



**FLORIDA DEPARTMENT *of*
ECONOMIC OPPORTUNITY**

2013

**Florida Keys Area of Critical State Concern
Annual Report**



**Division of Community
Planning and Development**
Areas of Critical State Concern
Program

Rick Scott
GOVERNOR



Jesse Panuccio
EXECUTIVE DIRECTOR

November 27, 2013

The Honorable Rick Scott, Governor
Plaza Level 05, The Capitol
Tallahassee, Florida 32399-0001

Pam Bondi, Attorney General
Plaza Level 01, The Capitol
Tallahassee, Florida 32399-1050

Adam Putnam, Commissioner of Agriculture
Plaza Level 10, The Capitol
Tallahassee, Florida 32399-0810

Jeff Atwater, Chief Financial Officer
Plaza Level 11, The Capitol
Tallahassee, Florida 32399-0300

Re: 2013 Florida Keys Area of Critical State Concern Annual Report

Dear Governor Scott and Honorable Members of the Administration Commission:

Pursuant to Section 380.0552(4)(b), Florida Statutes (F.S.), the Florida Department of Economic Opportunity (Department) is pleased to transmit its 2012 Florida Keys Area of Critical State Concern Annual Report. Section 380.0552(4)(b), F.S., requires the preparation of a report that describes the progress of the Florida Keys Area of Critical State Concern toward completing the tasks of the Work Program.

The Administration Commission issued a report on March 7, 2013, to Monroe County, the City of Marathon and the Village of Islamorada outlining the strategies necessary for completion of Work Program tasks. The report was issued in the form of a table detailing the strategies and the tasks with the relevant target dates for completion.

The Department's report includes information submitted by Monroe County, the City of Marathon, the Village of Islamorada, the Key Largo Wastewater Treatment District, the Florida Department of Health, and the Florida Department of Environmental Protection. Based upon this input, the Department's own review, and coordination with the local governments on the chief findings, the attached report is provided for your consideration.

The Department has evaluated the information provided by the local governments and state agencies against the Administration Commission Report and the Work Program requirements. The Department recommends that the City of Marathon, the Village of Islamorada and Monroe

Florida Department of Economic Opportunity | Caldwell Building | 107 E. Madison Street | Tallahassee, FL 32399
866.FLA.2345 | 850.245.7105 | 850.921.3223 Fax
www.floridaljobs.org | www.twitter.com/FLDEO | www.facebook.com/FLDEO

An equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. All voice telephone numbers on this document may be reached by persons using TTY/TDD equipment via the Florida Relay Service at 711.

County have made substantial progress towards accomplishing the strategies of the Administration Commission Report.

In accordance with its statutory charge found in Section 380.0552(4)(c), F.S., the Department recommends the following actions:

- (1) Accept the 2013 Annual Report for Monroe County, the City of Marathon and the Village of Islamorada;
- (2) Continue the Florida Keys Area of Critical State Concern designation in order to complete the Work Program requirements;
- (3) Accept the Department's recommendation that substantial progress toward accomplishing the strategies of the Work Program have been achieved for Monroe County, the City of Marathon, and the Village of Islamorada; and
- (4) Accept the Department's recommendation to initiate rule making for the City of Key Colony Beach delineating an annual Building Permit Allocation System.

The Department appreciates the efforts of the local governments and looks forward to continuing our cooperative relationship with the Florida Keys communities and working with all parties to fully achieve the goals of the Work Program.

Sincerely,



Jesse Panuccio

JP/rj

Enclosures: Department of Economic Opportunity 2012 Florida Keys Annual Report

cc: The Honorable George Neugent, Mayor, Monroe County
The Honorable Dick Ramsay, Mayor, City of Marathon
The Honorable Ted Blackburn, Mayor, Islamorada, Village of Islands
The Honorable Craig Cates, Mayor, City of Key West
The Honorable Ron Sutton, Mayor, City of Key Colony Beach
The Honorable Norman Anderson, Mayor, City of Layton

2013 Florida Keys Annual Progress Report Summary

A. Monroe: Achieved 8 of 11 (73%)

Tasks Completed

1. **Task 9:** Submit land acquisition report
2. **Task 12:** Evaluation land acquisition needs and apply for funding
3. **Task 18:** Revise allocation rates based upon Hurricane MOU if necessary
4. **Task 21:** Allocate wastewater funding in CIE
5. **Task 23:** Request Everglades bond issue
6. **Task 25:** Apply for wastewater grant funding
7. **Task 42:** Construct Duck Key collection system
8. **Task 45:** Complete 75% of potential connections
9. **Task 63:** Include stormwater funding in Capital Improvements Element

Tasks Not completed in 2013

10. **Task 39:** Complete 100% connections at Key Largo Wastewater Facility
11. **Task 49:** Complete remaining connections at Big Coppitt Wastewater Facility

B. Marathon achieved 7 of 10 (70%)

Tasks Completed

1. **Task 13:** Amend Building Permit Allocation System
2. **Task 17:** Allocate wastewater funding in Capital Improvements Element
3. **Task 19:** Apply for wastewater grants
4. **Task 21:** Request Everglades bonds issuance
5. **Task 23:** Provide report of property owners that fail to connect to wastewater
6. **Task 52:** Allocate funding for stormwater in CIP
7. **Task 38:** Sub Area 4 - Vaca Central (63 EDUs or 2.7% not connected) dep says 188

Tasks Not completed in 2013

8. **Task 7:** Apply for land acquisition funding
9. **Task 42:** Sub Area 5 Complete 100% connectons 88% complete
(678 EDU not connected)DEP says 375
10. **Task 50:** Sub Area 7: Complete 100% connections; 64% connected
(189 EDUsnot connected)DEP says 881

Tasks Not counted

11. **Task 53:** Apply for stormwater grant funding (Narrative)

C. Islamorada achieved 5 out of 6 (83%)

Tasks Completed

1. **Task 7:** Amend Building Permit Allocation System
2. **Task 10:** Identify wastewater funding in CIE
3. **Task 13:** Apply for wastewater grant funding
4. **Task 15:** Request Everglades bond financing
5. **Task 16:** Implement local funding necessary to construct, replace, maintain wastewater

Tasks Not completed in 2013

6. **Task 2:** Apply for land acquisition funds

**Florida Keys Area of Critical State Concern
Annual Report Summary for the Period July 1, 2012- June 30, 2013**

The Florida Keys Area of Critical State Concern designation includes the municipalities of Islamorada, Marathon, Layton and Key Colony Beach, and unincorporated Monroe County. The City of Key West challenged the designation as a Critical Area and after litigation in 1984 was given its own Area of Critical State Concern designation.

The Area of Critical State Concern Program (ACSC) authorized by Section 380.05, Florida Statutes (F.S.), allows the Governor and Florida Cabinet, sitting as the Administration Commission, to designate certain areas within Florida that contain resources of statewide significance as an Area of Critical State Concern. Administration Commission oversight includes authority to promulgate administrative rules containing Work Programs that guide local government's growth and development decisions, amend comprehensive plans and land development regulations, and to appeal local government development orders.



Boot Key

This report summarizes the status of the current Work Program for Islamorada, Marathon and Monroe County. The cities of Layton, Key West and Key Colony Beach do not have Work Programs because they contain little environmentally sensitive habitat and all three cities have central sewer systems. Work Program tasks are measurable actions with due dates intended to improve water quality and habitat protection, and ensure safe evacuation of the population from the Florida Keys in the event of a disaster.

Section 380.0552(4), F.S., directs the ACSC Program of the State Land Planning Agency (Department of Economic Opportunity) to submit a report to the Administration Commission, describing the progress of the Florida Keys Area toward completing the Work Program tasks specified in Administration Commission rules. The Administration Commission shall consider the findings and recommendations provided in the report and determine whether progress has been achieved in accomplishing the Work Program Tasks scheduled for completion during the year. Administration Commission rules provide that if the Administration Commission determines that progress has not been made for either Islamorada, Marathon, or Monroe County, their unit cap (i.e., the maximum number of residential units allowed to be constructed)for residential development shall be reduced by 20 percent. Additionally, Section 380.0552(4), F.S., provides the following process for removing the designation:

“(4) REMOVAL OF DESIGNATION.

- (a) *The designation of the Florida Keys Area as an area of critical state concern under this section may be recommended for removal upon fulfilling the legislative intent under subsection (2) and completion of all the work program tasks specified in rules of the Administration Commission.*
- (b) *Beginning November 30, 2010, the state land planning agency shall annually submit a written report to the Administration Commission describing the progress of the Florida Keys Area toward completing the work program tasks specified in Commission rules. The land planning agency shall recommend removing the Florida Keys Area from being designated as an area of critical state concern to the Commission if it determines that:*
- 1. All of the Work Program tasks have been completed, including construction of, operation of, and connection to central wastewater management facilities pursuant to section 403.086(10), F.S., and upgrade of onsite sewage treatment and disposal systems pursuant to Section 381.0065(4)(l), F.S.;*
 - 2. All local comprehensive plans and land development regulations and the administration of such plans and regulations are adequate to protect the Florida Keys Area, fulfill the legislative intent specified in Section 380.0552 (2), F.S., and are consistent with and further the principles for guiding development; and*
 - 3. A local government has adopted a resolution at a public hearing recommending the removal of the designation.*
- (c) *After receipt of the state land planning agency report and recommendations, the Administration Commission shall determine whether the requirements have been fulfilled and may remove the designation of the Florida Keys as an area of critical state concern. If the Administration Commission removes the designation, it shall initiate rulemaking to repeal any rules relating to such designation within 60 days. If, after receipt of the state land planning agency’s report and recommendations, the Commission finds that the requirements for recommending removal of designation have not been met, the Commission shall provide a written report to the local governments within 30 days after making such a finding, detailing the tasks that must be completed by the local government for the upcoming year. . .”*



PURPOSE

The Legislature designated the Florida Keys (Monroe County and its municipalities) and the City of Key West as Areas of Critical State Concern in 1975 due to the area's environmental sensitivity and mounting development pressures. The legislative intent was to establish a land use management system for the Florida Keys that would achieve the following:

- Protect the natural environment and improve the near shore water quality;
- Support a diverse economic base that promotes balanced growth in accordance with the capacity of public facilities;
- Promote public land acquisition and ensure that the population of the Florida Keys can be safely evacuated;
- Provide affordable housing in close proximity to places of employment; and
- Protect property rights and promote coordination among governmental agencies that have permitting jurisdiction.



This narrative provides an overview of this year's rule requirements and should be used in conjunction with the Administration Commission's Matrix at Tab 3 to expedite review. The Matrix is the Administration Commission Rule in a different format. It contains the status of each Work Program task in the third column as either "complete" or "incomplete" and the tasks due during this reporting period are highlighted in yellow. The Matrix includes comments and information submitted by the local governments. A one page summary of task achievement is located at Tab 3.



HISTORY

In 1972, the Florida Legislature adopted the Environmental Land and Water Management Act which provided the basis for the State to designate Areas of Critical State Concern. To be designated, an area must contain, or have a significant impact upon environmental or natural resources of regional or statewide importance where uncontrolled private or public development would cause substantial deterioration of such resources¹. Examples of resources of regional or statewide significance include: state or federal parks, forests, wildlife refuges, wilderness areas, aquatic preserves, major rivers and estuaries, state environmentally endangered lands, Outstanding Florida Waters, and aquifer recharge areas.



**Florida East Coast Railway train traveling overseas bridge
Knight Key, Florida**

Source: State Archives of Florida, Florida Memory

In the early 1990s, Monroe County revised its comprehensive plan to be consistent with the 1985 Growth Management Act. The Plan drew legal challenges from numerous parties, with litigation lasting several years. In 1996, the litigation was resolved through a stipulated settlement agreement and the adoption by the Administration Commission of Rule 28-20, Florida Administrative Code (F.A.C.). The Rule contained a Work Program which, when complete, would improve water quality, better protect habitat for threatened and endangered species, resolve challenges that were raised by the various parties, and ultimately provide for the repeal of the designation. These administrative challenges highlighted specific aspects of the Florida Keys ecosystem as having limited capacity to sustain additional impacts from development. Of particular concern was the declining water quality of the near shore environment due to a lack of central sewer facilities, the loss of habitat for state and federally listed species, public safety, adequate evacuation in the event of hurricanes, and a deficit of affordable housing. Rules containing Work Program tasks were adopted for Marathon and Islamorada after their subsequent incorporation.

Concerns about water quality resulted in legislative action which established requirements that by December 2015, all sewage disposal in the Florida Keys must be upgraded to meet advanced wastewater treatment standards that reduce the amount of nitrogen, phosphorus, biological oxygen demand, and total suspended solids. When the construction of central sewer systems is concluded, approximately 249 small package plants, 23,000 septic tanks and 2,800 cesspits will be eliminated and replaced with connections to central sewer systems providing advanced wastewater treatment. The bond financing in the Save the Everglades Program, approved by the Florida Legislature in 2012, and the extension of the Monroe County

¹ Section 380.05(2)(a), Florida Statutes

Infrastructure Sales Tax will provide the funds to complete central sewer by 2015. A detailed report on wastewater funding and the status of connections at each wastewater facility can be found at Appendix C.

Water quality and the economy are inextricably linked in the Florida Keys. Tourism is the chief economic engine in the Florida Keys with over \$1.2 billion dollars being spent annually by over 3.7 million visitors. Surrounded by sensitive coral reefs and highly productive marine nurseries, the Keys are an international destination for fishing and wildlife viewing. Recreational and commercial fishing are the next most important sectors of the local economy, annually contributing an estimated \$557 million². Hotel and motel properties alone constitute over \$1 billion in taxable property value and 90% of the top property taxpayers are tourism-related businesses. In the Florida Keys, nearly half of all taxable sales are direct purchases by tourists.



Seagrass Meadow



Elkhorn Coral

Maintenance of the Keys' natural resources is necessary for a sustainable economy which is dependent upon clean water and abundant natural resources and essential to maintaining a strong tourist industry. The Florida Keys contain the Florida Reef Tract which is the third largest barrier reef ecosystem in the world. The water surrounding the Florida Keys is biologically rich and diverse, and sensitive to the impacts of development and land uses. Excessive levels of nutrients in the

water stress marine life and make them prone to disease. The Florida Bay contains the most expansive seagrass meadow in the world. Seagrass monitoring trends in the Florida Bay suggest that increased nutrient levels are resulting in decreased species diversity.

More than 35,000 jobs in the Keys are supported by ocean recreation and tourism and account for 58% of the local economy. The cost of water quality improvements in the Keys are a small fraction of the long term asset value that the natural resources provide to the economy of the Florida Keys.

² National Marine Sanctuary Program, National Oceanic and Atmospheric Administration, National Ocean Service, and US Department of Commerce. 2007. *Florida Keys National Marine Sanctuary Revised Management Plan*. <http://floridakeys.noaa.gov/mgmtplans/2007.html>

FINDINGS

Status of Work Program Task Achievement

The following narrative summarizes the status of Work Program tasks that were targeted for completion by the local governments during this year.

Islamorada, Rule 28-19.310, Florida Administrative Code

Islamorada was scheduled to complete the following tasks:

- Apply for land acquisition funds
- Amend Building Permit Allocation System
- Identify wastewater funding in Capital Improvements Element
- Apply for wastewater grant funding
- Request Everglades bond financing
- Implement local funding necessary to construct, replace, maintain wastewater.



Islamorada completed five out of six tasks (83%) targeted for completion. The Village identified wastewater funding sources in the Capital Improvements Element, applied for wastewater grant funding, requested funding from the Everglades Restoration Act, and established the funding necessary to support the issuance of bond funding to complete construction of central wastewater facilities in the Village. The cost of providing wastewater in the Village is estimated at \$141 million, of this amount, \$33.5 million was provided by other State and Federal funding.

Tasks not achieved this period

Islamorada did not submit an application for land acquisition funding this year due to budgeting constraints. Islamorada has 1,109 vacant parcels. Based on the current building permit allocation system limiting new residential construction to a total of 280 units over the next ten years, there will likely remain 829 vacant parcels in need of acquisition by 2023. The estimated acquisition cost of these parcels is \$50 million.

Recommendations

Staff at DEO recommends strengthening coordination efforts for land acquisition. The Village could re-evaluate parcels within the Florida Forever targeted boundary and provide the Monroe County Land Authority with a prioritized list. Additional efforts should be made to partner with the Florida Department of Environmental Protection, Division of State Lands in providing fifty percent of the match for these parcels. Other concepts should be explored to revise the building permit allocation point system to provide additional points for the aggregation of adjacent lots, awarding bonus points for dedication of wetland lots, purchase of less than fee simple acquisitions, and educating the public regarding charitable contributions of land.



Whale Harbor

City of Marathon Rule 28-18.400 Florida Administrative Code

The City of Marathon was scheduled to complete the following tasks:

- Apply for land acquisition funding
- Amend Building Permit Allocation System based upon hurricane evacuation clearance time
- Allocate wastewater funding in Capital Improvements Element
- Apply for wastewater grants
- Request Everglades bonds issuance
- Provide report of property owners that fail to connect to central sewer
- Sub Area 4 (Vaca Central) complete 100% connections
- Sub Area 5 Complete 100% connectons
- Sub Area 7: Complete 100% connections;
- Allocate funding for stormwater implementation in Capital Improvements Element
- Apply for stormwater grant funding



Marathon completed seven out of ten tasks (70%) targeted for completion in 2013. Marathon identified wastewater funding sources in its Capital Improvements Element for wastewater construction, applied for wastewater funding, requested funding from the Everglades Restoration Act, and has established the funding necessary to support the issuance of bonds for the completion of central wastewater facilities. The cost to construct central wastewater systems in Marathon is \$102.9 million, with \$29.7 million provided from State and Federal sources. Task 53 on the Matrix requires Marathon to apply for stormwater grant funding from the South Florida Water Management District. No funding was available from the District, therefore this task was rated as “not applicable” this year. However, the City has established a stormwater utility tax to further water quality improvements.



Tasks not achieved this period

Marathon was not able to complete one hundred percent of the wastewater connections scheduled for two of the wastewater system sub-areas.

	Percent Connected	Remaining Connections	In Code Enforcement
Sub area 5	88%	678	55
Sub area 7	63%	189	34

Marathon did not apply for land acquisition funding. Based on the current building permit allocation system limiting new residential construction to a total of 300 units over the next ten years, there will likely remain 981 vacant parcels in need of acquisition by 2023. The estimated cost of these parcels is \$49 million.

Recommendations

Staff at DEO recommends strengthening of coordination efforts for land acquisition. The City could re-evaluate parcels within the Florida Forever targeted boundary and provide the Monroe County Land Authority with a prioritized list. Additional efforts should be made to partner with the Division of State Lands in providing fifty percent of the match for these parcels. Other concepts should be explored to revise the building permit allocation point system to provide additional points for the aggregation of adjacent lots, awarding bonus points for dedication of wetland lots, purchase of less than fee simple acquisitions and educating the public regarding charitable contributions of land.



Monroe County, Rule 28-20.300, Florida Administrative Code

The Monroe County was scheduled to complete the following tasks:

- Submit land acquisition report
- Evaluate land acquisition needs and apply for funding
- Revise allocation rates based upon hurricane evacuation clearance time
- Allocate wastewater funding in CIE
- Request Everglades bonds issuance
- Apply for wastewater grant funding
- Complete all remaining connections at Key Largo WWTP
- Complete construction of Duck Key collection system
- Complete remaining connections at South Lower Keys (Big Coppitt) WWTP
- Complete 75% of connections to Hawk's Cay WWTP
- Include stormwater funding in Capital Improvements Element



Monroe County completed 8 of 11 tasks (73%) targeted for completion. The County submitted its land acquisition report indicating that 125 parcels were purchased this year. Three applications for Administrative Relief were received and offers to purchase were made to all three, with only one applicant agreeing to sell their property. Based on the current building permit allocation system that limits new residential construction to 1,970 new residential structures over the next ten years, there will likely remain 6,788 vacant parcels in need of acquisition by 2023. The estimated acquisition cost of these parcels is \$206 million.

The State of Florida land acquisition program has purchased 9,572 acres within the Florida Keys at a cost of \$240 million to date. Please see Appendix A for a detailed land acquisition report prepared by Monroe County. Additionally, there are 519 privately owned vacant parcels in close proximity to Naval Air Station- Key West which are potential military encroachment sites in need of acquisition. The

County recently met with staff from the Department of Economic Opportunity and the Department of Environmental Protection, Division of State Lands to stress the importance of an aggressive land acquisition program coupled with the existing building permit allocation system and to explore mechanisms for collaborative acquisition.



The County identified funding sources for wastewater facilities in its Capital Improvements Element, applied for wastewater grant funding, submitted a resolution requesting funding from the Everglades Restoration Act, and has established the wastewater funding necessary to support the issuance of bonds to complete the construction of the central wastewater facilities. The County completed the construction of the Duck Key wastewater collection system. At the Hawks Cay facility, the County met the targeted 80% connection

schedule. The cost to provide central wastewater in unincorporated Monroe County is \$367 million with \$81.2 million provided from State and Federal sources. This figure includes costs for the Key Largo wastewater special District.

Tasks not achieved this period

The Key Largo Wastewater Treatment Facility (within Monroe County) has not achieved a 100% wastewater connection rate. To date, 82% of its customers are connected, leaving 2,649, with 113 referred to code enforcement.

The County also has not achieved 100% connections to the Big Coppitt wastewater facility. To date, 82% have been connected leaving 309 to be connected; with 232 code enforcement referrals.



Recommendations

The County has a code enforcement officer dedicated to processing wastewater connection code cases. During the past six months there has been coordination between Monroe County, the Florida Keys Aqueduct Authority, and the Department of Economic Opportunity to review and strengthen current practices regarding legal notice and documentation to property owners. Staff at DEO recommends additional outreach to property owners who have not connected, and assistance through existing Community Development Block Grants to those who are economically disadvantaged.

Status of Local Governments without Work Program Tasks

Layton 28-32 Florida Administrative Code



Layton has adopted the annual building permit allocation into its comprehensive plan. The plan is up to date and being adequately implemented. The City has a fully operational wastewater system that meets the advanced treatment standards. The cost to provide central wastewater for

Layton was \$5.7 million with \$4.1 million provided from other government sources. Based on the current building permit allocation system that allows construction of 30 new residential structures over the next ten years, and 13 remaining vacant parcels, there will likely be no vacant parcels in need of acquisition by 2023.



Zane Grey and his brother R.C. Grey

Key West, 28-36, Florida Administrative Code



Ernest Hemingway

The City of Key West has a fully operational wastewater system that meets the advanced treatment standards. The City has adopted the annual building permit allocation system into its comprehensive plan. The City is currently updating their land development regulations to be consistent with their newly updated plan. The City has addressed sea level rise and was recognized by national news services for its effort in developing a building permit allocation system that considers sea level rise.

Based on the current building permit allocation system that allows construction of 910 new residential structures over the next ten years and 84 remaining vacant parcels, there will likely remain no parcels in need of acquisition by 2023. Because Key West has an acute affordable housing shortage and few environmentally sensitive sites, any funding generated for land acquisition is used to purchase sites for affordable housing.



Source: State Archives of Florida, Florida Memory

Key Colony Beach, 28-21 and 28-31, Florida Administrative Code



The City of Key Colony Beach has a fully operational advanced wastewater treatment system. The city's comprehensive plan is up to date but the City has never established a building permit allocation system adopted within its comprehensive plan or land development regulations. Key Colony Beach is a small community with a population of approximately 850. The City has approximately 92 vacant parcels with an estimated acquisition cost of \$11.9 million.

Key Colony Beach representatives have approached the Department of Economic Opportunity requesting to be allowed to continue issuing building permits without the building permit allocation of 6 per year recommended in the Hurricane Memorandum of Understanding. Instead they are requesting an allocation of 10 residential building permit allocations per year. The City has no land acquisition program and the remaining vacant parcels are not targeted for acquisition by Florida Forever. The following excerpt from the Florida Administration Commission agenda documents the directive from the Administration Commission to work with the City to develop a comprehensive plan amendment to establish the building permit allocation.



