

## AGENDA

PLANNING COMMISSION  
MONROE COUNTY  
November 16, 2010  
9:00 A.M.

MARATHON GOV'T CENTER  
2798 OVERSEAS HIGHWAY  
MARATHON, FL 33050

### CALL TO ORDER

### PLEDGE OF ALLEGIANCE

### ROLL CALL

### COMMISSION:

Randy Wall, Chairman  
Denise Werling  
Jeb Hale  
Jim Cameron  
Elizabeth Lustberg

### STAFF:

Townsley Schwab, Senior Director of Planning and Environmental Resources  
Susan Grimsley, Ass't County Attorney  
John Wolfe, Planning Commission Counsel  
Mike Roberts, Sr. Administrator, Environmental Resources  
Mitch Harvey, Comp Plan Manager  
Joe Haberman, Planning & Development Review Manager  
Tiffany Stankiewicz, Development Administrator  
Bryan Davisson, Sr. GIS Planner  
Gail Creech, Planning Commission Coordinator

### COUNTY RESOLUTION 131-92 APPELLANT TO PROVIDE RECORD FOR APPEAL

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### SUBMISSION OF PROPERTY POSTING AFFIDAVITS AND PHOTOGRAPHS

-

### SWEARING OF COUNTY STAFF

### CHANGES TO THE AGENDA

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### APPROVAL OF MINUTES

## MEETING

New Items:

1. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS AMENDING TABLE 4.1 FIVE-YEAR SCHEDULE OF

CAPITAL IMPROVEMENTS OF THE MONROE COUNTY YEAR 2010 COMPREHENSIVE PLAN; PROVIDING FOR SEVERABILITY; DIRECTING THE DIRECTOR OF PLANNING TO FORWARD A COPY TO THE FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS; PROVIDING FOR FILING WITH THE SECRETARY OF STATE; PROVIDING FOR INCORPORATION INTO THE COMPREHENSIVE PLAN; PROVIDING FOR AN EFFECTIVE DATE  
[2010-123 SR PC 11.16.10.PDF](#)

2. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS ASSIGNING, AMENDING OR RATIFYING THE TIER OVERLAY DISTRICT DESIGNATIONS FOR APPROXIMATELY NINETY TWO (92) PARCELS COMPETING FOR BUILDING PERMITS IN THE RATE OF GROWTH ORDINANCE (ROGO) ALLOCATION SYSTEM IN ACCORDANCE WITH THE FINAL ORDER IN DOAH CASE NO. 06-2449GM; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE

3. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS ASSIGNING TIER OVERLAY DISTRICT MAP DESIGNATIONS TO APPROXIMATELY ONE HUNDRED TWELVE(112) PARCELS DETERMINED TO HAVE NO TIER ON THE TIER OVERLAY DISTRICT MAP FOR MONROE COUNTY IN DOAH CASE NO. 06-2449GM WHICH PARCELS HAVE BEEN THE SUBJECT OF AWARD OF ALLOCATION IN THE RATE OF GROWTH (ROGO) COMPETITION OR HAVE BEEN ISSUED BUILDING PERMITS; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE

4. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS ASSIGNING TIER OVERLAY DISTRICT MAP DESIGNATIONS TO APPROXIMATELY TWO THOUSAND NINE HUNDRED TWENTY ONE (2,921) PARCELS DETERMINED TO HAVE NO TIER ON THE TIER OVERLAY DISTRICT MAP FOR MONROE COUNTY IN DOAH CASE NO. 06-2449GM; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE

5. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS AMENDING OR RATIFYING THE TIER OVERLAY DISTRICT DESIGNATIONS FOR APPROXIMATELY THREE HUNDRED THREE (303) PARCELS PROPOSED FOR REVIEW BY THE BOARD OF COUNTY COMMISSIONERS, STAFF OR OWNERS, WHICH PARCELS CURRENTLY HAVE TIER DESIGNATIONS; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE  
[2010-125 SR PC 11.16.10.PDF](#)

If a person decides to appeal any decision made by the Commission with respect to any matter considered at such hearing or meeting, that person will need to ensure that a verbatim record of the proceedings is made; such record includes the testimony and evidence upon which the appeal is to be based. Pursuant to the Board of County Commissioners' Resolution #131-1992, if a person decides to appeal any decision of the Planning Commission he or she shall provide a transcript of the hearing before the Planning Commission, prepared by a court reporter at the appellant's expense, which transcript shall be filed as a part of the appeal within the time provided in Section 102-215 of the Monroe County Code, amended.

ADA ASSISTANCE: If you are a person with a disability who needs special accommodations in order to participate in this proceeding, please contact the County Administrator's Office, by phoning (305) 292-4441, between the hours of 8:30 a.m. - 5:00 p.m., no later than five (5) calendar days prior to the scheduled meeting; if you are hearing or voice impaired, call "711".

#### BOARD DISCUSSION

- GROWTH MANAGEMENT COMMENTS

- RESOLUTIONS FOR SIGNATURE

#### ADJOURNMENT

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**MEMORANDUM**  
**MONROE COUNTY PLANNING & ENVIRONMENTAL RESOURCES DEPARTMENT**  
*We strive to be caring, professional and fair*

**To:** Monroe County Planning Commission

**From:** Kathy Grasser, Comprehensive Planner

**Date:** November 2, 2010

**Subject:** Request for an Amendment to the Year 2010 Monroe County Comprehensive Plan to amend Table 4.1 Five-Year Schedule of Capital Improvements

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**Meeting:** November 16, 2010

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1 **PURPOSE:**

2 The principal purpose of this element is to determine the cost of any major County public facility  
3 improvements recommended in the various elements of the 2010 Comprehensive Plan for  
4 implementation during the five year period of Fiscal Years 2010-2015 and demonstrate the  
5 ability to fund those improvements. The Capital Improvements Element is required to be  
6 updated annually.

7  
8 **PROPOSED AMENDMENT:**

9 Staff is requesting the Monroe County Board of County Commissioners adopt an amendment to  
10 the Year 2010 Monroe County Comprehensive Plan amending Table 4.1 Five-Year Schedule of  
11 Capital Improvements (Exhibit A). A single public hearing is required (F.S. 163.3177).

12  
13 **PROCESS**

14 Pursuant to F.S. Sec. 163.3177(3)(a) and 163.3177(3)(b) the capital improvements element must  
15 be reviewed on an annual basis and modified as necessary in accordance with F.S. Sec. 163.3187  
16 or F.S. Sec. 163.3189 in order to maintain a financially feasible five-year schedule of capital  
17 improvements. Corrections and modifications concerning costs; revenue sources; or acceptance  
18 of facilities pursuant to dedications which are consistent with the plan may be accomplished by  
19 ordinance and shall not be deemed to be amendments to the local comprehensive plan. Capital  
20 improvements element amendments adopted after the effective date of this act shall require only  
21 a single public hearing before the governing board which shall be an adoption hearing as  
22 described in F.S. Sec. 163.3184(7). A copy of the ordinance shall be transmitted to the state land  
23 planning agency. An amendment to the comprehensive plan is required to update the schedule on  
24 an annual basis or to eliminate, defer, or delay the construction for any facility listed in the 5-  
25 year schedule. All public facilities must be consistent with the capital improvements element.

26  
27 Monroe County must become financially feasible by December 1, 2011 as stated in Florida  
28 Statutes Ch. 163.3177 (b)1:

1           *The capital improvements element must be reviewed on an annual basis*  
2           *and modified as necessary in accordance with s. 163.3187 or s. 163.3189*  
3           *in order to maintain a financially feasible 5-year schedule of capital*  
4           *improvements. Corrections and modifications concerning costs; revenue*  
5           *sources; or acceptance of facilities pursuant to dedications which are*  
6           *consistent with the plan may be accomplished by ordinance and shall not*  
7           *be deemed to be amendments to the local comprehensive plan. A copy of*  
8           *the ordinance shall be transmitted to the state land planning agency. An*  
9           *amendment to the comprehensive plan is required to update the schedule*  
10           *on an annual basis or to eliminate, defer, or delay the construction for any*  
11           *facility listed in the 5-year schedule. All public facilities must be consistent*  
12           *with the capital improvements element. The annual update to the capital*  
13           *improvements element of the comprehensive plan need not comply with the*  
14           *financial feasibility requirement until December 1, 2011. Thereafter, a*  
15           *local government may not amend its future land use map, except for plan*  
16           *amendments to meet new requirements under this part and emergency*  
17           *amendments pursuant to s. 163.3187(1)(a), after December 1, 2011, and*  
18           *every year thereafter, unless and until the local government has adopted*  
19           *the annual update and it has been transmitted to the state land planning*  
20           *agency.*

#### 23    **RELEVANT PRIOR COUNTY ACTIONS**

24    The Planning Commission adopted Resolution 34-10 on November 16, 2010 recommending the  
25    BOCC adopt the new Capital Improvements Implementation element Table 4.1.

#### 27    **DATA AND ANALYSIS**

28    Table 4.1, Five-Year Schedule of Capital Improvements (Fiscal Years 2010-2011, 2011-2012,  
29    2012-2013, 2013-2014, and 2014-2015), lists the public facilities which Monroe County will  
30    provide in order to reduce existing deficiencies, provide for necessary replacements, and meet  
31    the future demand identified by the Comprehensive Plan. In accordance with Rule 9J-5 of the  
32    Florida Administrative Code, the schedule includes the following public facility types for the  
33    five years subsequent to plan adoption.

35           The public facilities types are:

- 36           1.    Transportation facilities
- 37           2.    Potable Water
- 38           3.    Wastewater
- 39           4.    Drainage and Storm Water
- 40           5.    Solid Waste
- 41           6.    Parks and Recreation

43    Additionally, the Growth Management Division, The Monroe County Land Authority and The  
44    School Board have capital improvement projects in their budget.

#### 45    **TRANSPORTATION FACILITIES**

1 The revenue for transportation projects comes from Funds 102 and 130. The Road and Bridge  
 2 Fund County Capital Projects, the bike / shared use path, Key Colony Beach Roadway Project  
 3 and the Truman Pedestrian Bridge Projects have expenditures totalling \$3,689,506. FDOT  
 4 revenues for these projects total \$30,589,000. The following are FDOT's construction projects  
 5 and associated expenditures. Exhibit A contains all of FDOT's projects, including resurfacing.

1.	SR 5/BIG COPPITT KEY FROM ROCKLAND CHNL BRIDGE TO OLD BOCA CHICA CHANNEL Turn Lanes Construction	69,000
2.	SR 5/BIG COPPITT KEY FROM ROCKLAND CHNL BRIDGE TO OLD BOCA CHICA CHANNEL	20,000
3.	SR A1A/S. ROOSEVELT FROM BERTHA STREET TO SR 5/US-1 Flexible Pavement Construction: ROW	4,986,000
4.	SR A1A/S. ROOSEVELT FROM BERTHA STREET TO SR 5/US-1 Flexible Pavement Construction: Construction	20,877,000
5.	Bike Path Trail SR 5/N. ROOSEVELT FROM EISENHOWER DRIVE TO SR 5/US-1: Construction	1,073,000
6.	SR 5/US-1/LONG KEY V-PIERS REPL. & DEVIATION BLOCK REPAIRS: Prelim Eng.	20,000
7.	SR 5/OVRSEAS HRT.TRL FROM MM 15-BAY POINT TO MM 16.5-SUGARLOAF KEY: Construction	883,000
8.	SR 5/OVRSEAS HRT.TRL AT MM 106 (NEW TRAILHEAD) BTWN US-1 & CARD SOUND RD (bike path and trail) construction	2,620,000
9.	SR 5/OVRSEAS HRT.TRL KEMP CHANNEL BRIDGE (MM 23.6) LAP: Construction	1,350,000
10.	SR 5/OVRSEAS HRT.TRL (WINDLEY KEY) FROM MM 83.5 TO MM 84.8" Bike Path Construction	825,000
11.	SR 5/OVRSEAS HRT.TRL AT SPANISH HARBOR HISTORIC BRIDGE (MM 33): Bike Path Construction	1,300,000
12.	SR 5/OVRSEAS HRT.TRL AT SOUTH PINE CHANNEL HISTORIC BRIDGE (MM 29): Bike Path Construction	920,000
13.	SR 5/OVRSEAS HRT.TRL FROM MM 15 TO MM 16.5 (LOWER SUGARLOAF) Bike path construction	900,000
14.	SR 5/OVRSEAS HRT.TRL FROM MM 96 TO MM 106 (KEY LARGO) Bike path construction	1,400,000
15.	SR 5/OVRSEAS HWY FROM N. PINE CHL(MM 29.5) TO SPANISH HRBR CHL(MM33) ROW ACQ	1,795,000
16.	SR 5/OVRSEAS HRT.TRL AT MM 47 (KNIGHTS KEY) PEDESTRIAN UNDERPASS/ADA Bike Path	1,150,000
17.	SR 5/OVRSEAS HRT.TRL FROM MM 54.5 TO MM 60 (GRASSY KEY) Bike Path	1,635,000
18.	SR 5/OVRSEAS HRT.TRL & SCENIC HWY - VISTAS AT VARIOUS LOCATIONS Bike Path	1,225,000
19.	SR 5/OVRSEAS HRT.TRL ALL AMERICAN ROAD MM 0 TO MM 106 Bike Path	1,020,000
	<b>20. FDOT Expenditures</b>	
		<b>\$44,068,000</b>

6 Roads are one of the four critical public facilities identified for annual assessment in the Monroe

1 County Land Development (LDC). Regulations require all segments of U.S. 1 to remain at a  
2 LOS C or higher and all county roads are to remain at a LOS D or higher.

3  
4 This section of the report investigates the current capacity of the transportation network in  
5 Monroe County. The analysis includes changes in traffic volumes, the U.S. 1 level of service  
6 (LOS), the reserve capacity of the highway and county roads, and the Florida Department of  
7 Transportation Five-Year Work Program for Monroe County. All data and analysis was obtained  
8 from the 2009 U. S. 1 Arterial Travel Time and Delay Study' prepared by URS Corporation  
9 Southern, 3343 W. Commercial Blvd., Suite 100, Fort Lauderdale, Florida 33309.

10  
11 **LEVEL OF SERVICE (LOS)**

12 **OVERALL LEVEL OF SERVICE ON U.S. 1**

13 The overall level of service or capacity of the entire length of U.S. 1 is measured in the average  
14 speed of a vehicle traveling from one end to the other of U.S. 1. Both Monroe County and the  
15 Florida Department of Transportation have adopted a LOS C standard for the overall length of  
16 U.S. 1. In other words, a vehicle traveling from Mile Marker 4 to Mile Marker 112 (or vice  
17 versa) must maintain an average speed of at least 45 mph to achieve the LOS C standard.

