or about six feet or more above the typical elevation of street crowns. This compares to a much tamer one to two feet of water (limited by the elevation of the island's perimeter) above typical street elevation that can be expected in a greater than 100-year recurrence interval rainstorm event. It is for this reason that, the capability appears potentially available for, not only mitigating substantially, but ultimately eliminating, even the most severe rainstorms as a floodplain problem. The same cannot be said, however, for the hazard of storm surges which require drastically different mitigation approaches. • A combination of actors, including weather patters and man-made improvements have resulted in major Beach erosion along the Key Biscayne Oceanfront. This represents a hazard and a problem by virtue of the fact that beaches and, where they exist, dunes represent virtually the only storm surge mitigation tool that can exert a measurable effect on the problem. 	<ul style="list-style-type: none"> • Beach re-nourishment • Construct sand dunes • Erosion control • Flood warning systems • Flood response system (Emergency Action Plan) • Wet flood proofing

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>6. Soil Condition</p> <ul style="list-style-type: none"> a. Increase the drainage characteristics of the soils on Key Biscayne b. Preserve and expand the open areas in the village c. Reduce or minimize the amount of 'muck' and other soil and subsurface materials characterized by limited filtration capacity and permeability, in connection with all construction, site improvement and landscaping projects. 	<ul style="list-style-type: none"> • Severe rainstorm over the island will generate massive amounts of runoff which, until recently, would accumulate and be stored in the low areas for extended periods of time. Because of the high groundwater table and poor infiltration capacity of the soil, most of the rainfall will become stormwater and flood the low lying areas. 	<ul style="list-style-type: none"> • Create parks • Zoning regulations for minimum green space on developments • Specify allowable fill material • Construct swales • Educate public on swale/storm sewer maintenance

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>7. Old Law Buildings</p> <ul style="list-style-type: none"> a. Reduce the number of structures built with finished floor elevation below the base flood elevation b. Eliminate the use of garages for other than parking purposes unless the finished elevation of such garages is in conformance at least with the older Dade County Code requirements for the main floor of structures c. Encourage the redevelopment of old law properties (built below the base flood elevation) to meet current code requirements, if not in their entirety, then at least for major portions of the structure 	<ul style="list-style-type: none"> • The initial development of Key Biscayne only required the dwelling floor to be 13 inches above the road centerline elevation. This subjected many dwellings to potential flooding for long duration since only marginal storm drainage was available to alleviate rainfall induced flooding. Soil conditions allowed only poor percolation. Therefore, with the lack of storm drainage facilities, the flooding was frequent and of long duration. • Recently, storm drainage facilities were constructed. Therefore the problem related to flooding induced by rainfall would relate to the cost-benefit of providing a higher level of service by the drainage facilities. • Current laws cannot compel a change in finished floor elevations retrofitting, or other floodproofing work unless substantial improvements to the property in excess of 50% of its value are contemplated (the 50% rule)... or, of course, if total reconstruction is involved. For all practical purposes however, the 50% rule is less than fully effective as the determination of "cumulative" improvement costs covers a period of only one year, after which the owner, may apply the rule anew. 	<ul style="list-style-type: none"> • Modify through ordinance the 50/50 rule • Petition to lower BFE • Public information programs on FFE v. BFE • Code enforcement • Acquisition • Activity

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>8. Flood Data, Information and Analysis</p> <p>a. Reach the targets projected for the completion of the data-base project initiated by the Village Building, Zoning and Planning Dept., incorporating, among other elements:</p> <ul style="list-style-type: none"> - a wider range of property data - topographical data - storm drainage data - rainfalls as measured by the Bill Baggs rain gauge - building permit data - data on insurance - history of flooding - existing and changes in FFE, etc <p>b. Catalogue, organize and make accessible at a central location, the wide and fast growing information from NFIP, the State of Florida, Dade County, the Village, the media, other government agencies (NOAA, SFWMD, etc.)</p> <p>c. Promote analysis and research to improve, and continue to evolve the capacity and knowledge for state-of-the-art management of Flood Plain Management Activities for specific areas of:</p> <ol style="list-style-type: none"> 1) definitions of flooding and weather events in relation to the FIRM information 2) implication on insurance premiums (beyond CRS) resulting from the achievement of various levels of Floodplain Hazard Mitigation, including impact of such Mitigation on the BFE 3) measurement of floodplain vulnerability factors 4) measurement of storm drainage system effectiveness 5) evaluation of beach nourishment, dunes and related improvements as storm surge mitigation measure 	<ul style="list-style-type: none"> • Since the Village of Key Biscayne is a newly incorporated municipality, data prior to incorporation was vested with Dade County. In addition, there is a lack of development data since the initial development was in the early 1950's. Therefore, the ability to retrieve other than recent data is marginal. The ability to gather critical data (such as finished floor elevations and rainfall measurements) is very difficult. A program of putting together an effective data base would be a major benefit to the Floodplain Management Plan. However, time and cost would have to be compared with effective benefits. • The lack of rainfall data coupled with the fact that SFWMD maintains its records at locations remote from Key Biscayne such as Miami Beach, the Airport or Homestead, has forced the Village to rely on empirical rather than scientific data and information in measuring the severity of weather events. 	

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

6) benefit-cost analysis methodology

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
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Key Biscayne Floodplain Management Plan Phase II - Set Goals (cont.)