Sunset Park Beach - Key Colony Beach

Excerpt from March 7, 2013 Florida Cabinet Agenda:

“ . . . the Department's report specifically highlights activities and information on certain Work Program tasks addressing the topic of hurricane evacuation, on pages 14 through 21. These specific Work Program tasks require:

- The Department, the Florida Keys local governments, and the Division of Emergency Management to develop and enter into a memorandum of understanding that stipulates the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the agency to accurately depict evacuation clearance times for the population of the Florida Keys.*
- The Department to apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys ACSC and recommend appropriate revisions to the Commission regarding the allocation rates and distribution of allocations or identify strategies that support the 24-hour evacuation clearance time.*
- Consideration of the potential for future transient allocations and their impact on hurricane evacuation clearance times.*

After conducting multiple workshops, receiving public input, and coordinating with local governments and state and federal agencies, a Hurricane Evacuation Clearance Time Memorandum of Understanding (MOU) was entered into by the

Department, the Division of Emergency Management, and all Keys local governments addressing the above referenced Work Program tasks. (See Appendix C)

Based upon the MOU that stipulates the input variables and assumptions, the Department has determined that an additional 3,550 residential building allocations could be constructed and still maintain the 24-hour hurricane evacuation clearance time. For the purposes of guiding development, the Department has recommended maintaining the current annual allocation and distribution rates as follows:

- *Monroe County 197*
- *City of Marathon 30*
- *Village of Islamorada 28*
- *City of Key West 91*
- *City of Key Colony Beach 6*
- *City of Layton 3*

NOTE: *All allocations are at current rates as adopted in either local comprehensive plans or Commission rules, with the exception of the allocation for the City of Key Colony Beach. The Department will work with the City over the next year to develop a comprehensive plan amendment to establish the annual building allocation.” (emphasis added)*

All local governments in the Florida Keys are mutually bound together by the need to maintain a hurricane evacuation clearance time of 24 hours prior to the onset of hurricane-force winds. Additionally, all local governments rely on electricity and potable water that is generated on the Florida mainland, leaving the entire 112 miles of Florida Keys communities vulnerable in the event of a major hurricane. Evacuation of the Keys population in advance of a hurricane landfall is of paramount importance for public safety. Virtually all evacuees leave by way of US Highway 1 and seek shelter outside of Monroe County. As directed by Section 380.0552 (9)(a)2., F.S., computer modeling is used to estimate the maximum number of cars and people that can be evacuated within the 24 hour clearance time.



Key West Yacht Club – Hurricane Betsy 1965
Source: State Archives of Florida, Florida Memory

Hurricane evacuation computer modeling projects that when 3,550 additional units are constructed in the Florida Keys evacuation clearance time will be at the 24 hour mark. Unless U.S. Highway 1 is widened or

Section 380.0552 (9)(a)2., F.S., is modified to allow additional hurricane evacuation time, it is likely that concerns for protecting the health and safety of population during evacuations for hurricanes could supersede the issuance of new residential permits.

The Hurricane Evacuation Clearance Time Working Group (Working Group) considered the potential for private property rights takings cases due to the number of vacant lots remaining within each community. However, the Working Group recommended distribution of the allocation based on population, as it was done in 1996. The ratio of vacant lots is as follows:

Ratio of Vacant Parcels

Annual Allocation	10 Year Allocation	Vacant Parcels	% of Total Vacant Parcels
Monroe County	1,970	8,758	77.83%
Marathon	300	1,281	11.38%
Islamorada	280	1,109	9.86%
Key Colony Beach	60	92	0.82%
Key West	910	84	0.74%
Layton	30	13	0.12%

Each local government appointed an elected representative to the Hurricane Evacuation Clearance Time Working Group with the knowledge that the modeling would result in the maximum allocation and distribution of residential units that could be built without exceeding the 24 hour clearance time. A Hurricane Evacuation Memorandum of Understanding that referenced the allocation was executed by all the local governments after conducting numerous public hearings.



Key Haven flooded during Hurricane Wilma

Source: State Archives of Florida, Florida Memory

With the exception of Key Colony Beach, all local governments have comprehensive plans that allocate the annual number of building permits that may be issued. The City reports that it has already issued six permits since July 2013, equivalent to the total proportional one-year allocation based upon the Hurricane Evacuation Clearance Time Working Group modeled allocation. The Department of Economic Opportunity has drafted the following rule that allocates units to Key Colony Beach in accordance with the Hurricane Evacuation Memorandum of Understanding and provides maximum flexibility to the City of Key Colony Beach:

Policy 1.3.2(proposed)

The City of Key Colony Beach shall issue permits for no more than 60 new residential units between adoption of this rule and July 1, 2023. The City may allocate as many as six residential permits per year. Unused allocations may rollover to subsequent years and those units may be added to the six units per year allocation. The City may borrow from future year’s allocations upon the passage of a resolution by the City Council, provided that no more than 60 units are issued between adoption of this rule and July 1, 2023.

Upon adoption of a resolution by another local government located within Monroe County, building permit allocations may be transferred across jurisdictions in order to allow additional units. Units from existing development may be demolished and transferred to other lots within the City. Units transferred from other local governments or units demolished and rebuilt at other locations shall not be included in the 60 unit limit.

Recommendations

Key Colony Beach representatives have stated that 10 to 14 allocations are needed on an annual basis and the City has not adopted a plan amendment to establish an annual allocation. Staff at DEO recommend promulgation of the above rule.



Key Colony Beach – 1957
State Archives of Florida, Florida Memory

RECOMMENDATIONS FOR WORK PROGRAM

Section 380.0552(4)(b), F.S., directs the Department to provide a recommendation regarding whether substantial progress has been made towards accomplishing the tasks of the Work Program. The Department makes the following recommendations:

- (1) Accept the 2013 Annual Report for Monroe County, the City of Marathon and the Village of Islamorada;
- (2) Continue the Florida Keys Area of Critical State Concern designation in order to complete the Work Program requirements;
- (3) Accept the Department's recommendation that substantial progress toward accomplishing the strategies of the Work Program have been achieved for Monroe County, the City of Marathon, and the Village of Islamorada; and
- (4) Accept the Department's recommendation to initiate rule making for the City of Key Colony Beach delineating an annual Building Permit Allocation System.

**Village of Islamorada
2013 - Annual Report**

		Status	Islamorada Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-19.310, F.A.C.	Achieved/Not Achieved			
1	(5)(a) Carrying Capacity Study Implementation.				
2	1. By July 1, 2011 and each July 1 thereafter, Islamorada shall evaluate its land acquisition needs and state and federal funding opportunities and apply to at least one state or federal land acquisition grant program.	Incomplete (annual requirement)	FRDAP grant identified - grant opening period September 16-30, 2013.	July 1, 2013	
3	2. By July 1, 2012, Islamorada shall enter into a memorandum of understanding with the state land planning agency, Division of Emergency Management, Marathon, Monroe, Key West, Key Colony Beach, and Layton after a notice, public workshop and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the agency to accurately depict evacuation clearance times for the population of the Florida Keys.	Complete		July 1, 2012	
4	3. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding. Islamorada and the state land planning agency shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities Survey, Bureau of Business and Economic Research, and other studies). Islamorada shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.	Complete		July 1, 2012	
5	4. By July 1, 2012, Islamorada shall complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the state land planning agency, Monroe County and each municipality in the Keys.	Complete		July 1, 2012	
6	5. By July 1, 2012, the state land planning agency (agency) shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The agency will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24-hour evacuation clearance time. If necessary, state land planning agency shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.	Complete		July 1, 2012	
7	6. By July 1, 2013, based on the state land planning agency's recommendations, Islamorada shall amend the current building permit allocation system (BPAS in the Comprehensive Plan and Land Development Regulations) based on infrastructure availability, level of service standards, environmental carrying capacity constraints, and hurricane evacuation clearance time.	Complete		July 1, 2013	Yes
8	By March 31, 2012, the Area of Critical State Concern staff shall amend the agendas for the Hurricane Evacuation Clearance Modeling Workshops to include the potential for future transient allocations and their impact on hurricane evacuation clearance times. (January 18, 2012 Administration Commission Action)	Complete			

**Village of Islamorada
2013 - Annual Report**

		Status	Islamorada Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-19.310, F.A.C.	Achieved/Not Achieved			
9	(5)(b) Wastewater Implementation.				
10	1. Beginning July 1, 2011 and each July 1 thereafter, Islamorada shall identify any funding for wastewater implementation. Islamorada shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.	Complete	Ordinance 12-11 adopted on 9/27/12 approved the CIP. Transmitted to DEO on 6/07/13.	July 1, 2013	2011-139 LOF, removed the requirement that the capital improvement schedule be an amendment to the comprehensive plan
11	2. By December 1, 2013, Islamorada shall provide a final determination of non-service areas requiring upgrade to meet Sections 381.0065(4)(l) and 403.086(10), F.S., wastewater treatment and disposal standards. This shall be in the form of a resolution including a map of the non-service areas.	Incomplete		December 1, 2013	
12	3. By December 1, 2013, Islamorada shall work with the owners of wastewater facilities and on site systems throughout the Village and the Department of Environmental Protection (DEP) and the Department of Health (DOH) to fulfill the requirements of Sections 381.0065(3)(h) and (4)(l) and 403.086(10), F.S., regarding implementation of wastewater treatment and disposal systems. This will include coordination of actions with DOH and DEP to notify owners regarding systems that will not meet 2015 treatment and disposal standards.	Complete	Public meeting for owners of wastewater facilities and on site systems held on 2/27/13. Transmitted Public Notice as documentation on 8/07/13.	December 1, 2013	
13	4. By July 1, 2011 and by July 1 of each year thereafter, Islamorada shall evaluate its wastewater needs and state and federal funding opportunities and apply annually to at least one state or federal grant program for wastewater projects and connections.	Complete	Documentation of application for funding through the Gulf Coast Ecosystem Restoration Council Comprehensive Plan transmitted on 5/16/13.	July 1, 2013	
14	5. By September 1, 2011, Islamorada shall develop and implement local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement of facilities.	Complete		September 1, 2011	
15	6. By July 1, 2011 and each July 1 thereafter through 2013, Islamorada shall annually draft a resolution requesting the issuance of a portion of the \$200 million of bonds authorized under Section 215.619, F.S., and an appropriation of sufficient debt service for those bonds, for the construction of wastewater projects within the Florida Keys.	Complete	Resolution 13-02-18 adopted on 2/28/13.	July 1, 2013	
16	7. By July 1, 2011 and each July 1 thereafter through 2013, Islamorada shall develop a mechanism to provide accurate and timely information and establish Islamorada's annual funding allocations necessary to provide unmet funding needs to support the issuance of bonds authorized under Section 215.619, F.S., and to assure the timely completion of work as necessary to fulfill any terms and conditions associated with bonds.	Complete	June 2013 Wastewater Rate Study (financial plan) transmitted on 7/01/13.	July 1, 2013	
17	8. By December 1, 2013, Islamorada shall provide a report of addresses and the property appraiser's parcel numbers of any property owner that fails or refuses to connect to the central sewer facility within the required timeframe to the Monroe County Health Department, Department of Environmental Protection and the state land planning agency. This report shall describe the status of Islamorada's enforcement action and provide the circumstances of why enforcement may or may not have been initiated.	Incomplete		December 1, 2013	

**Village of Islamorada
2013 - Annual Report**

		Status	Islamorada Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-19.310, F.A.C.	Achieved/Not Achieved			
18	(5)(c) Wastewater Project Implementation.				
19	1. By June 1, 2011, Islamorada shall provide a wastewater financing plan to the state land planning agency and Administration Commission.	Complete		June 1, 2011	
20	2. By July 1, 2011, Islamorada shall conclude negotiations with Key Largo Wastewater Treatment District for treatment capacity.	Complete		July 1, 2011	
21	3. By July 1, 2011, Islamorada shall advertise for proposal for design build operate finance construction of Village-wide wastewater system.	Complete		July 1, 2011	
22	4. By July 1, 2011 submit a copy of contract agreement with Key Largo Wastewater District documenting acceptance of effluent or alternative plan with construction of wastewater treatment plants in Village that ensures completion and connection of customers by December 2015.	Complete		July 1, 2011	
23	5. By July 1, 2011, Islamorada shall make available to its customers an additional 700 connections (Phase II) to the North Plantation Key Wastewater Treatment Plant (WWTP).	Complete		July 1, 2011	
24	6. By September 1, 2011, Islamorada shall select the design build operate finance contractor for the Village-wide wastewater system.	Complete		September 1, 2011	
25	7. By October 1, 2011, Islamorada shall submit a wastewater construction status report to the state land planning agency and the Administration Commission which includes substantial completion of construction prior to January 1, 2015 and final completion prior to July 1, 2015.	Complete		October 1, 2011	
26	By January 31, 2012, Islamorada shall submit a wastewater construction status report to the state land planning agency and the Administration Commission which includes substantial completion of construction prior to January 1, 2015 and final completion prior to July 1, 2015. (January 18, 2012 Administration Commission Action)	Complete			
27	8. By September 1, 2013, Islamorada shall complete final design of the Village-wide wastewater system.	Incomplete		September 1, 2013	
28	9. By December 1, 2013, Islamorada shall commence construction of the Village-wide wastewater system.	Complete	Construction commenced on Village-wide project in November 2012	December 1, 2013	
29	10. By June 1, 2014, Islamorada shall make available to its customers 25% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.	Incomplete		June 1, 2014	
30	11. By December 1, 2014, Islamorada shall make available to its customers 50% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.	Incomplete		December 1, 2014	
31	12. By June 1, 2015, Islamorada shall make available to its customers 75% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.	Incomplete		June 1, 2015	
32	13. By December 1, 2015, Islamorada shall make available to its customers 100% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.	Incomplete		December 1, 2015	

**City of Marathon
2013 - Annual Report**

		Status	Marathon Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-18.400, F.A.C.	Achieved/Not Achieved			
1	(5)(a) Carrying Capacity Study Implementation.				
2	1. By July 1, 2011, Marathon shall adopt a Comprehensive Plan Policy to require that administrative relief in the form of the issuance of a building permit is not allowed for lands within the Florida Forever targeted acquisition areas unless, after 60 days from the receipt of a complete application for administrative relief, it has been determined the parcel will not be purchased by any city, county, state or federal agency. Marathon shall develop a mechanism to routinely notify the Department of Environmental Protection of upcoming administrative relief requests at least 6 months prior to the deadline for administrative relief.	Complete		July 1, 2011	Yes
3	2. By July 1, 2011, Marathon shall adopt Land Development Regulations to require that administrative relief in the form of the issuance of a building permit is not allowed for lands within the Florida Forever targeted acquisition areas unless, after 60 days from the receipt of a complete application for administrative relief, it has been determined the parcel will not be purchased by any city, county, state or federal agency.	Complete		July 1, 2011	
4	3. By July 1, 2011, Marathon shall amend the Comprehensive Plan to limit allocations into high quality tropical hardwood hammock.	Complete		July 1, 2011	Yes
5	4. By July 1, 2011, Marathon shall amend the Land Development Regulations to limit allocations into high quality tropical hardwood hammock.	Complete		July 1, 2011	
6	5. By July 1, 2011, Marathon shall adopt a Comprehensive Plan Policy discouraging private applications for future land use map amendments which increase allowable density/intensity on lands in the Florida Keys.	Incomplete	City Ordinance 2012-12 requires that a proposed FLUM changes which would increase density be compensated by TDR transfers to the property subject to the change from some other location in Marathon	July 1, 2011	Yes
7	6. By July 1, 2011, and each July thereafter, Marathon shall evaluate its land acquisition needs and state and federal funding opportunities and apply annually to at least one state or federal land acquisition grant program.	Incomplete (annual requirement)	None applied for in 2013/ continue to work toward the acquisition of Boot Key	July 1, 2013	
8	7. By July 1, 2012, Marathon shall enter into a memorandum of understanding with the State Land Planning Agency, Division of Emergency Management, Monroe County, Islamorada, Key West, Key Colony Beach, and Layton after a notice and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the State Land Planning Agency to accurately depict evacuation clearance times for the population of the Florida Keys.	Complete		July 1, 2012	
9	8. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding. Marathon and the state land planning agency shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities Survey, Bureau of Business and Economic Research, and other studies). The City shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.	Complete		July 1, 2012	

**City of Marathon
2013 - Annual Report**

		Status	Marathon Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-18.400, F.A.C.	Achieved/Not Achieved			
10	(5)(a) Carrying Capacity Study Implementation.				
11	9. By December 1, 2012 , July 1, 2012* Marathon shall complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the state land planning agency, Monroe County and each municipality in the Keys.	Complete		December 1, 2012 July 1, 2012*	
12	10. By December 1, 2012 , July 1, 2012* the state land planning agency (agency) shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The agency will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24-hour hurricane evacuation clearance time. If necessary, the state land planning agency shall work with each local government to amend the respective Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.	Complete		December 1, 2012 July 1, 2012*	
13	11. By July 1, 2013, based on the state land planning agency's recommendations, Marathon shall amend the current building permit allocation system (BPAS in the Comprehensive Plan and Land Development Regulations) based on infrastructure availability, level of service standards, environmental carrying capacity, and hurricane evacuation clearance time.	Complete		July 1, 2013	Yes
14	The City of Marathon may propose and adopt an amendment to their comprehensive plan to include a one-time allocation of 100 transient dwelling units. The plan amendment may also include an additional 100 units composed of units from the Administrative Relief pool and borrowing forward from the City's future allocations. (January 18, 2012 Administration Commission Action)	Complete	Policy 1-3.2.6		Yes
15	By March 31, 2012, the Area of Critical State Concern staff shall amend the agendas for the Hurricane Evacuation Clearance Modeling Workshops to include the potential for future transient allocations and their impact on hurricane evacuation clearance times. (January 18, 2012 Administration Commission Action)	Complete			

*Technical correction: Dates inconsistent with the intent of the Administration Commission's direction to Monroe County (28-20.140) and Islamorada (28-19.310)

**City of Marathon
2013 - Annual Report**

		Status	Marathon Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-18.400, F.A.C.	Achieved/Not Achieved			
16	(5)(b) Wastewater Implementation.				
17	1. By July 1, 2011 and each July 1 thereafter, Marathon shall annually evaluate and allocate funding for wastewater implementation. Marathon shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.	Complete		July 1, 2013	HB 7207 removes the requirement that the capital improvement schedule be an amendment to the
18	2. December 1, 2013, Marathon shall work with the owners of wastewater facilities and onsite systems throughout the City and the Department of Environmental Protection (DEP) and the Department of Health (DOH) to fulfill the requirements of Sections 381.0065(3)(h) and (4)(l) and 403.086(10), F.S., regarding implementation of wastewater treatment and disposal. This will include coordination of actions with DOH and DEP to notify owners regarding systems that will not meet 2015 treatment and disposal requirements.	Incomplete		December 1, 2013	
19	3. By July 1, 2011, Marathon shall evaluate its wastewater needs and state and federal funding opportunities and apply annually to at least one state or federal grant program for wastewater projects and connections.	Complete	FDEP grant	July 1, 2013	
20	4. By July 1, 2011, Marathon shall continue to develop and implement local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement facilities.	Complete		July 1, 2011	
21	5. By July 1, 2011 and each year through 2013, Marathon shall annually draft a resolution requesting the issuance of a portion of the \$200 million of bonds authorized under Section 215.619, F.S., and an appropriation of sufficient debt service for those bonds, for the construction of wastewater projects within the Florida Keys.	Complete		July 1, 2013	
22	6. By July 1, 2011, Marathon shall develop a mechanism to provide accurate and timely information and establish Marathon's annual funding allocations necessary to provide evidence of unmet funding needs to support the issuance of bonds authorized under Section 215.619, F.S., and to assure the timely completion of work as necessary to fulfill any terms and conditions associated with bonds.	Complete		July 1, 2011	
23	7. By December 1, 2012, Marathon shall provide a report of addresses and the property appraiser's parcel numbers of any property owner that fails or refuses to connect to the central sewer facility within the required timeframe to the Monroe County Health Department and the state land planning agency. This report shall describe the status of Marathon's enforcement action and provide the circumstances of why enforcement may or may not have been initiated.	Complete		December 1, 2012	

**City of Marathon
2013 - Annual Report**

		Status	Marathon Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-18.400, F.A.C.	Achieved/Not Achieved			
24	(5)(c) Wastewater Project Implementation.				
25	1. Sub area 1: Knight's Key.				
26	a. By July 1, 2011, Marathon shall secure plant site;	* *see note below		July 1, 2011	
27	b. By December 1, 2011, Marathon shall construct Knight's Key Wastewater Plant;	** see note below		December 1, 2011	
28	c. By May 1, 2012, Marathon shall initiate connections; and	Complete		May 1, 2012	
29	d. By July 1, 2012, Marathon shall complete connections (100%).	** see note below		July 1, 2012	
30	2. Sub area 2: Boot Key (non-service area).				
31	By July 1, 2011, Marathon shall ensure completion of upgrade.	Complete		July 1, 2011	
32	3. Sub area 3: 11 Street – 39 Street (Vaca Key West).				
33	a. By July 1, 2011, Marathon shall complete construction of plant;	Complete		July 1, 2011	
34	b. By July 1, 2011, Marathon shall complete construction of collection system;	Complete		July 1, 2011	
35	c. By July 1, 2011, Marathon shall initiate connections; and	Complete		July 1, 2011	
36	d. By July 1, 2012, Marathon shall complete connections (100%).	Incomplete		July 1, 2012	
37	4. Sub area 4: Gulfside 39 Street (Vaca Key Central).				
38	By July 1, 2013, Marathon shall complete connections (100%).	Complete		July 1, 2013	
39	5. Sub area 5: Little Venice (60 Street – Vaca Cut East).				
40	a. By July 1, 2012, Marathon shall complete construction of collection system;	Complete		July 1, 2012	
41	b. By July 1, 2012, Marathon shall initiate connections for Phase II;	Complete		July 1, 2012	
42	c. By July 1, 2013, Marathon shall complete connections (100%) for Phase II.	Incomplete		July 1, 2013	
43	6. Sub area 6-Vaca Cut-Coco Plum (Fat Key Deer West).				
44	By July 1, 2011, Marathon shall complete connections (100%).	Complete		July 1, 2011	

** Due to legal circumstances beyond the City's control, a plant site was not secured at Knight's Key and the plant was not constructed. The City connected this service area through a force main to the Area 3 plant.

**City of Marathon
2013 - Annual Report**

		Status	Marathon Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-18.400, F.A.C.	Achieved/Not Achieved			
45	7. Sub area 7: Tom Harbor Bridge-Grassy Key.				
46	a. By July 1, 2012, Marathon shall complete construction of plant;	Complete		July 1, 2012	
47	b. By July 1, 2012, Marathon shall bid and award design of collection system;	Complete		July 1, 2012	
48	c. By July 1, 2012, Marathon shall complete construction of collection system;*	Complete		July 1, 2012	
49	d. By July 1, 2012, Marathon shall initiate connections; and	Complete		July 1, 2012	
50	e. By July 1, 2013, Marathon shall complete connections (100%).	Incomplete		July 1, 2013	
51	(5)(d) Stormwater Treatment Facilities.				
52	1. Beginning July 1, 2011 and each July 1 thereafter Marathon shall annually evaluate and allocate funding for stormwater implementation. Marathon shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.	Complete		July 1, 2013	
53	2. Beginning July 1, 2011 and each July 1 thereafter, Marathon shall annually apply for stormwater grants from the South Florida Water Management District.	Funds not available not counted for or against		July 1, 2013	
54	3. By July 1, 2011, complete Stormwater Treatment Facilities simultaneously with wastewater projects, including the direct outfall retrofits for 27th Street and 24th Street. Sub area 3: 11 Street – 37 Street (Vaca Key West)	Complete		July 1, 2011	
55	(5)(d) Stormwater Treatment Facilities.				
56	4. By July 1, 2012, complete Stormwater Treatment Facilities simultaneously with wastewater projects. Sub area 5: Little Venice (60 Street – Vaca Cut East).	Complete		July 1, 2012	
57	5. By July 1, 2012, complete Stormwater Treatment Facilities simultaneously with wastewater projects. Sub area 7: Tom Harbor Bridge-Grassy Key.	Complete		July 1, 2012	
58	6. By July 1, 2012, Marathon shall eliminate direct outfall retrofits for: 27th Street, Sombrero Islands, 24th Street, and 52nd Street.	Complete		July 1, 2012	

* Corrects scrivener's error in Rule 28-18(5)(c) 7. c., F.A.C.