18  
19 The median overall speed during the 2009 study was 46.6 mph, which is 0.2 mph higher than the  
20 2008 median speed of 46.2 mph. The mean operating speed was 46.3 mph with a 95%  
21 confidence interval of plus or minus 0.7 mph. The mean and median speeds correspond to LOS  
22 C conditions. The highest overall speed recorded in the study was 48.4 mph (similar to the 2008  
23 highest overall speed of 48.2 mph), which occurred on Thursday, March 5, 2009 between 3:15  
24 p.m. and 5:45 p.m. in the southbound direction. The lowest overall speed recorded was 42.6  
25 mph (4.1 mph higher than the 2008 lowest overall speed of 38.5 mph) which occurred on  
26 Monday, March 2, 2009 between 9:45 a.m. and 12:40 p.m. in the southbound direction.

27  
28 **LEVEL OF SERVICE ON U.S. 1 SEGMENTS**

29 The Land Development Code requires each segment of the highway to maintain a LOS of C or  
30 better. The LOS criteria for segment speeds on U.S. 1 in Monroe County depend on the flow  
31 characteristics and the posted speed limits within the given segment. Flow characteristics relate  
32 to the ability of a vehicle to travel through a particular segment without being slowed or stopped  
33 by traffic signals or other devices. Segments with a series of permanent traffic signals or other  
34 similar traffic control devices in close proximity to each other are considered to be "Interrupted  
35 Flow Segments" and are expected to have longer travel times due to the delays caused by these  
36 signals or control devices. Roadway segments without a series of signals or control devices are  
37 considered to be "Uninterrupted Flow Segments". Uninterrupted segments may have one or  
38 more traffic signals, but they are not in close proximity to one another as in the interrupted  
39 segment case. The methodology used to determine median speed and level of service on a  
40 particular segment is based upon that segment's status as an interrupted or uninterrupted flow  
41 segment.

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43  
44  
45  

<u>Interrupted Flow</u>	<u>Uninterrupted Flow</u>
-------------------------	---------------------------

LOS A $\geq$ 35 mph	LOS A 1.5 mph above speed limit
LOS B $\geq$ 28 mph	LOS B 1.5 mph below speed limit
LOS C $\geq$ 22 mph	LOS C 45 mph below speed limit
LOS D $\geq$ 17 mph	LOS D 7.5 mph below speed limit
LOS E $\geq$ 13 mph	LOS E 13.5 mph below speed limit
LOS F < 13 mph	LOS F more than 13.5 mph below speed limit

1  
2 Compared to last year's (2008) study results, there is level of service changes to eight segments –  
3 three (3) resulted in positive level of service changes while five (5) resulted in negative level of  
4 service changes.

- 5  
6           The Boca Chica segment (Segment 2) increased from LOS 'B' to LOS 'A'  
7           The Big Pine (Segment 10) increased from LOS 'D' to LOS 'C'  
8           The Cross segment (Segment 24) increased from LOS 'E' to LOS 'A'  
9           The Big Coppitt (Segment 3) decreased from LOS 'C' to LOS 'D'  
10          The Cudjoe segment (Segment 6) decreased from LOS 'A' to LOS 'B'  
11          The Duck segment (Segment 15) decreased from LOS 'B' to LOS 'C'  
12          The Long Key segment (Segment 16) decreased from LOS 'B' to LOS 'C'  
13          The Plantation segment (Segment 21) decreased from LOS 'B' to LOS 'C'

14  
15 Compared to 2008, the median segment speeds increased in ten (10) of the 24 segments ranging  
16 between 0.4 mph to 13.8 mph. Fourteen segments experienced a decrease in median speeds,  
17 ranging from 0.1 mph to 3.4 mph, compared to last year's data. The biggest difference in speed  
18 change was observed for Segment 24, the level of service changed from LOS 'E' to LOS 'A'  
19 because most of the construction work has been completed and the bascule bridge was replaced  
20 with a fixed-span bridge.

## 21 DELAY EVENTS

22 A delay event occurs whenever the speed of the test vehicle fell below 5 mph. The delay event  
23 continues until the test vehicle's speed rose to 15 mph. During the study, the observers  
24 encountered a total of 123 separate delay events (a 10% increase compared to the 2008 study).  
25 Six of these delay events at 20 minutes and 50 seconds were excluded from the overall travel  
26 times. The excluded delay events were caused by non-recurring congestion events such as  
27 accidents, school bus, roadside construction. In addition to these six delay events, the 6  
28 drawbridge delay events were also excluded from the segment travel times (41 minutes and 51  
29 seconds). The mean delay per trip is the total delay recorded for a given sources divided by the  
30 study's 28 one-way trips. The mean delay per trip is found to be 5 minutes and 19 seconds (a 1  
31 minute and 51 second increase in delay compared to the 2008 data).  
32  
33

## 34 SIGNAL DELAYS

35 The largest single delay source along U.S. 1 in Monroe County is the traffic signal. During the  
36 2009 study, 99 (80%) out of 123 delay events were caused by signals which is 5% higher than  
37 the 2008 study. The signal delays accounted for 1 hour 19 minutes and 43 seconds (53% of total  
38 delays).  
39

1 The mean delay per event for signals in segments 5, 10, 13, 14, 21 and 22 are higher than the  
2 LOS C threshold value of 25 seconds, which is the signal impact discount in the methodology.  
3 The signal on Big Pine Key segment (Segment 10) caused 18 (18%) signals delay events  
4 accounting for 31 minutes and 22 seconds.

5  
6 Key Deer Boulevard signal was the most significant delay causing 18 signal delay events  
7 accounting for 31 minutes and 22 seconds (39% of the total signal delays). The mean delay per  
8 event at Key Deer Boulevard signal was higher than the threshold of 25 seconds at 1 minute and  
9 45 seconds. The mean delay per trip was also higher than the threshold of 25 seconds at 1  
10 minute and 7 seconds.

11  
12 The signals on the Marathon segment (Segment 13) were the second most significant causing 36  
13 signal delay events account for 20 minutes and 2 seconds (25% for the total signal delays). The  
14 mean delay per event at the Marathon signals was higher than the 25 seconds threshold at 22  
15 seconds. The mean delay per trip was higher than the 25 seconds threshold at 43 seconds.

#### 16 17 ACCIDENT DELAY

18 The accident delays were the third largest delay events during the 2009 study. There were three  
19 (3) accident delays recorded during the 2009 study accounting for 16 minutes and 47 seconds.  
20 The accident delays account for 11% of the total delays. No accident delays were recorded  
21 during the 2008 study. The drawbridge delays were excluded from the overall travel time.

#### 22 23 TURNING VEHICLE DELAY

24 There were 7 left-turn delays amounting to 2 minutes and 35 seconds during this year's study.  
25 The total delay time related to turns increased compared to last year's turn delays of 58 seconds.

#### 26 27 DRAW BRIDGE DELAY

28 There is one drawbridge along the length of U.S. 1 in Monroe County, across Snake Creek. This  
29 year drawbridge delays were the second largest delay events. The Snake Creek Draw Bridge  
30 (between Segments 20 and 21) created six (6) drawbridge related delay during this year's travel  
31 time runs, totally 41 minutes and 51 seconds. The drawbridge delay events and total time were  
32 significantly higher in the 2009 study compared to the 2008 study accounting for only 4 minutes  
33 and 21 seconds. The drawbridge delays were excluded from the segment travel time but are  
34 included in the overall travel time.

#### 35 36 CONGESTION DELAY

37 The delays caused by congestion were not that significant during 2009. In previous years,  
38 congestion delays were caused by events such as the Kid's Carnival (MM 34) and the Islamorada  
39 Flea Market. In 2009, the largest congestion delay occurred at Segment 20 at Snake Creek  
40 Bridge. The congestion delay events contributed an average of 8 seconds per trip, a significant  
41 decrease compared to last year's average delay per trip of 57 seconds. Four congestion delay  
42 events amounted to 3 minutes and 37 seconds during the 2009 study.

#### 43 44 45 46 CONSTRUCTION DELAY

1 The construction delay was the fourth largest delay. During the 2009 study there was on-going  
2 construction at the following segments:

- 3 1. Stock Island (Segment 1)
- 4 2. Big Coppitt (Segment 3)
- 5 3. Duck (Segment 15)
- 6 4. Snake Creek Bridge (Segment 21)
- 7 5. Cross (Segment 24)

8  
9 The construction delay events accounted for 4 minutes and 3 seconds in 2009. This is a  
10 significant decrease from 2008 construction delays accounting for 12 minutes and 1 second.  
11 During years 2007 and 2008 construction delays occurred mostly along Cross segment (Segment  
12 24). The construction of a high level fixed bridge has been completed along Cross segment and  
13 speeds along the approach sections of the segment that are still under construction were observed  
14 to be above the posted speed limit.

15  
16 **SPEED LIMIT**

17 The posted speed limit affects both the segment and the overall LOS. For instance, a lower  
18 speed limit could benefit a segment's LOS by reducing the difference between the travel speed  
19 and the posted speed limit. The reduction in the speed limit negatively impacts the overall LOS  
20 because motorists tend to travel at reduced speeds to comply with the speed limits, whereas the  
21 overall LOS C threshold is set at 45 mph regardless of the speed limits changes. For these  
22 reasons, the posted speed limit is an important component in this study.

23  
24 In Big Pine Key, due to the Key Deer habitat, the speed limit is strictly enforced with additional  
25 signs and frequent police presence. The travel speeds in this segment were observed to be near  
26 the posted speed limit, unless impeded by delays created by the signal.

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**FIGURE 2.7**  
**US 1 SEGMENTS STATUS, MEDIAN SPEEDS AND CHANGE 2008-2009**

#		Segment	2009 LOS	2008 LOS	2009 Median Speed	2008 Median Speed	Numeric Change
1	4-5	Stock Island	B	B	34.2	31.7	2.5
2	5-9	Boca Chica	A	B	56.7	55.5	1.2
3	9-10.5	Big Coppitt	D	C	42.3	45.7	-3.4
4	10.5-16.5	Saddlebunch	C	C	52.4	51.6	0.8
5	16.5-20.5	Sugarloaf	D	D	46.8	47.2	-0.4
6	20.5-23	Cudjoe	B	A	47.0	47.7	-0.7
7	23-25	Summerland	B	B	44.7	46.4	-1.7
8	25-27.5	Ramrod	A	A	47.6	47.7	-0.1
9	27.5-29.5	Torch	A	A	47.9	46.6	1.3
10	29.5-33	Big Pine	C	D	37.9	35.7	2.2
11	33-40	Bahia Honda	B	B	51.7	52.3	-0.6
12	40-47	7-Mile Bridge	B	B	55.4	56.1	-0.7
13	47-54	Marathon	A	A	38.2	37.3	0.9
14	54-60.5	Grassy	C	C	50.3	50.7	-0.4
15	60.5-63	Duck	C	B	51.3	54.4	-3.1
16	63-73	Long	C	B	51.3	52.3	-1.0
17	73-77.5	L. Matecumbe	C	C	51.4	51.0	0.4
18	77.5-79.5	Tea Table	D	D	48.5	50.0	-1.5
19	79.5-84	U. Matecumbe	C	C	40.8	42.1	-1.3
20	84-86	Windley	A	A	42.2	43.8	-1.6
21	86-91.5	Plantation	C	B	39.6	41.9	-2.3
22	91.5-99.5	Tavernier	A	A	48.2	47.6	0.6
23	99.5-106	Largo	A	A	46.0	44.4	1.6
24	106-112.5	Cross	A	E	52.1	38.3	13.8
<b>Overall</b>			<b>C</b>	<b>C</b>	<b>46.6</b>	<b>46.4</b>	<b>0.2</b>

Due to construction in 2009 the posted speed limit was changed from 45 mph to 35 mph in some sections of the following segments:

1. Stock Island (Segment 1)
2. Bog Coppitt (Segment 3)
3. Duck (Segment 15)
4. Snake Creek Bridge (Segment 21)
5. Cross (Segment 24)

This caused these segments' medium speed to decrease since year 2008. In Segment 15 and Segment 21, this action caused the LOS to decrease.

A large part of the traffic in Monroe County consists of tourist travelers, who generally tend to have a leisurely driving style. The traffic also tends to include a large number of recreational vehicles. Combined with some slow moving heavy vehicles, the travel speeds tend to go below the speed limits when there are no opportunities for faster moving vehicles to pass. Such impacts are evident on 16 of the 24 segments operating below the posted speed limits.

1 **RESERVE CAPACITIES**

2 The difference between the median speed and the LOS C standard gives the reserve speed, which  
3 in turn can be converted into an estimated reserve capacity of additional traffic volume and  
4 corresponding additional development using mathematical formulas. The median overall speed  
5 of 46.6 mph compared to the LOS C standard of 45 mph leaves an overall reserve speed of 1.6  
6 mph. The reserve speed is then converted into an estimated number of reserve trips. The  
7 estimated reserve capacity is then converted into an estimated capacity for additional residential  
8 development, assuming balanced growth of other land uses. Applying the formula for reserve  
9 volume to each of the 24 segments of U.S. 1 individually gives maximum reserves volumes for  
10 all segments totally 86,707 trips. These individual reserve volumes may be unobtainable, due to  
11 constraint imposed by the overall reserve volume.

12  
13 County regulations and FDOT policy allow segments that fail to meet LOS C standards to  
14 receive an allocation not to exceed five percent (5%) below the LOS C standard. The flexibility  
15 allows a limited amount of additional land development to continue until traffic speeds are  
16 measured again next year or until remedial actions are implemented. These segments are  
17 candidates for being designated either 'backlogged' or 'constrained' by FDOT.