<p>9. Economic Goals</p> <p>a. Encourage the use of market-driven, economic incentives rather than regulatory constraints in stimulating floodproofing activities and rebuilding projects. (The goal is to gradually achieve an appropriate balance that maximizes the value of the total real estate by bringing building values into proper proportion with that of the underlying land. This will create a system of incentives to improve real estate to levels requiring adherence to current codes.)</p> <p>b. Manage and execute the activities the Floodplain Management Plan as cost efficiently as possible with a minimum financial burden on Village residents and property owners, capitalizing where possible on the availability of grant-in-aid programs and the Village's ability to secure same</p> <p>c. Reduce the vulnerability of Key Biscayne to floodplain hazards, and to the costs resulting from such hazards, whether in the form of loss of building or content, flood insurance premiums, or other economic hardship</p>	<ul style="list-style-type: none"> • The cost of retrofitting most one or two-story single family homes on Key Biscayne and raising them to and several feet above Base Flood Elevation is either not affordable or not economically feasible given that the structures are typically of masonry or concrete block construction above a reinforced concrete slab. <p>At the same time, in most instances, the land on which these structures were built has dramatically appreciated in relation to the value of the structure. To wit:</p> <p>In 1992 vacant residential land on Key Biscayne was appraised at \$32,985,000. In 1997 this value has climbed to \$120,961,000 for a similar number of parcels; representing an increase of about 267%.</p> <p>On the other hand, single family homes on Key Biscayne were appraised in 1992 at \$472,852,000. In 1997 this value rose to \$621,981,000. An increase of only about 31.5%.</p> <p>These circumstances have created almost fatal disincentives for investing in floodproofing and retrofitting older buildings. Collaterally, however they have produced powerful and growing incentives for the reconstruction or substantial improvements where the appreciated land values can be leveraged into vastly improved overall value of the real states asset... built or re-built, as the case may be at or above the Base Flood Elevation.</p> <ul style="list-style-type: none"> • The cost of many mitigation projects may not be affordable unless shared with other units of government (i.e. County, State or Federal). There exists, however, a wide range of loan and grant programs which would have to be tapped, at various government levels and sometimes on an unconventional basis to implement the Floodplain Management Plan. For example, given the chronic condition of budget limitations there is often a need for multiyear funding for some of the projects that are suitable for staged execution. This will require a great deal of collaboration with Government Agencies as well as a total Program Context that can serve as funding policies and criteria.
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**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>10. Public Information and Involvement Increase the public awareness of floodplain hazards and problems and to educate the public through a widespread program of general information, media coverage and participatory involvement about the Floodplain Management Plan and the Action Programs to be undertaken therewith</p>	<ul style="list-style-type: none"> • An uninformed public is probably the greatest hazard and problem in the management of the floodplain. This is manifest at three levels: <ul style="list-style-type: none"> - At the preventive level, prior to the occurrence of a disaster, when flood insurance, floodproofing, retrofitting, and evacuation as well as other disaster preparedness activities will make a significant difference in the ability to cope with, and in some instances, survive disaster. - During a disaster lack of information about the organization of the disaster response system may prove devastating with such things as evacuation procedures, routes, and destinations; protection of property, security of assets and the ability to obtain assistance and vital information. - At the post-disaster level, during the recovery stage, the awareness that such dark events can, in fact, usher in small and larger scale renewal efforts, fulfilling many of the Floodplain Management Plan Goals is a matter that cannot be achievable without broad public support and understanding. 	<ul style="list-style-type: none"> • Public Service Announcements • Public and in-school presentations • Informational mailings • Cable TV • Internet/Web page devoted to Floodplain Management • Telephone Hotline

**Key Biscayne Floodplain Management Plan
Phase II - Set Goals (cont.)**

Floodplain Management Plan Working Goals	Related Floodplain Hazards and Problems	Possible Floodplain Management Activities
<p>11. Organizational, Managerial and Administrative Goals</p> <ol style="list-style-type: none"> a. Make Floodplain Management a mainstream function in the organization, management and administration of Key Biscayne's municipal affairs b. Spread the allocation of Floodplain Management responsibilities as broadly as possible within the Village of Key Biscayne administrative structure in order to assure longer term continuity and full integration of Floodplain Management functions into the operations of the Village c. Accept the NFIP/CRS as the administrative framework to: <ol style="list-style-type: none"> 1) budget and plan Floodplain Management activities 2) monitor, evaluate and report progress on the implementation of the Floodplain Management Plan 	<ul style="list-style-type: none"> • The Village of Key Biscayne operates under a Council/Manager form of government. As a newly created independent community, Key Biscayne's administrative structure is extremely efficient. Its size and the fiscal conservatism of its elected Officials has turned economy in management of government an art form and therefore a matter of pride and achievement. However, this has also placed pressure on the extent various municipal functions are staffed. • Accordingly, the assumption of additional programs and activities cannot occur by merely adding new departments and/or staff. Instead, the additional burden will have to be absorbed within the existing structure, adding part-time staff supplement, volunteer forces and consultants as necessary, all operating under the leadership of the Village Manager and his key executives. • While the administrative efficiency of such a management arrangement is fully consistent with the spirit of Key Biscayne's approach to government, additional financial requirements for these purposes would have to be considered on a reliable and on-going basis. 	



VILLAGE OF KEY BISCAYNE

Office of the Village Manager

Village Council
John F. Festa, *Mayor*
Mortimer Fried, *Vice Mayor*
Martha Fdez-León Broucek
Gregory C. Han
Hugh T. O'Reilly
Michele Padovan
Betty Sime

Village Manager
C. Samuel Kissinger

January 19, 1998

Ms. Deborah De Leon, AIA
Village Architects
2800 Biscayne Boulevard, Suite 303
Miami, Florida 33137

Re: Working Review Committee
Meeting #5: Floodplain Management Plan
Phase III: "Review Possible Activities" &
Draft an Action Plan".

Dear Deborah:

Enclosed please find:

- An Agenda and Notice for the next meeting of the Working Review Committee which has been set for Tuesday February 3, 1998 at 10:00 AM in the Council Chambers at the Village Hall;
- A draft of Part A of the Phase III report covering section VIII of the Floodplain Management Plan: "Review Possible (floodplain management plan) Activities".

Section IX, detailing "Action Plan" projects, will be prepared and transmitted to the Committee after the Section VIII decisions are made, namely, after Working Review Committee No. 6. Therefore one of the Phase III decisions to be made at Working Review Committee No. 6 will be whether one or more additional meetings of the Committee will be necessary before the Floodplain Management Plan is presented for public review and acceptance by the Village Council.

The enclosed material, i.e. Section VIII of the report describes and reviews thirty one (31) floodplain management activities in terms of seven (7) evaluation criteria. The review of these activities has suggested, for a wide range of reasons, that nine (9) of the 31 possible activities should not be considered as part of the Floodplain Management Plan and that another two should be deferred.

This would leave a core of twenty (20) activities that will represent the focus of Key Biscayne's Flood Management Plan.

Specific Projects have then been selected from this core of 20 activities and each project is to be assigned a priority which will determine its inclusion for implementation in an Action Plan for any given year.

Within this context:

1. Working Review Committee Meeting No. 5 (i.e. the February 3 Meeting) will be a "Presentation Meeting" during which the evaluation of the activities will be presented and discussed;
2. Working Review Committee Meeting No. 6 (Date to be set) will be a "Decision Meeting", wherein Committee consensus will be sought with respect to:
 - a. the review of the activities as presented in Part A of the Phase III Report;
 - b. the elimination of those not suitable for the Plan;
 - c. the deferral of those requiring further analysis beyond the scope of the current effort;
 - d. the selection of activities to be considered for projects in Action Plans;
 - e. the prioritizing of projects, including those to be further defined and programmed in the 1998/1999 Action Year Plan; and
 - f. the need for additional Working Review Committee Meetings before the plan is presented at public meetings.