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
1	(5)(a) Carrying Capacity Study Implementation.				
2	1. By July 1, 2012, Monroe County shall adopt the conservation planning mapping (the Tier Zoning Overlay Maps and System) into the Comprehensive Plan based upon the recommendations of the Tier Designation Review Committee with the adjusted Tier boundaries.	Incomplete	<p>Monroe County sent a letter to the Administration Commission requesting that Rule 28-20.140, F.A.C. be amended to remove the requirement to adopt the Tier Overlay Zoning Maps into the Comprehensive Plan as an overlay to the Future Land Use Map (FLUM).</p> <p>On July 12, 2013, the final Tier Zoning Overlay maps went into effect after approval by the State Land Planning Agency. The effective date is after the Rule deadline date of July 1, 2012.</p> <p>Now that all of the undesignated or invalidated parcels have a tier designation and the overlay district on the County's Zoning Maps is effective, starting the process over to adopt the maps for approximately 44,000 parcels as a Comprehensive Plan FLUM overlay would expose the County and all parcel owners to potential challenges by affected persons, as defined in Section 163.3184(1)(a), F.S. Completion of this requirement risks significant exposure (including restarting the appeal clock and possible takings claims to the County and State), as well as personnel demands/expenses, legal costs and attorney's fees.</p>	July 1, 2012	Yes
3	2. By July 1, 2012, Monroe County shall adjust the Tier I and Tier IIIA (SPA) boundaries to more accurately reflect the criteria for that Tier as amended by Final Order DCA07-GM166 and implement the Florida Keys Carrying Capacity Study, utilizing the updated habitat data, and based upon the recommendations of the Tier Designation Review Committee Work Group.	Complete		July 1, 2012	
4	3. By July 1, 2012, Monroe County shall create Goal 106 to complete the 10 Year Work Program found in Rule 28-20.110, F.A.C., and to establish objectives to develop a build-out horizon in the Florida Keys and adopt conservation planning mapping into the Comprehensive Plan.	Incomplete	<p>On July 12, 2013, the final Tier Zoning Overlay maps went into effect after approval by the State Land Planning Agency. The effective date is after the Rule deadline date of July 1, 2012.</p> <p>Monroe County has processed a draft of Goal 106 (without the adoption of the Tier Overlay Zoning Maps into the Comprehensive Plan as an overlay to the FLUM) through its Development Review Committee on August 27, 2013. The County will incorporate the text amendment for Goal 106 into its EAR-based amendments for adoption in 2014.</p>	July 1, 2012	Yes
5	4. By July 1, 2012, Monroe County shall create Objective 106.2 to adopt conservation planning mapping (Tier Maps) into the Monroe Comprehensive Plan based upon the recommendations of the Tier Designation Review Committee Work Group.	Incomplete	<p>On July 12, 2013, the final Tier Zoning Overlay maps went into effect after approval by the State Land Planning Agency. The effective date is after the Rule deadline date of July 1, 2012.</p> <p>Monroe County has processed a draft of Objective 106.2 (without the adoption of the Tier Overlay Zoning Maps into the Comprehensive Plan as an overlay to the FLUM) through its Development Review Committee on August 27, 2013. The County will incorporate the text amendment for Objective 106.2 into its EAR-based amendments for adoption in 2014.</p>	July 1, 2012	Yes
6	5. By July 1, 2012, Monroe County shall adopt Policy 106.2.1 to require the preparation of updated habitat data and establish a regular schedule for continued update to coincide with evaluation and appraisal report timelines.	Incomplete	<p>On July 12, 2013, the final Tier Zoning Overlay maps went into effect after approval by the State Land Planning Agency. The effective date is after the Rule deadline date of July 1, 2012.</p> <p>Monroe County has processed a draft of Policy 106.2.1 through its Development Review Committee on August 27, 2013. The County will incorporate the text amendment for Objective 106.2 into its EAR-based amendments for adoption in 2014.</p>	July 1, 2012	Yes

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
7	(5)(a) Carrying Capacity Study Implementation.				
8	6. By July 1, 2012, Monroe County shall adopt Policy 106.2.2 to establish the Tier Designation Work Group Review Committee to consist of representatives selected by the state land planning agency from Monroe County, Florida Fish & Wildlife Conservation Commission, United States Fish & Wildlife Service, Department of Environmental Protection and environmental and other relevant interests. This Committee shall be tasked with the responsibility of Tier designation review utilizing the criteria for Tier placement and best available data to recommend amendments to ensure implementation of and adherence to the Florida Keys Carrying Capacity Study. These proposed amendments shall be recommended during 2009 and subsequently coincide with the Evaluation and Appraisal report timelines beginning with the second Evaluation and Appraisal review which follows the adoption of the revised Tier System and Maps as required above adopted in 2011. Each evaluation and appraisal report submitted following the 2011 evaluation and appraisal report shall also include an analysis and recommendations based upon the process described above.	Incomplete	On July 12, 2013, the final Tier Zoning Overlay maps went into effect after approval by the State Land Planning Agency. The effective date is after the Rule deadline date of July 1, 2012. Monroe County has processed a draft of Policy 106.2.2 through its Development Review Committee on August 27, 2013. The County will incorporate the text amendment for Objective 106.2 into its EAR-based amendments for adoption in 2014.	July 1, 2012	Yes
9	7. By July 1, 2012 and each July thereafter, Monroe County and the Monroe County Land Authority shall submit a report annually to the Administration Commission on the land acquisition funding and efforts in the Florida Keys to purchase Tier I and Big Pine Key Tier II lands and the purchase of parcels where a Monroe County building permit allocation has been denied for four (4) years or more. The report shall include an identification of all sources of funds and assessment of fund balances within those sources available to the County and the Monroe County Land Authority.	Complete	From August 1, 2012 to July 31, 2013, the Monroe County Land Authority acquired 115 Tier I parcels and 10 Big Pine Key Tier II parcels. From August 1, 2012 to July 31, 2013, the Monroe County Land Authority received three (3) requests to purchase parcels for administrative relief. The three requests consisted of two (2) Tier I parcels and one (1) Tier III-A SPA parcel. Three purchase offers were made to the property owners and one offer was accepted. See attached Acquisition Report.	July 1, 2013	
10	8. By July 1, 2012, Monroe County shall adopt Land Development Regulations to require that administrative relief in the form of the issuance of a building permit is not allowed for lands within the Florida Forever targeted acquisition areas or Tier I lands unless, after 60 days from the receipt of a complete application for administrative relief, it has been determined the parcel will not be purchased by any county, state, federal or any private entity. The County shall develop a mechanism to routinely notify the Department of Environmental Protection of upcoming administrative relief requests at least 6 months prior to the deadline for administrative relief.	Complete		July 1, 2012	
11	9. By July 1, 2012, in order to implement the Florida Keys Carrying Capacity Study, Monroe County shall adopt a Comprehensive Plan Policy to discourage private applications for future land use changes which increase allowable density/intensity.	Complete		July 1, 2012	Yes
12	10. By July 1, 2011, Monroe County shall evaluate its land acquisition needs and state and federal funding opportunities and apply annually to at least one state or federal land acquisition grant program.	Complete	Monroe County Land Authority applied for a federal land acquisition grant from the US Army Corps of Engineers on June 5, 2013 in the amount of \$33,103.50. USACOE has not yet made a decision on whether to fund the application.	July 1, 2013	
13	11. By July 1, 2012, Monroe County shall enter into a memorandum of understanding with the state land planning agency (agency), Division of Emergency Management, Marathon, Islamorada, Key West, Key Colony Beach, and Layton after a notice and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the agency to accurately depict evacuation clearance times for the population of the Florida Keys.	Complete		July 1, 2012	

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
14	(5)(a) Carrying Capacity Study Implementation.				
15	12. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding to complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the state land planning agency and each municipality in the Keys.	Complete		July 1, 2012	
16	13. By July 1, 2012, the state land planning agency shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities Survey, Bureau of Economic and Business Research, and other studies). The County shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.	Complete		July 1, 2012	Yes
17	14. By July 1, 2012, the state land planning agency (agency) shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The agency will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24 hour evacuation clearance time. If necessary, the state land planning agency shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.	Complete		July 1, 2012	
18	15. By July 1, 2013, if necessary, the state land planning agency shall work with each local government to amend the Comprehensive Plan to reflect revised allocation rates and distribution or propose rule making to the Administration Commission.	Complete	<p>This task is a requirement of the State Land Planning Agency. On July 18, 2013, the Monroe County Board of County Commissioners discussed the build-out challenges facing the Florida Keys and directed staff to consider reducing the County's annual allocation rate to allow additional time to implement land acquisition strategies.</p> <p>Further, the State Land Planning Agency entered into a Memorandum of Understanding with each local government and determined that a minimum of 3,540 additional allocations could be distributed among Florida Keys local governments (10 years of growth), while still maintaining an evacuation clearance time of 24 hours. Additionally, the Administration Commission approved 1,970 of the available 3,540 ROGO allocations for issuance within unincorporated Monroe County, from July 1, 2013 through June 30, 2013.</p>	July 1, 2013	Yes
19	By March 31, 2012, the Area of Critical State Concern staff shall amend the agendas for the Hurricane Evacuation Clearance Modeling Workshops to include the potential for future transient allocations and their impact on hurricane evacuation clearance times. (January 18, 2012 Administration Commission Action)	Complete			

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
20	(5)(b) Wastewater Implementation.				
21	1. By July 1, 2011, Monroe County shall annually evaluate and allocate funding for wastewater implementation. Monroe County shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.	Complete	<p align="center"><u>Allocated Funding in the FY 2012-2017 CIE</u> Long Key WW Treatment Plant = \$700,000 Hook up County owned facilities = \$433,025 Cudjoe WW Treatment Plant = \$1,758,126 Cudjoe Regional Project = \$30,704,034 Key Largo WW Treatment Plant = \$153,876 Big Coppitt WW Treatment Plant = \$5,903,663 Duck Key WW Treatment Plant = \$6,360,590</p>	July 1, 2013	2011-139 LOF, removed the requirement that the capital improvement schedule be an amendment to the comprehensive plan
22	2. By December 1, 2013, Monroe County shall work with the owners of wastewater facilities and onsite systems throughout the County and the Department of Health (DOH) and the Department of Environmental Protection (DEP) to fulfill the requirements of Sections 403.086(10) and 381.0065(3)(h) and (4)(l), F.S., regarding implementation of wastewater treatment and disposal. This will include coordination of actions with DOH and DEP to notify owners regarding systems that will not meet the 2015 treatment and disposal standards.	Incomplete		December 1, 2013	
23	3. By July 1, 2011, Monroe County shall annually draft a resolution requesting the issuance of \$50 million of the \$200 million of bonds authorized under Section 215.619, F.S., and an appropriation of sufficient debt service for those bonds, for the construction of wastewater projects within the Florida Keys.	Complete	Monroe County did not adopt a Resolution because of the Legislative leadership announcement in December 2012, of its intent to not incur additional debt during the 2013 session. By Interlocal agreement with the municipalities, the County advocated through the Governor's office for a direct appropriation which was not realized.	July 1, 2013	
24	4. By July 1, 2011, Monroe County shall develop a mechanism to provide accurate and timely information and establish the County's annual funding allocations necessary to provide evidence of unmet funding needs to support the issuance of bonds authorized under Section 215.619, F.S., and to assure the timely completion of work as necessary to fulfill any terms and conditions associated with bonds.	Complete		July 1, 2011	
25	5. By July 1, 2011, Monroe County shall evaluate its wastewater needs and state and federal funding opportunities and apply annually to at least one state or federal grant program for wastewater projects and connections.	Complete	<p>The County applied for, and was awarded a State Revolving fund loan of \$90 million for the Cudjoe Regional Wastewater system. Of the funding allocation, \$40 million was funded in FY13. Further allocations are expected in FY14.</p> <p>The County continued its effort, through the Florida legislative delegation in Washington, to secure the addition of the Cudjoe project as an extension of the Florida Keys Water Quality Improvement Program (FKWQIP) funding authorization after the already approved projects in the event Congress were to consider reauthorization of WRDA (source of funds for the FKWQIP).</p>	July 1, 2013	

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
26	(5)(b) Wastewater Implementation.				
27	6. By July 1, 2011, Monroe County shall develop and implement local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement of facilities.	Complete		July 1, 2011	
28	By February 29, 2012, Monroe County shall submit a financial plan demonstrating local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement of facilities. (January 18, 2012 Administration Commission Action)	Complete		February 29, 2012	
29	7. By December 1, 2013, the County shall provide a report of addresses and the property appraiser's parcel numbers of any property owner that fails or refuses to connect to the central sewer facility within the required timeframe to the Monroe County Health Department, Department of Environmental Protection, and the state land planning agency. This report shall describe the status of the County's enforcement action.	Incomplete	Monroe County created a Code Compliance Inspector position in FY13.	December 1, 2013	
30	(5)(c) Wastewater Project Implementation.				
31	1. Key Largo Wastewater Treatment Facility. Key Largo Wastewater Treatment District is responsible for wastewater treatment in its service area and the completion of the Key Largo Wastewater Treatment Facility.				
32	a. By July 1, 2012, Monroe County shall complete construction of the South Transmission Line;	Complete		July 1, 2012	
33	b. By July 1, 2013, Monroe County shall complete design of Collection basin C, E, F, G, H, I, J, and K;	Complete		July 1, 2013	
34	c. By July 1, 2012, Monroe County shall complete construction of Collection basins E-H;	Complete		July 1, 2012	
35	d. By December 1, 2011, Monroe County shall schedule construction of Collection basins I-K;	Complete		December 1, 2011	
36	e. By July 1, 2011, Monroe County shall complete construction of Collection basins I-K;	Complete		July 1, 2011	
37	f. By July 1, 2011, Monroe County shall complete 50% of hook-ups to Key Largo Regional WWTP;	Complete		July 1, 2011	
38	g. By July 1, 2012, Monroe County shall complete 75% of hook-ups to Key Largo Regional WWTP;	Complete		July 1, 2012	
39	h. By July 1, 2013, Monroe County shall complete all remaining connections to Key Largo Regional WWTP.	Incomplete	There are 14,572 EDUs capable of generating wastewater out of 16,871 assessed. 11,923 EDUs are tied in or 82%. Monroe County created a Code Compliance Inspector position in FY13. To date, 113 unconnected properties have been referred to Monroe County Code Compliance to secure compliance with F.S. 381.00655. The 113 unconnected properties will be heard before the Special Magistrate within 2013.	July 1, 2013	

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
40	2. Hawk's Cay, Duck Key and Conch Key Wastewater Treatment Facility.				
41	a. By July 1, 2012, Monroe County shall complete construction of Hawk's Cay WWTP upgrade/expansion, transmission, and collection system;	Complete		July 1, 2012	
42	b. By July 1, 2013, Monroe County shall complete construction of Duck Key collection system;	Complete	Substantial completion was achieved on August 24, 2013; Punch list inspection on August 27, 2013 with final completion expected by September 24, 2013.	July 1, 2013	
43	c. By July 1, 2012, Monroe County shall initiate property connections to Hawk's Cay WWTP;	Complete		July 1, 2012	
44	d. By December 1, 2012, Monroe County shall complete 50% of hook-ups to Hawk's Cay WWTP;	Complete		December 1, 2012	
45	e. By July 1, 2013, Monroe County shall complete 75% of hook-ups to Hawk's Cay WWTP; and	Complete	As of July 2013, there are 1,454 EDUs in the Duck Key / Conch Key system and 1,167 EDUs (80%) are connected to the collection system. Monroe County created a Code Compliance Inspector position in FY13. To date, FKAA has not yet referred any properties.	July 1, 2013	
46	f. By July 1, 2014, Monroe County shall complete all remaining connections to Hawk's Cay WWTP.	Incomplete	Monroe County created a Code Compliance Inspector position in FY13.	July 1, 2014	
47	3. South Lower Keys Wastewater Treatment Facility (Big Coppitt Regional System).				
48	a. By July 1, 2012, Monroe County shall complete 75% hookups to South Lower Keys WWTP; and	Complete		July 1, 2012	
49	b. By July 1, 2013, Monroe County shall complete all remaining connections to the South Lower Keys WWTP.	Incomplete	As of July 2013, there are 1,726 EDUs and 1,417 EDUs (82%) are connected. Connections are ongoing. Monroe County created a Code Compliance Inspector position in FY13. To date, 232 unconnected properties have been referred to Monroe County Code Compliance to secure compliance with F.S. 381.00655. Of the 232 properties it was noted that approximately half are no longer in existence and will not have anything to connect. Further, no evidence of notification to any of the property owners was provided by the utility. Therefore, the County is returning the files back to FKAA until proof of good service is provided.	July 1, 2013	

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
50	4. Cudjoe Regional Wastewater Treatment Facility.				
51	a. By July 1, 2011, Monroe County shall complete planning and design documents for the Cudjoe Regional Wastewater Treatment Facility, the Central Area (Cudjoe, Summerland, Upper Sugarloaf) collection system and the Central Area Transmission Main;	Complete		July 1, 2011	
52	b. By October 1, 2012, Monroe County shall initiate construction of Wastewater Treatment Facility, Central Area Collection System and Central Area Transmission Main;	Complete	The contracts were executed in January 2013. The Notices to Proceed were issued to the contractors by FCAA in late January 2013. Construction started on the wastewater treatment plant and the collection and transmission system in the central (inner islands) area in February 2013. On January 16, 2013, the Monroe County Board of County Commissioners approved the expansion of the Cudjoe Regional Inner Island service area to serve an additional 16 EDUs.	October 1, 2012	
53	c. By July 1, 2014, Monroe County shall complete construction of Wastewater Treatment Facility, Central Area Collection System and Central Area Transmission Main; *	Incomplete		July 1, 2014	
54	By January, 2012 Monroe County shall complete design and planning for Outer Area (Lower Sugarloaf, Torches, Ramrod, Big Pine Key) Collection System and Transmission Main.**	Incomplete	The Design-Build contract was executed on January 13, 2013. Design of the Lower Sugarloaf and Ramrod collection system is complete as of August 2013, FDEP permits issued, and construction has started on the collection and transmission system on those islands. Design on the remaining areas of the outer islands is 80% complete as of August 2013 and permit applications have been submitted. On January 16, 2013, the Monroe County Board of County Commissioners approved the expansion of the Cudjoe Regional Outer area to serve an additional 115 EDUs. Further, on July 17, 2013, the Monroe County Board of County Commissioners approved the expansion of the Cudjoe Regional Outer area to serve an additional 6 EDUs.	January 1, 2012	
55	d. By February 1, 2012, Monroe County shall initiate construction of Wastewater Treatment, Outer Area Collection System and Transmission Main; *	Complete	Construction of the outer islands collection and transmission system was started in late July 2013 on Lower Sugarloaf Key.	February 1, 2012	
56	e. By February 1, 2015, Monroe County shall complete construction of Outer Area collection and transmission main;	2015 deadline		February 1, 2015	
57	f. By July 1, 2014, Monroe County shall initiate property connections – complete 25% of hook-ups to Cudjoe Regional WWTP;	2014 deadline		July 1, 2014	

**Monroe County
2013 - Annual Report**

		ACSC Status	Monroe Comments	Rule Completion Date	Comprehensive Plan Amendment Required
Task #	WORK PROGRAM REQUIREMENTS PURSUANT TO RULE 28-20.140, F.A.C.	Achieved/ Not Achieved			
58	(5)(c) Wastewater Project Implementation.				
59	4. Cudjoe Regional Wastewater Treatment Facility.				
60	g. By July 1, 2015, Monroe County shall complete 50% of hook-ups to Cudjoe Regional WWTP; and	2015 deadline		July 1, 2015	
61	h. By December 1, 2015, Monroe County shall complete remaining hook-ups to Cudjoe Regional WWTP.	2015 deadline		December 1, 2015	
62	(5)(d) Stormwater Treatment Facilities.				
63	1. By July 1, 2011, Monroe County shall evaluate and allocate funding for stormwater implementation. Monroe County shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.	Complete	<p>Recently, County staff completed a thorough review of the 2001 Stormwater Master Plan. The 2001 Stormwater Master Plan includes 6 projects in unincorporated Monroe County [4 water quality (WQ) projects and 2 flooding projects] with a total estimated cost of \$254,000 (2001 cost estimate).</p> <p>Three (3) projects have already been completed (2 WQ and 1 flooding). The remaining three projects are estimated to cost \$149,500.</p> <p>Also, the County has initiated a design evaluation of storm water flooding projects on Stock Island and Key Largo. The County will roll over up to \$600k in unspent road funds from FY13 for design and construction of these projects (not included in the FY 2012-2017 CIE).</p>	July 1, 2013	2011-139 LOF, removed the requirement that the capital improvement schedule be an amendment to the comprehensive plan
64	2. By July 1, 2011, Monroe County shall apply for stormwater grants from the South Florida Water Management District.	Incomplete	<p>No stormwater grant funding has been available since FY2012 from the South Florida Water Management District. As a result, the County did not apply for any SFWMD grants.</p> <p>The County has prepared and submitted a grant request for storm water project funding from the RESTORE Act funds.</p>	July 1, 2011	
65	3. By July 1, 2011, Monroe County shall complete Card Sound Road stormwater improvements.	Incomplete	<p>This project remains on hold pending determination of scope and permitting requirements. This proposed project was identified in the Stormwater Master Plan in 2001 and identified in all subsequent years for completion. It is estimated to cost \$89,700, which includes sodding the shoulders to filter roadway drainage and creating berms (with sod on the berms) at the toe of the slope of parking areas to obstruct flow into the canals, creeks, and lakes. Its cost- benefit ratio should be re-evaluated.</p> <p>The County recommends re-evaluating stormwater projects, including the scope and priorities for these projects.</p>	July 1, 2011	

* Corrects scrivener's error in Rule 28-20.140 (5)(c)4.c. & d., F.A.C.

** Omitted in final adopted rule. When rule is amended, rule will be modified to reflect this task.

Appendix A



MONROE COUNTY
THE FLORIDA KEYS AREA OF CRITICAL STATE CONCERN
BUILD-OUT CHALLENGES FACING THE FLORIDA KEYS

The Potential Price of Preserving Paradise...

The Florida Keys are designated as an Area of Critical State Concern (ACSC) by the State Legislature. A Rate of Growth Ordinance (ROGO) was implemented in order to provide for the safety of residents in the event of a hurricane evacuation and to protect the significant natural resources of Monroe County (MC), as required by the State of Florida. ROGO established a competitive permit allocation system whereby those applications with the highest scores are awarded building permits. The State of Florida allows issuance of 197 building permits per year for new residential development (Rule 28-20.140, F.A.C.), within unincorporated MC.

In 2012, pursuant to Rule 28-20.140, F.A.C., the Department of Economic Opportunity (DEO) completed the hurricane evacuation clearance time modeling task and found that with 10 years' worth of building permits, the Florida Keys would be at a 24 hour evacuation clearance. A Memorandum of Understanding (MOU) [see Exhibit 1] was entered into by and between DEO, the Florida Division of Emergency Management, MC and the municipalities to stipulate the input variables and assumptions for the hurricane model. Based upon the MOU and the resulting 24 hour evacuation clearance, DEO determined the remaining allocations for the Florida Keys (3,550 additional permits countywide).

In March 2013, the Governor and Cabinet, sitting as the State Administration Commission, approved the recommendation to allocate 10 years' worth of growth (197 x 10 = 1,970 permits) to MC while maintaining an evacuation clearance time of 24 hours, through the year 2023. Table 1 demonstrates the challenges unincorporated MC may face, as there are 8,168 privately owned vacant parcels (minimum value of \$248,314,487). With just 197 permits per year, it would take over 41 years' worth of annual allocations (at the current rate of 197) to absorb these parcels. This may result in a balance of 6,198 privately held vacant parcels at risk of not obtaining permits in the future (minimum value of \$188,424,716). This deficit of building permit allocations could trigger takings suits against both the State and MC, if no additional permits are allowed beyond the year 2023.

Table 1: Analysis of Vacant Parcels in Unincorporated Monroe County, Florida

TIER	NUMBER OF VACANT PARCELS	YEARS TO ALLOCATE PERMITS	THEORETICAL MAXIMUM DENSITY**
No Tier (ORCA, etc.)	235		766
Tier I	3,979		4,806
Tier II	393		590
Tier III-A	260		553
Tier III	3,301		5,048
TOTAL	8,168*	41.5	11,763
TOTAL ALLOCATIONS	1,970		
POTENTIAL LIABILITY	6,198*		

**Assumes one (1) unit per parcel and does not take into account additional density potential.*

*** Theoretical density analysis is based on acreage multiplied by the maximum allocated residential density for each FLUM category. This data is provided for illustrative purposes only; conditions specific to the individual parcel, including physical size, environmental sensitivity, zoning and tier designation and other regulatory constraints, such as ROGO are the final determinant of development potential.*

In recognition of the possibility that the inventory of vacant parcels exceeds the permits MC can award, the BOCC has already adopted some strategies to help transition land into public ownership to reduce the potential takings claims, and address the future build out of the Florida Keys by incentivizing development that eliminates privately owned vacant parcels. These strategies include:

ADOPTED COUNTY STRATEGIES

- Incentivize Dedication of Land – the BOCC adopted an amendment to encourage additional land dedication by providing additional points in ROGO/NROGO.
- Discouragement Policy– the BOCC adopted an amendment to discourage private applications for FLUM amendments that increase density and intensity, as required by Rule 28-20.140, F.A.C., unless mitigated by providing land (acreage or Improved Subdivision [IS] parcels) to MC.
- Created Commercial FLUM category (no residential component) - the BOCC adopted an amendment to provide options to re-designate property for other nonresidential uses (Provides alternative uses of property).
- Revised NROGO to make the process simpler and encourage nonresidential redevelopment and development.