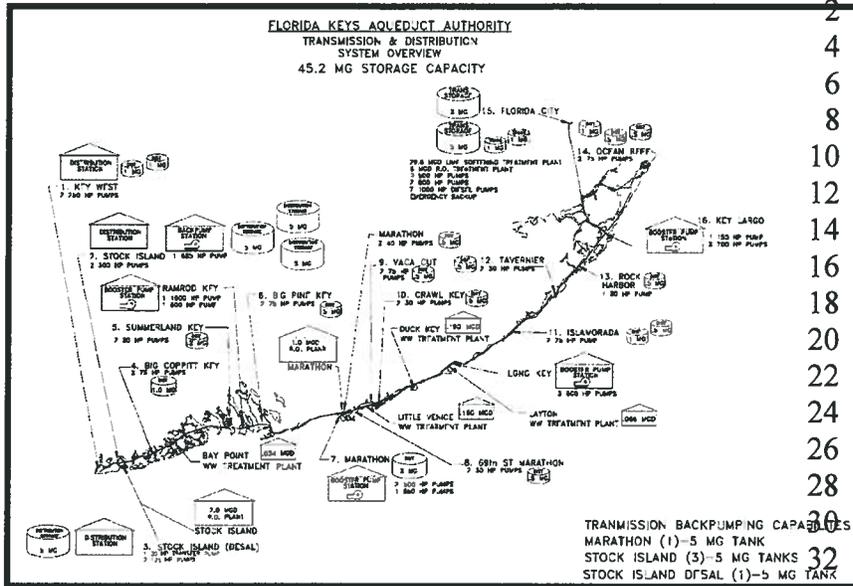
18  
19 **LEVEL OF SERVICE ANALYSIS**

20 Based on this year's results, Big Coppitt (Segment 3), Sugarloaf (Segment 5) and Tea Table  
21 (Segment 18) are below the LOS C threshold. However, Sugarloaf and Tea Table have reserve  
22 capacity within the 5% allocation and Big Coppitt segment is under construction. Segments that  
23 have used-up the 5% reserve trips are restricted from new development or redevelopment, except  
24 where redevelopment has no net increase in trips.

25  
26 **POTABLE WATER**

27 Monroe County does not own or maintain a potable water supply or distribution and treatment  
28 system. FKAA is the County's provider / supplier and ensures that sufficient supply and  
29 distributional capacity is available to serve the current and projected potable water needs in the  
30 county.

31  
32 The Florida Keys Aqueduct Authority (FKAA) is the sole provider of potable water in the  
33 Florida Keys. The Biscayne Aquifer is a shallow groundwater source and FKAA's primary  
34 water supply. The FKAA's wellfield is located in a pineland preserve west of Florida City in  
35 south Miami-Dade County. The FKAA's wellfield contains some of the highest quality  
36 groundwater in the State, meeting all regulatory standards prior to treatment. Laws protect the  
37 wellfield from potential contamination from adjacent land uses. Beyond the County's  
38 requirements, FKAA is committed to comply with and surpass all federal and state water quality  
39 standards and requirements.



2 The groundwater from the  
 4 wellfield is treated at the  
 6 FCAA's Water Treatment  
 8 Facility in Florida City,  
 10 which currently has a  
 12 maximum water treatment  
 14 design capacity of 29.8  
 16 million gallons per day  
 18 (MGD). The primary water  
 20 treatment process is a  
 22 conventional lime  
 24 softening/filtration water  
 26 treatment plant and is  
 28 capable of treating up to  
 30 23.8 MGD from the  
 32 Biscayne Aquifer. The  
 34 secondary water treatment

35 process is the newly constructed Reverse Osmosis water treatment plant and is capable of  
 36 producing 6 MGD from the brackish Floridian Aquifer. The product water from these treatment  
 37 processes is then disinfected and fluoridated. The FCAA treated water is pumped 130 miles  
 38 from Florida City to Key West supplying water to the entire Florida Keys. Including  
 39 overlapping coverage, the FCAA maintains 187 miles of transmission main at a maximum  
 40 pressure of 250 pounds per square inch. The transmission pipeline varies in diameter from 36  
 41 inches to 12 inches. The FCAA distributes the treated water through 690 miles of distribution  
 42 piping ranging in size from 3/4-inch to 12 inches in diameter.

43  
 44 The FCAA maintains storage tank facilities which provide an overall storage capacity of 45.2  
 45 million gallons system wide. The sizes of tanks vary from 0.2 to 5.0 millions gallons. These  
 46 tanks are utilized during periods of peak water demand and serve as an emergency water supply.  
 47 Since the existing transmission line serves the entire Florida Keys (including Key West), and  
 48 storage capacity is an integral part of the system, the capacity of the entire system must be  
 49 considered together, rather than in separate service districts.

50  
 51 Also, the two (2) saltwater Reserve Osmosis (RO) plants, located on Stock Island and Marathon,  
 52 are available to produce potable water under emergency conditions. The RO desalination plants  
 53 have design capacities of 2.0 and 1.0 MGD of water, respectively.

54  
 55 At present, Key West and Ocean Reef are the only areas of the County served by a flow of  
 56 potable water sufficient to fight fires. Outside of Key West, firefighters rely on a variety of  
 57 water sources, including tankers, swimming pools, and salt water either from drafting sites on the  
 58 open water or from specially constructed fire wells. Although sufficient flow to fight fires is not  
 59 guaranteed in the County, new hydrants are being installed as water lines are replaced to make  
 60 water available for fire-fighting purposes and pump station/tank facilities are being upgraded to  
 61 provide additional fire flow and pressure.

62  
 63

1 **DEMAND FOR POTABLE WATER**

2

<b>Annual Water Withdrawals 1980 to 2009</b>				
<b>Year</b>	<b>Annual Withdrawal (MG)</b>	<b>% Change</b>	<b>WUP Limit (MG)</b>	<b>WUP Annual Allocation (MG) +/-</b>
1980	2,855	-	N/A	N/A
1981	3,101	8.60%	N/A	N/A
1982	3,497	12.80%	N/A	N/A
1983	3,390	-3.10%	N/A	N/A
1984	3,468	2.30%	4,450	983
1985	4,139	19.40%	4,450	311
1986	4,642	12.10%	5,110	469
1987	4,795	3.30%	5,110	315
1988	4,820	0.50%	5,110	290
1989	4,936	2.40%	5,110	174
1990	4,404	-10.80%	5,560	1156
1991	4,286	-2.70%	5,560	1274
1992	4,461	4.10%	5,560	1099
1993	5,024	12.60%	5,560	536
1994	5,080	1.10%	5,560	480
1995	5,140	1.20%	5,778	638
1996	5,272	2.60%	5,778	506
1997	5,356	1.60%	5,778	422
1998	5,630	5.10%	5,778	148
1999	5,935	5.40%	5,778	-157
2000	6,228	10.60%	5,778	-450
2001	5,627	-9.70%	5,778	151
2002	6,191	10.03%	7,274	1083
2003	6,288	1.57%	7,274	986
2004	6,461	2.74%	7,274	813
2005	6,471	0.16%	7,274	803
2006	6,310	-2.49%	7,274	964
2007	5,846	-7.35%	7,274	1428
2008	5,960	1.95%	8,751	2791
2009	5,966	0.09%	8,751	2785

Source: Florida Keys Aqueduct Authority, 2009

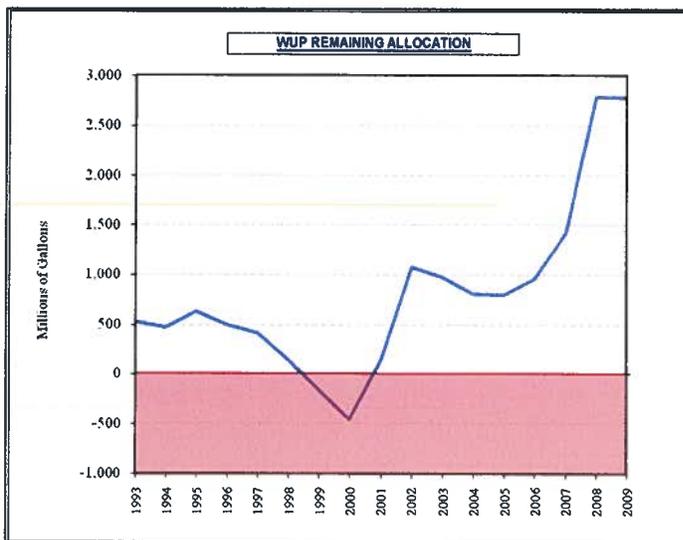
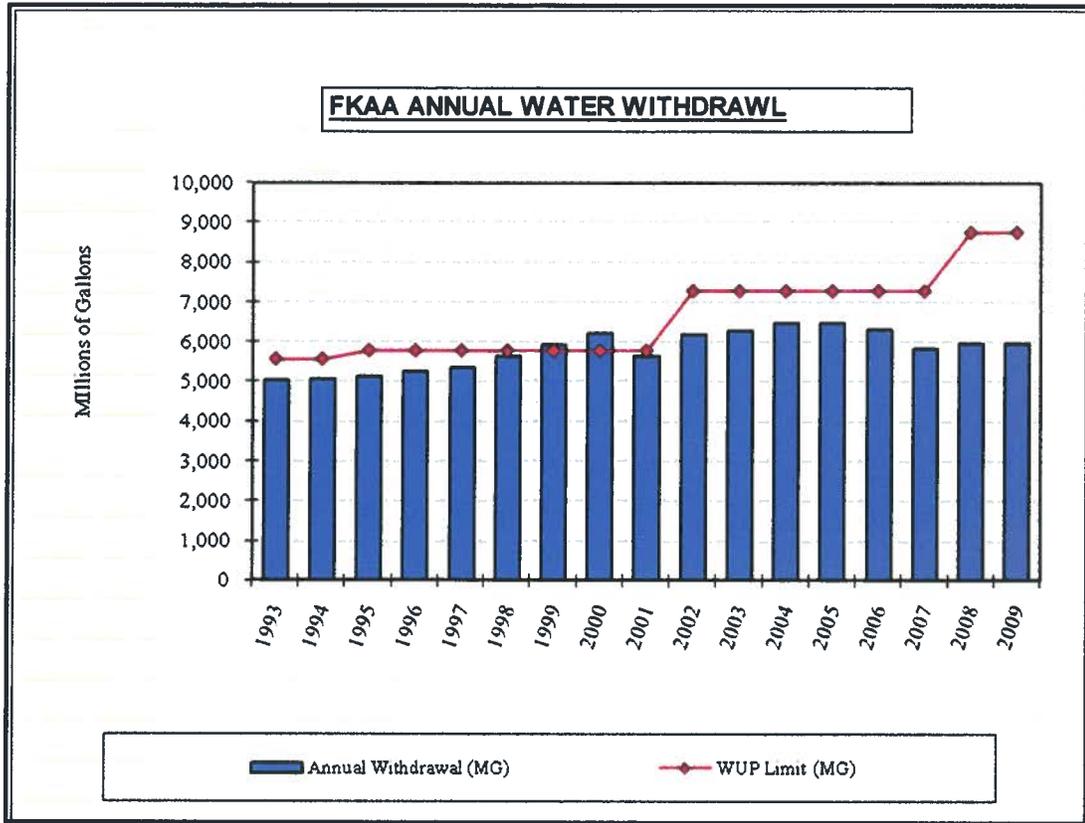
The chart and two tables below provide a historical overview of the water demands in the FKAA service area, Water Use Permit (WUP) allocation limits, yearly percent change, and water allocation remaining.

In March 2008, South Florida Water Management District (SFWMD) approved the FKAA's modification of WUP 13-00005-5-W for a 20-year allocation from the Biscayne and Floridian Aquifers. The WUP provides an annual allocation of 8,751 Million Gallons (MG) or 23.98 MGD and a maximum monthly allocation of 809 MG with a limited annual withdrawal from the Biscayne Aquifer of 6,492 MG or 17.79 MGD and an average dry season (December 1<sup>st</sup>-April 30<sup>th</sup>) of 17.0 MGD.

In order to meet the requirements of this limitation, the FKAA constructed a new Floridian Aquifer Reverse Osmosis (RO) water treatment system. This RO water treatment system is designed to withdraw brackish water from the Floridian Aquifer, an alternative water source, which

41 is approximately 1,000 feet below the ground surface, and treated to drinking water standards.  
 42 The new RO water treatment plant provides added capability to limit Biscayne aquifer  
 43 withdrawals and is designed to meet current and future water demands. The RO water treatment  
 44 system provides an additional 6.0 MGD of potable water.  
 45  
 46

1 Along with the new RO water treatment plant, compliance with withdrawal limits can also be  
 2 accomplished by using other alternative water sources (blending of the Floridian Aquifer,  
 3 reclaimed water and operation of the RO desalination plants), pressure reduction, public  
 4 outreach, and assistance from municipal agencies in enforcing water conservation ordinances  
 5 (i.e. irrigation ordinance).



Demand for potable water is influenced by many factors, including the number of permanent residents, seasonal populations and day visitors, the demand for commercial water use, landscaping practices, conservation measures, and the weather. In 2009, the FCAA distributed an annual average day of 16.35 MGD and a dry season average day of 17.34 MGD as shown in Figure 3.5.