3. Beyond Working Review Committee No. 6, the Phase I, II and III Reports and supporting documentation (including the Action Plan for the 1998/1999 Action Year) will be:
 - a. consolidated and organized for easier use and reference; and
 - b. undergo a public approval process culminating in the adoption of the Plan by the Village Council. (i.e. Phase IV of the Planning Process).

The above summarizes the steps remaining in the preparation of the Floodplain Management Plan. The immediate next steps are, therefore, clearly very significant in determining the effectiveness of the Plan. The successful completion of the Plan will serve to place floodplain management and flood hazard mitigation into the mainstream (no pun intended) of Community activities while helping to establish an action agenda for these activities.

If you have any comments or questions regarding this letter, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter Kory', written in a cursive style.

Peter Kory
CRS Coordinator

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN**

WORKING REVIEW COMMITTEE

Phase III "Presentation Meeting"

February 3, 1998 10:00 AM

**Village Hall Council Chambers
85 West McIntyre Street
Key Biscayne, Florida
Second Floor**

A G E N D A

- I. Review: Phases I and II; context for Phase III
(Deborah DeLeon and Peter Kory)

- II. Presentation: Phase III evaluation of activities and selection for Action
Plan consideration. (WHS & Peter Kory)

- III Date for next meeting & adjournment. (Deborah De Leon)

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN
WORKING REVIEW COMMITTEE**

Minutes, meeting of February 3, 1998

Members Present: Deborah De Leon (Chairman), Brian Flynn;
Absent: Maribel Balbin, Robert Cuevas, Gregory Han, Lee Niblock, Ron White;
Others present: C. Samuel Kissinger, John Gilbert, Peter Kory, Tracy Ward,
Carroll Sanders.

Deborah De Leon opened the meeting at 10:30 AM noting poor attendance, probably due to particularly severe weather in the area during the past 24 hours. It was decided, nevertheless to hold the meeting since no decisions or recommendations for decision were planned for this meeting. Accordingly, there is no need for a quorum and maintenance of momentum was deemed sufficient justification to proceed.

The Chairman discussed the purpose of the meeting, i.e. to present the Phase III recommendations for the Floodplain Management Plan involving a review and evaluation of possible floodplain management plan activities. The WRC would be asked, at a subsequent meeting, to vote on the acceptance of this evaluation and to vote on specific Action Plan Projects to be derived from these activities.

Shawnette Mr. Kory noted that the substance of the review and evaluation of the floodplain management activities is found in the "Phase III Report" which had been mailed to the members. He suggested that instead of painstakingly go through the written material, the limited time of the meeting would be best employed if questions about the report were discussed. He noted that the report dealt with some 31 floodplain management activities, that 9 of these activities were eliminated from consideration due to a variety of reasons; and that 2 were deferred until B-C analysis and further study were completed. Of the 20 remaining activities, 10 were deemed to be of a repetitive nature and therefore related to normal Village operations. This would leave 10 activities from which high priority projects can be selected for implementation in Action Plans.

John Gilbert questioned the appropriateness of including the "critical Facilities" activity as one to be deferred, in view of the fact that workshops, discussions and other public meetings regarding such facilities in connection with a new municipal building complex have been underway and that various site acquisition

possibilities were under consideration. Mr. Kory agreed with this position to the point of suggesting the removal of ALL activities from a "Deferred" status. In the specific case of the "Critical Facilities", this activity could thus be considered for implementation as a high priority project and become part of an Action Plan as soon as the Village Manager makes a determination that a consensus exists with respect to the development of a new Police and Fire Rescue Department.

Various other matters were discussed, including flood insurance rates, where the question was raised as to the relative difference in rates between protected and floodprone properties within the same flood zone.

After reminding everyone that it was important to fill out the project "Rating Schedule" needed to identify the projects to be considered as part of the Floodplain Management Plan's first Action Year Plan, the meeting was adjourned at 11:50 AM.

Submitted on 2/15/1998, by

A handwritten signature in black ink, appearing to be 'PK' with a stylized flourish extending to the right.

Peter Kory

**KEY BISCAZYNE
FLOODPLAIN MANAGEMENT PLAN**

WORKING REVIEW COMMITTEE

Phase III "Decision Meeting"

March 3, 1998 10:00 AM

**Village Hall Council Chambers
85 West McIntyre Street
Key Biscayne, Florida
Second Floor**



A G E N D A

- I. **Status of Project, discussion of minutes (Feb. 3, 1998 meeting) and Schedule for Completion, including Councilmanic action. (Deborah DeLeon & Peter Kory)**
- II. **Discussion and Vote on Recommendations for Decision (Deborah De Leon)**
- III. **Discussion of 1998/1999 Action Year (Tracy Ward/Carroll Sanders)**
- IV. **Decision about future involvement of WRC in implementation of the Floodplain Management Plan. (Deborah DeLeon & Peter Kory)**
- V. **If time permits, description of effort's end product, format & substance. (Peter Kory)**

4/28

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**KEY BISCAIYNE
FLOODPLAIN MANAGEMENT PLAN**

**PHASE III REPORT
PART C**

Recommendations for Decisions

**Sponsored by the State of Florida, Division of Emergency Management and
the Village of Key Biscayne**

February 1998

VIII-A 2a. Context and Introduction; Review Criteria

The criteria proposed on Page 3 of Part A of the Phase III Report shall be used as the criteria for the evaluation and review of possible floodplain management activities:

Yes _____ No _____

VIII-A 2b. Context and Introduction; Approach to Selection

ALTERNATIVE A

Page 4 of Part A of the Phase III Report identifies the approach to be used in selecting the range of activities to be included for implementation in an Action Plan.

Yes _____ No _____

ALTERNATIVE B

Eliminate “**Deferral**” of any activities and include these activities, i.e. “Critical Facilities” and “Beach Nourishment” that had been recommended for deferral, as part of those to be **included** for consideration as part of an Action Plan, bearing in mind that the contingencies cited as part of the reason for deferring consideration, would still have to be recognized before full implementation can proceed.

Yes _____ No _____

VIII-B 1: Review and Evaluation of possible Floodplain Management Activities; Inventory of Possible Activities.

The range of possible floodplain management activities listed on pages 7 and 8 of Part A of the Phase III Report is accepted for Floodplain Management Plan purposes.

Yes _____ No _____

VIII-B 2: Review and Evaluation of possible Floodplain Management Activities; Activities Eliminated from Consideration.