While these adopted strategies, if utilized, help off-set the costs for direct acquisition of land, the projected costs outlined in Table 2 (below) suggest that these efforts will not serve to completely close the gap between the number of vacant parcels that may seek a permit and the number of permits the County is currently authorized by the State to issue, based on ROGO.

Current Land Acquisition Strategy

At present, there are two recurring dedicated funding sources for purchasing land within the County. The first is through half of a 1 cent Tourist Impact tax (pursuant to § 125.0108, F.S.), which provides an annual revenue for the Florida Keys ACSC of approximately \$1.2 million. This tax also generates approximately \$1.6 million annually for the Key West ACSC. The second recurring revenue is provided through a State Park surcharge that generates approximately \$400,000 annually. For the total revenue (on average \$1.6 million) in the Florida Keys ACSC, the Land Authority has historically allocated 60% (approximately \$900,000) to the acquisition of conservation land, with the remainder going towards purchase of parcels for affordable housing, or occasionally for active recreation areas. These funding sources alone will not be sufficient to meet the land acquisition needs of MC in the future.

As demonstrated in Table 2, at current funding levels and with the State discontinuing its aggressive land acquisition in the Florida Keys, adding 3,550 allocations for dwelling units through the year 2023, it would take approximately 272 years to generate the funds equal to the tax assessed value and offer to purchase the remaining inventory of private, vacant parcels in the Florida Keys (unincorporated and incorporated).

Note: The analysis in this paper is limited to tax assessed value of parcels and does not consider: the future willingness of owners to sell; if the value assumed will be equal to the acquisition price; sufficiency of funds; if the parcels have a marketable title; the suitability of public ownership of certain parcels; the feasibility and costs of managing parcels; etc.

Table 2: Inventory of Vacant Parcels in Florida Keys and Approximate Land Value

AREA	NO. VACANT PARCELS	AVERAGE PARCEL VALUE***	APPROXIMATE LAND VALUE (December 2012 MC Property Appraiser data)	ESTIMATED FUNDING Based on Historic Rates For Acquisition of Conservation Lands	YEARS TO GENERATE THE FUNDS EQUAL TO THE TAX ASSESSED VALUE
Key West ACSC*	104	\$355,045	\$ 36,924,754	\$ 270,000	137
Unincorporated MC	8,168	\$ 30,400	\$ 248,314,487	\$ 900,000	276 ϕ
Marathon	1,680	\$ 49,845	\$ 83,740,226		93 ϕ
Layton	34	\$ 51,080	\$ 1,736,724		2 ϕ
Key Colony Beach	109	\$129,746	\$ 14,142,347		16 ϕ
Islamorada	1,269	\$ 60,877	\$ 77,253,680		86 ϕ
TOTAL PARCELS	11,364	\$40,664	\$ 462,112,218		
TOTAL ALLOCATIONS	3,550	3,550 County wide including cities, with 1,970 units for unincorporated MC			
PARCELS TO PURCHASE (COUNTYWIDE)**	7,814	\$40,664***	\$ 317,748,496	\$ 1,170,000	272**

* The Monroe County Land Authority has historically allocated approximately 18% (\$270,000/yr) of the Key West ACSC portion of tourist impact tax revenue to the purchase of conservation and recreation lands. The remainder of Key West ACSC tourist impact tax revenue has been allocated for the purchase of affordable housing sites.

** The total vacant parcels (11,364) less the 3,550 allocations available results in 7,814 parcels to purchase. At an average cost of \$40,664 it will take MC 272 years to acquire these parcels utilizing \$1.17M (900,000+270,000).

*** This analysis assumes no growth in property value over time. Note property values could change exponentially.

ϕ Land values for each jurisdiction are divided by the \$900,000 estimated funding figure.

The County staff recognizes the need for ADDITIONAL STRATEGIES aimed at reducing the total inventory of privately owned vacant land. To that end, MC staff is currently evaluating the potential for future policy and program strategies that could apply within the unincorporated and incorporated areas of the Florida Keys, including:

ADDITIONAL STATE & FEDERAL LAND ACQUISITION STRATEGIES

1. Request the State of Florida Division of State Lands to continue to aggressively acquire vacant, privately owned land as a State partner in the ACSC program. The County should encourage the state government to target the acquisition of Tier I land within their acquisition boundaries.
 - 7,589 Tier I parcels within the State's Florida Forever Boundary are owned by public and nonprofit agencies. 3,377 Tier I parcels within the State's Florida Forever Boundary remain privately owned and vacant. The 3,377 Tier I privately owned vacant parcels have an approximate value of \$25,925,309.
2. Request the Federal Government to continue to aggressively acquire vacant, privately owned land. The County should encourage the federal government to target the acquisition of lands containing suitable habitat for and known populations of federally-designated wildlife species (Endangered Species Act).
 - 12,147 parcels within the Federal Species Focus Area and Buffer Areas are owned by public and nonprofit agencies. 7,193 parcels within remain privately owned and vacant. The 7,193 privately owned vacant parcels have an approximate value of \$307,155,602.

Table 3: Past State of Florida Division of State Lands Acquisition Strategy in Monroe County

State of Florida Land Acquisition Programs	Years	Total Number of Transactions	Total Acres	Total Cost
Land Acquisition Trust Fund	1966 - 1979	100	1623.42	\$ 12,097,641
Conservation & Recreation Land (CARL) Trust Fund	1982 - 1993	143	3028.64	\$ 74,669,999
Save Our Coast Trust Fund	1983 - 1993	4	39.03	\$ 2,400,000
Preservation 2000 (P-2000) Trust Fund	1993 - 2002	798	3689.1	\$ 73,687,905
Florida Forever Trust Fund	2002 - 2009	808	1192.45	\$ 77,502,431
		1853	9572.64	\$ 240,357,976

Since 2009, funding has not been available for the Division of State Lands to continue its partnership with Monroe County and purchase additional conservation lands (see Exhibit 2 - maps of the current Monroe County lands owned by public and nonprofit agencies).

ADDITIONAL COUNTY POLICY STRATEGIES

3. Reduce the current yearly allocation rate of 197 units per year with a MC Comprehensive Plan amendment, thereby extending the timeframe of the recently awarded allocations (3,550 County wide including cities, with 1,970 units for unincorporated MC). This would provide additional time to implement other strategies, such as land acquisition.
4. Further Incentivize Lot Aggregation by encouraging additional aggregation by increasing points awarded in ROGO. Currently, 3 positive points are awarded for each vacant, legally platted lot which is aggregated in a designated Tier II or III area on BPK/NNK, and 4 positive points are awarded for each vacant, legally platted lot which is aggregated in a designated Tier III area in the Upper or Lower Keys (not BPK/NNK). These also require a legally binding restrictive covenant limiting the number of dwelling units on the aggregated lots. This policy could be revised to encourage the aggregation of additional lots from any Tier designation.
5. If no additional permits are authorized after 2023, allow the transfer of dwelling units (market rate, affordable and transient) so that property owners with more than one lawfully established unit can move the additional units to another location. The County could consider allowing transfers from:
 - a) site to site within a subarea in MC (Upper to Upper, Lower to Lower, BPK/NNK to BPK/NNK);
 - b) between ROGO sub-areas; (Upper to Lower or Lower to Upper; BPK/NNK to BPK/NNK, Lower or Upper; BPK/NNK to BPK/NNK and Lower); and/or
 - c) between jurisdictions (MC and cities).

For example, a parcel owner with 2 or 3 lawfully established residential units may transfer 1 or 2 units to another vacant parcel, thereby reducing the need for a new ROGO allocation for those vacant parcels.
6. Re-designate and/or rezone land to commercial categories that do not allow residential use. The County could review existing mapping inconsistencies and consider re-designating certain lands, particularly along U.S.1, within a commercial category.
7. Continue land acquisition programs to purchase additional undeveloped parcels and re-evaluate land acquisition priorities to balance growth management, habitat protection, retirement of development rights, reduction of density & intensity, future build-out of the Florida Keys, climate change, sea level rise, affordable housing, etc.
8. Seek federal legislation to prohibit subsidized flood insurance for new development on vacant land containing suitable/critical habitat for federally listed species within Monroe County.
9. Exercise the power of eminent domain and directly condemn parcels to avoid acquisition costs or payment of takings compensation.
10. Purchase the tax certificates and tax deeds on property with delinquent real estate taxes. Requires coordination with the Monroe County Property Appraiser’s Office and the Monroe County Tax Collector.

ADDITIONAL COUNTY LAND ACQUISITION FUNDING STRATEGIES

These strategies assume there are willing sellers.

11. **Increase the 1 cent Tourist Impact Tax.** Currently 50% of the 1 cent tax is dedicated to land acquisition within the areas from which it is derived and used by MC Land Authority to purchase land for conservation or affordable housing. This tax is collected on hotel rooms rentals and other transient accommodations.
12. **Dedicate 10% of current 1 cent infrastructure sales surtax (§ 212.055(2)(f)3., F.S.).** Currently the County may designate 10% of this tax for “other purposes,” which could be for land acquisition.
13. **Increase sales tax.** Currently at 7.5% and dedicate 100% of the revenue generated by the increase to land acquisition. This tax is collected on all qualifying sales at the time of purchase.
14. Establish a **special taxing authority**, a dedicated revenue stream and corresponding bond issue, by referendum for an ad-valorem tax to be dedicated to land acquisition.
15. **Explore a toll on US 1** with a portion of the funds generated to be used to fund acquisition, restoration and maintenance of conservation lands (similar to Alligator Alley toll for Everglade’s restoration).
16. Work with **non-governmental organizations**, such as the Trust for Public Lands and the Nature Conservancy, to supplement governmental acquisition efforts.

Further Details on County Land Acquisition FUNDING Strategies (#11-15 Above)

Increasing Tourist Impact Tax – (Strategy #11)

Currently, the 1 cent Tourist Impact Tax yields approximately \$5.6 million annually. This amount is split between the general fund (\$2.8M) and the County Land Authority (\$2.8M). Of the \$2.8M that goes to the Land Authority, \$1.2M is for MC outside Key West (along with \$400,000 from state park surcharges) equaling \$1.6M for MC, excluding Key West, and \$1.6M goes to Key West.

Of the approximate total revenue (\$1.6M) in the Florida Keys ACSC:

- MC Land Authority has historically allocated 60% (approximately \$900,000) to the acquisition of conservation land, with the remainder going towards purchase of parcels for affordable housing, or occasionally for active recreation areas in areas outside Key West.

Of the approximate total revenue (\$1.6M) in Key West ACSC:

- MC Land Authority has historically allocated 17% (approximately \$270,000) to the acquisition of conservation land, with the remainder going toward affordable housing.

If the County passed by referendum, after amending State legislation, an additional 0.5% to the Tourist Impact Tax and dedicated the full amount to land acquisition, this would yield an additional \$2.8 million which could be split as follows:

- The Florida Keys ACSC (\$602,000 [43%] additional); and
- Key West ACSC (\$798,000 [57%] additional)

[NOTE: An additional amendment to the state legislation would be needed in order to allow the additional 0.5% to be spent within the entire County, rather than the area from which the tax is derived.]

TOTAL additional funds available of \$2.8M, in addition to the \$1.17M (900,000+270,000 historically allocated for the acquisition of conservation lands), equals \$3.9M. If this was accomplished, the Land Authority would be able to generate the funds equal to the tax assessed value for the remaining 7,814 parcels within 80 years (see Table 3).

Table 3: Vacant Parcels and Years to Acquire with an Increase to Tourist Impact Tax

AREA	NO. VACANT PARCELS	AVERAGE PARCEL VALUE	APPROXIMATE LAND VALUE (December 2012 MC Property Appraiser data)	ANNUAL BUDGET FOR LAND ACQUISITION	YEARS TO GENERATE THE FUNDS EQUAL TO THE TAX ASSESSED VALUE
PARCELS TO PURCHASE (COUNTYWIDE)*	7,814	\$40,664 (analysis assumes no growth in property value over time)	\$ 317,748,496	\$ 3,970,000	80*

* The total vacant parcels (11,364) less the 3,550 allocations available results in 7,814 parcels to purchase. At an average cost of \$40,664 it will take MC 80 years to acquire these parcels utilizing \$1.17M (900,000+270,000) + an additional \$2.8M from 0.5% additional tourist tax if passed by referendum, after State Legislature authorization to hold a referendum, for a total of \$3.97M annually.

Dedicating 10% of Current Infrastructure Sales Surtax (Strategy #12)

One cent of sales tax produces the following revenue for the various entities:

- **\$16,500,000 – Unincorporated Monroe County (60%)**
- \$ 1,700,000 – Islamorada (6%)
- \$ 200,000 – Key Colony Beach (0.72%)
- \$ 6,800,000 – Key West (25%)
- \$ 50,000 – Layton (0.18%)
- \$ 2,300,000 – Marathon (8%)
- **\$27,550,000 – Entire county**

The BOCC can make a policy decision to allocate 10% of the amount of sales tax received for unincorporated Monroe County for land acquisition without a referendum or state authorization. This would result in an additional \$1.65M annually toward this program. If this was accomplished, MC would be able to generate the funds equal to the tax assessed value for the remaining 7,814 parcels within 81 years (see Table 4).

Table 4: Vacant Parcels and Years to Acquire with a Dedication of 10% of Infrastructure Sales Surtax

AREA	NO. VACANT PARCELS	AVERAGE PARCEL VALUE	APPROXIMATE LAND VALUE (December 2012 MC Property Appraiser data)	ANNUAL BUDGET FOR LAND ACQUISITION	YEARS TO GENERATE THE FUNDS EQUAL TO THE TAX ASSESSED VALUE
PARCELS TO PURCHASE (COUNTYWIDE)*	7,814	\$40,664 (analysis assumes no growth in property value over time)	\$ 317,748,496	\$ 3,925,000	81*
MC PARCELS TO PURCHASE (UNINCORPORATED)**	6,198	\$30,400 (analysis assumes no growth in property value over time)	\$ 188,419,200	\$ 2,550,000	74**

* The total vacant parcels (11,364) less the 3,550 allocations available results in 7,814 parcels to purchase. At an average cost of \$40,664 it will take MC 81 years to acquire these parcels utilizing 1.17M (900,000+270,000) + an additional \$2.755M from 10% of sales tax if authorized by Board of County Commissioners for a total of \$3.925M.

** The total vacant parcels (8,168) less the 1,970 allocations available results in 6,198 parcels to purchase. At an average cost of \$30,400 it will take MC 74 years to acquire these parcels utilizing \$900,000 + an additional \$1.65M from 10% of sales surtax if authorized by Board of County Commissioners for a total of \$2.55M.

Increasing Sales Tax (Strategy #11)

One cent of sales tax produces the following revenue for the various entities:

- **\$16,500,000 – Unincorporated Monroe County (60%)**
- \$ 1,700,000 – Islamorada (6%)
- \$ 200,000 – Key Colony Beach (0.72%)
- \$ 6,800,000 – Key West (25%)
- \$ 50,000 – Layton (0.18%)
- \$ 2,300,000 – Marathon (8%)
- **\$27,550,000 – Entire county**

If the County passed by referendum, after legislative authorization, adding an *additional* 1 cent sales tax, an additional \$27,550,000 could be available County-wide toward this program. If this was accomplished, MC would be able to generate the funds equal to the tax assessed value for the remaining 7,814 parcels within 11 years (see Table 3).

Table 5: Vacant Parcels and Years to Acquire with an Increase in the Sales Tax

AREA	NO. VACANT PARCELS	AVERAGE PARCEL VALUE	APPROXIMATE LAND VALUE (December 2012 MC Property Appraiser data)	ANNUAL BUDGET FOR LAND ACQUISITION	YEARS TO GENERATE THE FUNDS EQUAL TO THE TAX ASSESSED VALUE
PARCELS TO PURCHASE (COUNTYWIDE)*	7,814	\$40,664 (analysis assumes no growth in property value over time)	\$ 317,748,496	\$ 28,720,000	11*
MC PARCELS TO PURCHASE (UNINCORPORATED)**	6,198	\$30,400 (analysis assumes no growth in property value over time)	\$ 188,419,200	\$ 17,400,000	11**

* The total vacant parcels (11,364) less the 3,550 allocations available results in 7,814 parcels to purchase. At an average cost of \$40,664 it will take MC 11 years to acquire these parcels utilizing \$1.17M (900,000+270,000) + an additional \$27.5M from additional 1cent sales tax if authorized by Board of County Commissioners and State of Florida and passed by voters for a total of \$28,720,000.

** The total vacant parcels (8,168) less the 1,970 allocations available results in 6,198 parcels to purchase. At an average cost of \$30,400 it will take MC 11 years to acquire these parcels utilizing \$900,000 + an additional \$16.5M from 10% of sales tax if authorized by Board of County Commissioners for a total of \$17.4M.

Special Taxing Authority (Strategy #12)

Establishing a County-wide Environmental Land Acquisition Ordinance contingent upon adopting an ad valorem tax designated specifically for the purchase and management of conservation lands would generate additional revenue for land acquisition. This option has had wide application in Florida, with 20+ Counties and 20+ municipalities adopting an environmental lands program based on this model. Each community has adopted programs tailored to their specific needs and voter preferences. As can be seen in Table 6 below, some have established specific revenue caps, while others have established a time frame with no revenue cap. In addition, some of the Counties elected to bond the cap amount (Osceola, Lee and Volusia) and use the tax to pay for the bonds.

Table 6: Summary of Ad Valorem Tax Initiatives

COUNTY	YEAR ADOPTED	MILLAGE RATE	TOTAL REVENUE	TERM
LAKE	2004	0.33	\$ 36 MILLION (cap)	5 YRS (bond issue)
LEE	1996	0.5	\$ 400 MILLION	ANNUAL RENEWAL
MIAMI-DADE	1990	0.75	\$ 90 MILLION	2 YRS
OSCEOLA	2004	0.25	\$ 60 MILLION (cap)	20 YRS (bond issue)
VOLUSIA	2000	0.20	\$ 40 MILLION (cap)	20 YRS (bond issue)

Process for Establishing Countywide Taxing Authority by County

Although the enabling legislation and implementation may vary, in general, the process followed by the majority of jurisdictions researched has been:

- 1) Formation of a grass-roots citizens group to highlight and support the issues, initiated by residents or by the County (for example: via contracting with an organization such as The Trust for Public Lands, etc.)
- 2) BOCC passes enabling legislation purchase program and proposed tax
- 3) Voter approval referendum for ad valorem tax for purchases or bond issue
- 4) BOCC adopts conservation land selection standards
- 5) BOCC approves funding for either or both
 - a) A bond issue to borrow funds for purchase
 - b) Establishing a Conservation Land Fund to purchase as revenue is collected

Approximate Annual Revenue from Special Taxing Authority

According to data from the Monroe County Property Appraiser (MCPA), the total taxable value for real property in the Florida Keys (unincorporated and incorporated) in 2012 was approximately \$18,691,323,445. Using this value, the table below depicts approximate annual revenues associated with a range of millage rates and the time in years to acquire all privately owned vacant parcels, after ROGO allocation through the year 2023.

Table 7: Summary of Potential Revenue Generation & Acquisition Timeframe

TOTAL TAXABLE VALUE (MCPA - 2012)	ANNUAL REVENUES		
	0.75 MIL	0.50 MIL	0.25 MIL
\$ 18,691,323,445	\$ 14,018,492	\$ 9,345,661	\$ 4,672,830
POTENTIAL LIABILITY AFTER ALLOCATIONS	YEARS TO GENERATE THE FUNDS EQUAL TO THE TAX ASSESSED VALUE		
\$ 317,748,496	23	34	68

Toll on US 1 (Strategy #13)

Seek and support Federal and State legislation that would authorize the imposition of a toll on U.S. 1. This strategy would require a change to existing legislation that authorizes the expenditure of tolls paid for use of Alligator Alley for acquisition, restoration, and maintenance of conservation lands in the Everglades to include an authorization for land acquisition in the Keys. Alternatively, entirely new legislation could be sought. Prior discussions with state and federal officials exploring the possibility of imposing a toll on U.S. 1 as a means of raising money to fund wastewater have conclusively demonstrated that any such effort would require state and federal legislation.

Summary of Additional County Land Acquisition Funding Strategies

In summary, with the 3,550 ROGO allocations recently awarded by the State of Florida, it may take MC up to 272 years to generate the funds equal to the tax assessed value for the remaining 7,814 privately owned vacant parcels in the Florida Keys (Cities and County - Table 2), based upon the average 2012 property values and the current funding levels.

To continue to preserve the County's quality of life and reduce the potential takings claims against the State and the County, which would ultimately be paid by the taxpayers, the remaining vacant, privately owned parcels (7,814), at a total value of \$317,748,496 (based on average 2012 parcel value) may need to be addressed by a combination of policy and funding strategies.

Staff has outlined five (5) possible funding strategies (from the above list of strategies) that would create additional revenues to pursue land acquisition. Each one has pros and cons and requires extensive administrative achievements, including changing state law and/or approval by voter referenda. The following table highlights the various time periods it would take to generate revenue, based on today's dollars, given revenue estimates that could be achieved.

Table 8: Summary of Potential Revenue Generation of Various Strategies & Acquisition Timeframe

Strategy	Annual Revenue Toward Land Acquisition (Countywide)	Based Upon Today's Dollars Years To Generate The Funds Equal To The Tax Assessed Value
Historic Status Quo (50% of tourist impact tax and revenue from park entrances – allocated at the historic rates for the acquisition of conservation lands)	\$ 1,170,000 (estimated based on historic rates)	272
Increase the Tourist Impact tax	\$ 3,970,000	80
Dedicate 10% of current infrastructure sales tax	\$ 3,925,000	81
Increase sales tax	\$ 28,720,000	11
Establish a taxing authority		
0.75 MIL	\$ 14,018,492	23
0.50 MIL	\$ 9,345,661	34
0.25 MIL	\$ 4,672,830	68



Note: The analysis in this paper is limited to tax assessed value of parcels and does not consider: the future willingness of owners to sell; if the value assumed will be equal to the acquisition price; sufficiency of funds; if the parcels have a marketable title; the suitability of public ownership for certain parcels; the feasibility and costs of managing parcels; etc.

Appendix B

Hurricane Evacuation

The Florida Keys consist of a chain of islands that are connected by a narrow ribbon of U.S. Highway 1, stretching 112 miles and spanned by 19 miles of bridges. The highest point of elevation along these rocky islands is only 18 feet above sea level and there is no point that is more than four miles from the water. The Florida Keys are isolated from the rest of the state and receive electricity and potable water from Florida City, located on the Florida mainland. Although access to and from the Keys is primarily by U.S. Highway 1, some visitors arrive by cruise ship or at one of the two airports serving the Keys.

All local governments in the Florida Keys are united by the need to maintain a hurricane evacuation clearance time of 24 hours prior to the onset of hurricane-force winds as prescribed by their local as well as state laws. Evacuation of the Keys' population in advance of a hurricane strike is of paramount importance for public safety. No hurricane shelters are available in the Florida Keys for Category 3-5 hurricane storm events.

Work Program Task

By July 1, 2012, the local governments of the Florida Keys shall enter into a memorandum of understanding with the state land planning agency, Division of Emergency Management, Marathon, Monroe, Key West, Key Colony Beach, the Village of Islamorada and Layton after a notice, public workshop and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the agency to accurately depict evacuation clearance times for the population of the Florida Keys.

In response to the Work Program directive adopted by the Administration Commission, a Hurricane Evacuation Clearance Time Work Group (Work Group) was appointed by the Department of Economic Opportunity. The Work Group included an elected representative from each of the six local governments and a cross section of the population including the tourism industries, chambers of commerce, and community organizations as well as representatives from state and federal agencies. Four workshops were conducted in various locations in the Florida Keys to consider hurricane model inputs, Census data, behavioral studies, hurricane forecasting, military evacuation procedures, traffic flow rates, private property rights, vacant platted lots, and other related research. Public testimony was received and considered. The model was updated with recent statistical information and numerous scenarios were modeled to estimate maximum build out capacity and to determine the remaining allocations that may occur and maintain the 24 hour hurricane evacuation goal. The Work Group recommended strategies for future mitigation, data needs, and the addressed the regional implications of hurricane evacuation. Overall, this exercise resulted in a Memorandum of Understanding which included the agreed upon assumptions and variables to be used for hurricane evacuation modeling exercises.