The maximum monthly water demand of 562 MG shown in Figure 3.5 occurred in March of 2009. Preliminary

1 figures and projections for 2010 indicate a slight increase to an annual average daily demand to  
 2 16.58 MGD and an increase in maximum monthly demand to 564.78 MG as compared to 2009  
 3 figures. Also, Figure 3.5 provides the water treatment capacities of the RO plants. The RO  
 4 plants do not require a WUP because the water source is seawater. However, the RO plants are  
 5 available for emergency water supply.  
 6

<b>Projected Water Demand in 2010 (in MG)</b>			
	<b>FKAA Permit Thresholds</b>	<b>2009 Pumpage</b>	<b>2010 Water Demand Projected</b>
<b>Annual Allocation</b>			
Average Daily Withdrawal	23.98	16.35	16.58
Maximum Monthly Withdrawal	809.01	562.62	564.78
Annual Withdrawal	8,751	5,966.00	6,051.00
<b>Biscayne Aquifer Annual Allocation/Limitations</b>			
Average Daily Withdrawal	17.79	15.9	15.47
Average Dry Season Withdrawal*	17	17.34	16.08
Annual Withdrawal	6,492	5,801.68	5,645.46
<b>Emergency RO WTP Facilities</b>			
Kermit L. Lewin Design Capacity	2.00 (MGD)	2.78 (MGY)	0
Marathon RO Design Capacity	1.00 (MGD)	0.00 (MGY)	0
<i>All figures are in millions of gallons</i>			
<i>*Dry Season is defined as December thru April</i>			
Source: Florida Keys Aqueduct Authority, 2010			

7  
 8 The chart below indicates the amount of water available on a per capita basis. Based on  
 9 Functional Population and permitted water withdrawal from Biscayne Aquifer, the average water  
 10 available is above 100 gallons per capita (person). The 100 gallons per person per day standard is  
 11 commonly accepted as appropriate, and reflected in Policy 701.1.1 of the Year 2010  
 12 Comprehensive Plan. The Per Capita Water Availability Table by KFAA projects a functional  
 13 per capita water demand of 158.73.  
 14  
 15

Per Capita Water Availability					
Year	Functional Population <sup>1</sup>	Average Available Daily Withdrawal (gallons) <sup>2</sup>	Average Water Available Per Capita (gallons) <sup>2</sup>	Actual Average Daily Withdrawal (gallons) <sup>2,3</sup>	Actual Average Water Use Per Capita (gallons) <sup>2,3</sup>
1998	151,163	15,830,000	104.72	15,424,657	102.04
1999	151,396	15,830,000	104.56	16,260,274	107.4
2000	153,080	15,830,000	103.41	17,063,014	111.46
2001	153,552	15,830,000	103.09	15,416,438	100.4
2002	154,023	19,930,000	129.4	16,961,644	110.12
2003	154,495	19,930,000	129	17,227,397	111.51
2004	154,966	19,930,000	128.61	17,701,370	114.23
2005	151,227	19,930,000	131.79	17,728,767	117.23
2006	151,189	19,930,000	131.82	17,287,671	114.34
2007	151,151	19,930,000	131.85	16,016,438	105.96
2008	151,114	23,975,000	158.66	16,328,767	108.06
2009	151,076	23,975,000	158.69	16,345,205	108.19
2010	151,039	23,975,000	158.73	16,345,210	108.22
Source: 1. Projected Permanent and Seasonal County-wide Population Update (1990-2015)- Monroe County Planning Department, 2007					
2. Florida Keys Aqueduct Authority, 2010					
3. Projected Actual Withdrawal and Per Capita for 2010					

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**Projected Population**

**Permanent Population**

The MCPD permanent population projections include the most appropriate and applicable information and are viewed as the basis of future projections in this Plan. From 1990 through 1995, the permanent population of Monroe County increased from 78,856 to 79,200 (0.4 percent); from 1995 through 2000, it increased from 79,200 to 79,589 (0.5 percent); and from 2000 through 2005, it increased from 79,589 to 81,701 (2.7 percent). The MCPD data in the USACE Carrying Capacity Study (USACE, 2003) project a permanent population of 79,589 for 2000; 81,701 in 2005; 83,400 in 2010; 83,799 in 2015; 84,200 in 2020; and 84,603 in 2025. Exhibit 2-1 summarizes the MCPD permanent population projections. The permanent population is projected to grow at an overall average rate of 1.2 percent for each 5-year period from 2005 through 2025, with a higher rate (2.1 percent from 2005 to 2010) and a lower rate (0.5 percent) thereafter as Monroe County nears build-out.

**Seasonal Population**

The MCPD seasonal population projections in the USACE Carrying Capacity Study (USACE, 2003) also were used to project the seasonal population for Monroe County. Although there are

1 no exact counts of the seasonal population, the MCPD developed historical seasonal population  
2 projections for 1990, 1995, and 2000. The MCPD projected that the 1990 seasonal population of  
3 70,493 increased by 1.1 percent to a 1995 population of 71,266, and further increased by 3.1  
4 percent to a 2000 seasonal population of 73,491. The MCPD continues these seasonal population  
5 projections in 5-year increments starting with a seasonal population of 73,737 in 2005; 74,533 in  
6 2010; 74,712 in 2015; 74,891 in 2020; and 75,071 in 2025. The seasonal population is projected  
7 to increase at an overall average rate of 0.4 percent for each 5-year period from 2005 through  
8 2025, with a 1.1 percent increase between 2005 and 2010 and a 0.24 percent increase from 2010  
9 through 2025.

10  
11 **Functional Population**

12 The term “functional population” is a concept that incorporates three elements of population:  
13 permanent residents, seasonal visitors, and day visitors. Because of the unique nature of the  
14 Keys, which has an economy based on seasonal tourism, it is appropriate to use one “population”  
15 number that incorporates these three separate population components. In 2004 and 2005, CH2M  
16 HILL developed population projections for the FKAA service area. The population projections  
17 were based on those developed by the Monroe County Planning Department, and combined the  
18 permanent population with the seasonal population to form a “functional population” that was  
19 used to estimate water demand.

20  
21 FKAA serves three distinct populations: permanent residents, seasonal residents (those residing  
22 in the Keys for 6 months or less), and day visitors. The term “functional population” is a concept  
23 that incorporates these three elements of population. Because of the unique nature of the Keys,  
24 which has an economy based on seasonal tourism, it is appropriate to use one “population”  
25 number that incorporates these three separate population components. For this Plan, the  
26 functional population value is used in all per capita calculations and estimates. There are  
27 approximately 3.6 people per customer account within FKAA’s service area using functional  
28 population as the basis. Population projections developed by the Monroe County Planning  
29 Department (MCPD) indicate that the permanent population for the Florida Keys in 2005 was  
30 81,701, and the seasonal population was 73,737. The term “functional population” is a concept  
31 that incorporates permanent residents, seasonal residents, and day visitors. The functional  
32 population for Monroe County in the year 2005 was 155,438. By 2025, Monroe County is  
33 expected to have a permanent population of 84,603, a seasonal population of 75,071, and a  
34 functional population of 159,674.

35  
36  
37  
38  
39 THIS SPACE LEFT BLANK INTENTIONALLY  
40  
41

1 **Projected Water Demand**

2 The maximum day projected finished water demands in the FKAA service area are expected to  
 3 increase from 22.39 mgd in 2005 to 25.09 mgd in 2010, 27.60 mgd in 2015, 29.26 mgd in 2020,  
 4 and 29.85 mgd in 2025. Projected maximum-day and peak hour demand were also calculated  
 5 using peaking factors of 1.25 and 1.35, respectively.  
 6

POPULATION		FINISHED WATER DEMANDS		
YEAR	FUNCTIONAL	PER CAPITA (gpcd)	MAX.DAY (mgd)	AVG. DAY (mdg)
2005	155,438	114.08	22.39	17.73
2010	157,933	127.08	25.09	20.07
2015	158,511	139.30	27.60	22.08
2020	159,091	147.15	29.26	23.41
2025	159,674	149.55	29.85	23.88

7  
 8 **Water Supply Recommendations**

9 Because of recent regulatory trends, it is unlikely that FKAA will be able to rely on the Biscayne  
 10 Aquifer, its historical source of potable water, to meet its future needs for additional water. The  
 11 South Florida Water Management District's (SFWMD's) Lower East Coast (LEC) Regional  
 12 Water Supply Plan (RWSP) (SFWMD, 2005) advocates the use of the Floridan aquifer as an  
 13 alternative water supply, either for ASR or for direct withdrawals for blending or reverse  
 14 osmosis (RO).  
 15

16 **IMPROVEMENTS TO POTABLE WATER FACILITIES**

17 FKAA has a 20-year Water System Capital Improvement Master Plan for water supply, water  
 18 treatment, transmission mains and booster pump stations, distribution mains, facilities and  
 19 structures, information technology, reclaimed water systems, and Navy water systems. The  
 20 master plan was revised in 2009 to include the critical projects such as:

PROJECT	CONST. COST	TOTAL CONSTRUC- TION COST	CONSULT, ADMIN, LEGAL	CONT.	TOTAL PROJECT COST	TIMING
J. Robert Dean WTP Phase I and Phase II RO Facility, Floridan Wells Construction Cost						
Floridan Water Supply Well - Phase I 4.5 mgd WTP Three 2mgd wells and one standby	\$5,913,044	\$5,913,044	\$1,182,609	\$1,064,348	\$8,160,000	2007-2009
Floridan Water Supply Well - Phase II adding 1.5 mgd for a total of 6 mgd WTP One additional 2 mgd well	\$1,750,000	\$1,750,000	\$350,000	\$315,000	\$2,415,000	2013
ASR (Cost per FKAA for FY 2007 only)	\$1,000,000	\$1,000,000			\$1,000,000	2007
<b>Project Total</b>					<b>\$11,575,000</b>	

1 The table above shows the schedule and costs projected for the capital improvements to the  
2 potable/alternative water systems planned by the FKAA. The total cost of the scheduled  
3 improvements is approximately \$49 million over the next 5 years. These projects are to be  
4 funded by the water rate structure, long-term bank loans, and grants.

5  
6 In 1989 FKAA embarked on the Distribution System Upgrade Program to replace approximately  
7 190 miles of galvanized lines throughout the Keys. FKAA continues to replace and upgrade its  
8 distribution system throughout the Florida Keys and the schedule for these upgrades is reflected  
9 in their long-range capital improvement plan. The FKAA's Water Distribution System Upgrade  
10 Plan calls for the upgrade or replacement of approximately 20,000 feet of water main during  
11 fiscal year 2010.

12  
13 Additionally, significant improvements have been completed at the water treatment plant and  
14 ongoing improvements continue on the transmission and distribution water mains and pump  
15 stations. Most notably in 2009 was the completion of the new state of the art reverse osmosis  
16 (RO) facility at the Florida City Water Treatment Plant.

17  
18 **SUMMARY**

19 In summary, with the construction of the new water supply wells and RO water treatment facility  
20 that will provide an additional capacity of 6.0 MGD, the new reclaimed systems, and the ability  
21 to operate the 3.0 MGD RO desalination plants during emergency situations, there is an adequate  
22 supply of water to meet current and future demand.

23  
24 Also, the continued implementation of conservation measures and the continued system  
25 distribution and transmission upgrades will help to minimize the projected increase in water  
26 demand. A 1.4% increase in demand is projected in 2010.

27  
28 The following projects are funded through the Florida Keys Aqueduct Authority.  
29 FKAA's revenues are 53,780,357. The total cost for all FKAA projects for the five fiscal years  
30 is \$79,886,500.

- 31
- 32
1. J. Robert Dean Floridan Wells
2. J. Robert Dean RO Facility
3. J. Robert Dean New Storage Tank
4. Key largo Booster Pump Station
5. Plantation Key Booster Pump Station
6. Marathon Transmission Main Replacements
7. Marathon Booster Pump Station
8. Ramrod Booster PS
9. Upsize Mains
10. Ocean Reef Storage Tank
11. Lake Surprise Pub Station and Storage Tank
12. Rockharbor Pump Station Replacement
13. Rock Harbor Storage Tank
14. Tavernier Pump Station Replacement & Storage Tank

- 15. Tavernier Water Lines
- 16. Vaca Cut Storage Tank
- 17. 33rd Street Storage Tank Replacement
- 18. Stock Island Pump Station Replacement

**SOLID WASTE**

Monroe County's solid waste facilities are managed by the Solid Waste Management Department, which oversees a comprehensive system of collection, recycling, and disposal of solid waste. Prior to 1990 the County's disposal methods consisted of incineration and land filling at sites on Key Largo, Long Key, and Cudjoe Key. Combustible materials were burned either in an incinerator or in an air curtain destructor. The resulting ash was used as cover on the landfills. Non-combustible materials were deposited directly in the landfills.

In accordance with County-approved franchise agreements, private contractors perform collection of solid waste. Residential collection takes place three times a week (2 garbage/trash, 1 recycling); nonresidential collection varies by contract. The four (4) contractors currently serving the Keys are:

<b>SOLID WASTE CONTRACTORS</b>		
<b>Upper Keys</b>	<b>Middle Keys*</b>	<b>Lower Keys</b>
Keys Sanitary Service & Ocean Reef Club, Inc.	Marathon Garbage Service, Inc.	Waste Management of Florida, Inc.
Source: Monroe County Solid Waste Management Department, 2009		
*Veolia ES (Onyx) currently serves the Village of Islamorada.		

<b>MONROE COUNTY'S LANDFILL AND INCINERATORS</b>			
<b>Site</b>	<b>Incinerators</b>	<b>Landfills</b>	<b>Reserve Capacity (cubic yards)</b>
<b>Key Largo</b>	Closed 12/31/90	No Longer Active	0
<b>Long Key</b>	Closed 1/7/91	No Longer Active	0
<b>Cudjoe</b>			
<b>Old Site</b>	Closed 2/25/91	No Longer Active	0
<b>Unused Site</b>	None	Currently Inactive	45,000

The County's landfills and incinerators are no longer in operation. The landfill sites are now used as transfer stations for wet garbage, yard waste, and construction debris collected throughout the Keys by the four curbside contractors and prepared by WMI for shipment out of the Keys. However, it is important to note that a second, unused site on Cudjoe Key may be opened if necessary.

Household hazardous waste is collected at the Long Key and Cudjoe Key Transfer Stations and the Key Largo Recycling Yard. Hazardous waste from small quantity generators is collected once a year as part of an Amnesty Days program. An electronics recycling program is conducted in cooperation with the Household Hazardous Waste collections. Recycling transfer centers have

1 been established in the Lower, Middle, and Upper Keys. There are three (3) drop off locations:

- 2
- 3 • Cudjoe Key Transfer Station, MM 21.5
- 4 • Long Key Transfer Station, MM 68
- 5 • Waste Management Recycling Center MM 100.2
- 6

7 **DEMAND FOR SOLID WASTE FACILITIES**

8 For solid waste accounting purposes, the County is divided into three districts which are similar,  
9 but not identical to the service areas outlined in Section 114-2(b)(2) of the LDC. The main  
10 difference is Windley Key is located in the upper keys, but for solid waste accounting, is in the  
11 middle keys district. Layton and Key Colony Beach are incorporated, but included in the middle  
12 keys accounting.

13  
14 Demand for solid waste facilities is influenced by many factors, including the size and income  
15 levels of resident and seasonal populations, the extent of recycling efforts, household  
16 consumptive practices, landscaping practices, land development activities, and natural events  
17 such as hurricanes and tropical storms.

18  
19 The Department of Agriculture has suspended the County’s mulching program indefinitely due to  
20 the presence of Citrus Canker in the Florida Keys. This is a highly contagious bacterial disease  
21 for citrus trees.

22  
23 The following chart summarizes the past 8 years of solid waste generated by each district. The  
24 totals for each district are a combination of four categories of solid waste: garbage, yard waste,  
25 bulk yard waste and other (includes construction and demolition debris).

26

<b>SOLID WASTE GENERATION BY DISTRICT</b>					
<b>Year</b>	<b>Key Largo</b>	<b>Long Key</b>	<b>Cudjoe Key</b>	<b>Total</b>	<b>% Change</b>
<b>2000</b>	32,635	30,079	33,420	96,134	-1.65%
<b>2001</b>	29,663	29,367	31,166	90,196	-6.18%
<b>2002</b>	31,018	31,217	30,700	92,935	3.04%
<b>2003</b>	31,529	31,889	30,385	93,803	0.93%
<b>2004</b>	32,193	31,583	33,762	97,538	3.98%
<b>2005</b>	36,035	32,257	35,290	103,582	6.20%
<b>2006</b>	35,211	33,704	36,168	105,083	1.45%
<b>2007</b>	37,423	30,759	30,999	99,001	-6.14%
<b>2008</b>	33,996	28,402	29,190	91,589	-7.00%

27  
28  
29 A decline shown in 2000 and 2001 is due to a reduction in construction and demolition debris  
30 being brought to the County transfer stations following the implementation of the Specialty  
31 Hauler ordinances. Solid Waste Generation continues to rise again from 2002 through 2005 with  
32 a 6.2% increase between 2004 and 2005. “A” very active hurricane season in 2005 could have  
33 caused increased generation. Yearly fluctuations are expected to continue due to increasing  
34 storm activity and seasonal population changes. The dramatic decrease in solid waste generation

1 could be explained by the downturn of the economy forcing residents to move out of the county  
2 and the decrease in tourism.