The following activities, described on pages 9 and 10 of Part A of the Phase III Report are eliminated from consideration as part of the

Floodplain Management Plan, bearing in mind that reconsideration is always possible through Plan changes (check-mark confirms elimination)

- Relocation and Acquisition _____
- Sewer Back-up Protection _____
- Wetlands Protection _____
- Reservoirs/levees/floodwalls/seawalls/diversion/channel modifications _____
- Real Estate Disclosures _____

VIII-B 3. Review and Evaluation of possible Floodplain Management Activities; Activities that suggest projects to be considered for inclusion in Action Plans and which meet the selection criteria.

The following activities, described on pages 10 through 43 of Part A of the Phase III Report, shall form the basis for selecting Action Plan Projects and are deemed to be consistent with the selection criteria. (Check-mark in the space to the right of the activity signifies agreement with the evaluation):

- Planning and Zoning _____
- Open Space Preservation _____
- Floodplain Development Regulations _____
- Stormwater Management _____
- Drainage System Maintenance _____
- Dune and Beach Maintenance _____
- Elevation and floodproofing _____
- Insurance _____
- Erosion and Sediment Control _____
- Best Management Practices _____
- Flood Warning & Response; Health & Safety Maintenance _____
- Storm Sewer _____
- Map Information _____
- Outreach Projects _____
- Library _____
- Technical Assistance _____

yes ✓ no _____

VIII-B 4. Review and Evaluation of Possible Floodplain Management Activities; Activities which require more extensive B-C Analysis and Feasibility Study before implementation.

The activities in this Recommendation involve "Critical Facilities" and "Beach Nourishment". Regardless of their designation as either activities to be **deferred** or to be **included** for consideration for inclusion in an Action Plan, the WRC Recommendation is that these are important activities to be implemented on a high priority basis as soon as the concerns expressed on pages 44,45 and 46 in Part A of the Phase III Report have been affirmatively addressed, including, more specifically:

- Village Consensus with respect to the development of new Police and Fire Headquarters; and
- Project financing, including B-C analysis documenting the cost effectiveness of the Beach Nourishment Project.

IX-B and C Activities to be Considered For 1998/1999 Action Plan Projects.

Activities of an "On-Going" Nature to be treated as ACTION PLAN ON-GOING TASKS --- rather than discreet projects. For description of tasks see pages 49 through 53 of Part A of the Phase III Report (check-mark in space to the right of the activity signifies agreement with proposal and how it is treated in the Report)

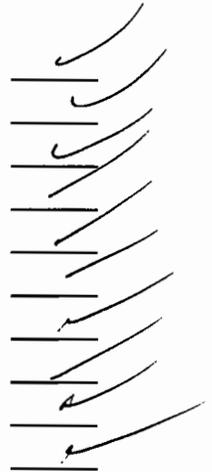
- Drainage System Maintenance
- Dune and Beach Maintenance
- Best Management Practices
- Flood Warning
- Flood Response
- Health and Safety Maintenance
- Map Information
- Outreach Projects
- Library
- Technical Analysis

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Activities from which Floodplain Management Plan discreet Action Year Projects are to be selected. Potential projects are described on Pages 53 to 58 of Part A of the Phase III Report. (Check-mark in

space to the right of the activity signifies agreement with the proposal and how it is treated in the report.)

- Planning & Zoning
- Open Space Preservation
- Floodplain Development Regulations
- Stormwater Management
- Building Elevation
- Floodproofing
- Insurance
- Erosion and Sediment Control
- Storm Sewers
- Environmental Education



IX-D Selection of action year 1998/1999 Projects

Individual members of the Working Review Committee and Ex-Officio members, having individually and independently rated the ten possible 1998/1999 Action Year Projects, with the result of said rating attached hereto, the WRC confirms the combined score and thus the results, involving the implementation of the following three projects:

- Comprehensive review of Local Laws and Regulations;
- Storm Drainage System Up-Grade;
- Earth-Shaping Master Plan.

Yes _____

No _____

**KEY BISCAIYNE
FLOODPLAIN MANAGEMENT PLAN**

**PHASE III REPORT
PART C**

Recommendations for Decisions

**Sponsored by the State of Florida, Division of Emergency Management and
the Village of Key Biscayne**

February 1998

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VIII-A 2a. Context and Introduction; Review Criteria

The criteria proposed on Page 3 of Part A of the Phase III Report shall be used as the criteria for the evaluation and review of possible floodplain management activities:

Yes _____ No _____

VIII-A 2b. Context and Introduction; Approach to Selection

ALTERNATIVE A

Page 4 of Part A of the Phase III Report identifies the approach to be used in selecting the range of activities to be included for implementation in an Action Plan.

Yes _____ No _____

ALTERNATIVE B

Eliminate “**Deferral**” of any activities and include these activities, i.e. “Critical Facilities” and “Beach Nourishment” that had been recommended for deferral, as part of those to be **included** for consideration as part of an Action Plan, bearing in mind that the contingencies cited as part of the reason for deferring consideration, would still have to be recognized before full implementation can proceed.

Yes _____ No _____

VIII-B 1: Review and Evaluation of possible Floodplain Management Activities; Inventory of Possible Activities.

The range of possible floodplain management activities listed on pages 7 and 8 of Part A of the Phase III Report is accepted for Floodplain Management Plan purposes.

Yes _____ No _____

VIII-B 2: Review and Evaluation of possible Floodplain Management Activities; Activities Eliminated from Consideration.

The following activities, described on pages 9 and 10 of Part A of the Phase III Report are eliminated from consideration as part of the

Floodplain Management Plan, bearing in mind that reconsideration is always possible through Plan changes (check-mark confirms elimination)

- Relocation and Acquisition
- Sewer Back-up Protection
- Wetlands Protection
- Reservoirs/levees/floodwalls/seawalls/diversion/channel modifications
- Real Estate Disclosures

VIII-B 3. Review and Evaluation of possible Floodplain Management Activities; Activities that suggest projects to be considered for inclusion in Action Plans and which meet the selection criteria.

The following activities, described on pages 10 through 43 of Part A of the Phase III Report, shall form the basis for selecting Action Plan Projects and are deemed to be consistent with the selection criteria. (Check-mark in the space to the right of the activity signifies agreement with the evaluation):

- Planning and Zoning
- Open Space Preservation
- Floodplain Development Regulations
- Stormwater Management
- Drainage System Maintenance
- Dune and Beach Maintenance
- Elevation and floodproofing
- Insurance
- Erosion and Sediment Control
- Best Management Practices
- Flood Warning & Response; Health & Safety Maintenance
- Storm Sewer
- Map Information
- Outreach Projects
- Library
- Technical Assistance

VIII-B 4. Review and Evaluation of Possible Floodplain Management Activities; Activities which require more extensive B-C Analysis and Feasibility Study before implementation.