Since 1992, all local governments within the Florida Keys, with the exception of the City of Key Colony Beach, have limited residential growth through an annual cap on new residential development to ensure the ability of the population of the Florida Keys to safely evacuate. The Work Group made recommendations regarding future building permit allocations for each local government. Marathon, Islamorada, and Monroe County have building permit allocations established by Administration Commission rule and within their adopted comprehensive plans. Layton and Key West have allocations adopted within their adopted comprehensive plans. Key Colony Beach has no allocation established within its adopted plan or within an Administration Commission rule. The Department will work with Key Colony Beach over the next year to develop a comprehensive plan amendment to establish an annual building allocation to alleviate the need for the Administration Commission to undertake rulemaking that is contemplated in the adopted Work Plans for Monroe County, Islamorada, and Marathon.



Flooding - Hurricane Wilma

Computer modeling is used to estimate the maximum number of vehicles and people that can be evacuated within the established 24 hour clearance time criteria. The Department utilized the Transportation Interface for Modeling Evacuations (TIME) Model, a state-of-the-art transportation evacuation model developed for the Florida Division of Emergency Management for statewide application. The TIME Model was updated with 2010 U.S. Census and the 2006-2010 American Community Survey information for the number and occupancy rates of dwelling units by type (site-built

and mobile home) and their associated characteristics such as number of people and vehicles per household. Tourist unit data was provided by the Florida Department of Business and Professional Regulation. Tourist unit occupancy rates were collected from Smith Travel Research in coordination with the Monroe County Tourism Development Council. Human behavioral assumptions were provided from studies conducted for the Statewide Regional Evacuation Study Program for the South Florida Region. Roadway characteristics, including roadway capacity and flow rates were provided by the Florida Department of Transportation. Updates to the TIME Model were peer reviewed and approved by the South Florida Regional Planning Council for accuracy of methodology and application.

Evacuation Modeling Assumptions and Variables

The Memorandum of Understanding included the following assumptions:

1. **Tourist Units:** There are 13,665 tourist units with approximately 11,287 units occupied (during July) with 100 percent participation for a Category 5 hurricane event. July is the highest month of hotel occupancy. The average car usage is 1.10 vehicles per tourist unit.
2. **Mobile Home Units:** There are 8,134 mobile home units with approximately 4,576 occupied units with 100 percent participation for a Category 5 hurricane storm event.
3. **Site-Built Units:** There are 44,630 site-built units with approximately 28,053 occupied units.
4. **Participation Rate:** 90% for a Category 5 hurricane storm event for site-built units. Section 163.3177(8)(a)1, F.S., requires that a proposed comprehensive plan amendment shall be found in compliance with the state coastal high-hazard area provisions if the adopted level of service for out-of-county hurricane evacuation is maintained for a Category 5 hurricane storm event as measured on the Saffir-Simpson scale.
5. **Response Curve:** 12 hours.
6. **Number of Vehicles Unit type:** The number of vehicles owned by unit type (i.e. mobile home, site-built) was taken from 2006-2010 American Communities Survey.
7. **Vehicle Usage:** The percent of vehicles owned that will be used during an evacuation is based upon the 2010 Statewide Regional Evacuation Study Program, South Florida Region: Monroe County Planning Assumptions, Volume 1-11, Appendix IIIC.
8. **Vehicle Usage by the Special Populations:** 2,338 vehicles will be evacuated during Phase 1 by Naval Air Station-Key West as confirmed by NAS Key West. The number of vehicles from the Florida Keys Community College is based upon the assumption that each of the 100 dorm beds will contribute one evacuating vehicle per bed.
9. **Evacuation Stream:** The evacuating traffic from Monroe County is the only traffic demand modeled (Section 163.3178(9), F.S.).
10. **Roadway Capacity:** Traffic Flow Rates for Emergency Evacuation in the Florida Keys, dated June 18, 2010, submitted by the Florida Department of Transportation.

Over 100 hurricane evacuation modeling scenarios were completed based on these input variables and assumptions. These scenarios employed these base assumptions and variables along with additional adjustments to analyze the amount and distribution of additional development in the Florida Keys. Specific scenarios which provided significant evacuation clearance time information were validated by staff from the South Florida Regional Planning Council to ensure there were no errors regarding assumptions, inputs and reported clearance times.

Work Program Task

By July 1, 2012, the state land planning agency (agency) shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The agency will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24-hour evacuation clearance time. If necessary, state land planning agency shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.

As a result of the scenario analysis, the Department recommends that a maximum of 3,550 additional allocations could be distributed over the next ten years beginning in July 2013 among the Florida Keys' jurisdictions while maintaining the evacuation clearance time of 24 hours. Development that will occur between the years 2010-2013 will account for an additional 883 units. Below describes in detail the hurricane evacuation clearance time results from those scenarios used to identify the building permit allocations.

Evacuation Clearance Time Results

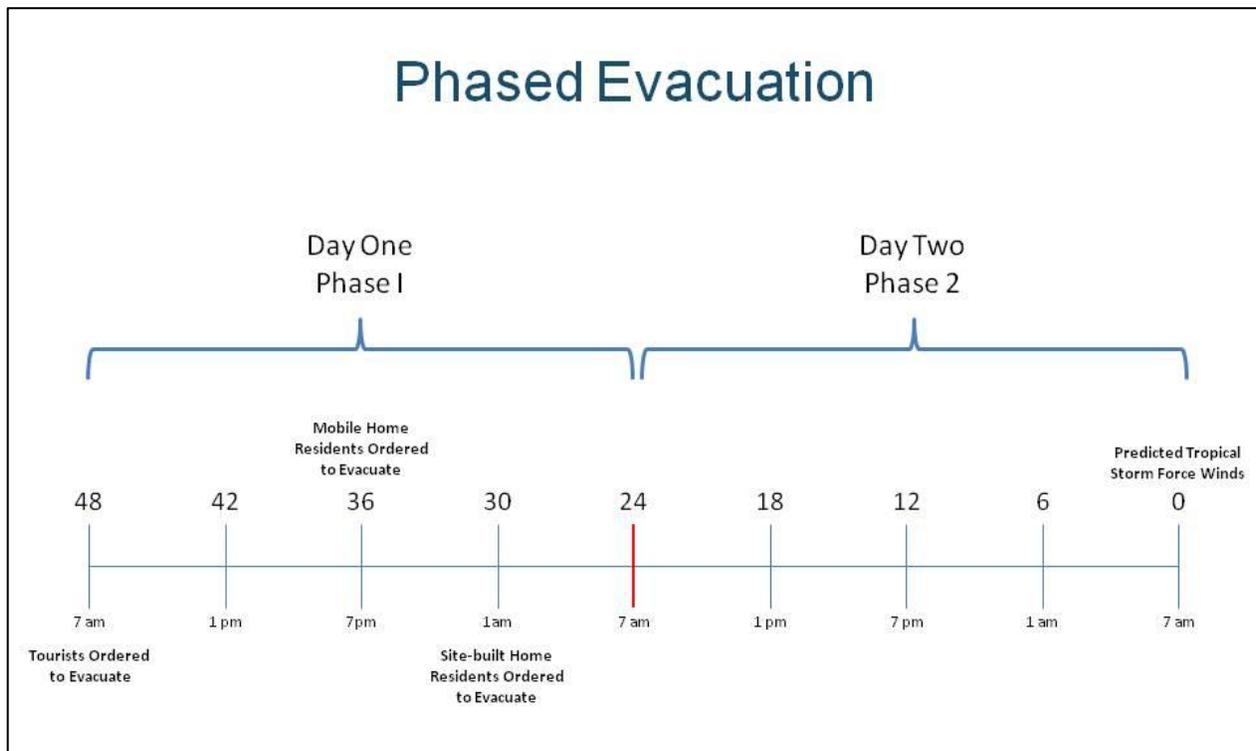
The phased evacuation approach is a form of mitigation, by initiating an earlier evacuation notice for the transient population, the military personnel, and those located in more vulnerable structures (mobile home residents). The Florida Keys' approach to hurricane evacuation consists of a phased, two day (48-hour) evacuation sequence. This approach to evacuation is modeled by breaking evacuation modeling into two parts, Phase I and Phase II. During the first day (Phase I), and 48 hours prior to anticipated landfall of hurricane force winds, tourists, mobile home residents and military personnel not needed for emergency operations evacuate while those residents who live in site-built homes leave during the second day (Phase II). The adopted 24-hour limit on the evacuation of the permanent population refers to those residents who live in site-built homes which are analyzed under Phase II evacuation scenarios.



Phase II Evacuation Scenarios

Of the hurricane evacuation scenarios presented on June 8, 2012, the Work Group recommended Scenario M5 which provides for the continuation of the existing annual building permit allocations that have been adopted by either rule and/or comprehensive plan amendment for all local governments with the exception of Key Colony Beach and Key West. Scenario M5 assumed that the military, mobile home residents and tourists will leave during Phase I and 15% of existing mobile homes would convert to site-built homes. Scenario M5 produced an evacuation clearance time of 24 hours with a future allocation of 3,550 new residential building permits.

Additional scenario runs were conducted to include building permit allocations that may have been awarded between the time of the 2010 Census and July 2013, the starting date of the new allocations, if approved by the Administration Commission. Scenario BA-3 takes the assumptions and variables of Scenario M5 and includes 3 additional years of allocations being awarded by Monroe County, the Village of Islamorada, and the Cities of Marathon, Layton and Key Colony Beach from between 2010 to 2013. Scenario BA-3 produced an evacuation clearance time of 24 hours.



Based on existing infrastructure and evacuation strategies, computer modeling indicates that the projected maximum build out for the Florida Keys is the development of an additional 3,550 vacant lots beginning July 2013 while maintaining the 24 hour evacuation clearance time as required by section 380.0552(9)(a)2., F.S. Unless infrastructure improvements are made, land acquisition is accelerated, or additional modifications are made to the evacuation clearance time

and strategies, there is the potential that approximately 7,000 vacant lots will not be able to secure residential building permits without exceeding the 24 hour evacuation criteria. Additional efforts must be made to accelerate land acquisition, develop additional mitigation strategies, or improve roadway infrastructure.

Work Program Task

By March 31, 2012, the Area of Critical State Concern staff shall amend the agendas for the Hurricane Evacuation Clearance Modeling Workshops to include the potential for future transient allocations and their impact on hurricane evacuation clearance times. (January 18, 2012 Administration Commission Action)

Phase I Evacuation Scenarios

During the last annual reporting period, the Administration Commission directed staff to analyze the impacts of new tourist unit development in the Florida Keys since the Building Permit Allocation Systems used by Monroe County, Islamorada and Marathon have not assigned any allocations for the development of transient units for the last 10 years. The prohibition on transient unit allocations was developed in recognition of the more than 11,000 vacant platted lots that exist in the Keys. Transient units typically are awarded as multiple units on one parcel. Since evacuation of the Keys is limited by the existing infrastructure with no substantive plans in place to augment the transportation system, the allocation of the units to vacant residential lots has been a priority in order to limit potential takings cases.



In response to a request for economic development assistance from the City of Marathon, the Administration Commission awarded the City 100 new tourist units with the potential for an additional 100 units to come from the Administrative Relief pool and/or the City's future building permit allocations. To analyze the potential impacts of additional tourist development, a series of Phase I scenarios were conducted. The assumptions for all Phase I evacuation scenarios were consistent with the evacuation stream containing all of the tourists, mobile home residents and military evacuating.

The month of July had the highest occupancy rate in the Keys when compared month by month. Using July tourist occupancy rates provided an evacuation clearance time of 16 hours and 30 minutes (Scenario T1). Members of the public urged the use of a scenario using the highest weekend occupancy rate which was Labor Day Weekend, (Saturday, September 3, 2011). This scenario provided an evacuation clearance time of 17 hours and 30 minutes. An additional scenario was conducted by increasing tourist units by an additional 215 units in Key West while using the July occupancy rates which provided an evacuation clearance time of 16 hours and 30 minutes (Scenario T5).

An additional concern expressed by the Work Group is the high vacancy rate of existing site-built units. A Phase 1 scenario was developed that added approximately 16,577 site-built units considered vacant by the 2010 U.S. Census as tourist units (Scenario VSBT) and this provided an evacuation clearance time of 23 hours and 30 minutes. However, it must be understood that the use of the additional vacant units in this scenario was generalized. There is the potential of an unknown number of units being double counted as the assumption of using all site-built units considered vacant which could include those units already identified as tourist units. Additional evaluations would be needed to understand this situation in the future.



Building Permit Allocation Recommendation

The Work Group recommended the continuation of adopted allocations for each local government with 6 units per year allocated to Key Colony Beach and 91 to the City of Key West, including a provision that the City of Key West would transfer annually (by July 15th), any remaining allocations for the year to the other local governments. The unused allocations would be distributed to the other local governments based upon the local governments' ratio of vacant platted land. The vacant land analysis is the comparison of each local government's vacant land percentage to the whole of all the vacant lands in the Florida Keys. If, for example Key West had 51 units remaining, the table below illustrates how redistribution would be carried out.

Redistribution of 51 Annually unused Key West Units

Local Government Allocation		Vacant Parcels	% of Total Vacant Parcels	% of Surplus Key West Allocations
Islamorada	28	1,109	9.86%	5.03
Key Colony Beach	6	92	0.82%	0.42
Layton	3	13	0.12%	0.06
Marathon	30	1,281	11.38%	5.81
Monroe County	197	8,758	77.83%	39.69
Total ²		11,253	100.00%	51.00

The typical planning time frame for local governments to award their allocations is ten years. Local governments can, if they wish, expand their allocation planning horizon past ten years. The hurricane evacuation scenario modeling was based on ten years of growth since the U.S. Census only comes out every ten years. The Department will continue to monitor the rate of growth in the Florida Keys and will run additional hurricane evacuation scenario exercises as circumstances change. The allocation issue will need to be reevaluated after 2020 when the next U.S. Census is completed and published.

² See Technical Appendix for full listing of Vacant Land Analysis

Appendix C

Florida Keys
History and Impact of Wastewater Project Funding

Florida Department of Environmental Protection
Florida Department of Economic Opportunity
October 10, 2013



NASA – Florida Keys, December 5, 2003, taken by the Moderate Resolution Imaging Spectroradiometer (MODIS) on the Aqua satellite

**Florida Keys
History and Impact of Wastewater Project Funding
Table of Contents**

Executive Summary	3
Governor’s Direction	4
Background	5
Water Quality	6
Area of Critical State Concern	8
Other Water Quality Protection Requirements	9
Status of Wastewater Facilities and Connections	11
Project Costs	17
State and Federal Grant Funding	18
Wastewater Funding Impacts	21
Economic Information	22
Demographics	24
Conclusions and Recommendations	27

Florida Keys

History and Impact of Wastewater Project Funding

Executive Summary

The Florida Keys chain of islands is approximately 220 miles long and extends from the end of the Florida peninsula southwest toward the Dry Tortugas. The area contains the third largest barrier reef ecosystem in the world, biologically rich and diverse, and sensitive to the impacts of growth and development. Water quality monitoring over the last two decades has demonstrated elevated levels of nitrogen and phosphorus in the near shore waters, pollutants associated with wastewater and fertilizer.

Florida formally recognized the ecological sensitivity of the area and the need for better wastewater treatment, in particular, by designating the Florida Keys an Area of Critical State Concern in 1974. The area is also a National Marine Sanctuary. As a result of these designations, and subsequent state laws establishing specific “best available technology” wastewater treatment requirements for the area, to be met no later than December 31, 2015, substantial federal and state funding has been directed to communities in the Keys to leverage local resources to build needed wastewater infrastructure.

Following the most recent state appropriations for Keys projects in fiscal year 2013-14, Governor Scott directed the Departments of Environmental Protection and Economic Opportunity to review the status of wastewater funding and facilities completion and develop this report, which summarizes environmental circumstances in the Keys, the status of wastewater facilities completion, historical state and federal funding along with future funding opportunities, and economic indicators characterizing Monroe County and its local governments.

Construction of the wastewater collection, treatment and disposal facilities necessary to meet the December 2015 deadline is essentially complete for systems serving Key Largo, Layton, Marathon, Conch Key/Duck Key, Bay Point, Key Colony Beach, and Big Coppitt. In some cases, minor additions to collection systems or treatment upgrades still need to be accomplished.

The major projects remaining to be completed are the collection and transmission systems for the Village of Islamorada, which are to connect to the Key Largo wastewater treatment plant, and Monroe County’s Cudjoe regional system. Both projects are slated to be in operation by the 2015 deadline. To date, about 64% percent of the projected customer base in the Keys has sewer service available and the majority of these have been connected. (This assessment excludes Key West and Key Colony Beach, both of which were completely sewered many years ago.)

The estimated cost of the facilities constructed to date or that remain to be built is about \$620 million. Total state and federal grant funds provided to Keys communities to underwrite the cost of the facilities is nearly \$150 million, or about 25% of the costs. In addition, the Department has or will have provided

financing for approximately \$340 million of the \$470 million local share through low-interest State Revolving Fund (SRF) loans, further reducing utility customer rates.

The SRF program remains open to the local governments in the Keys for other wastewater projects. The program has a publicly adopted priority system that allows projects to compete based on their beneficial impact on public health and pollution abatement. Keys projects are always highly competitive in the program and likely to receive funding if funds are available.

Keys wastewater projects are also potentially eligible to receive additional financing or refinancing for wastewater management projects from Everglades bond proceeds. Section 215.619(a)(2), F.S., provides for bonds—not to exceed \$200 million in total, limited to \$50 million per fiscal year—to fund the cost of constructing sewage collection, treatment, and disposal facilities in the Florida Keys Area of Critical State Concern. As a result of bonds authorized by the Legislature in 2012-13 for Islamorada and Monroe County, \$150 million remains to be appropriated for these or other Keys wastewater projects should the Legislature choose to do so. The Legislature also has the authority to appropriate funds directly for projects through the annual budget process as it did in 2013-14, appropriating \$1 million each for Marathon and Key Largo wastewater projects.

Governor's Direction

Following the most recent state appropriations for Keys projects in fiscal year 2013-14, Governor Scott directed the Departments of Environmental Protection and Economic Opportunity to review the status of wastewater funding and facilities completion and develop this report. Specifically, the Governor's May 20, 2013 letter to Secretary of State Ken Detzner on the subject of budgetary vetoes included the following language, excerpted from page 38:

The Florida Families First budget also includes \$2 million for the continued investments in wastewater projects for the Florida Keys. As part of this investment in protecting the waters of this important community, the Department of Environmental Protection is directed, in coordination with the Department of Economic Opportunity, to perform a review of the sources of funding currently being utilized for this issue. These agencies are also directed to evaluate the uses and impact of prior state funding, and provide the Office of Policy and Budget within the Executive Office of the Governor with a report outlining the findings of this review, as well as provide recommendations for actions needed to address the continued funding of wastewater projects in the Florida Keys.

The report that follows provides background information on the Florida Keys environment, the current status of wastewater facilities construction, state and federal funding assistance for the construction of these facilities, and a variety of tables reflecting economic circumstances. It also includes a summary of funding sources available as the wastewater facilities are completed or modified in the future.

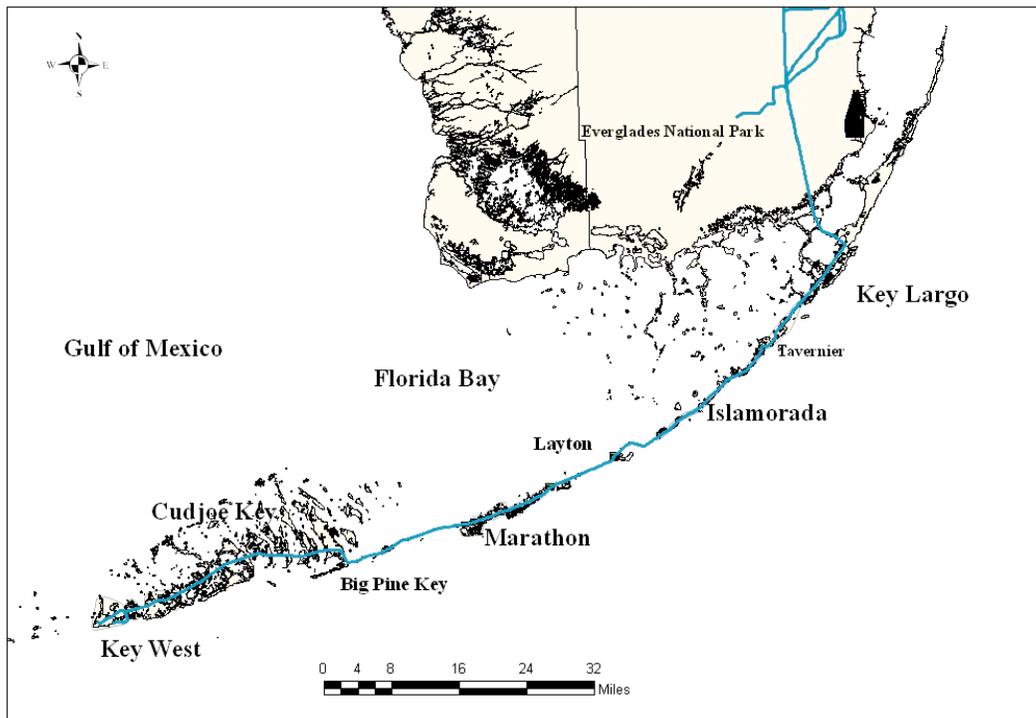
Florida Keys

History and Impact of Wastewater Project Funding

Background

The Florida Keys is a chain of islands approximately 220 miles long, extending from the end of the Florida peninsula and curving southwest toward the Dry Tortugas. Consisting of some 822 islands, of which about 30 are inhabited, the Keys are traversed by U.S. Highway 1 (Overseas Highway) with its 19 miles of bridges. The islands are predominately within Monroe County and include the municipalities of Islamorada, Key Colony Beach, Layton, Marathon, and Key West, along with a variety of named unincorporated areas within the County, and the Key Largo Wastewater Treatment District. See Figure 1.

Figure 1 – Florida Keys



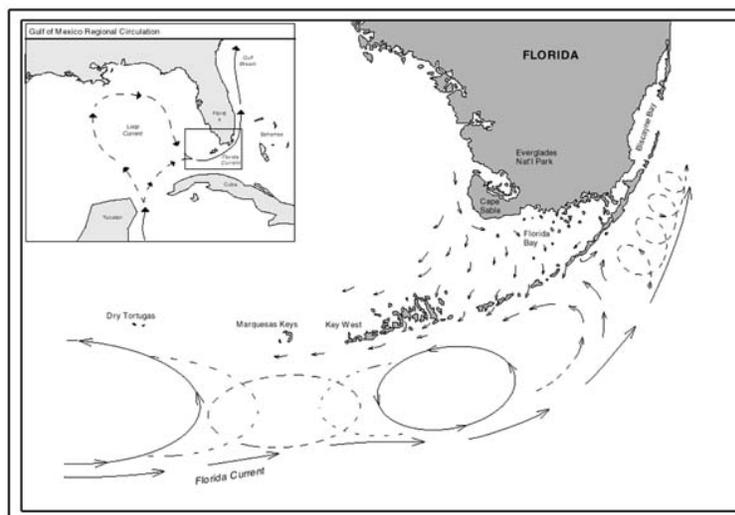
The aquatic environment of the Florida Keys is unique. Adjacent to the islands is the most extensive living coral reef in the United States, most of which lies within the boundaries of the Florida Keys National Marine Sanctuary. The four-mile-wide Florida Reef Tract extends some 150 miles from Soldier Key in Biscayne Bay to the Tortugas Banks and comprises coral formations similar to those in the Caribbean Sea. It is the third largest barrier reef ecosystem in the world, biologically rich and diverse, and particularly sensitive to the impacts of growth and development and corresponding land uses.

Designated on November 16, 1990, the Florida Keys National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System. It is administered by the National Oceanic and Atmospheric Administration (NOAA), and jointly managed with the State of Florida. The sanctuary protects 2,900 square nautical miles of waters surrounding the Florida Keys (some 60% within state waters) from south of Miami westward to encompass the Dry Tortugas, excluding Dry Tortugas National Park. The shoreward boundary of the sanctuary is the mean high-water mark. The sanctuary's management plan includes strategies to reduce pollution from land-based sources of domestic wastewater in the Florida Keys (see http://floridakeys.noaa.gov/mgmtplans/344_water.pdf). The plan is not self-executing—it relies on state and local programs and requirements.