3  
4 **LEVEL OF SERVICE FOR SOLID WASTE FACILITIES**

5 Section 114-2(a)(2) of the Land Development Code requires that the County maintain sufficient  
6 capacity to accommodate all existing and approved development for at least three (3) years. The  
7 regulations specifically recognize the concept of using disposal sites outside Monroe County.

8  
9 As of 2009, Waste Management Inc., reports a reserve capacity of approximately 26.91 million  
10 cubic yards at their Central Sanitary Landfill in Broward County, a volume sufficient to serve  
11 their clients for another seventeen (17) years.  
12

<b>REMAINING CAPACITY, CENTRAL SANITARY LANDFILL</b>								
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Remaining Capacity (volume in millions of cubic yards, (yd<sup>3</sup>))</b>	34.2	32.3	30.5	31.2	26	22.62	26.91	26.91
<b>Remaining Capacity (years)</b>	14	14	14	12	7	6	17	17

13  
14  
15 Monroe County has a contract with WMI authorizing use of in-state facilities through September  
16 30, 2016, thereby providing the County with approximately eight years of guaranteed capacity.  
17 Ongoing modifications at the Central Sanitary Landfill are creating additional air space and years  
18 of life.  
19

20 **WASTEWATER**

21 Monroe County is designing and constructing sanitary sewer facilities in order to comply with  
22 Chapter 99-395 of the Laws of Florida which require construction of Advanced Wastewater  
23 Treatment systems 2015. The proposed service areas for central sewer are based on the results  
24 of the Sanitary Wastewater Master Plan that was completed in June 2000. The level of service  
25 for residential and nonresidential flow is 145 gallons per day per EDU.  
26

27 Wastewater flow and customer projects were developed from FCAA water use records for the  
28 baseline year of 1998 and 10 year (2008) and 20 year (2018) planning horizons. (EXHIBIT 3-6, Sanitary  
29 Wastewater Master Plan)

1

<b>TOTAL ESTIMATED 1998 WASTEWATER FLOWS</b>	<b>mgd</b>	<b>EDU</b>	<b>gpd/EDU</b>
Total Residential Flow	4.5985	31,847	145
Total Non-Residential Flow	2.5475	17,004	
Total Flow (excludes small contributions from live-aboard flows)	7.1460	48,851	
<b>TOTAL ESTIMATED 2008 WASTEWATER FLOWS</b>	<b>mgd</b>	<b>EDU</b>	<b>gpd/EDU</b>
Total Residential Flow	5.0183	34,613	145
Total Non-Residential Flow	2.6341	17,594	
Total Flow (excludes small contributions from live-aboard flows)	7.6524	52,207	
<b>TOTAL ESTIMATED 2018 WASTEWATER FLOWS</b>	<b>mgd</b>	<b>EDU</b>	<b>gpd/EDU</b>
Total Residential Flow	5.4208	37,343	145
Total Non-Residential Flow	2.7239	18,208	
Total Flow (excludes small contributions from live-aboard flows)	8.1447	55,511	

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There are currently four wastewater projects listed in the capital improvements Table 4.1. They are: Big Coppitt, Duck Key, Key Largo and Cudjoe Key Regional Wastewater projects.

Big Coppitt Wastewater District consists of the following five service areas: Rockland Gulf, Rockland Ocean, Big Coppitt, Shark Key and Geiger Key. A collection system for each service area will tie into a transmission main along US 1 that conveys the wastewater to the WWTP at MM 8.5. Approximately 80,000 feet of collection system piping, 13,000 feet of transmission main and 25 pump stations will be installed for the project. Total funding for this project is \$36,770,400. Funding for this project is received from Funds 310 and 304. Past expenditures amounted to \$29,400,163. Duck Key total project cost is \$16,428,500. Funds are received from Funds 311 and 304. Prior expenditures amounted to \$3,734,185. Cudjoe Regional's total project cost is \$3,700,000 and comes from Fund 308. Past expenditures amounted to \$3,146,589. Lastly, Key Largo's total project cost is \$20,000,000 and revenues are received from Funds 308 and 304. Prior expenditures total \$7,054,202. Total revenues for the four wastewater projects amount to \$76,898,900.

The Big Coppitt Waste Water Project, Fund 311 received \$2,000,000 from Fund 304. Current revenues for this project contain a DEP Grant, A FRUFC Loan, and Special Assessments. The purpose of the Loan Agreement is to construct the collection systems to service Geiger Key and Rockland Key portions of the Big Coppitt Regional Wastewater Treatment System and the South Lower Keys Regional Wastewater Treatment Plant. The programmed funding was for \$21,000,000. In FY 2011, there is \$150,000 left on the loan. The DEP grant was approved by the BOCC on March 21, 2007. This grant is to provide construction funds for the Big Coppitt Regional Wastewater System project not to exceed \$10,962,000.

1 Special Assessments total \$2,158,324 for FY 2011 only. DEP Grant LP8983 will be used to  
 2 fund construction of the wastewater collection system on Geiger and Rockland Keys. On  
 3 January 28, 2009, the BOCC approved to execute the Grant. The grant amount was \$100,000  
 4 plus \$33,000 grant match for a total project of \$133,000.

5  
 6 Duck Key Wastewater's funding is received from Special Assessments and Fund 311. The  
 7 special Assessment refunds equal \$5,000 for FY 2011 only. Transfers from Fund 304 of  
 8 \$14,100,000, will fund construction of a gravity wastewater collection and transmission system  
 9 to serve all of the islands of Duck Key. Addition of capacity to the Hawk's Cay Wastewater  
 10 Treatment Plant to service Duck Key, Conch Key and Hawk's Cay flows, and upgrade of  
 11 treatment to meet advanced wastewater treatment standards. Fund 311 was created on  
 12 11/14/2007. The special assessments amount to \$39,315 for FY 2011 only.

13  
 14 Key Largo Wastewater funds are received through Fund 308 for total programmed funding of  
 15 \$20,000,000. The project is for a new wastewater system. Payments for this project are made to  
 16 the Key Largo WWTD. Fund 308 Project costs for FY 08 & 09 were \$5,853,450. FY 10  
 17 expenditure was an estimated \$3,992,349. FY 11 proposed budget is \$3,100,000. For the four  
 18 years project costs were \$12,945,799. Fund 304 expenditures were \$7,054,202 from FY 05  
 19 through FY 08.

20  
 21 The Cudjoe Regional Wastewater project is funded from Fund 308 for a portion of the total  
 22 Cudjoe/Summerland Wastewater Project. On May 20, 2009, \$3,700,000 was transferred from  
 23 the Public Works Compound Project #CG0803.

24  
 25 **SOLID WASTE AND DRAINAGE**

26 There is no drainage or solid waste projects report for the next five fiscal years.

27  
 28 **LEVEL OF SERVICE FOR SOLID WASTE FACILITIES**

29 Section 114-2(a)(2) of the Land Development Code requires that the County maintain sufficient  
 30 capacity to accommodate all existing and approved development for at least three (3) years. The  
 31 regulations specifically recognize the concept of using disposal sites outside Monroe County.

32  
 33 As of 2009, Waste Management Inc., reports a reserve capacity of approximately 26.91 million  
 34 cubic yards at their Central Sanitary Landfill in Broward County, a volume sufficient to serve  
 35 their clients for another seventeen (17) years.

36

<b>REMAINING CAPACITY, CENTRAL SANITARY LANDFILL</b>								
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
<b>Remaining Capacity (volume in millions of cubic yards, (yd<sup>3</sup>))</b>	34.2	32.3	30.5	31.2	26	22.62	26.91	26.91
<b>Remaining Capacity (years)</b>	14	14	14	12	7	6	17	17

1 Monroe County has a contract with WMI authorizing use of in-state facilities through September  
2 30, 2016, thereby providing the County with approximately eight years of guaranteed capacity.  
3 Ongoing modifications at the Central Sanitary Landfill are creating additional air space and years  
4 of life.  
5

## 6 **PARKS AND RECREATION**

7 An annual assessment of parks and recreational facilities is not mandated by Monroe County  
8 Code, though it is required for by the Florida Statutes. The following section has been included  
9 for informational purposes only. The Level of Service standards for parks and recreational  
10 facilities are listed in Policy 1201.1.1 of the Monroe County Year 2010 Comprehensive Plan.  
11 However, they are not mentioned in the LDC  
12

### 13 **PARKS AND RECREATIONAL FACILITIES LEVEL OF SERVICE STANDARD**

14 The level of service (LOS) standard for neighborhood and community parks in unincorporated  
15 Monroe County is 1.64 acres per 1,000 functional population. To ensure a balance between the  
16 provisions of resource- and activity-based recreation areas the LOS standard has been divided  
17 equally between these two types of recreation areas. Therefore, the LOS standards are:  
18

- 19 0.82 acres of resource-based recreation area per 1,000 functional population; and
  - 20 0.82 acres of activity-based recreation area per 1,000 functional population
- 21

22 Resource-based recreation areas are established around existing natural or cultural resources of  
23 significance, such as beach areas or historic sites. Activity-based recreation areas can be  
24 established anywhere there is sufficient space for ball fields, tennis or basketball courts, or other  
25 athletic events.  
26

27 It is important to note that the subareas used for park and recreational facilities differ from those  
28 subareas used in the population projections. For the purpose of park and recreational facilities,  
29 the Upper Keys are considered to be the area north of Tavernier (PAEDs 15 through 22). The  
30 Middle Keys are considered to be the area between Pigeon Key and Long Key (PAEDs 6 through  
31 11). The Lower Keys are the area south of the Seven Mile Bridge (PAEDs 1 through 6).  
32 Although the Middle and Lower Keys subareas both contain portions of PAED 6, the population  
33 of PAED 6 is located in the Lower Keys subarea.  
34

35 An inventory of Monroe County's parks and recreational facilities are listed on Figure 6.1. The  
36 facilities are grouped by subarea and are classified according to the principal use (resource or  
37 activity). There are currently 97.96 acres of resource-based recreation areas either owned or  
38 leased by Monroe County.  
39

### 40 **LEVEL OF SERVICE ANALYSIS FOR ACTIVITY-BASED RECREATION AREAS**

41 The Year 2010 Comprehensive Plan allows activity-based recreational land found at educational  
42 facilities to be counted towards the park and recreational concurrency. There is currently a total  
43 98.98 acres of developed resourced-based and 118.25 acres of activity-based recreation areas  
44 either owned or leased by Monroe County and the Monroe County School Board.  
45  
46

PARKS AND RECREATION FACILITIES SERVING UNINCORPORATED MONROE COUNTY			
Site Name	Facilities	Classification and Size (acres)	
		Resource	Activity
<i>Upper Keys Subarea</i>			
Coral Shores High School	Monroe County School District; baseball field, football field, softball field, five (5) tennis courts, and indoor gym.		10.1
Friendship Park	Two (2) basketball courts, playground, ball field, picnic shelters, public restrooms, and parking.		1.92
Garden Cove	Undeveloped.	1.5	
Harry Harris	Two (2) ball fields, playground, restrooms, picnic shelters, beach, parking (89), and boat ramp.		16.4
Hibiscus Park	Undeveloped.		0.46
Key Largo Community Park	Soccer field, two (2) ball fields, six (6) tennis courts, jogging trail, three (3) basketball courts, roller hockey, volleyball, skate park, playground, picnic shelters, public restrooms, aquatic center, and parking.		14
Key Largo Elementary	Monroe County School District; playground, ball field, running track, and indoor gym.		3.4
Plantation Key Elementary	Monroe County School District; playground, tennis court, basketball court, and ball field.		1.7
Settler's Park	Playground, park benches, trails, and a historic platform.	3	
Sunny Haven	Undeveloped.	0.09	
Sunset Point	Waterfront park with a boat ramp.	1.2	
<b>Subarea Total</b>		<b>5.79</b>	<b>47.98</b>
<i>Middle Keys Subarea</i>			
Marathon High School	Monroe County School District; football field, baseball field, softball field, three (3) tennis courts, three (3) basketball courts, and indoor gym.		7.8
Pigeon Key	Historic structures, research/educational facilities, and a railroad museum.	5	
Switlik Elementary	Monroe County School District; playground, two (2) baseball fields, and shared soccer/football field.		2.5
<b>Subarea Total</b>		<b>5.00</b>	<b>10.3</b>
<i>Lower Keys Subarea</i>			
Baypoint Park	Playground, volleyball, bocchi ball, two (2) tennis courts, and picnic area.		1.58
Bernstein Park	Ball field, soccer, basketball court, track, tennis courts, playground, restrooms, and volleyball.		11
Big Coppitt Fire Department Playground	Playground and benches.		0.75
Big Coppitt Skate Park	One full court skating rink, a single racquetball / handball court, picnic area		0.57
Big Pine Key Community Park	1 baseball/softball field, one large multi-purpose field, one basketball/roller-hockey (combination) court, two tennis courts, one skate park, two multi-purpose (handball) courts, four shuffleboard courts, one playground area, six station fitness trail.		10
Big Pine Leisure Club	Undeveloped.		1.75
Blue Heron Park	Playground, basketball court, youth center, and picnic shelters.		5.5
Boca Chica Beach	Beach area.	6	
Delmar Avenue	Boat ramp.	0.2	
East Martello	Historic structures, teen center, and picnic area.	14.58	
Heron Avenue	Undeveloped.	0.69	
Higgs Beach/Astro City	Five (5) tennis courts, playground, volleyball, picnic shelters, beach area, pier, and public restrooms.		15.5
Lighthouse Museum	Historic structure and museum.	0.77	
Little Duck Key	Picnic shelters, restrooms, boat ramp, and beach area.	25.5	
Little Torch Boat Ramp	Boat ramp.	0.1	
Missouri Key	Undeveloped.	3.5	
Palm Drive cul-de sac	Undeveloped.	0.1	
Palm Villa	Playground and benches.		0.57
Ramrod Key Swim Hole	Swimming area with no facilities.	0.5	
Rockland Hammock	Undeveloped.	2.5	
Sugarloaf Elementary	Monroe County School District; baseball field and playground.		3.1
Sugarloaf School	Monroe County School District; undeveloped.		6.6
Summerland Estates	Undeveloped.	0.13	
Watson Field	Two (2) tennis courts, ball field, playground, and volleyball.		2.4
West Martello	Historic structure.	0.8	
West Summerland	Boat Ramp.	31.8	
Wilhelmina Harvey Children's Park	Two (2) playground areas, a walking trail, and green space.		0.65
<b>Subarea Total (in acres)</b>		<b>87.17</b>	<b>59.97</b>
<b>UNINCORPORATED MONROE COUNTY TOTAL (in acres)</b>		<b>97.96</b>	<b>118.25</b>

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## FUTURE PARKS AND RECREATION PLANNING

Identifying parks and recreation needs is a part of the on-going Livable CommuniKeys Program. This community based planning initiative looks at all aspects of an area and, among other planning concerns, identifies the parks and recreation desires of the local population. The Livable CommuniKeys Program has been completed on Big Pine Key/No Name Key, Stock Island and Tavernier and partially completed on Key Largo. The LCP from Sugarloaf to Little Torch Key is in process. The Big Pine Key Community Park has been completed.