The activities in this Recommendation involve "Critical Facilities" and "Beach Nourishment". Regardless of their designation as either activities to be **deferred** or to be **included** for consideration for inclusion in an Action Plan, the WRC Recommendation is that these are important activities to be implemented on a high priority basis as soon as the concerns expressed on pages 44,45 and 46 in Part A of the Phase III Report have been affirmatively addressed, including, more specifically:

- Village Consensus with respect to the development of new Police and Fire Headquarters; and
- Project financing, including B-C analysis documenting the cost effectiveness of the Beach Nourishment Project.

IX-B and C Activities to be Considered For 1998/1999 Action Plan Projects.

Activities of an "On-Going" Nature to be treated as ACTION PLAN ON-GOING TASKS --- rather than discreet projects. For description of tasks see pages 49 through 53 of Part A of the Phase III Report (check-mark in space to the right of the activity signifies agreement with proposal and how it is treated in the Report)

- Drainage System Maintenance
- Dune and Beach Maintenance
- Best Management Practices
- Flood Warning
- Flood Response
- Health and Safety Maintenance
- Map Information
- Outreach Projects
- Library
- Technical Analysis

Activities from which Floodplain Management Plan discreet Action Year Projects are to be selected. Potential projects are described on Pages 53 to 58 of Part A of the Phase III Report. (Check-mark in

space to the right of the activity signifies agreement with the proposal and how it is treated in the report.)

- Planning & Zoning
- Open Space Preservation
- Floodplain Development Regulations
- Stormwater Management
- Building Elevation
- Floodproofing
- Insurance
- Erosion and Sediment Control
- Storm Sewers
- Environmental Education

IX-D Selection of action year 1998/1999 Projects

Individual members of the Working Review Committee and Ex-Officio members, having individually and independently rated the ten possible 1998/1999 Action Year Projects, with the result of said rating attached hereto, the WRC confirms the combined score and thus the results, involving the implementation of the following three projects:

- Comprehensive review of Local Laws and Regulations;
- Storm Drainage System Up-Grade;
- Earth-Shaping Master Plan.

Yes No

HBN

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN**

**PHASE III REPORT
PART C**

Recommendations for Decisions

**Sponsored by the State of Florida, Division of Emergency Management and
the Village of Key Biscayne**

February 1998

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VIII-A 2a. Context and Introduction; Review Criteria

The criteria proposed on Page 3 of Part A of the Phase III Report shall be used as the criteria for the evaluation and review of possible floodplain management activities:

Yes _____ No _____

VIII-A 2b. Context and Introduction; Approach to Selection

ALTERNATIVE A

Page 4 of Part A of the Phase III Report identifies the approach to be used in selecting the range of activities to be included for implementation in an Action Plan.

Yes _____ No _____

ALTERNATIVE B

Eliminate "Deferral" of any activities and include these activities, i.e. "Critical Facilities" and "Beach Nourishment" that had been recommended for deferral, as part of those to be included for consideration as part of an Action Plan, bearing in mind that the contingencies cited as part of the reason for deferring consideration, would still have to be recognized before full implementation can proceed.

Yes _____ No _____

VIII-B 1: Review and Evaluation of possible Floodplain Management Activities; Inventory of Possible Activities.

The range of possible floodplain management activities listed on pages 7 and 8 of Part A of the Phase III Report is accepted for Floodplain Management Plan purposes.

Yes _____ No _____

VIII-B 2: Review and Evaluation of possible Floodplain Management Activities; Activities Eliminated from Consideration.

The following activities, described on pages 9 and 10 of Part A of the Phase III Report are eliminated from consideration as part of the

VIII-B 4. Review and Evaluation of Possible Floodplain Management Activities; Activities which require more extensive B-C Analysis and Feasibility Study before implementation.

The activities in this Recommendation involve "Critical Facilities" and "Beach Nourishment". Regardless of their designation as either activities to be **deferred** or to be **included** for consideration for inclusion in an Action Plan, the WRC Recommendation is that these are important activities to be implemented on a high priority basis as soon as the concerns expressed on pages 44,45 and 46 in Part A of the Phase III Report have been affirmatively addressed, including, more specifically:

- Village Consensus with respect to the development of new Police and Fire Headquarters; and
- Project financing, including B-C analysis documenting the cost effectiveness of the Beach Nourishment Project.

IX-B and C Activities to be Considered For 1998/1999 Action Plan Projects.

Activities of an "On-Going" Nature to be treated as ACTION PLAN ON-GOING TASKS --- rather than discreet projects. For description of tasks see pages 49 through 53 of Part A of the Phase III Report (check-mark in space to the right of the activity signifies agreement with proposal and how it is treated in the Report)

- Drainage System Maintenance
- Dune and Beach Maintenance
- Best Management Practices
- Flood Warning
- Flood Response
- Health and Safety Maintenance
- Map Information
- Outreach Projects
- Library
- Technical Analysis

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Activities from which Floodplain Management Plan discreet Action Year Projects are to be selected. Potential projects are described on Pages 53 to 58 of Part A of the Phase III Report. (Check-mark in

space to the right of the activity signifies agreement with the proposal and how it is treated in the report.)

- Planning & Zoning
- Open Space Preservation
- Floodplain Development Regulations
- Stormwater Management
- Building Elevation
- Floodproofing
- Insurance
- Erosion and Sediment Control
- Storm Sewers
- Environmental Education

IX-D Selection of action year 1998/1999 Projects

Individual members of the Working Review Committee and Ex-Officio members, having individually and independently rated the ten possible 1998/1999 Action Year Projects, with the result of said rating attached hereto, the WRC confirms the combined score and thus the results, involving the implementation of the following three projects:

- Comprehensive review of Local Laws and Regulations;
- Storm Drainage System Up-Grade;
- Earth-Shaping Master Plan.

Yes No

MEMORANDUM

DATE: February 3, 1998
TO: Members of the Working Review Committee
FROM: Peter Kory and Tracy Ward
SUBJECT: Floodplain Management Plan Projects.

The purpose of this memorandum is to identify a range of possible projects which may be implemented as part of the Floodplain Management Plan Action Plans for the first year (1998/1999).

Members of the Working Review Committee, using among other information, the background and material provided as part of Phases I, II and III of the effort, are asked to consider this range of possible projects and select those to be included in the first year action (i.e. 1998/1999) by completing the "Rating Schedule" attached hereto.

In order to keep the implementation of the Action Plan within manageable bounds it is recommended that no more than three Projects should be selected unless a particularly strong mandate from members of the Working Review Committee exists.