Water Quality

The Florida Keys is a complicated aquatic ecosystem, with continuous interchange of inshore, near shore and offshore surface waters with the high ground water table. Tidal flows take place daily through the channels between the Keys and Florida Bay and between the bay and the Gulf of Mexico. Two large surface currents, the Florida Current and the Gulf of Mexico Loop Current, along with the inshore currents, also sweep across the region. The National Oceanographic and Atmospheric Agency map in Figure 2 illustrates the complexity of surface water currents.

Figure 2 - Current Patterns in the Florida Keys



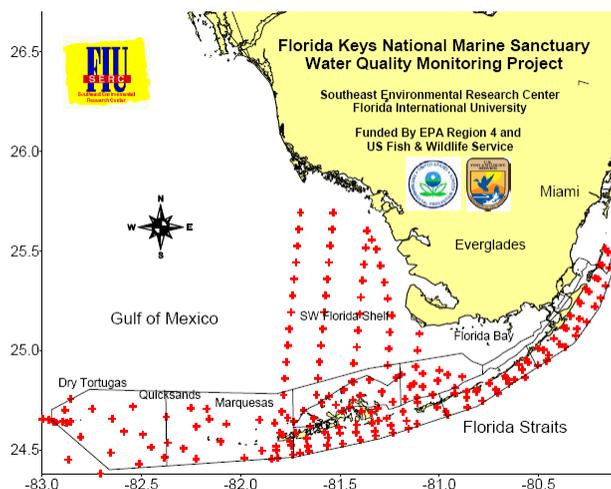
Pollutants are widely dispersed and the soils and underlying geology in the Keys allow rapid infiltration and percolation, preventing nutrient (nitrogen and phosphorus) entrapment and treatment in the soils matrix. The limited size of the land area makes it difficult to control stormwater and, because of the high water table and tides, onsite sewage treatment and disposal systems (for example, septic tanks) have extremely limited treatment capability. Nutrients are typically found in high concentrations in stormwater and poorly treated wastewater. Excessive levels of nutrients in the environment stress marine life and make them prone to disease and death.

The Florida Keys National Marine Sanctuary Water Quality Protection Program is administered by the U.S. Environmental Protection Agency and the Department. Through the program, water quality, seagrass meadows, and coral reefs have been monitored in the sanctuary since the mid-1990s. See <http://floridakeys.noaa.gov/wqpp/welcome.html> for more about the program. The following paragraphs summarize information from that site.

Water Quality Monitoring

The Water Quality Monitoring Project has been collecting data from 154 stations (see Figure 3) since 1995. From 1995-2010, near shore waters exhibited elevated levels of nitrate, an inorganic form of nitrogen found in plant fertilizers and sewage. In contrast, elevated nitrate concentrations were not present in the Tortugas.

Figure 3 – Florida Keys National Marine Sanctuary Water Quality Monitoring Project¹



Coral Reef Monitoring

According to the Coral Reef Monitoring Program, mean stony coral species richness has decreased by 2.3 species per sampling station throughout the Florida Keys since monitoring began in 1996. Seventy-five percent of all stations show a decrease in species richness between 1996 and 2008. Of the 43 coral species initially recorded in 1996, 29 have decreased in presence while seven species have increased in presence. Mean species richness changed very little between 2008 and 2009 but is higher than in 2006, which was the low point since the program began.²

¹ Image from <http://serc.fiu.edu/wqmnetwork/Report%20Archive/2010FKNMSEexec.pdf>

² Summarized from <http://floridakeys.noaa.gov/scisummaries/wqcrem.pdf>.

Seagrass Monitoring

Seagrass meadows cover much of the seafloor in the National Marine Sanctuary. Turtle grass (*Thalassia testudinum*) is the dominant species in much of the sanctuary; it is slow-growing and thrives in low-nutrient conditions. As more nutrients become available, changes will occur in the dominant species.

According to the Seagrass Monitoring Program, scientists have recorded thousands of field observations and have not found significant overall loss of seagrass coverage in the sanctuary, but significant changes have occurred in species composition. In 19 of the 30 monitoring sites, the dominant species has shifted from turtle grass to other species, suggesting higher levels of nutrients. In some of the sites, turtle grass density increases were seen as well. Both trends indicate increased nutrients—as nutrient levels rise, turtle grass density increases first and then, with more nutrients, dense grass dies and is replaced with faster-growing species.³

Area of Critical State Concern

The State of Florida has formally recognized the sensitivity of Keys waters and the need for better wastewater treatment and stormwater management along with effective and timely hurricane evacuation. This formal recognition came when the Florida Legislature designated the Florida Keys an Area of Critical State Concern.

The Area of Critical State Concern program was created as part of the Environmental Land and Water Management Act of 1972, included in chapter 380, Florida Statutes (F.S.). The Area of Critical State Concern designation denotes areas of Florida that contain natural resources of regional or statewide importance, areas that are or will be significantly affected by major public facilities, or areas of major development potential. There are five designated areas:

1. City of Apalachicola (Franklin County)
2. Florida Keys, excluding Key West (Monroe County)
3. City of Key West (Monroe County)⁴
4. Green Swamp (portions of Polk and Lake counties)
5. Big Cypress Swamp (Collier County)

Section 380.0552, F.S., the Florida Keys Area Protection Act, establishes state policies to guide decision making at the local level to protect natural resources and the environment, reverse the deterioration of water quality, and facilitate orderly, well-planned growth while protecting property rights. The Act gives the Governor and Cabinet, sitting as the Administration Commission, oversight of local land use decisions.

³ Summarized from <http://floridakeys.noaa.gov/scisummaries/seagrassmonitor.pdf>.

⁴ The Florida Keys, including Key West, were originally designated an Area of Critical State Concern in 1974. Key West challenged the original designation and, after resolution of litigation, was re-designated separately in 1984.

The Administration Commission has adopted growth management rules for the Florida Keys that include, among other requirements, the development of work programs for planning, design and implementation of centralized wastewater systems and upgraded onsite sewage treatment and disposal systems within Monroe County and its municipalities. These rules are contained within chapter 28 of the Florida Administrative Code (F.A.C.) Key West is not within the designation that is the current focus of the Administration Commission.⁵ A comprehensive overview of the Keys Area of Critical State Concern, including the current compliance status of the affected local governments with their respective work programs, is available from the Florida Department of Economic Opportunity at: www.floridajobs.org/community-planning-and-development/programs/areas-of-critical-state-concern.

Monroe County Sanitary Wastewater Master Plan

The growth management rules and associated Monroe County Comprehensive Plan led to the completion of the Monroe County Sanitary Wastewater Master Plan (Master Plan) in 2000 (www.monroecounty-fl.gov/DocumentCenter/Home/View/1117). The Master Plan was predicated on research findings that nutrients (nitrogen and phosphorus) from wastewater were a major contributor to the decline of water quality in the Keys, and specifically that:

- Cesspits are illegal, provide very little treatment, and are a health hazard.
- Sewage discharges from cesspits and septic tanks are a source of nutrients and human pathogens.
- Septic tank systems remove a very small amount of nutrients.
- Aerobic treatment units (ATUs) and package treatment plants do not remove dissolved nutrients.

In an effort to bring about water quality improvements cost-effectively, the Master Plan focused on “hot spot” areas, generally defined by the Monroe County Cesspool Identification and Elimination Ordinance at the time as more intensely developed areas expected to be connected to a community wastewater collection and treatment system within the next 10 years, or by 2010. These were typically areas with illegal cesspits, numerous or densely clustered septic tanks, or small wastewater plants (“package plants”), where centralized wastewater service would make engineering and economic sense.

Other Water Quality Protection Requirements

In 1999, the Florida Legislature bolstered the rules of the Administration Commission through passage of sections 4-6 of chapter 99-395, Laws of Florida (L.O.F.). Sections 5 and 6 established specific treatment requirements for wastewater treatment facilities and onsite sewage treatment and disposal systems in the Area of Critical State Concern. The law required the owners of all wastewater facilities and onsite systems to meet specific treatment requirements by July 1, 2010, the same timeline established in the Monroe County ordinance and Master Plan referenced in the previous section. Section

⁵ See Administration Commission rules 28-18, 28-19 and 28-20, F.A.C.

4 of the law authorized each local government within the area to require the connection of onsite systems and “package” (small) wastewater treatment plants to a central sewer system within 30 days of the notice of service availability. This provision allows local governments to generate the customer revenues necessary to finance wastewater facility construction and operation.

The Legislature amended section 6 of chapter 99-395, L.O.F., several times before repealing it and, along with section 5, replacing it in statutory law by sections 35 and 38 of chapter 2010-205, L.O.F. (<http://laws.flrules.org/2010/205>). Section 35 amended s. 381.0065, F.S., to update the onsite system requirements in the Area of Critical State Concern while section 38 created s. 403.086(10), F.S., to update the wastewater treatment requirements. Chapter 2010-205, L.O.F., also revised the statutory provisions related to the Florida Keys Area of Critical Concern in s. 380.0552, F.S., to link more closely to the water quality protection requirements in chapters 381 and 403, F.S.

Section 403.086(10), F.S., which the Department of Environmental Protection (Department) is responsible for enforcing, provides the following legislative findings: 1) poorly treated effluent from small wastewater facilities and onsite systems, including septic tanks, harms the coastal environment and threatens the local economy; 2) the only practical and cost-effective way to improve wastewater management is to implement Administration Commission rules and the 2000 Monroe County Master Plan; and 3) construction and operation of centralized wastewater systems is in the public interest. The law specifically:

- Prohibits facilities from discharging wastewater into surface waters.
- Places responsibility on local governments and special districts to build and begin operating central wastewater systems by December 31, 2015, in accordance with the Master Plan and schedules established by Administration Commission rules. (This locus of responsibility represents a significant change from chapter 99-395, L.O.F., which simply required any facility that was built to meet specific treatment requirements.)
- Carries forward the chapter 99-395, L.O.F., authorization for local governments to require facilities (package plants and onsite systems) owned by other entities to connect to central sewer within 30 days after notice that service is available.
- Carries forward the specific treatment standards from chapter 99-395, L.O.F., which must be met by December 31, 2015. The standards for Best Available Treatment (BAT) and Advanced Wastewater Treatment (AWT) are included in Table 1.

Table 1 – Wastewater treatment standards in the Florida Keys

Effluent (treated wastewater) concentration in milligrams per liter as an annual average*	BOD	TSS	TN	TP
BAT – applies to facilities with design capacities less than 100,000 gallons per day (generally, OSTDS and package wastewater treatment plants)	10	10	10	1
AWT – applies to facilities with design capacities equal to or greater	5	5	3	1

than 100,000 gallons per day (central wastewater treatment systems)				
---	--	--	--	--

*BOD = Biochemical Oxygen Demand; TSS = Total suspended solids; TN = Total nitrogen; TP = Total phosphorus. One milligram per liter is equal to one part per million.

Section 381.0065 (4)(l), F.S., similarly requires onsite sewage treatment and disposal systems (e.g., septic tanks) to comply with the BAT standards listed in Table 1 or, in the case of total nitrogen, a certified technology-based standard of 70% nitrogen removal, by the 2015 deadline. The technology-based standard was added during the 2013 legislative session through passage of HB 375 (now chapter 2013-079, L.O.F.). That legislation also extended the time property owners, who have already spent money on improved onsite systems, are allowed before they must connect to central wastewater systems. Most private entities with package plants and homeowners with septic tanks will ultimately rely on connecting to local government centralized systems to comply with the December 2015 deadline.

Status of Wastewater Facilities and Connections

Once the central systems have been completed, the majority of wastewater service in the Florida Keys will be provided by local governments. The current status of facilities is summarized below.

Upper Keys

Service is or will be provided primarily by the Key Largo Wastewater Treatment District (Key Largo), Islamorada and Layton.

Currently the area served by Key Largo begins where U.S. Highway 1 enters the Florida Keys at mile marker 107 and extends down Highway 1 to Tavernier at mile marker 91. See Figure 4 on the next page.

Service to additional areas to the north is being designed and will extend up County Road 905 to and including Charlemagne Boulevard. These facilities are expected to be completed in February 2014.

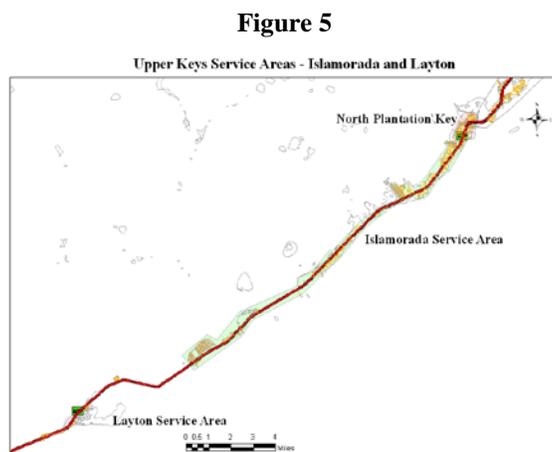
Figure 4



Islamorada and Layton are located south of Key Largo. The Islamorada service area extends down U.S. 1 from mile marker 90 to mile marker 74. Currently, the only area with central wastewater service is on North Plantation Key just south of Tavernier. Once Islamorada's regional collection and transmission system is placed on line, treatment for this entire service area will be provided by Key Largo under a service agreement with Islamorada signed on May 22, 2012.

The service area for Layton currently includes the city itself and Long Key State Park, from mile marker 69 to 67. Expansion of the service area to incorporate the entire island of Long Key from mile marker 66 to 70 is to begin construction in early 2014.

East Long Key extends from mile marker 67 to 70. A collection and transmission system will be constructed to the Layton Wastewater Treatment Plant, which will be expanded to accommodate approximately 30,000 additional gallons of flow per day and modified to provide reclaimed water. West Long Key is located at mile marker 66. With the exception of the Outdoor Resorts Community, which is upgrading its package plant to BAT standards, the properties in this service area will be served by the Layton Wastewater Treatment Plant once the collection and transmission system is completed. See Figure 5 for the Islamorada and Layton service areas.



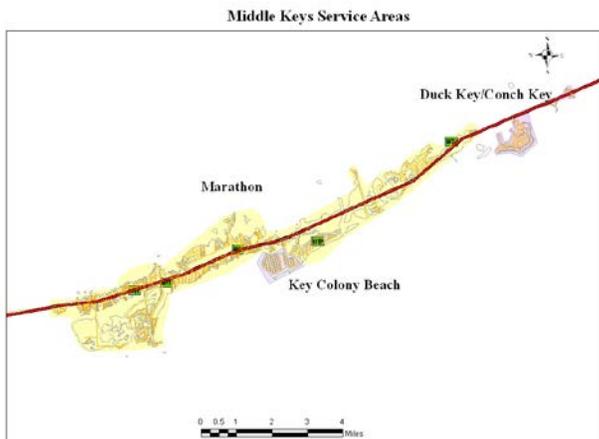
Middle Keys

Further down the Florida Keys are Conch Key, Duck Key, Marathon, and Key Colony Beach. Conch Key and Duck Key are served by a Monroe County treatment facility located in Hawks Cay resort. The service area for this system extends from mile marker 63 to mile marker 60.

Marathon divided its facilities into multiple service areas as a cost saving measure. There are seven service areas from mile marker 60 to mile marker 47, which are served by five wastewater treatment plants.

The third local government providing wastewater service in the middle keys is Key Colony Beach, accessed via a causeway south of mile marker 54, which built central wastewater facilities many years ago. See figure 6 for the service areas in the Middle Keys.

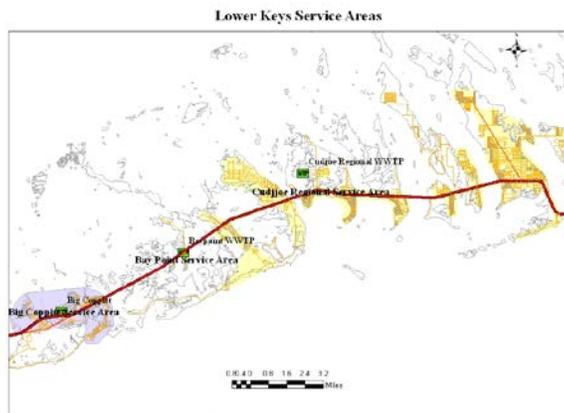
Figure 6



Lower Keys

The Lower Keys, excluding Key West and Key West Resort Utilities (including treatment for Stock Island), are served by four Monroe County treatment facilities: the Big Coppitt, Bay Point and Key Haven wastewater systems, and the Cudjoe regional wastewater system. The Cudjoe service area stretches from mile marker 33 to mile marker 16; Bay Point is at mile marker 15; the Big Coppitt system extends from mile marker 12 to mile marker 8; and Key Haven is located at mile marker 5.5. Figure 7 identifies the Lower Keys service areas.

Figure 7



Remaining Construction

Construction of wastewater collection, treatment and disposal facilities necessary to meet the December 31, 2015 deadline is essentially complete for systems serving Key Largo and Layton in the Upper Keys, Marathon, Conch Key/Duck Key in the Middle Keys, Bay Point, and Big Coppitt.

The Layton Wastewater Treatment Plant will be expanded to accommodate flows from East Long Key and West Long Key and modified to provide reclaimed water. Transmission and collection systems will be constructed to deliver flows to the plant. Construction is anticipated to begin in 2014.

In Islamorada, the system serving North Plantation Key is complete and in operation. Islamorada has entered into a design-build contract to construct a collection and transmission system to serve the rest of the Village. Construction is underway in Middle and South Plantation Key. Construction of the collection systems on Windley, Upper Matecumbe, and Lower Matecumbe keys will begin as soon as the designs are complete and the required permits are obtained, all of which is anticipated by the end of 2013. As already noted, treatment for Islamorada will be provided by the advanced wastewater treatment plant operated by Key Largo. The transmission main to Key Largo is under construction. All facilities in Islamorada are scheduled to be completed by December 2015.

Key Colony Beach invested in a centralized wastewater treatment and disposal system many years ago. The plant is currently operating in a “secondary treatment” mode, which is less stringent than the treatment required by the December 2015 deadline. The plant is capable of operating as an advanced treatment facility to meet the statutory requirements and Key Colony Beach is prepared to make the conversion, including replacing the existing membrane system. Because Key Colony Beach planned and built its facilities early on, the community is not included in the Monroe County Master Plan and has not been a focus of the Area of Critical State Concern work program.

Construction on Monroe County’s Cudjoe regional system began in January 2013 with construction of the advanced wastewater treatment facility and the “inner islands” collection system. The “outer islands” collection system will be built through a design-build contract. All facilities are expected to be complete by early 2016, but substantial completion and start-up for the last phases of the collection system are scheduled for December 2015. The treatment facilities for the regional system are expected to be substantially complete and in operation by January 2015.

The Florida Keys Aqueduct Authority acquired the aging Key Haven Wastewater Treatment Plant from the Key Haven Wastewater Utility in 2009. The plant does not currently meet BAT standards and collection system testing and analysis indicate adverse inflow and infiltration issues. The collection system will be refurbished and the plant will be abandoned with flows being directed to one of the neighboring compliant treatment plants. Construction is slated to begin in 2014. Table 2 summarizes service area progress.

Table 2 – Wastewater Project Status by Service Area

Project	General Comments
Key Largo WWTD	The WWTP in operation and meeting standards. The collection system and transmission mains are essentially complete and service is available to almost all potential customers. Some outlying areas are still under construction.
Islamorada	North Plantation Key is complete and in operation. The collection system for Middle and South Plantation Key is under construction. The collection system for the rest of Islamorada is currently being designed and constructed as part of the design/build contract. All treatment will eventually be done at the KLWTD WWTP.
East Long Key	The project is in the design phase. A collection and transmission system will be constructed to the Layton Wastewater Treatment Plant, which will be expanded to accommodate the flow and upgraded to allow for utilization of reclaimed water. Construction is anticipated to begin in 2014.
Layton	Complete and in operation.
West Long Key	The project is in the planning phase. A collection system is proposed to be constructed to deliver flows from West Long Key residents and businesses, excluding the Outdoor Resorts Community, to the Layton Wastewater Treatment Plant. Construction is anticipated to begin in 2014.
Marathon	Phase One complete, consisting of Wastewater Service Areas 1 and 3-7. Phase Two consists of 0.1 MGD plant and wastewater collection system equipment and infrastructure for connections that were value-engineered out of Phase One because properties were vacant or required utility easements were not in place at the time of construction. Phase Two also includes extensions to the reclaimed water distribution system and a maintenance facility.
Conch Key, Duck Key, and Hawk's Cay	Collection system complete - wastewater is pumped and treated at Hawks Cay.
Key Colony Beach	Centralized wastewater facilities completed before 2000. The plant currently operates at "secondary treatment" and can meet the advanced treatment requirements of the 2015 deadline with chemical addition. Note that the membrane system for this membrane bioreactor facility is at the end of its useful life and is in need of replacement.
Key Haven	The collection system will be refurbished to correct extensive inflow and infiltration and the treatment plant will be abandoned with flow directed to one of the neighboring compliant plants. Construction is expected to begin in 2014.
Cudjoe Regional	Construction of the WWTP and the inner islands collection system began on 1/24/13. The outer islands collection system is currently in design.
Bay Point	Complete and in operation.
Big Coppitt Regional	Complete and in operation.
Stock Island	The collection system is mostly complete, with only a small portion that is expected to be constructed in the near future.

Connection to Available Wastewater Facilities

When the Master Plan was developed, potential service areas were evaluated based on “equivalent dwelling units,” or EDUs. In this way, single-family dwellings, multi-family dwellings, businesses and other potential service units could be equalized for analytical purposes. According to page 52 of the Master Plan, an EDU represented 145 gallons per day of wastewater. Connection of EDUs serves as a general gauge of progress in achieving state and local water quality improvement objectives in the Keys.

It should be noted that as detailed planning, design and construction have progressed, there have been changes in the determination of EDUs, and even the equivalent value of EDUs, to be connected to central wastewater service. Some changes are based on engineering choices, but a significant factor has been the decline in Monroe County’s population since the time of the Master Plan. According to the U.S. Census, population decreased by about 8% between 2000 and 2010. Most of this decline, both in absolute number and by percentage, occurred outside Key West. (It appears the County’s population is once again on the rise, with about a 2.4% jump between 2010 and 2012.⁶) For these reasons, the characterizations of EDU connections that follow are an approximation.

About 50% percent of projected EDUs have been connected to date. (This figure excludes Key West and Key Colony Beach, which were completely sewered many years ago.) Some 64% of the EDUs have central wastewater service available, meaning that connections are lagging somewhat behind service availability. See Table 3 for details.

Table 3 – Equivalent Dwelling Unit (EDU) Status by Service Area (Estimate)

Project	EDUs	Connected ⁷	Project Complete – Being Connected	Project Under Construction	Project in Planning or Design
Key Largo Wastewater Treatment District	14,572	11,923	2,649	146	0
Islamorada	7,556	1,055	648	5,853	0
East Long Key	225	0	0	0	225
Layton	351	351	0	0	0
West Long Key	72	0	0	0	72
Marathon*	10,180	6,921	2,260	0	599
Conch Key, Duck Key, Hawk's Cay	1,454	1,051	403	0	0
Cudjoe Regional	8,800	0	0	8,800	0
Bay Point	437	420	17	0	0
Big Coppitt Regional	1,713	1,315	398	0	0
Key Haven	450	0	0	0	450

⁶ The population data and other demographic attributed to the Census have been gathered through the Census’s online portal at <http://www.census.gov/>.

⁷ As noted in the text, there have been changes in EDUs and projected EDU connections over time, and this will likely continue, if only marginally, until completion of remaining facilities. For that reason, the total of connected and to-be-connected EDUs does not equal the total EDUs estimated in the Master Plan.

Bahia Honda	377	0	0	0	377
Totals	46,187	23,036	6,375	14,799	1,723

**Includes Phase Two treatment plant capacity expansion.*

Project Costs

As outlined in the project status section, most wastewater facilities in the Keys have been completed and final costs are available. In securing cost estimates, the Department has relied on the various local governments for information on the facilities, or components of facilities, that have been financed locally or with funding from other agencies. The Department can only directly document the costs associated with the grant and loan funding it has provided, and it has verified this information with the local governments as well.

Two major projects remain to achieve compliance with the December 2015 deadline: the Islamorada regional collection and transmission system and the Monroe County Cudjoe regional wastewater facilities. Until construction is completed, cost estimates are based on construction contract documents, which can change over time for a variety of circumstances. The contract to construct and operate the Islamorada project was awarded in August 2012, with an estimated cost of \$141 million. The cost for the Monroe County Cudjoe regional project is estimated at \$137.4 million.

Table 4 summarizes the best available information on project costs for all of the facilities in the Area of Critical State Concern. Original planning costs and some design costs are not available to the Department. Figure 8 illustrates the current estimated costs based on completed construction of most facilities and executed contracts for construction of the Islamorada and Monroe County-Cudjoe facilities.