1 **ACQUISITION OF ADDITIONAL RECREATION AREAS**

2 The Monroe County Year 2010 Comprehensive Plan states in Objective 1201.2 that “Monroe  
3 County shall secure additional acreage for use and/or development of resource-based and  
4 activity-based neighborhood and community parks consistent with the adopted level of service  
5 standards.” The elimination of deficiencies in LOS standards for recreation areas can be  
6 accomplished in a number of ways. Policy 1201.2.1 of the Comprehensive Plan provides six (6)  
7 mechanisms that are acceptable for solving deficits in park level of service standards, as well as  
8 for providing adequate land to satisfy the demand for parks and recreation facilities that result  
9 from additional residential development. The six (6) mechanisms are:

- 10 1. Development of park and recreational facilities on land that is already owned by the  
11 county but that is not being used for park and recreation purposes;
- 12 2. Acquisition of new park sites;
- 13 3. Interlocal agreements with the Monroe County School Board that would allow for the use  
14 of existing school-park facilities by county residents;
- 15 4. Interlocal agreements with incorporated cities within Monroe County that would allow  
16 for the use of existing city-owned park facilities by county residents;
- 17 5. Intergovernmental agreements with agencies of state and federal governments that would  
18 allow for the use of existing publicly-owned lands or facilities by county residents; and  
19 6. Long-term lease arrangements or joint use agreements with private entities that would  
20 allow for the use of private park facilities by county residents.  
21

22  
23 To date, the county has employed two of these six mechanisms – acquisition of new park sites  
24 and interlocal agreements with the School Board.  
25

26 The Parks and Recreation projects are funded with the Impact Fees collected in Fund 131.  
27 Current revenues are received from the three park districts. There are currently five projects  
28 listed. Bay Point Park, Big Coppitt Park, Palm Villa Park and Watson field are listed on the CIP.  
29 Total revenue for the projects is \$379,941.  
30

31 **GROWTH MANAGEMENT DIVISION**

32 The Growth Management Division has one (1) capital improvement project. This project is a  
33 four year project. Its end purpose is to update the Monroe County Year 2010 Comprehensive  
34 Plan. Keith and Schnars, is the consultant for the project. The update of the Year 2010  
35 Comprehensive Plan has a project deadline of 2014 and will be funded through ad valorem taxes  
36 at \$260,000 for each of the four years.  
37

38 **MONROE COUNTY LAND ACQUISITION**

39 The Monroe County Land Acquisition is reports annually on its budget of \$9,817,420.00 for FY  
40 2011. The Monroe County Land Authority is funded through property acquisitions. The funding  
41 provides for the buying of property for conservation lands.  
42

43 **PUBLIC EDUCATION**

44 Subsection 163.3177(12), Florida Statutes, authorizes the Department of Community Affairs to  
45 provide a waiver to a county and to the municipalities within the county if (a) the capacity rate  
46 for all the schools within the school district is not greater than 100 percent, and (b) the projected

1 5-year capital outlay full-time equivalent student growth rate is less than 10 percent. The data  
2 analyzed in The Monroe County School District's Work Plan 2009-2010 capacity rate does not  
3 exceed 100 percent and the projected 5-year capital outlay full-time equivalent student growth  
4 rate is 0.12%. Pursuant to Florida Statutes Sections 163.3177 (6)(h) 2 and 163.31777, if the  
5 local government has failed to adopt the public school facility element and enter into an  
6 approved interlocal agreement, amendments which increase residential density may not be  
7 adopted. In order for Monroe County to fulfill its requirements, The Board of County  
8 Commissioners approved and signed the waiver in 2010 waiving the adoption of a public school  
9 facilities element and implementation of school concurrency from the municipalities.

10  
11 The Monroe County School Boards annually distributes the 5-Year District Facilities Work  
12 Program. The district's facilities work program must be a complete, balanced capital outlay plan  
13 that is financially feasible. The School Board's budget for FY 11 is \$21,992,852,537. There are  
14 two projects having expenditures of \$1,746,000.

15  
16 **RECOMMENDATION**  
17 **APPROVAL.**

**MEMORANDUM**  
**MONROE COUNTY PLANNING &**  
**ENVIRONMENTAL RESOURCES DEPARTMENT**  
*We strive to be caring, professional and fair*



To: Monroe County Planning Commission

Through: Townsley Schwab, Sr. Director of Planning & Environmental Resources

From: Michael Roberts, CEP, PWS; *Sr. Administrator/Environmental Resources*  
Tiffany Stankiewicz, *Development Administrator*

Date: November 3, 2010

Re: Tier Designation Review Staff Report for Planning Commission

Meeting Date: November 16, 2010

---

**I. BACKGROUND**

The Monroe County Board of County Commissioners adopted Ordinances 08-2006, 09-2006, 10-2006, 11-2006 and 13-2006 in March of 2006. These Ordinances established in the Land Development Code the criteria for determining the Tier designation, revised the ROGO and NROGO point system and implemented the Tier Overlay maps for unincorporated Monroe County, excluding Ocean Reef.

On June 16, 2006 the Department of Community Affairs (DCA) published notice of the Final Orders determining that the above ordinances were consistent with Chapter 380 F.S. and were approved. On July 7, 2006 Florida Keys Citizens Coalition, Inc. and Protect Key West and the Florida Keys, Inc. d/b/a Last Stand [Petitioners] filed a petition for administrative hearing regarding the Final Orders. The final administrative hearing was held in February 2007 and the Administrative Law Judge (ALJ) issued a Recommended Order on June 26, 2007. The majority of the challenges raised by the Petitioners were rejected by the ALJ, however three (3) key assertions were upheld and the ALJ determined:

- The four (4) acre minimum threshold for Tier 1 designation was arbitrary and

- 1 • The one (1) acre minimum threshold for Special Protection Areas (Tier  
2 III-A SPA) was likewise arbitrary.
- 3 • The division of parcels by a road of sixteen feet or more was not a basis to  
4 petition for a Tier IIIA property to become Tier III.  
5

6 A Final Order was signed on 9/26/07 by the DCA Secretary Pelham accepting the  
7 recommended order incorporating the findings of the ALJ and on 1/2/08, DCA  
8 Secretary Pelham issued the Amended Final Order correcting a scrivener's error.  
9 The orders required Monroe County to revise Chapter 130-130 of the Land  
10 Development Code to reflect the findings of the Amended Final Order,  
11 specifically deleting the acreage criteria that was found to be arbitrary and  
12 eliminating the provision that allowed a road of sixteen feet or more to be the  
13 basis to petition for a tier designation change from Tier IIIA property to become  
14 Tier III.  
15

16 After the amended final order, in 2008 and subsequent years the Monroe County  
17 "30 day report" submitted to and accepted by the Governor and Cabinet regarding  
18 progress under the Area of Critical State Concern, 10 year work program required  
19 Monroe County to revise the Tier Maps that were previously rendered tierless by  
20 the Amended Final Order. The work plan required preparation of new habitat  
21 data based on the best available ortho-photography. It also required Monroe  
22 County to establish a Tier Designation Review Committee (TDRC) with  
23 members selected by the DCA. The TDRC was established to make  
24 recommendations to the Monroe County Board of County Commissioners on  
25 proposed adjustments to the Tier boundaries for the Tierless properties. In  
26 addition, Planning Commission is required to review the proposed tier  
27 recommendations by the TDRC and Monroe County staff and the Planning  
28 Commission should make a recommendation to the Board of County  
29 Commissioners after taking public input for designation of each parcel in the Tier  
30 System.  
31

### 32 **Tierless Parcel Information and information on parcels recommended for** 33 **review under Tier Sytem** 34

35 The Amended Final Order discussed above resulted in approximately 3125  
36 parcels being rendered tierless. In addition, throughout the past several years, the  
37 Board of County Commissioners or staff have reviewed the tier designations of  
38 other parcels (approximately 303) and recommended they be re-reviewed for  
39 consideration of an alternate tier under the tier system.  
40

41 The Planning Commission should use the information provided in this agenda  
42 item to review the parcels that are tierless or those parcels recommended for  
43 review and consideration of an alternate tier under the tier system. This is the  
44 same criteria used by the TDRC and staff to formulate the recommendations in  
45 this report and on the maps included in this agenda packet. Please note the TDRC  
46 recommendations (from September 30, 2010) are included for Maps 1-86. The

1 Monroe County staff has recommended alternate recommendations for certain  
2 parcels on Maps 8, 10, 12, 25, 29, 30, 35, 40, 54, 57, 58, 59, 69, and 78. The  
3 Development Review Committee met on October 15, 2010 to review the staff  
4 recommendations and recommended no changes to the staff recommendations or  
5 the TDRC recommendations.

6  
7 To reiterate, the Planning Commission is being asked for their recommendations  
8 for tier designations for each parcel found on the map series on map pages 1-86.

9  
10 The criteria for the tier overlay district map designations for Tier I, Tier III-A and  
11 Tier III are:

- 12 • Section 130-130 of the Monroe County Code (Code) (formerly Sec. 9.5-  
13 256 at the time of ordinance adoption (Ordinance 10-2006)); and
- 14 • The Monroe County Year 2010 Comprehensive Plan (Plan) Policies  
15 102.7.3, 103.2.1, 105.2.1 and 205.1.1; and
- 16 • A three-page map series of color aerial maps with reference data  
17 including the following on pages numbered 1 through 86 which show:
  - 18 • Previous Conditions (area of parcels, previous tier status as undesignated  
19 or with designations, and surrounding parcels and area)
  - 20 • Land Use District Map Designation(Zoning)
  - 21 • Future Land Use Map Designation
  - 22 • Land Cover Hammock
  - 23 • U.S. Fish and Wildlife Listed Species (2009)
  - 24 • Land Cover Habitat 2009 (different vegetative communities)
  - 25 • ELC Challenged Area boundaries (areas needing tiers as a result of the  
26 DOAH Case No. 06-2449GM
  - 27 • Kreuer 2006 recommendations (Plaintiff's expert's recommendations for  
28 the challenged areas resulting from the DOAH Case No. 06-2449GM)

29 Because of the complex nature of the parcels rendered tierless and the status of  
30 each parcel in the Rate of Growth Ordinance building permit allocation system,  
31 the parcels to be considered for tier designations have been divided into 4 groups  
32 for processing through the land use district Tier Overlay Map amendment  
33 process. Your agenda item includes 4 ordinances for each sub-group and  
34 spreadsheets that include the data for each parcel. The 4 sub-groups follow:

- 35  
36 1. Ninety-two (**92**) parcels in the Rate of Growth Ordinance building permit  
37 allocation system competing for building permits which are tierless
- 38  
39 2. One Hundred Twelve (**112**) parcels which have no tier for which ROGO  
40 allocations or building permits have been issued in the Rate of Growth  
41 Ordinance building permit allocation system since the Final Order  
42

1 3. Two Thousand Nine Hundred Twenty One (2,921) other parcels which  
2 have no tier

3  
4 4. Three Hundred Three (303) parcels whose owners had petitioned for  
5 review or which staff felt should have been changed or which were  
6 included to be reviewed because of requests by owners or staff by BOCC  
7 Resolution No. 148-2006 dated March 15, 2006;

8  
9 In all, there are 3428 parcels being reviewed by the Tier Designation Review  
10 Committee, staff, Development Review Committee, Planning Commission and  
11 ultimately the Board of County Commissioners for recommendation of a new  
12 Tier Designation.

13  
14 If the Planning Commission recommends adoption of the TDRC  
15 recommendations as presented, 670 parcels or 19% of the reviewed parcels are  
16 recommended to change from Tier 3 to a more restrictive Tier (1 or SPA).

17  
18 The affected 670 parcels (19%) contain 125.1 acres of tropical hardwood  
19 hammock. The TDRC recommendations are summarized in Table 1 below.

20

1  
2  
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**Table 1. Tier Designation Review Committee Recommendations**

<b>TDRC</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres</b>	<b>% of Total</b>
Tier I	526	15%	76.86	44%
SPA	144	4%	48.24	28%
Tier III	2758	80%	50.06	29%
<b>TOTAL</b>	<b>3428</b>		<b>175.16</b>	

		<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>	<b>154</b>	<b>6.15%</b>
<b>Acres Hammock in Changed Parcels</b>	<b>10.77</b>	
<b>Parcels Changed Tier 3 to SPA</b>	<b>119</b>	<b>13.84%</b>
<b>Acres Hammock in Changed Parcels</b>	<b>24.25</b>	
<b>Parcels Changed SPA to Tier 1</b>	<b>132</b>	<b>15.26%</b>
<b>Acres Hammock in Changed Parcels</b>	<b>26.73</b>	
<b>Parcels Changed Tier 1 to SPA</b>	<b>6</b>	<b>2.44%</b>
<b>Acres Hammock in Changed Parcels</b>	<b>4.27</b>	
<b>Parcels Changed Tier 1 to Tier 3</b>	<b>77</b>	<b>0.46%</b>
<b>Acres Hammock in Changed Parcels</b>	<b>0.81</b>	
<b>Parcels Changed SPA to Tier 3</b>	<b>6</b>	<b>0.60%</b>
<b>Acres Hammock in Changed Parcels</b>	<b>1.05</b>	
<b>Parcels With No Change</b>	<b>2921</b>	<b>58.08%</b>
<b>Acres Hammock in Unchanged Parcels</b>	<b>101.73</b>	
<b>Parcels Previous Tier "0"</b>	<b>13</b>	<b>3.17%</b>
<b>Acres Hammock in 0 Tier Parcels</b>	<b>5.55</b>	

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As stated previously, the Planning and Environmental Resources staff made alternate recommendation to the TDRC recommendation for parcels on Maps 8, 10, 12, 25, 29, 30, 35, 40, 54, 57, 58, 59, 69, and 78 . Those alternate recommendations result in 597 parcels or 17% of the reviewed parcels changing from Tier 3 to a more restrictive Tier (1 or SPA). The affected 597 parcels contain 117.18 acres of tropical hardwood hammock. The Staff recommendations are summarized in Table 2 below.