Possible Projects:

A. Comprehensive Review of local laws and regulations including among others, the Village's Master plan, Zoning Ordinance, Building Code, Flood Ordinance, Subdivision Regulations and other local codes, ordinances and regulations relating to floodplain management. These may include, without limitations, measures aimed at keeping flood damage-prone development out of hazardous and sensitive areas within the floodplain, as well as those aimed at imposing standards on what is allowed to be built **within** such areas.

The project would involve:

1. extracting, abstracting and otherwise organizing the web of relevant provisions of existing laws and regulations to facilitate their understanding, compliance and administration;
2. drafting proposals for improvements, including the enactment of legislation as necessary; and
3. securing the resources required to implement the laws and regulations as improved.

This project addresses and falls within the scope of the following Floodplain Management Plan Activities:

- Planning and Zoning
- Open space Preservation
- Floodplain Development Regulations

B. Feasibility study for additional open space preservation, including comprehensive search of new opportunities for Key Biscayne to increase its inventory of areas to be preserved as open space, as well as proposals and programs to assure the preservation of open space areas already identified. The study would include: benefit-cost and related economic analysis for each potential transaction; identification of implementation tools and resources; analysis of incentives and potential business arrangements and agreement among the parties at interest of policy context for the implementation of this activity.

This project addresses and falls within the scope of the following Floodplain Management Activities:

- Open Space Preservation

C. Elimination of converted garages in “old law” buildings where garages were built per the old code with only 9” above street grade. When such garage space was subsequently converted into living space the potential for flooding damage was materially increased. Raising the elevation of the converted space to or above the building elevation could help mitigate this problem at relatively little cost compared to major mitigation measures such as floodproofing or elevating the entire structure.

The project would involve:

1. the identification of the properties involved;
2. an analysis of the benefits and costs involved;
3. a legal analysis to determine the best method for inducing the elimination of the problem;
4. development of a program for implementing this improvement.

This project addresses and falls within the scope of the following Floodplain Management Plan Activities:

- Floodplain development regulations;
- Elevation & Floodproofing.

D. Earth Shaping Master Plan. This project involves:

1. the development of topographical survey information with respect to the districts within Key Biscayne that contain the most floodprone properties;
2. the design of changes in the existing topography, including, a system of swales among other earthworks, at selected locations within the drainage basins, to improve the behavior of stormwaters, particularly in areas where surface drainage problems tend to exist; and,
3. the development of an implementation program including the identification of potential funding sources, and a timelines the incremental execution of this project.

This project addresses and falls within the scope of the following Floodplain Management Plan Activities:

- Stormwater Management
- Floodproofing

E Demonstration Project, involving the selection of one or more floodprone properties to be used as a demonstration for the application of “elevation”, “floodproofing” and other measures available for the mitigation of flood hazards and problems.

The demonstration will serve a number of purposes:

1. it will test state-of-the-art technology, various methods for elevating buildings and various other floodproofing measures;
2. it will provide a firm basis for measuring all of the costs involved;
3. it will provide a physical model to which the public can relate when subjects such as retrofitting and floodproofing are discussed;
4. it will represent a laboratory where other flood damage prevention measures can be illustrated; and,
5. it will enable a benefit-cost analysis which will provide a well documented assessment of the measure's cost effectiveness.

This project addresses and falls within the scope of the following Floodplain Management Plan activities:

- Building Elevation
- Floodproofing

F. Economic Incentives. This project involves the creation of a package of economic incentive to induce property owners to undertake such flood protection measures as elevating structures above the BFE, floodproofing improvements and the like. In this connection the following are examples of the kinds of means that might be considered for study, analysis, feasibility, etc:

1. Low interests loans to help owners pay to elevate or rebuild structure;
2. Deferral for a number of years, or forbearance, of ad-valorem tax increases which may be triggered by the building elevation or floodproofing work;
3. Zoning and other land utilization concessions off-setting the cost of the flood mitigation work with an opportunity for maximizing the value of the underlying land;
4. Exemption of the property, insofar as the cost the mitigation work is concerned, from the 50 % rule as it applies to the "substantial improvement" of the property.

This project addresses and falls within the scope of the following Floodplain Management Activities:

- Building Elevation and Floodproofing

G. Flood Insurance Research Project This project will seek to determine the number and characteristics of properties which do not have flood insurance and the reasons therefor. It would culminate with an action program designed to increase the number of properties covered by the flood insurance and with a local information program including brochures, pamphlets and the like designed to de-mystify the subject.

The project will also review the validity of the BFE as reflected on the FIRM and explore the possibilities of variable flood insurance rates that distinguish within the same flood zone between properties that are floodprone and vulnerable to flooding hazards and those which are not and/or have taken steps to correct the potential problem.

me
Hot

This project addresses and falls within the scope of the following Floodplain Management Plan Activities:

- Insurance

H. Erosion Control Hot Line and Response System. This project involves creating and implementing a discreet program of inspection, focused on construction sites, as well as public areas within the Village, to assure that policies and regulations with respect to erosion and sedimentation control are effectively followed. The program would be designed to operate in tandem with normal storm sewer maintenance activities and normal construction site inspection activity. The intent is to create a second, primarily volunteer based line of defense for the protection of storm water management facilities.

This project addresses and falls within the scope of the following Floodplain Management Plan Activities:

- Erosion and Sediment Control.

I. Storm Drainage System Upgrade. This project consists of two distinct parts:

One is essentially an engineering and design analysis to determine:

1. The “as-built” effectiveness of the system compared with the criteria governing its design;
2. Its mitigation potentials in terms of protection against rainstorms and weather events of recurring frequency intervals of 25, 50 and 100 years;
3. The technical feasibility of achieving these potentials, in terms of capital and operating projects; and,
4. The justification for such projects in terms of Benefit-Cost Analysis geared to the eligibility criteria of potential funding agencies.

The other component is the implementation and execution of the projects and programs defined by the first component.

This project addresses and falls within the scope of the following Floodplain Management Plan activities:

- Storm Sewers

J. Environmental Forum. This project involves the organization of an ongoing program of lectures and events, including field trips, as necessary, bringing the public together with speakers from the various agencies whose concerns straddle floodplain management and environmental issues. The lecture program would be supplemented with the production of publications, and, if affordable, a video promoting awareness of environmental issues such as beach erosion, non-point source pollution, hydrology/hydraulics, BMP benefits, and the like.