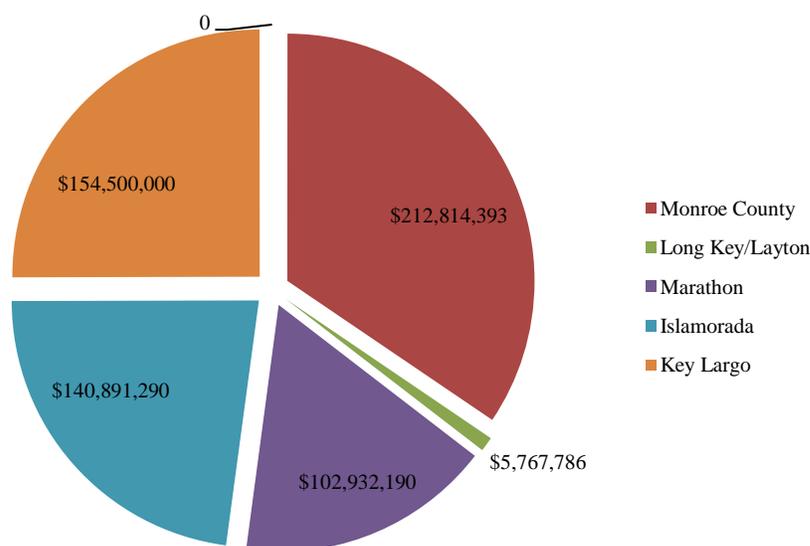
Table 4 – Estimated Project Costs by Local Government

Planning (Service) Area	Estimated Cost in Master Plan⁸	Master Plan Update 11-07	Estimated Current Costs⁹
Monroe County	\$124,012,000	\$302,600,000	\$212,814,393
Long Key/Layton	\$3,540,000	\$6,480,000	\$5,767,786
Marathon	\$77,480,000	\$110,650,000	\$102,932,190
Islamorada	\$75,670,000	\$169,700,000	\$140,891,290
Key Largo	\$119,360,000	\$248,290,000	\$154,500,000
Totals	\$400,062,000	\$837,720,000	\$616,905,659

⁸ The Master Plan was prepared in 2000. Master Plan costs adjusted to 2013 dollars equal \$541,154,240.

⁹ The wide variation in estimated and actual costs is attributable to a variety of factors, including macroeconomic circumstances affecting equipment and labor costs and adjustments in service areas and project configurations between the planning and construction phases.

Figure 8 – Estimated Project Costs, Completed and Ongoing Projects



State and Federal Grant Funding

Since 2000, based on the best information available¹⁰, communities in the Florida Keys have received approximately \$174 million in grants for wastewater projects from various state and federal sources (see Table 5 and Figure 9). These grants have come from direct legislative line item appropriations provided primarily through the Department’s budgets. Grants have also come from other entities, including the South Florida Water Management District (SFWMD), the Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers (USACOE), and the U.S. Environmental Protection Agency (EPA).

The award of state grant funds has been governed by different proviso language in the General Appropriations Act from year to year. In some years, proviso set forth the distribution of money. In other years, proviso required the local governments to agree on a distribution, including consideration of certain criteria upon which to base the agreement. Grants awarded by the SFWMD and the several federal agencies were determined based on the programmatic criteria of those agencies, whether related to water quality, economic or emergency response considerations.

The most recent grant funding directly related to meeting the wastewater compliance deadline of December 2015 was derived from the issuance of \$50 million in Everglades bonds pursuant to s. 215.619, F.S., dated April 25, 2013.¹¹ This section of law authorizes up to \$200 million in bonds, limited to \$50 million per fiscal year, to fund the Florida Keys Area of Critical State Concern protection

¹⁰ DEP can directly account for funds that the agency has awarded. The amounts for other grant funds are based on information from the respective agencies or from the local government recipients of the grants.

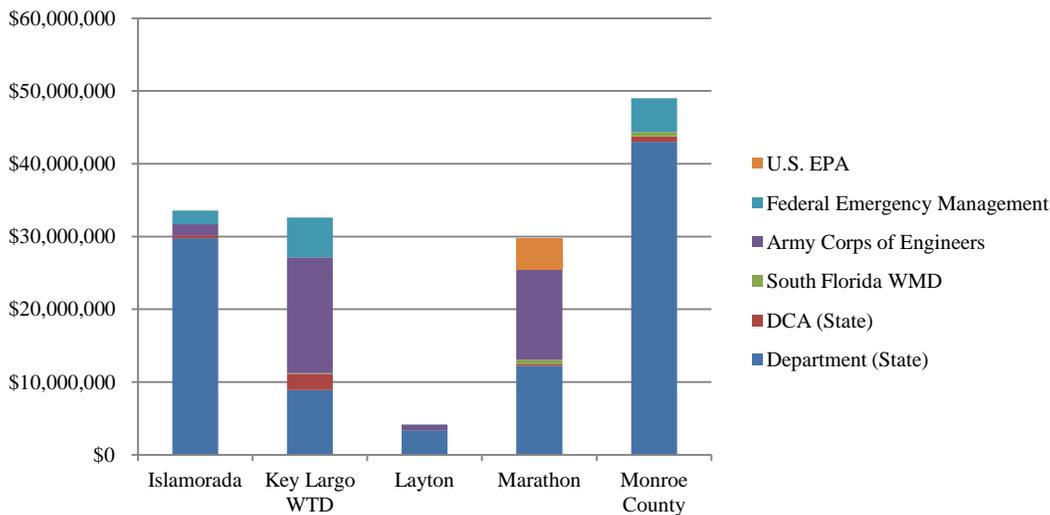
¹¹ State of Florida, Department of Environmental Protection, Everglades Restoration Revenue Bonds, Series 2013A \$46,445,000 (Dated 04/25/2013). Official Statement available: https://www.sbafla.com/fsb/portals/bondfinance/archive/OfficialStmts/EnvironmentalPrgrm/Everglades/EVERGLADES2013A_FOS.pdf

program. The 2012-13 General Appropriations Act appropriated the first year’s estimated debt service along with budget for receipt of bond proceeds, and included proviso establishing that the proceeds would be split between Monroe County (60%) and Islamorada (40%). The Department entered into grant agreements awarding these funds on June 13, 2013 and July 16, 2013, respectively.

Table 5 – Estimated State and Federal Grants since 2000

Local Government	Department (State)	DCA (State)	South Florida WMD	Army Corps of Engineers	Federal Emergency Management	U.S. EPA	Total Grant Funds
Islamorada	\$29,763,760	\$ 381,730	\$0	\$1,560,430	\$1,844,910	\$0	\$ 33,550,830
Key Largo WTD	\$8,885,312	\$ 2,239,286	\$100,000	\$15,904,906	\$5,485,714	\$0	\$ 32,251,596
Layton	\$3,350,000	\$ 9,000	\$0	\$782,238	\$ 56,000	\$0	\$ 4,197,238
Marathon	\$12,213,758	\$ 214,000	\$ 653,200	\$12,345,669	\$ -	\$ 4,326,000	\$ 29,752,627
Monroe County	\$43,028,445	\$ 735,000	\$ 613,400	\$0	\$4,650,000	\$0	\$ 49,026,845
Totals	\$97,741,275	\$3,579,016	\$1,366,600	\$30,593,243	\$12,036,624	\$4,326,000	\$148,779,136

Figure 9 – Estimated State and Federal Grants since 2000



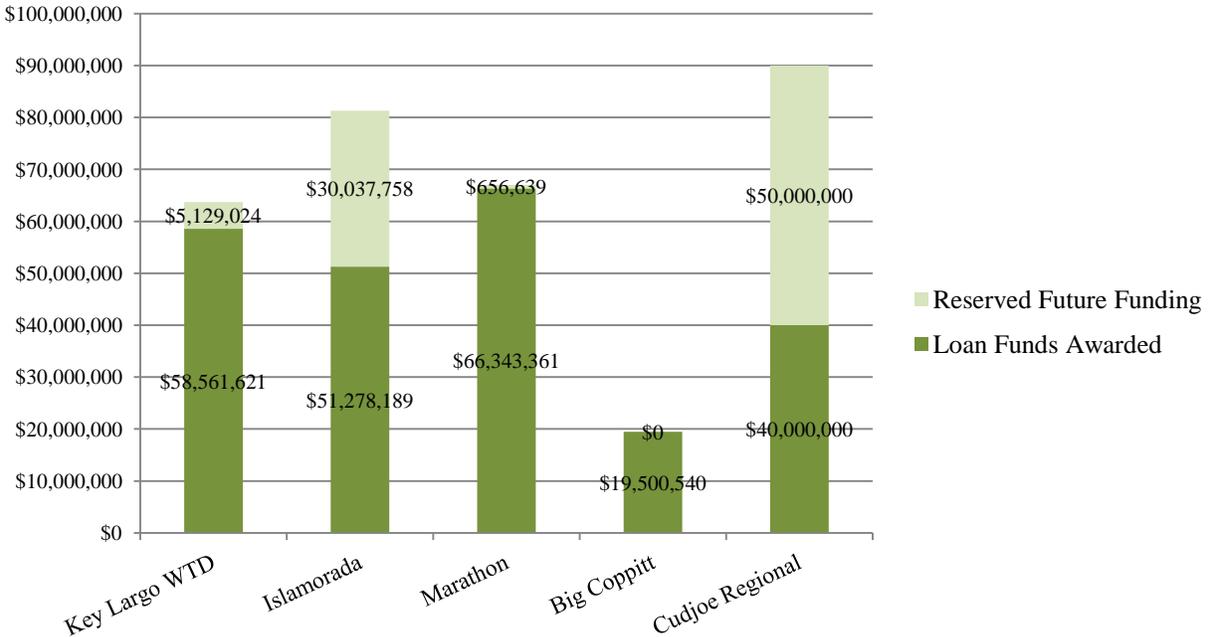
Loan Funding

The Department’s Clean Water State Revolving Fund (SRF) loan program has been financing projects in Monroe County since an initial loan to Key Colony Beach on July 15, 1998. Key West received a loan on February 9, 2001. All SRF loans are awarded at substantially below-market interest rates. At present, the subsidy on interest rates is primarily based on the economic wherewithal of the recipient community based on an “affordability index.”

Key Largo, Marathon, Islamorada, and Monroe County have been active in the SRF program more recently. Figure 10 illustrates SRF loan funding to these communities as of July 2013. The graph includes loans awarded and reserved future funding. At present, large loan commitments remain for Islamorada (\$30 million) and the Monroe County Cudjoe project (\$50 million). The communities may opt not to take all of the future loans based on changing project costs and receipt of other funds, if any.

Figure 10

Clean Water State Revolving Fund Loans



It is worth noting that Monroe County and its local governments have pursued and received more SRF loan funding since 2000 than all but one other county (Lee). Because participation in the loan program is voluntary, the reasons local governments choose to do so vary. Taking on the debt burden associated with SRF loans—even though they are subsidized and substantially less costly than conventional financing—requires careful consideration. Participation in the program may reflect local demand for infrastructure or the need to build infrastructure to meet general or specific federal or state requirements. SRF funds may be borrowed to finance entire projects or they may be part of a portfolio of financing. Thus, comparing communities should be considered in that light. Figure 11 identifies the 10 areas (county and local governments within county) receiving the most SRF loan dollars since 2000.

Figure 11

SRF Loan Amount

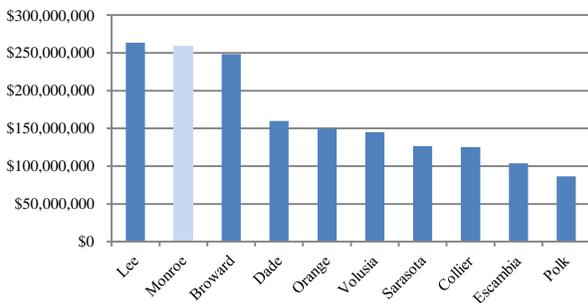
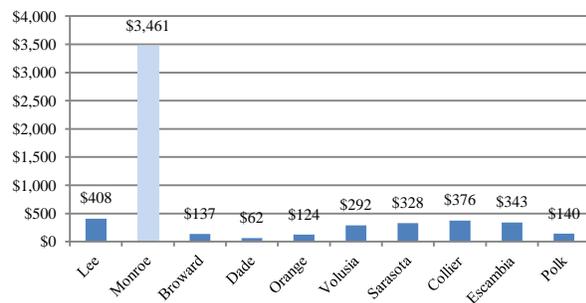


Figure 12

Loan Funding per Person



Among these top ten SRF program participant counties, Monroe County communities have received more loan funding per person (Figure 12). (Key West received a relatively small share of these loan dollars.) While this fact means that Monroe County residents have benefited from much less expensive project financing than would be the case in the private market, it also means that they have taken on substantial obligations through their costs for wastewater service to enable that debt to be paid off (see Wastewater Rates, Fees and Charges, below).

Wastewater Funding Impacts

The Governor’s veto letter calls for an evaluation “of the uses and impact of prior state funding” and “recommendations for actions needed to address the continued funding.” Impacts to date and future demand cannot be measured with any single metric because of the differences in projects, implementation timing, the economic dynamics in effect when funding was received, the underlying economic differences among the communities, and a host of other factors. In order to provide context for considering the need for future funding, this report presents several measures of assistance and local economic circumstances in this section and those that follow.

The simplest way to consider the affect of financial assistance is to compare all forms of subsidies with the total estimated project costs for each community (see Table 6). The last column identifies Department awarded or reserved low-interest SRF loan funding, which saves substantial money when compared to any form of conventional market or bank financing.

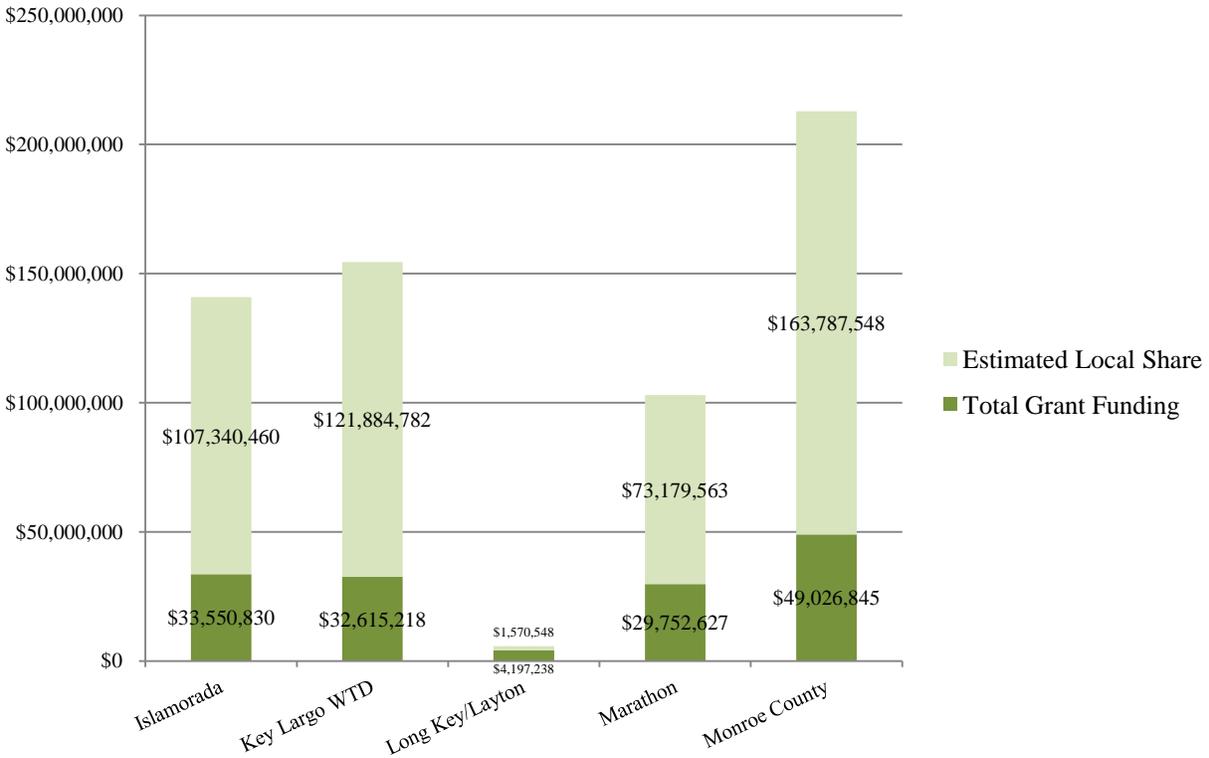
Table 6 – Comparison of Current Keys Project Costs to Estimated Financial Assistance since 2000

Local Government	Final or Current Project Costs	Estimated State Grant Funding	% of State Grant Funding	Estimated Other Grant Funding	Total Grant Funding	% of Total Grant Funding	Department SRF Low-Interest Loans ¹²
Islamorada	\$140,891,290	\$30,145,490	21.4%	\$3,405,340	\$33,550,830	23.8%	\$101,315,947
Key Largo	\$154,500,000	\$11,124,598	7.2%	\$21,490,620	\$32,615,218	23.1%	\$63,690,645
Long Key/Layton	\$5,767,786	\$3,359,000	58.2%	\$838,238	\$4,197,238	72.8%	\$0
Marathon	\$102,932,190	\$12,427,758	12.1%	\$17,324,869	\$29,752,627	28.9%	\$67,000,000
Monroe County	\$212,814,393	\$43,763,445	20.6%	\$5,263,400	\$49,026,845	23.0%	\$109,500,540
Totals	\$616,905,659	\$100,820,291	16.3%	\$48,322,467	\$149,142,758	24.2%	\$341,507,132

Figure 13 illustrates the relationship between the grant funding the Monroe County communities have received and their estimated local shares. It must be reiterated that these estimates are based on the best information available to the Department and have been verified wherever possible.

¹² As noted in the loan funding section, loans here include those already awarded and, for Islamorada and Monroe County, reserved future funding. Depending on project costs, timing and receipt of other funds, if any, they may decide not to take the reserved funds.

Figure 13
Keys Project Costs – Estimated Local Share and External Grant Funding



Economic Information

There are innumerable ways to characterize the economic circumstances of communities. Each one has limitations and biases. The best way to minimize these limitations and biases is to examine a number of different data sets for context.

Wastewater Rates, Fees and Charges

The cost of wastewater service is influenced by a wide variety of circumstances, including location, physical difficulty of building facilities and providing service, total population and population density, timing and economic circumstances, the ability of planning to anticipate and provide for growth, etc. Beyond the cost, the manner by which rate structures are established and individual rates, fees and other charges are assessed varies from community to community. In many communities, wastewater rates are combined with water use rates in one monthly fee. Thus, direct comparisons of rates, fees and charges from one community to another can be misleading. That fact should be kept in mind when considering the information in Table 7.

Table 7 – Monroe County Wastewater Rates

Service Area	Base Rate (standard meters)	User Charge per 1,000 gallons	Cost for 6,000 gallons	System Development Charge*	Notes
Stock Island	\$17.81	\$3.87	\$41.03	\$2,700	
Big Coppitt	\$27.05	\$10.24	\$88.49	\$4,500	
Bay Point	\$27.05	\$10.24	\$88.49	\$2,700	
Cudjoe Regional System	\$27.05	\$10.24	\$88.49	\$4,500	
Conch Key/Duck Key	\$27.05	\$10.24	\$88.49	\$4,500	\$4,500 is the SDC for the recently completed project serving 1,173 EDUs. The SDC for 281 EDUs connected in 2005 was \$2,700.
Key Haven	\$27.05	\$10.24	\$88.49	\$1,800	
Long Key/Layton	\$27.05	\$10.24	\$88.49	\$3,400	
Long Key East and West	\$27.05	\$10.24	\$88.49	TBD	
Marathon	\$35.97	\$8.06	\$84.33	\$4,681	
Islamorada Regional System	\$49.01	\$6.27	\$86.63	\$6,392	
Key Largo	\$33.60	\$5.27	\$65.22	\$5,700	Original SDC charges for Key Largo were \$4,770 and have incrementally increased over time. The average SDC is estimated at \$5,000.

*A system development charge is a one-time fee intended to cover the impact of each additional user on the system; these charges are sometimes called impact fees.

The rates for several other Florida communities for which data are readily available include:

- Tallahassee – \$16.50 customer charge; \$5.27 per 1,000 gallons (\$48.12 per 6,000 gallons).
- Apalachicola – \$12.00 residential base charge; \$3.30 per 1,000 gallons. As a result of financing, these rates are projected to go to \$18.81 base and \$5.16 per 1,000 gallons by 2018 (\$49.77 per 6,000 gallons).
- Lee County - \$16.27 single-family service charge; \$5.59 per 1,000 gallons (\$49.81 per 6,000 gallons).
- Collier County - \$26.94 service availability charge; \$3.79 per 1,000 gallons (\$49.68 per 6,000 gallons).

Unfortunately, the disparity in the way rates and fees are assessed and reported means that the information does not speak for itself. It is safe to say that the customer costs of wastewater service in the

Keys are more expensive than many if not most communities in Florida. The costs have been mitigated to a significant extent by state and federal grant funding as well as Clean Water SRF low-interest loans.

Demographics

Figures 14 – 21 illustrate select Census and Florida Department of Revenue (DOR) data. Certain local governments outside Monroe County are included for comparison because they appear to have some similarity to the Monroe County communities because of population or Area of Critical State Concern status. In all cases, overall State of Florida information is included for reference. Both the Census and DOR make much more data available that could be used to further refine the picture. Census data are available at www.census.gov/; Florida Department of Revenue information is available at <http://dor.myflorida.com/dor/>.