1 **Table 2. Monroe County Planning & Environmental Resources Staff**  
 2 **Recommendations**  
 3

All Parcels	Total Parcels	% of Total	Acres (Hammock)	% of Total
Tier I	376	11%	58.92	34%
Tier III-A	221	6%	58.26	33%
Tier III	2831	83%	57.98	33%
<b>TOTAL</b>	<b>3428</b>		<b>175.16</b>	

		% of Total Hammock
<b>Parcels Changed Tier 3 to Tier 1</b>	<b>89</b>	
<b>Acres Hammock in Changed Parcels</b>	<b>7.22</b>	<b>4.12%</b>
<b>Parcels Changed Tier 3 to SPA</b>	<b>116</b>	
<b>Acres Hammock in Changed Parcels</b>	<b>23.69</b>	<b>13.52%</b>
<b>Parcels Changed SPA to Tier 1</b>	<b>61</b>	
<b>Acres Hammock in Changed Parcels</b>	<b>13.64</b>	<b>7.79%</b>
<b>Parcels Changed Tier 1 to SPA</b>	<b>18</b>	
<b>Acres Hammock in Changed Parcels</b>	<b>2.33</b>	<b>1.33%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>	<b>80</b>	
<b>Acres Hammock in Changed Parcels</b>	<b>4.48</b>	<b>2.56%</b>
<b>Parcels Changed SPA to Tier 3</b>	<b>8</b>	
<b>Acres Hammock in Changed Parcels</b>	<b>1.19</b>	<b>0.68%</b>
<b>Parcels With No Change</b>	<b>3042</b>	
<b>Acres Hammock in Unchanged Parcels</b>	<b>116.63</b>	<b>66.58%</b>
<b>Parcels Previous Tier "0"</b>	<b>13</b>	
<b>Acres Hammock in 0 Tier Parcels</b>	<b>5.55</b>	<b>3.17%</b>

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2 **II. Process**  
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4 Tier overlay amendments are processed as changes to the land use district map  
5 (130-130(e)). The Director of Planning shall review and process Tier Overlay map  
6 revisions and pass them on to the Development Review Committee and the  
7 Planning Commission for recommendation and final approval by the BOCC. In  
8 addition to the map amendments, new Ordinances addressing the change in Tier  
9 designation of the affected parcels are also required. Staff has prepared four (4)  
10 proposed Ordinances that address the varying circumstances of the parcels (1)  
11 Parcels competing in ROGO (2) Parcels that have been awarded an allocation or  
12 development permit (3) the Parcels that were rendered Tierless by the Final Order  
13 and (4) Parcels that were reviewed by previous request of the property owner,  
14 BOCC or Staff. These Ordinances will also require a recommendation from the  
15 Planning Commission and final approval by the BOCC.  
16

17 The Planning Commission shall hold at least one public hearing on the proposed  
18 map revisions. The Planning Commission shall review the revised maps, the  
19 reports and recommendations of the Tier Designation Review Committee  
20 (TDRC), the Department of Planning & Environmental Resources and the  
21 Development Review Committee, and the testimony given at the public hearing,  
22 and shall submit its recommendations and findings to the BOCC. The BOCC  
23 shall consider the staff report, recommendations, and testimony given at the  
24 public hearings before it. Because of the statutory notice and Monroe County  
25 Code notice requirements, two required notification processes will be followed.  
26 Individual notices to parcel owners and newspaper advertising will be provided.  
27 Two hearings will be required before the BOCC because of statutory  
28 requirements for contiguous parcels of more than 10 acres. If the BOCC adopts  
29 the ordinances, they are sent to DCA for consideration and approval by a final  
30 order, published in the Florida Administrative Weekly. There is a 21 day appeal  
31 period before the ordinances are considered final.  
32

33 **III. Ordinances**  
34

35 **As stated earlier, the parcels recommended for redesignation have been**  
36 **separated into sub-groups because of their status in: the ROGO allocation**  
37 **building permit system; the building permit system; or because they were**  
38 **not originally part of the tierless parcels from the Amended final order. The**  
39 **following sub-groups have been described in the attached ordinances and the**  
40 **breakdown of the recommended changes, with corresponding hammock**  
41 **acreage is included.**  
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- 44 1. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY  
45 COMMISSIONERS ASSIGNING, AMENDING OR RATIFYING THE  
46 TIER OVERLAY DISTRICT DESIGNATIONS FOR APPROXIMATELY

1 NINETY-TWO (92) PARCELS COMPETING FOR BUILDING PERMITS  
 2 IN THE RATE OF GROWTH ORDINANCE (ROGO) ALLOCATION  
 3 SYSTEM IN ACCORDANCE WITH THE FINAL ORDER IN DOAH  
 4 CASE NO. 06-2449GM; PROVIDING FOR SEVERABILITY; PROVIDING  
 5 FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR  
 6 TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS  
 7 AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE  
 8 DATE

<b>Tier Designation Review Committee (TDRC)</b>					
<b>Tier Designation Recommendations</b>					
<b>All Parcels</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres (Hammock)</b>	<b>% of Total</b>	
Tier I	10	11%	1.01	19%	
Tier III-A	14	15%	1.91	36%	
Tier III	68	74%	2.33	44%	
<b>TOTAL</b>	<b>92</b>		<b>5.25</b>		<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>2</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.27</b>	<b>5.14%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>13</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>1.72</b>	<b>32.76%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>2</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.29</b>	<b>5.52%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>2</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0.00%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>1</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.14</b>	<b>2.67%</b>
<b>Parcels With No Change</b>				<b>70</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>2.83</b>	<b>53.90%</b>
<b>Parcels Never having a Tier Designation</b>				<b>2</b>	
<b>Acres Hammock in 0 Tier Parcels</b>				<b>0.00</b>	<b>0.00%</b>

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Growth Management Staff Recommendations					
All Parcels	Total Parcels	% of Total	Acres (Hammock)	% of Total	
Tier I	8	9%	0.74	14%	
Tier III-A	10	11%	1.31	25%	
Tier III	74	80%	3.20	61%	
<b>TOTAL</b>	<b>92</b>		<b>5.25</b>		<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>9</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>1.12</b>	<b>21.33%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>2</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.3</b>	<b>5.52%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>2</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0.00%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>1</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.14</b>	<b>2.67%</b>
<b>Parcels With No Change</b>				<b>76</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>3.70</b>	<b>70.48%</b>
<b>Parcels Never having a Tier Designation</b>				<b>2</b>	
<b>Acres Hammock in 0 Tier Parcels</b>				<b>0.00</b>	<b>0.00%</b>

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Variation between TDRC and Staff Recommendations:

RE Number	Hammock Acres	Previous Tier	TDRC	Staff	Map Series
00210440-000000	0.14	III	I	III	57
00210450-000000	0.13	III	I	III	57
00484450-000000	0.15	III	III-A	III	30
00484460-000000	0.15	III	III-A	III	30
00484470-000000	0.15	III	III-A	III	30
00484480-000000	0.15	III	III-A	III	30

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7

Ninety-two (92) parcels out of approximately 273 applications competing in ROGO are tierless. Twenty-seven (27) of these have an allocation being held in

1 abeyance by the Planning Commission. One (1) of the 27 parcels is proposed to  
 2 be designated to a more restrictive tier (Real Estate Number 00445980-000000).

3  
 4 10 other parcels of the 92 parcels are recommended for change to a more  
 5 restrictive tier. Below is a list of the 11 parcels. 8 of these 11 parcels have been  
 6 scored based on the Tier designation previously assigned. 3 of the 11 parcels  
 7 have been scored in ROGO as if they were Tier I and are recommended to go to  
 8 Tier III-A (Real Estate Numbers 00445660-000000; 00510450-000000; and  
 9 00510460-000000).

10  
 11 It should be noted that the proposed Tier designation for 8 of these 11 parcels, if  
 12 adopted by the Board of County Commission, would result in their current score  
 13 in ROGO being reduced due to the change in Tier designation. The  
 14 recommendation for 3 parcels would result in their current score in ROGO  
 15 increasing. These parcels are shown below:

RE Number	Owner Name	Previous Tier	Staff Recommendation	Scored in ROGO as	Hammock Acres
00210500-000000	PARKINSON DEAN	III-A	I	III-A	0.13
00210811-005600	HANEY NORMAN & MARIA	III-A	I	III-A	0.16
00445610-000000	DAVIS SARAH	III	III-A	III	0.14
00445660-000000	NATIVE RENTAL PROPERTIES LLC	III	III-A	I	0.14
00445820-000000	TAYLOR MARK AND ANDREA	III	III-A	III	0.14
00445970-000000	PARKINSON DEAN	III	III-A	III	0.14
00445980-000000	PARKINSON DEAN	III	III-A	III	0.12
00446940-000000	HARPER LINDA W	III	III-A	III	0.10
00510280-000000	WHITE RICHARD H	III	III-A	III	0.12
00510450-000000	QUIROS CONSTANTINO	III	III-A	I	0.12
00510460-000000	QUIROS CONSTANTINO	III	III-A	I	0.10

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2. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS ASSIGNING TIER OVERLAY DISTRICT MAP DESIGNATIONS TO APPROXIMATELY ONE HUNDRED TWELVE (112) PARCELS DETERMINED TO HAVE NO TIER ON THE TIER OVERLAY DISTRICT MAP FOR MONROE COUNTY IN DOAH CASE NO. 06-2449GM WHICH PARCELS HAVE BEEN THE SUBJECT OF AWARD OF ALLOCATION IN THE RATE OF GROWTH (ROGO) COMPETITION OR HAVE BEEN ISSUED BUILDING PERMITS; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE

<b>Tier Designation Review Committee (TDRC)</b>				
<b>Tier Designation Recommendations</b>				
<b>All Parcels</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres (Hammock)</b>	<b>% of Total</b>
Tier I	4	4%	0.38	7%
Tier III-A	12	11%	1.27	24%
Tier III	96	86%	3.70	70%
<b>TOTAL</b>	<b>112</b>		<b>5.35</b>	
				<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>3</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0.38</b>
				<b>7.10%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>12</b>
<b>Acres Hammock in Changed Parcels</b>				<b>1.27</b>
				<b>23.74%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>0</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>
				<b>0.00%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>0</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>
				<b>0.00%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>1</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>
				<b>0.00%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>1</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0.17</b>
				<b>3.18%</b>
<b>Parcels With No Change</b>				<b>95</b>
<b>Acres Hammock in Unchanged Parcels</b>				<b>3.53</b>
				<b>65.98%</b>

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<b>Growth Management Staff Recommendations</b>					
<b>All Parcels</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres (Hammock)</b>	<b>% of Total</b>	
Tier I	2	2%	0.16	3%	
Tier III-A	13	12%	1.39	26%	
Tier III	97	87%	3.80	72%	
<b>TOTAL</b>	<b>112</b>		<b>5.35</b>		
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>1</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>2.99%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>13</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>1.39</b>	<b>25.98%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>1</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0.00%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>1</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.17</b>	<b>3.18%</b>
<b>Parcels With No Change</b>				<b>96</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>3.63</b>	<b>67.85%</b>

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2 Variation between TDRC and Staff Recommendations:

<b>RE Number</b>	<b>Hammock Acres</b>	<b>Current Tier</b>	<b>Previous Tier</b>	<b>TDRC</b>	<b>Staff</b>	<b>Map Series</b>
00468420-000000	0.11	UNDES	III	I	III-A	8
00468430-000000	0.11	UNDES	III	I	III-A	8
00447450-000000	0.10	UNDES	III	III-A	III	35

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4 The Planning Commission has issued allocations for 112 of the Tierless parcels.  
 5 These allocations were issued prior to the County's knowledge that the ROGO  
 6 scores were incorrect due to the Tier designations. Many of these have had  
 7 building permits issued, have homes constructed, or are on the FEMA injunction  
 8 list.