This project addresses and falls within the scope of the following Floodplain Management Activities:

- Environmental Education

Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations		
B. Feasibility Study for Additional Open Space Preservation		
C. Elimination of Converted Garages		
D. Earth Shaping Master Plan		
E. Demonstration Project		
F. Economic Incentives		
G. Flood Insurance Research Project		
H. Erosion Control Hot Line and Response System		
I. Storm Drainage System Upgrade		
J. Environmental Forum		
K.		
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be included in First Year Ranking (1998/1999) Action Plan
Rating Summary Sheet

Project	Priority (1-10)									Total Points	Rank
	DeLeon	Balbin	Cuevas	Flynn	Han	Niblock	White	Gilbert	Little		
A Comprehensive review of local laws and regulations	1	3	1	3	6	1	2	1	1	19	I
B Feasibility study for additional open space	2	5	8	7	5	3	9	9	6	54	V
C Elimination of converted garages	8	6	6	4	9	8	1	8	10	60	VIII
D Earth shaping master plan	6	1	2	6	1	10	4	2	9	41	III
E Demonstration project	10	4	7	5	10	9	8	3	2	58	VII
F Economic incentives	5	7	5	2	2	7	5	5	8	46	IV
G Flood insurance research project	7	8	3	9	3	5	6	6	7	54	V
H Erosion control hotline and response system	4	10	9	8	8	6	7	7	5	64	IX
I Storm drainage upgrade	3	2	4	1	7	2	3	4	4	30	II
J Environmental forum	9	9	10	10	4	4	10	10	3	69	X

Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	1	
B. Feasibility Study for Additional Open Space Preservation	2	
C. Elimination of Converted Garages	8	
D. Earth Shaping Master Plan	6	
E. Demonstration Project	10	
F. Economic Incentives	5	
G. Flood Insurance Research Project	7	
H. Erosion Control Hot Line and Response System	4	
I. Storm Drainage System Upgrade	3	
J. Environmental Forum	9	
K.		
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	1	
B. Feasibility Study for Additional Open Space Preservation	3	
C. Elimination of Converted Garages	8	
D. Earth Shaping Master Plan	10	
E. Demonstration Project	9	
F. Economic Incentives	7	
G. Flood Insurance Research Project	5	
H. Erosion Control Hot Line and Response System	6	
I. Storm Drainage System Upgrade	2	
J. Environmental Forum	4	
K.		
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

**Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan**

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	1	
B. Feasibility Study for Additional Open Space Preservation	9	
C. Elimination of Converted Garages	8	
D. Earth Shaping Master Plan	2	
E. Demonstration Project	3	
F. Economic Incentives	5	
G. Flood Insurance Research Project	6	
H. Erosion Control Hot Line and Response System	7	
I. Storm Drainage System Upgrade	4	
J. Environmental Forum	10	
K.		<p><i>J.C. Gilbert</i> <i>Chief of Fire Rescue</i></p>
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

**Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan**

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	1	
B. Feasibility Study for Additional Open Space Preservation	6	
C. Elimination of Converted Garages	10	
D. Earth Shaping Master Plan	9	
E. Demonstration Project	2	
F. Economic Incentives	8	
G. Flood Insurance Research Project	7	
H. Erosion Control Hot Line and Response System	5	
I. Storm Drainage System Upgrade	4	
J. Environmental Forum	3	
K.		
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

**Rating Sched
Village of Key B
Floodplain Manage
Selection of Projects to be Included in Fir**

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 1	
To	PETER KOREY	From	BRIAN FLYNN
Co.		Co.	DADE COUNTY DERM
Dept.		Phone #	372-6850
Fax #	361-1341	Fax #	372-6630

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	3	WOULD ESTABLISH THE NECESSARY REGULATORY FRAMEWORK TO PREVENT NEW PROBLEMS, AND TO ADDRESS EXISTING ONES OVER TIME (REDEVELOPMENT.)
B. Feasibility Study for Additional Open Space Preservation	7	DESIREABLE, BUT MAY NOT BE THE MOST COST-EFFECTIVE PROJECT GIVEN REAL ESTATE (LAND) PRICES ON THE KEY
C. Elimination of Converted Garages	4	OVER TIME WOULD ELIMINATE A MAJOR SOURCE OF FLOODING PROBLEMS ON THE KEY. COULD BE COMPLEMENTED BY THE IMPLEMENTATION OF #A AND F.
D. Earth Shaping Master Plan	6	COULD BE USEFUL BUT MIGHT BE DIFFICULT TO IMPLEMENT (OBJECTIONS FROM PUBLIC/LEGAL AND LOGISTICAL OBSTACLES)
E. Demonstration Project	5	WOULD BE USEFUL IN ESTABLISHING GOOD COST ESTIMATES FOR IMPROVEMENTS. ALSO FOR POSSIBLY DEVELOPING "ARCHITECTURAL STANDARDS"
F. Economic Incentives	2	WOULD PROVIDE THE "CARROT" NEEDED TO SPUR IMPROVEMENTS OUTSIDE THE SCOPE OF PUBLIC SECTOR ACTIVITIES.
G. Flood Insurance Research Project	9	COULD BE USEFUL, ALTHOUGH RELATIVE SAVINGS MAY NOT BE ENOUGH OF AN INCENTIVE COMPARED TO OTHER ECONOMIC INCENTIVES.
H. Erosion Control Hot Line and Response System	8	GOOD CONCEPT, BUT MAY HAVE PROBLEMS WITH "VOLUNTEER" POLICING. WOULD BE BETTER IMPLEMENTED AS A VILLAGE REGULATORY PROGRAM.
I. Storm Drainage System Upgrade	1	WILL PROVIDE MOST TANGIBLE AND TARGETED MEANS OF FLOOD REDUCTION. FUNDING MECHANISM ALREADY IN PLACE (SW UTILITY).
J. Environmental Forum	10	WHILE WORTHWHILE, INFORMATION COULD BE DISSEMINATED THROUGH OTHER EXISTING MECHANISMS.
K.		
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

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Bob Cuevas
2/10/98

**Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan**

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	1	Good start to have regulations we can build on. Every thing else can follow.
B. Feasibility Study for Additional Open Space Preservation	8	To me, this is a long range solution.
C. Elimination of Converted Garages	6	Will prevent potential flooding. Don't believe it will affect ins. cost.
D. Earth Shaping Master Plan	2	This long overdue. Implementation may be difficult.
E. Demonstration Project	7	Sounds good, but appears as "Pie in the Sky" sort of thing.
F. Economic Incentives	5	Excellent possibility. May be hard to implement.
G. Flood Insurance Research Project	3	O.K. but I thought rates are based on Elev.'s first, prone area second
H. Erosion Control Hot Line and Response System	9	Is it not ongoing now? Village force an enforcing code & regulations
I. Storm Drainage System Upgrade	4	Good! We have actual operating data that we can improve on.
J. Environmental Forum	10	Can't argue, but consider it low priority.
K.		
L.		