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3. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS ASSIGNING TIER OVERLAY DISTRICT MAP DESIGNATIONS TO APPROXIMATELY TWO THOUSAND NINE HUNDRED TWENTY ONE (2921) PARCELS DETERMINED TO HAVE NO TIER ON THE TIER OVERLAY DISTRICT MAP FOR MONROE COUNTY IN DOAH CASE NO. 06-2449GM ; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE

<b>Tier Designation Review Committee (TDRC)</b>					
<b>Tier Designation Recommendations</b>					
<b>All Parcels</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres (Hammock)</b>	<b>% of Total</b>	
Tier I	290	10%	42.11	33%	
Tier III-A	112	4%	40.79	32%	
Tier III	2519	86%	43.21	34%	
<b>TOTAL</b>	<b>2921</b>		<b>126.11</b>		<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>149</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>10.12</b>	<b>8%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>94</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>21.26</b>	<b>17%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>130</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>26.44</b>	<b>21%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>0%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>4</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.74</b>	<b>1%</b>
<b>Parcels With No Change</b>				<b>2533</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>62.00</b>	<b>49%</b>
<b>Parcels in Tier "0" To Tier I</b>				<b>11</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>5.55</b>	<b>4%</b>

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<b>Growth Management Division Development Review Committee (DRC)</b>				
<b>Tier Designation Recommendations</b>				
<b>All Parcels</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres (Hammock)</b>	<b>% of Total</b>
Tier I	159	5%	26.39	21%
Tier III-A	180	6%	53.23	42%
Tier III	2582	88%	46.49	37%
<b>TOTAL</b>	<b>2921</b>		<b>126.11</b>	
				<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>88</b>
<b>Acres Hammock in Changed Parcels</b>				<b>7.06</b>
				<b>6%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>94</b>
<b>Acres Hammock in Changed Parcels</b>				<b>21.18</b>
				<b>17%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>60</b>
<b>Acres Hammock in Changed Parcels</b>				<b>13.78</b>
				<b>11%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>0</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>
				<b>0%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>0</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>
				<b>0%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>6</b>
<b>Acres Hammock in Changed Parcels</b>				<b>0.88</b>
				<b>1%</b>
<b>Parcels With No Change</b>				<b>2662</b>
<b>Acres Hammock in Unchanged Parcels</b>				<b>77.66</b>
				<b>62%</b>
<b>Parcels in Tier "0" To Tier I</b>				<b>11</b>
<b>Acres Hammock in Unchanged Parcels</b>				<b>5.55</b>
				<b>4%</b>

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<b>RE Number</b>	<b>Hammock Acres</b>	<b>Previous Tier</b>	<b>TDRC</b>	<b>Staff</b>
00118420-000000	0.00	III	I	III
00185860-000000	0.00	III	I	III
00185870-000000	0.00	III	I	III
00185880-000000	0.00	III	I	III
00185890-000000	0.00	III	I	III
00185900-000000	0.00	III	I	III
00185910-000000	0.00	III	I	III
00185920-000000	0.00	III	I	III
00185930-000000	0.00	III	I	III
00185940-000000	0.00	III	I	III
00185950-000000	0.00	III	I	III
00186040-000000	0.00	III	I	III
00186050-000000	0.00	III	I	III

00186060-000000	0.00	III	I	III
00186070-000000	0.00	III	I	III
00186080-000000	0.00	III	I	III
00186090-000000	0.00	III	I	III
00186100-000000	0.00	III	I	III
00186110-000000	0.00	III	I	III
00186120-000000	0.00	III	I	III
00186130-000000	0.00	III	I	III
00186140-000000	0.00	III	I	III
00186150-000000	0.00	III	I	III
00186160-000000	0.00	III	I	III
00186170-000000	0.00	III	I	III
00186180-000000	0.00	III	I	III
00186190-000000	0.00	III	I	III
00186200-000000	0.00	III	I	III
00186210-000000	0.00	III	I	III
00186220-000000	0.00	III	I	III
00186230-000000	0.00	III	I	III
00209150-000000	0.14	III	I	III
00209160-000000	0.14	III	I	III
00209170-000000	0.13	III	I	III
00210160-000000	0.00	III-A	I	III
00210480-000000	0.00	III	I	III
00210490-000000	0.00	III	I	III
00210640-000000	0.14	III-A	I	III
00210650-000000	0.14	III	I	III
00210811-011400	0.19	III	I	III
00210811-011500	0.08	III	I	III
00211200-000000	0.00	III	I	III
00211200-000100	0.00	III	I	III
00211230-000000	0.00	III	I	III
00211240-000000	0.00	III	I	III
00211250-000000	0.00	III	I	III
00211260-000000	0.00	III	I	III
00211270-000000	0.00	III	I	III
00211280-000000	0.00	III	I	III
00211290-000000	0.00	III	I	III
00211300-000000	0.00	III	I	III
00211310-000000	0.00	III	I	III
00211320-000000	0.00	III	I	III
00215130-000000	0.00	III	I	III
	<b>0.96</b>			
00088570-000000	0.98	III	I	III-A
00090401-000100 thru 00090401-000436	1.56	III-A	I	III-A
00466540-000000	0.11	III	I	III-A
00466550-000000	0.11	III	I	III-A
00466560-000000	0.11	III	I	III-A

00468310-000000	0.08	III	I	III-A
00468320-000000	0.10	III	I	III-A
00468390-000000	0.11	III	I	III-A
00468400-000000	0.12	III	I	III-A
00486850-000100	1.65	III-A	I	III-A
00486870-000000	0.60	III-A	I	III-A
00486900-000000	0.78	III-A	I	III-A
00486900-000100	0.23	III-A	I	III-A
00486910-000000	2.22	III-A	I	III-A
00486920-000000	3.20	III-A	I	III-A
00486920-000100	2.28	III-A	I	III-A
00487120-000000	0.52	III	I	III-A
	<b>14.76</b>			
00447420-000000	0.11	III	III-A	III
00447460-000000	0.10	III	III-A	III
00458560-000000	0.12	III	III-A	III
00458710-000000	0.12	III	III-A	III
00466830-000000	0.09	III	III-A	III
00466990-000000	0.21	III	III-A	III
00483370-000000	0.98	III	III-A	III
00566010-000000	0.31	III	III-A	III
00566300-000000	0.28	III	III-A	III
	<b>2.32</b>			

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2 The remaining 2921 Tierless parcels have no applications pending with the  
3 County.

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5 4. AN ORDINANCE BY THE MONROE COUNTY BOARD OF COUNTY  
6 COMMISSIONERS AMENDING OR RATIFYING THE TIER OVERLAY  
7 DISTRICT DESIGNATIONS FOR APPROXIMATELY THREE  
8 HUNDRED THREE (303) PARCELS PROPOSED FOR REVIEW BY THE  
9 BOARD OF COUNTY COMMISSIONERS, STAFF OR OWNERS,  
10 WHICH PARCELS CURRENTLY HAVE TIER DESIGNATIONS ;  
11 PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL OF  
12 CONFLICTING PROVISIONS; PROVIDING FOR TRANSMITTAL TO  
13 THE DEPARTMENT OF COMMUNITY AFFAIRS AND THE  
14 SECRETARY OF STATE; PROVIDING FOR AN EFFECTIVE DATE

15

Tier Designation Review Committee (TDRC)				
Tier Designation Recommendations				
All Parcels	Total Parcels	% of Total	Acres (Hammock)	% of Total
Tier I	222	73%	33.36	87%
Tier III-A	6	2%	0.82	2%

Tier III	75	25%	4.27	11%	
<b>TOTAL</b>	<b>303</b>		<b>38.45</b>		<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>6</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>4</b>	<b>11%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>74</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.81</b>	<b>2%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0%</b>
<b>Parcels With No Change</b>				<b>223</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>33.37</b>	<b>87%</b>

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<b>Growth Management Staff Recommendations</b>					
<b>All Parcels</b>	<b>Total Parcels</b>	<b>% of Total</b>	<b>Acres (Hammock)</b>	<b>% of Total</b>	
Tier I	207	68%	31.63	82%	
Tier III-A	18	6%	2.33	6%	
Tier III	78	26%	4.49	12%	
<b>TOTAL</b>	<b>303</b>		<b>38.45</b>		<b>% of Total Hammock</b>
<b>Parcels Changed Tier 3 to Tier 1</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 3 to SPA</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0.00%</b>
<b>Parcels Changed SPA to Tier 1</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.0</b>	<b>0.00%</b>
<b>Parcels Changed Tier 1 to SPA</b>				<b>18</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>2.33</b>	<b>6.06%</b>
<b>Parcels Changed Tier 1 to Tier 3</b>				<b>77</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>4.48**</b>	<b>11.65%</b>
<b>Parcels Changed SPA to Tier 3</b>				<b>0</b>	
<b>Acres Hammock in Changed Parcels</b>				<b>0.00</b>	<b>0.00%</b>
<b>Parcels With No Change</b>				<b>208</b>	
<b>Acres Hammock in Unchanged Parcels</b>				<b>31.64</b>	<b>82.29%</b>

3 \*\* 3.17 acres mapped as hammock that is cleared land with no hammock. See Map Series 59;  
4 RE #'s 00114090 & 00114120

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RE Number	Hammock Acres	Current Tier	TDRC	Staff
00544590-000000	0.14	I	I	III-A
00544600-000000	0.11	I	I	III-A
00544620-000000	0.12	I	I	III-A
00545100-000000	0.10	I	I	III-A
00545110-000000	0.12	I	I	III-A
00545200-000000	0.09	I	I	III-A
00545230-000000	0.09	I	I	III-A
00545240-000000	0.14	I	I	III-A
00545250-000000	0.12	I	I	III-A
00545260-000000	0.12	I	I	III-A
00545270-000000	0.12	I	I	III-A
00545280-000000	0.12	I	I	III-A
00545310-000000	0.12	I	I	III-A
00545320-000000	0.12	I	I	III-A
00545330-000000	0.10	I	I	III-A
00114090-000000	2.21**	I	III-A	III
00114090-000100	0.50	I	III-A	III
00114120-000000	0.96	I	III-A	III

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There are 303 parcels that have a Tier Designation where the property owners or staff applied for reconsideration of the Tier Designation, or were included in a BOCC resolution for Staff to review the Tier designation. Most of these applications were evaluated by a Special Magistrate using the now invalid criteria and need to be re-evaluated using the revised criteria.

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#### IV. Issues

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##### TDRC vs. Staff recommendations - explanation

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The TDRC evaluated the challenged parcels with regard to the revised Tier Designation criteria. The removal of acreage criteria from the Code resulted in the TDRC making some recommendations for parcels that contained tropical hardwood hammock vegetation to be Tier I and SPA, while staff felt in some circumstances that these parcels, occurring within existing, substantially developed subdivisions with improved infrastructure, were more appropriately defined as Tier III and made their recommendations accordingly. The other major variation between Staffs recommendations and that of the TDRC is the designation of wetlands. In some instances the TDRC recommended a Tier I or SPA designation for a parcel that did not contain native upland vegetation, but was wetland habitat. Where wetlands were the sole native habitat on a parcel, Staff recommends a Tier III designation as stated in the Land Development Code (130-130).

1  
2 In all, the TDRRC recommended a total of 125.1 acres of tropical hardwood  
3 hammock be designated as Tier I or SPA, while Staff's recommendation places a  
4 total of 117.18 acres of hammock in these two Tiers.  
5

6 **V. Consistency with the Principles for Guiding Development in the Florida**  
7 **Keys Area of Critical State Concern pursuant to F.S. Chapter 380.0552(7).**  
8

9 For the purposes of reviewing consistency of the Land Development Code or any  
10 amendments to the Code with the principles for guiding development and any  
11 amendments to the principles, the principles shall be construed as a whole and no  
12 specific provision shall be construed or applied in isolation from the other  
13 provisions.  
14

15 (a) To strengthen local government capabilities for managing land use and  
16 development so that local government is able to achieve these objectives  
17 without the continuation of the area of critical state concern designation.

18 (b) To protect shoreline and marine resources, including mangroves, coral  
19 reef formations, seagrass beds, wetlands, fish and wildlife, and their  
20 habitat.

21 (c) To protect upland resources, tropical biological communities,  
22 freshwater wetlands, native tropical vegetation (for example, hardwood  
23 hammocks and pinelands), dune ridges and beaches, wildlife, and their  
24 habitat.

25 (d) To ensure the maximum well-being of the Florida Keys and its citizens  
26 through sound economic development.

27 (e) To limit the adverse impacts of development on the quality of water  
28 throughout the Florida Keys.

29 (f) To enhance natural scenic resources, promote the aesthetic benefits of  
30 the natural environment, and ensure that development is compatible with  
31 the unique historic character of the Florida Keys.

32 (g) To protect the historical heritage of the Florida Keys.

33 (h) To protect the value, efficiency, cost-effectiveness, and amortized life  
34 of existing and proposed major public investments, including:

- 35 1. The Florida Keys Aqueduct and water supply facilities;
- 36 2. Sewage collection and disposal facilities;
- 37 3. Solid waste collection and disposal facilities;
- 38 4. Key West Naval Air Station and other military facilities;
- 39 5. Transportation facilities;
- 40 6. Federal parks, wildlife refuges, and marine sanctuaries;
- 41 7. State parks, recreation facilities, aquatic preserves, and other  
42 publicly owned properties;
- 43 8. City electric service and the Florida Keys Electric Co-op; and
- 44 9. Other utilities, as appropriate.

1 (i) To limit the adverse impacts of public investments on the  
2 environmental resources of the Florida Keys.

3 (j) To make available adequate affordable housing for all sectors of the  
4 population of the Florida Keys.

5 (k) To provide adequate alternatives for the protection of public safety  
6 and welfare in the event of a natural or manmade disaster and for a  
7 post disaster reconstruction plan.

8 (l) To protect the public health, safety, and welfare of the citizens of  
9 the Florida Keys and maintain the Florida Keys as a unique Florida  
10 resource.

11 Staff finds the proposed amendment consistent with the Principles for Guiding  
12 Development as a whole and is not inconsistent with any one principle.

13  
14 **VI. Staff Recommendation:**

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16 Staff recommends:

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18 I. The Planning Commission recommend approval of the four  
19 ordinances, with the staff recommended alternative designations on  
20 Maps 8, 10, 12, 25, 29, 30, 35, 40, 54, 57,58, 59, 69, and 78, that  
21 indicate the recommended tier designations for all parcels included in  
22 the 4 sub-groups including:

23  
24 1. Ninety-two (92) parcels in the Rate of Growth Ordinance building  
25 permit allocation system competing for building permits which are  
26 tierless

27  
28 2. One Hundred Twelve (112) parcels which have no tier for which  
29 ROGO allocations or building permits have been issued in the Rate of  
30 Growth Ordinance building permit allocation system since the Final  
31 Order

32  
33 3. Two Thousand Nine Hundred Twenty One (2,921) other parcels  
34 which have no tier

35  
36 4. Three Hundred Three (303) parcels whose owners had petitioned for  
37 review or which staff felt should have been changed or which were  
38 included to be reviewed because of requests by owners or staff by  
39 BOCC Resolution No. 148-2006 dated March 15, 2006;

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II. The Planning Commission review and discuss the following 8 parcels competing in ROGO and make a recommendation to the Board of County Commissioners as to whether these 8 parcels should maintain the original tier designation as shown below. Seven (7) of the 8 parcels have not yet come before the Planning Commission for award. One (1) of the 8 parcels has a ROGO allocation held in abeyance by the Planning Commission.

RE Number	Owner Name	Original Tier aka Previous Tier
00210500-000000	PARKINSON DEAN	III-A
00210811-005600	HANEY NORMAN & MARIA	III-A
00445610-000000	DAVIS SARAH	III
00445820-000000	TAYLOR MARK AND ANDREA	III
00445970-000000	PARKINSON DEAN	III
00445980-000000	PARKINSON DEAN	III
00446940-000000	HARPER LINDA W	III
00510280-000000	WHITE RICHARD H	III

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III. Any parcel which has a ROGO allocation being held in abeyance whose tier designation did not change shall be awarded after the ordinances amending the tier designations are effective. The remaining parcels in ROGO will be rescored and re-ranked based on the applicable tiers.

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- VII. Exhibits**
- Comprehensive Plan Policies
- Revised Land Development Code 130-130
- Tier Designation Review Committee (TDRC) Recommendation Maps (86)
- Monroe County Environmental Resources Staff Recommendation Maps (14)
- Pages 8, 10, 12, 25, 29, 30, 35, 40, 54, 57,58, 59, 69, and 78
- Proposed Ordinances (4)