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1035

Ron White

Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	2	LOCAL LAWS AND ENFORCEMENT MAY BE DIFFICULT - BUT IMPORTANT
B. Feasibility Study for Additional Open Space Preservation	9	OPEN SPACE ALMOST GONE - BUT DESIRABLE WHERE FEASIBLE
C. Elimination of Converted Garages	1	HIGH POTENTIAL SOURCE OF FLOOD LOSS, MIGHT BE DIFFICULT TO ENFORCE
D. Earth Shaping Master Plan	4	PART OF ONGOING PROBLEM OF STORMWATER MANAGEMENT
E. Demonstration Project	8	NICE TO HAVE - BUT PRACTICAL APPLICATIONS FUZZY
F. Economic Incentives	5	MIGHT WORK FOR SOME FLOOD PRONE PROPERTIES
G. Flood Insurance Research Project	6	IF SOMEHOW LOWER RATES GIVEN AS INCENTIVE MAY INDUCE IMPROVEMENTS
H. Erosion Control Hot Line and Response System	7	GOOD FOLLOW UP ON STORM SEWERS, SHOULD BE PART OF REGULAR MAINTENANCE
I. Storm Drainage System Upgrade	3	CONSTANT UPGRADING - SHOULD BE PART OF STORMWATER MANAGEMENT
J. Environmental Forum	10	NICE TO HAVE EXCHANGE OF IDEAS BUT PRACTICALITY FUZZY.
K.		
L.		

¹ For a description of each project refer to Peter Kory's February 3, 1998 memorandum.

² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

HESTOR GARREGO

**Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan**

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
A. Comprehensive Review of Local Laws and Regulations	3	THIS REVIEW IS AN EXCELLENT EXERCISE TO BECOME FAMILIAR WITH THE AREA AND ITS FLOODING PROBLEMS
B. Feasibility Study for Additional Open Space Preservation	5	THIS PROJECT IS NOT A CRUCIAL STEP FOR THE DEVELOPMENT OF THE PLAN BUT SHOULD BE PERFORMED LATER ON.
C. Elimination of Converted Garages	6	AN IMPORTANT PROJECT THAT CAN BE EXECUTED AT A LATER TIME
D. Earth Shaping Master Plan	1	TOPOGRAPHICAL SURVEY INFORMATION IS CRUCIAL FOR THE FLOODPLAIN MANAGEMENT PLAN.
E. Demonstration Project	4	I BELIEVE IT IS USEFUL TO TRY THE PLAN AT A SMALLER SCALE.
F. Economic Incentives	7	
G. Flood Insurance Research Project	8	
H. Erosion Control Hot Line and Response System	10	
I. Storm Drainage System Upgrade	2	THE ENGINEERING AND DESIGN ANALYSIS SHOULD BE ONE OF THE FIRST PROJECTS INCLUDED IN THE PLAN.
J. Environmental Forum	9	
K.		
L.		

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² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

G. Han.

361-1341

**Rating Schedule
Village of Key Biscayne
Floodplain Management Plan
Selection of Projects to be Included in First Year (1998/1999) Action Plan**

Project ¹	Priority ² (1 - 10)	Provide brief explanation for the priority ranking assigned to each project.
6 A. Comprehensive Review of Local Laws and Regulations	5 ₅	ALWAYS NECESSARY
5 B. Feasibility Study for Additional Open Space Preservation	4 ₄	GOOD PLAN
9 C. Elimination of Converted Garages	8 ₈	TOUGH TO DO
1 D. Earth Shaping Master Plan	1	* COULD BE 1, 2, 3 AND 4
10 E. Demonstration Project	9 9	?
2 F. Economic Incentives	2 ₂	WILL HELP HOMEOWNERS
3 G. Flood Insurance Research Project	3 3	DON'T WANT HAVE FLOOD INS.
8 H. Erosion Control Hot Line and Response System	7 ₇	
7 I. Storm Drainage System Upgrade	6 ₆	
4 J. Environmental Forum	3 ₃	GOOD TO GET COMM AWARE
K.		
L.		

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² Each project should be assigned a priority ranking from 1 - 10, with 1 being assigned to the project with the highest priority for inclusion in the first year Action Plan and 10 being assigned to the project with the least preference for inclusion in the first year action plan.

**KEY BISCAYNE
FLOODPLAIN MANAGEMENT PLAN
WORKING REVIEW COMMITTEE**

Minutes, meeting of March 5, 1998

Members Present: Deborah De Leon, Robert Cuevas, Nestor Gallego, Gregory Han, Lee Niblock, Ron White.

Absent: Brian Flynn.

Others Present: C. Samuel Kissinger, John Gilbert, John Little, Peter Kory, Tracy Ward.

The chairman opened the meeting at 10:15 AM, and continued the presentation and discussion of Floodplain Management Activities started in the prior meeting (Feb. 3, 1998).

Action Plan tasks and projects were discussed at some length. The rating of projects in which all members of the WRK participated was the focus for such discussion. While no major conflicts appeared to exist, it was clear that a few differences in view did exist. Thus direct action oriented projects such as the proposed storm sewer upgrade found substantially more favor than, for example, "Environmental Education" where the benefits are likely to manifest themselves over the longer term. In the end, the rating process carried the day with the system identifying the following three projects to be pursued on the highest priority basis:

1. "Comprehensive Review of Local Laws and Regulations"
2. "Storm Drainage System Upgrade"
3. "Earth Shaping Master Plan"

Peter Kory led the WRC through the Phase III Recommendations for Decision. Committee members generally concurred with the recommendations, including the modification of the "Critical Facilities" language to reflect a greater emphasis on this aspect of the activities along the lines reflected in the minutes of the February 3 meeting of the WRC.

The matter of future meetings was discussed. In this connection, the Committee was advised that the next step was to present the Floodplain Management Plan to the Village Council for adoption and that attendance at that meeting would be very helpful.

The desirability of maintaining the WRC as presently constituted in existence after the Floodplain Management Plan is adopted was discussed. The matter was tabled for the time being with the general understanding that the Committee is really the custodian of the Plan and that a group of similar composition will be needed in any event to advise the Village on the implementation aspects of the Plan.

The meeting was adjourned at 11:45 AM.

Submitted on 3/24/1998, by

A handwritten signature in black ink, appearing to read "Peter Kory". The signature is stylized with a large, sweeping initial "P" and a long, horizontal stroke extending to the right.

Peter Kory