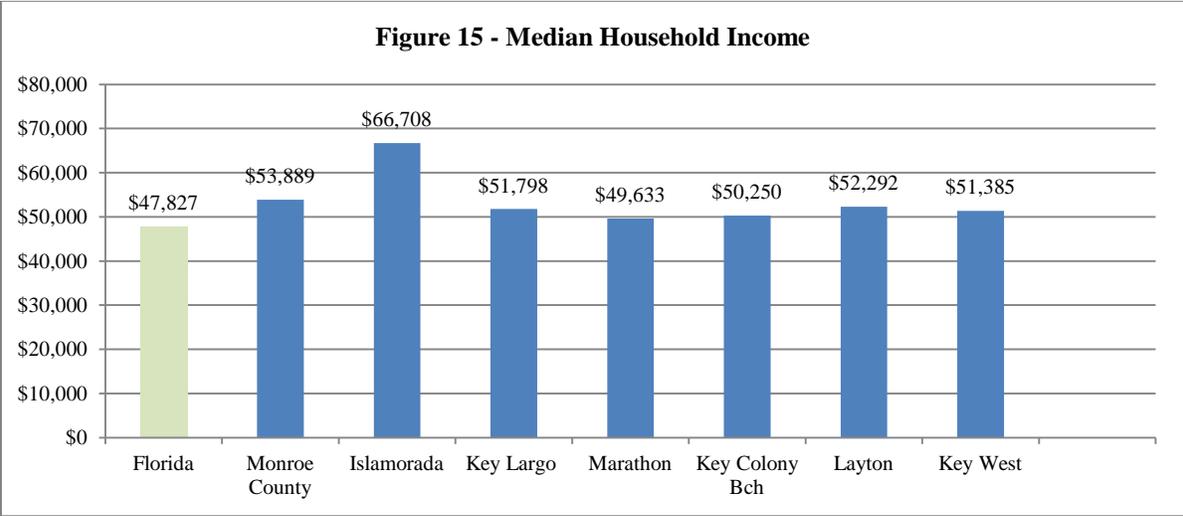
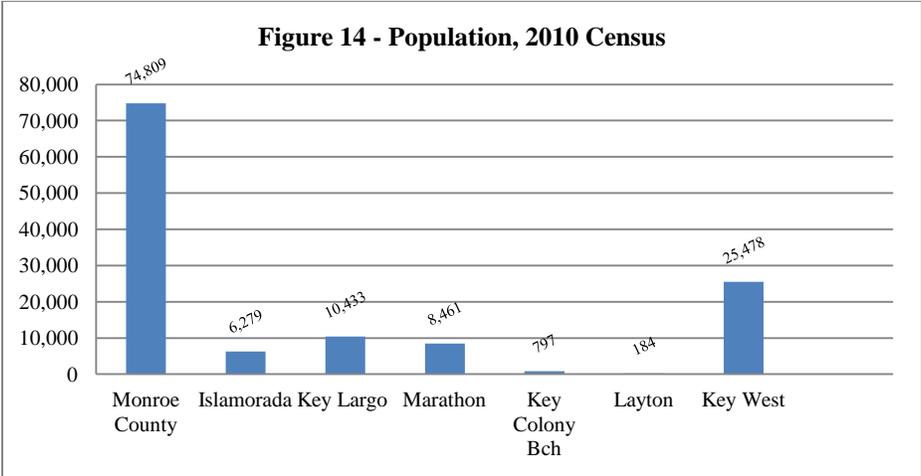


Figure 16 - Per Capita Income

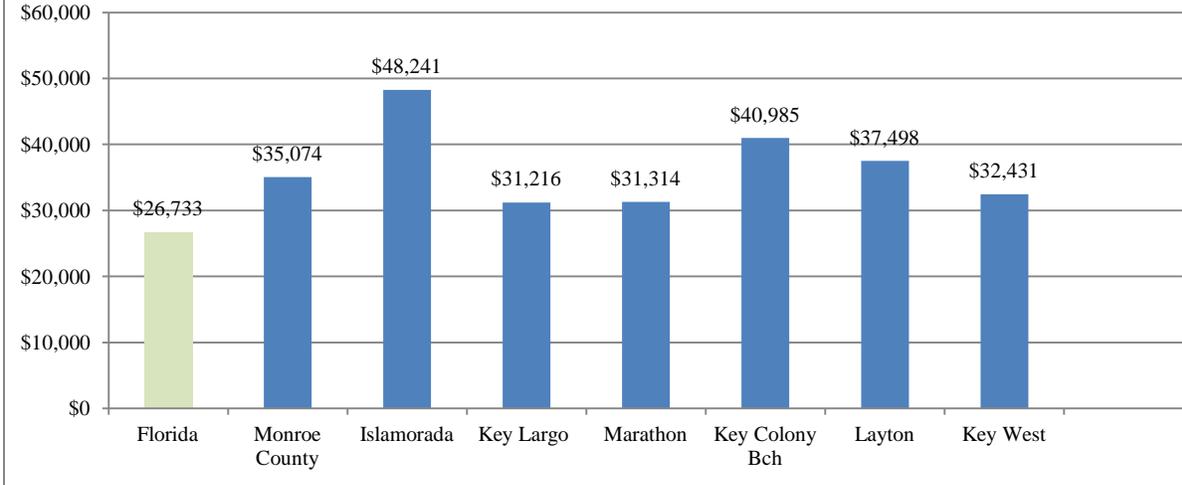
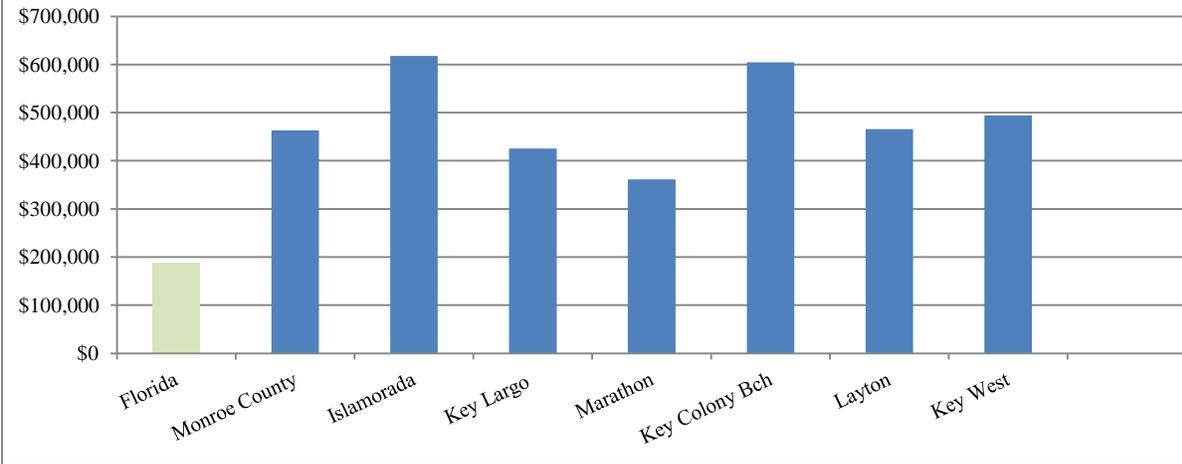
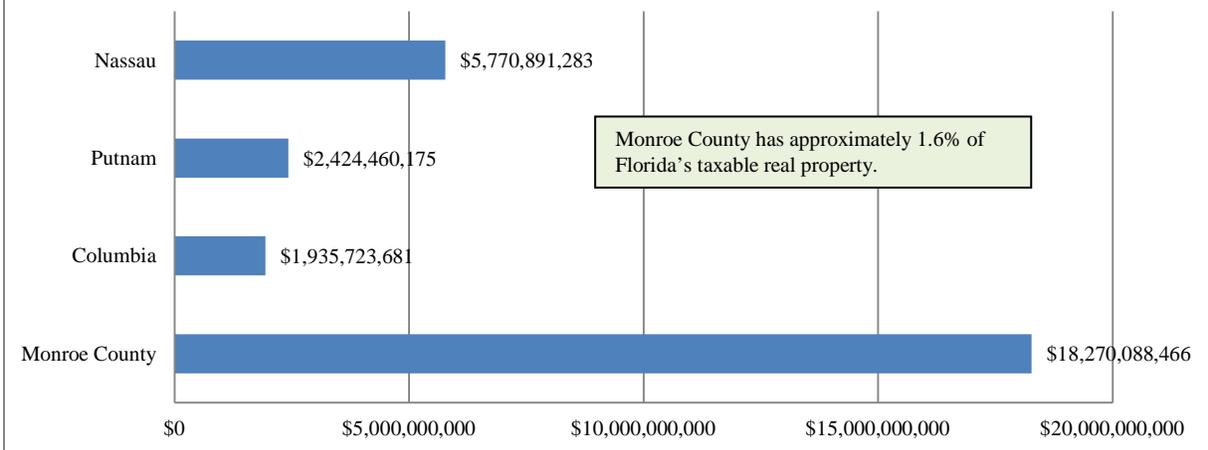
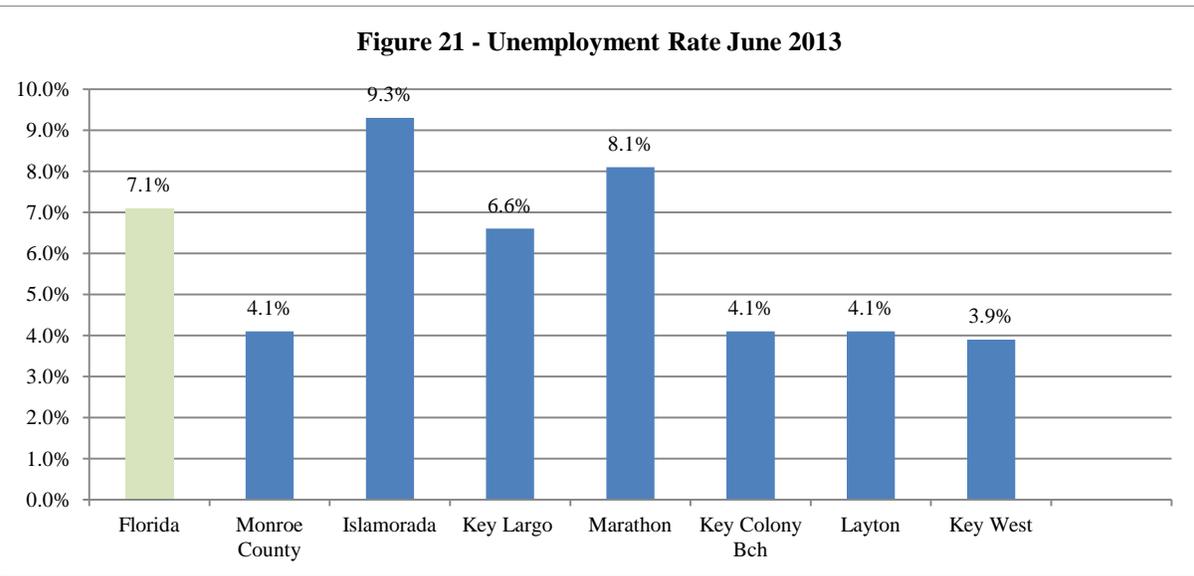
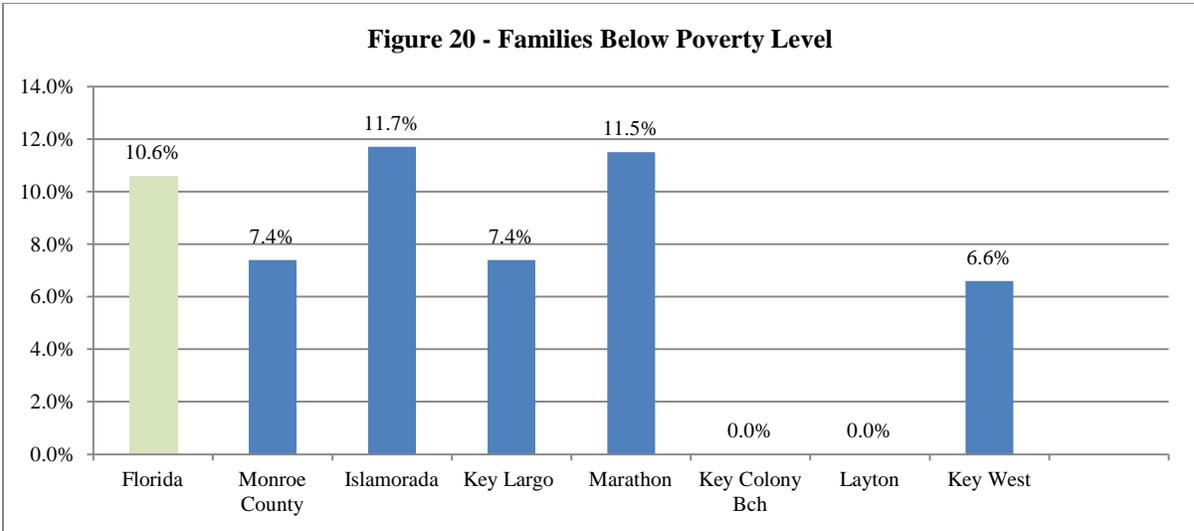
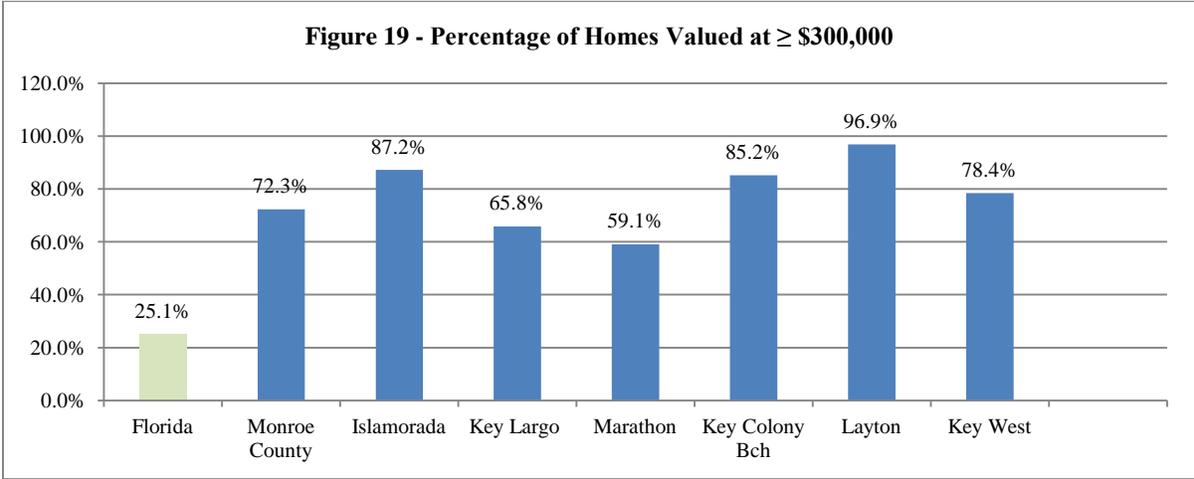


Figure 17 - Median Owner-Occupied Home Value



**Figure 18 - Taxable Real Property
Monroe County and Other Comparably Sized Counties in Florida**





Conclusions and Recommendations

This report has set forth information related to wastewater requirements, construction costs, funding, and economic and demographic information in the Florida Keys Area of Critical State Concern. The Governor's veto letter also charges the Department and Department of Economic Opportunity to recommend actions needed to address the continued funding of wastewater projects in the Florida Keys.

Clean Water State Revolving Fund

The Department continues to fund Keys projects through its Clean Water SRF loan program. Islamorada and Monroe County are in the middle of building large projects necessary to meeting the December 2015 wastewater treatment deadline and for which they have collectively been awarded \$91.3 million to date and could receive up to another \$100 million. Key Largo and Marathon are also on the SRF program's list for small increments of additional funding in addition to the \$125 million they have been awarded to date.

The SRF program remains open to the local governments in the Keys for other wastewater and stormwater projects, as it does to other communities across Florida. The program has a publicly adopted and federally approved priority system that allows projects to fairly compete based on their beneficial impact on public health and pollution abatement, particularly in Florida's priority waterbodies. Keys projects are always competitive in the program and likely to receive funding if funds are available.

Everglades Bonding Authority

Keys wastewater projects are also potentially eligible to receive additional funding for wastewater management projects from Everglades bond proceeds. Under s. 215.619(a)(2), F.S., the Legislature has authorized bonds—not to exceed \$200 million in total, limited to \$50 million per fiscal year—to fund the cost of constructing sewage collection, treatment, and disposal facilities in the Florida Keys Area of Critical State Concern. The Department is the designated agency to receive bond proceeds, if any, and enter into financial assistance agreements with the local governments to finance or refinance project costs.

The Legislature appropriated budget to the Department in 2012-13 for the purpose of obligating \$50 million in bond proceeds, which bonds were dated April 25, 2013 and which have been obligated to Islamorada and Monroe County. Therefore, under s. 215.619(a)(2), F.S., \$150 million of the \$200 million in authority remains to be appropriated should the Legislature choose to do so. The Division of Bond Finance is the appropriate entity for addressing technical questions about the mechanics of selling bonds and the significance of tax and other considerations associated with refinancing versus original financing.

Legislative Line Item Appropriations for Projects

The Legislature periodically appropriates money by budget line item for specific local governments or other entities. For example, for fiscal year 2013-14, the Legislature included several dozen such projects in the Department's budget, including \$1 million each for wastewater projects in Marathon and Key Largo.

Summary

The Department has identified several available state sources of project funding that could be applied to wastewater projects in Monroe County. One of those sources, previously authorized (but not fully appropriated) bond-related grant funds identified expressly for wastewater projects in the Keys, lies within the discretion of the Legislature to continue. The other two sources, Legislative line item appropriations and the Department's own Clean Water SRF program, invoke the Department's statutorily defined role as an objective reviewer of potential projects from communities across the state.

Appendix D

**DEPARTMENT OF ENVIRONMENTAL
PROTECTION**
Office of the Secretary Correspondence Control

Correspond Number	Date Received	Date Due
EO-63054	11/01/13	11/18/13

Name: Margaret Blank
Key Largo
Organization: Wastewater Treatment District
Address: P.O. Box 491
City/State/Zip: Key Largo, FL 33037
County: Monroe
Phone:
Email:

Assigned to: Water Resource Management

Instructions: Respond For Secretary

The signature is at the discretion of the Division/District/Office Director; copy Public Services with the response.

Comments:

Route a draft response through your Deputy Secretary to the Deputy Chief of Staff for the Secretary's review prior to sending out the response. If the assignment cannot be completed within the allotted time, please contact the Office of Public Services to request an extension.

Also, if you are not able to send a response by the initial deadline, please contact the correspondent to acknowledge receipt of their letter within the first week and let them know a response is being prepared. Please let PS know that you have done so. If the response is handled by phone, e-mail PS a brief summary of how the issue was handled.

REMINDER: The due date above is when the letter needs to be mailed. You need to allow time for review by the Deputy Secretary and Secretary before the due date.

Assigned by Joni Scott, Office of Citizen Services 850/245-2118 Ext. 4123, SC - Ext. 4123, Fax: 850/245-2128, Email: Joni.Scott@dep.state.fl.us

If there are any concerns with assignment, due date, etc., the OCS analyst listed above should be contacted immediately.

Key Largo Wastewater Treatment District

98880 Overseas Highway – PO Box 491
Key Largo, FL 33037
Phone: (305) 451-4019 Fax: (305) 453-5807
www.klwtd.com



October 29, 2013

Secretary Herschel T. Vinyard, Jr.
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, M.S. 49
Tallahassee, Florida 32399-3000

Dear Mr. Vinyard;

I want to thank you and your staff for preparing the draft "Florida Keys History and Impact of Wastewater Project Funding" report dated October 10, 2013. It gives an accurate overview of the project to date.

I would like to take this opportunity to offer some comments and clarifications.

On page 3, the last paragraph, the estimated cost of the facilities constructed to date or that remain to be built is about \$620 million. I used \$645 million. The difference appears to be that Ocean Reef was excluded from the FDEP report. That project cost around \$32 million. I have no opinion as to whether Ocean Reef should be included or not. I simply wanted to explain where the difference in estimated cost comes from.

Throughout the document, you point out the availability of State Revolving Fund (SRF) Loans. The Key Largo Wastewater Treatment District (KLWTD) has certainly made use of this form of funding. Not only are the interest rates extremely reasonable, but the review process for securing these funds encourages wise planning and spending. You also mention the downside of excessive borrowing, which is certainly a side effect of this under-funded mandate.

On page 6, the last paragraph, you say, "Excessive levels of nutrients in the environment stress marine life and make them prone to disease and death." In fact, researchers at Rollins College and the University of Georgia completed a study that linked a bacteria found in under-treated sewage with a disease that kills elk horn coral. The researchers tested the influent and effluent at the Key West WWTP and the Key Largo WWTP. The bacteria were found in the influent but not in the effluent at both plants. A copy of an article summarizing the research is attached.

Figure 13 on page 22 gives a good overall funding picture. However, I think that there are some nuances that it fails to capture. Please see Figure 13-1 and Table 13-1 attached. You correctly point out that it is very difficult to compare the financial situations of each of the project. They are like apples and oranges to some extent. Nevertheless, I think that a few points need to be made.

1. County-wide funding through the sales tax is a significant funding source. Ultimately, it will account for 20% of all sewer project funding assuming that no additional State or Federal money is received. Although the tax is collected County-wide it will primarily be distributed to a few

connecting is an improvement in environmental balance

unincorporated areas. Figure 13 does not distinguish between this funding source and those that come strictly from the local service area. As a result the local contribution from those areas that receive sales tax money is over-stated and the contribution from the other areas, which pay but do not benefit from the tax to the same extent, is under-stated.

2. I acknowledge the difficulty when it comes to determining the contribution per EDU. In Key Largo's case, some of the local contribution comes from assessments and some comes from rates. Approximately 16,800 EDU's were assessed in the service area; however, approximately 2,300 of those are undeveloped parcels. This means that the 14,500 EDU's that are currently being billed for wastewater make an additional contribution through rates. As a result the calculation becomes quite complex and difficult to compare to other areas.
3. Because of the difficulty mentioned in item 2 above, I used the permitted capacity of each area to determine an approximate per EDU cost. This is a more straightforward way to compare the financial impact of the projects on the customers in the various local service areas. While it may not be precise, I believe it gives an accurate overall picture of where the needs are.
4. Note the wide variations in the local contributions per EDU – from a low of about \$2,400 per EDU to a high of over \$13,000 per EDU. When the local entities negotiated the interlocal agreement to distribute the remaining \$150 million of the Mayfield Grant, one goal was to alleviate this disparity. Each entity has its own unique circumstances, such as access to other funding sources, costs associated with interim loans, characteristics of the service area, etc. These factors were all considered during negotiations.

Figure 15 on page 24 compares median household income in various areas of the Keys to the state of Florida. I believe it would be more informative to adjust these figures to reflect the cost of living in the various areas. The cost of living indices come from Sperling's Best Places (<http://www.bestplaces.net/>). Please see Table 15-1 and Figure 15-1 attached. Note that when cost of living differences are taken into account the median household income in the Florida Keys is less than that for Florida as a whole. The cost of living is higher than it is in other areas primarily because of the high cost of housing. The cost of the sewer projects only adds to the burdens already faced by local property owners, renters and businesses.

Figure 21 on page 26 compares unemployment rates for the various service areas. It is interesting to note that the three areas with highest per EDU contributions (Key Largo, Marathon and Islamorada) also have the highest unemployment rates. Because of high costs, lack of funding or some combination of the two, these areas are obligated to pass on the costs of the sewer project to local residents and businesses. It seems probable that this is having a negative impact on the economy in these areas. Additional evidence is provided in Figure 21-1 attached. This data was taken from the annual Economic Survey conducted by the Census Bureau. Note that between 2004 and 2011, the number of employees in Key Largo and Islamorada decreased by 17% and 18% respectively. In Marathon it was 31%. The overall decrease for Monroe County was 15%. The decrease in Key West and the Lower Keys was 8%. The overall decrease for the State of Florida was 1.9%. This data seems to suggest that the Keys were hard hit by the economic downturn which overlapped with a number of the sewer projects.

The EPA has developed affordability criteria for water, wastewater and storm water projects. The preliminary screening tool shows that wastewater assessments and rates result in a Residential Indicator

Key Largo Wastewater Treatment District

98880 Overseas Highway – PO Box 491
Key Largo, FL 33037
Phone: (305) 451-4019 Fax: (305) 453-5807
www.klwtd.com



(RI) of over 2% for most of the Florida Keys. A project with an RI of 2% or greater is considered to have a "large economic impact" on the community. Table 21-2 calculates the RI using unadjusted Median Household Income (MHI). When the MHI is adjusted for cost-of-living, some areas in the Keys have an RI of over 3%. See Table 21-3. It should also be noted that the average assessment is a rough calculation using principal amounts only. In Key Largo, for example, the annual average assessment payment is approximately \$400 per year when interest and fees are included, which would push the RI up even further.

On page 27, second to last paragraph, thank you for acknowledging that the Mayfield Grant was meant to be used for not only for financing but also for refinancing sewer projects in the Florida Keys. Obviously, if all the entities had continued to wait for grant funding, none of the projects would ever have been built. Presumably, it was never the intention of the State to punish those entities that went forward with the mandated sewer system.

Again, thank you for the effort that obviously went into this report. FDEP has always worked hard on behalf of the KLWTD and the other entities of the Keys. We sincerely appreciate your efforts. The data presented tracks closely with my own observations and findings. I offer my comments as a supplement to what has been provided in the report.

Sincerely,

Margaret Blank, PE
General Manager
Key Largo Wastewater Treatment District

Cc: Rep. Holly Raschein
Noah Valenstein
Timothy Banks
Cynthia Henderson

YALE ENVIRONMENT REVIEW



© MarkDoh/Veer

Untreated wastewater kills coral

By LEIGH WHELPTON - APRIL 30, 2012

Coral reefs are one of the most critically endangered ecosystems on the planet, and untreated human waste is contributing to their decline.

Elkhorn coral plays an important role in the growth and maintenance of coral reefs, and it is disappearing -- bad news, as coral reefs are home to a quarter of all marine fish species and provide food, coastal protection, and livelihood to 500 million people. Although elkhorn coral was once common in the Caribbean, it is now listed under the United States Endangered Species Act, in large part because of a coral disease called white pox. It causes white patches, tissue loss, and even death in elkhorn coral.

Although previously poorly understood, it has now been discovered that the bacterium responsible for white pox is a human pathogen that can pass from humans to coral reefs through untreated wastewater. This is the first time anyone has ever observed marine "reverse zoonosis," a process where humans pass disease to marine wildlife rather than wildlife transferring pathogens to humans. Essentially, it means that our untreated waste is killing coral reefs.

These findings came from a recent study from Rollins College and the University of Georgia published in the journal *PLoS ONE*. While studying a 2003 disease outbreak, researchers discovered a new and unique strain of the white pox coral pathogen, called PDR60. This strain was found on the reef in diseased corals, healthy non-host corals, and in a coral predatory snail, but surprisingly, it was also found in untreated human sewage. By following up on these findings through controlled experiments, the authors found that this disease strain is indeed a coral pathogen, and, more importantly, that it comes from human waste.

To obtain their findings, the authors tested the ability of PDR60 to infect elkhorn coral. They isolated the disease from reefs and wastewater sources. These included infected elkhorn coral, round starlet coral, and short coral-shell snails, along with untreated wastewater. As part of their experiments, the authors inoculated healthy elkhorn coral in aquariums with the disease strain. In as little as four days, PDR60 from untreated wastewater and from infected elkhorn coral caused signs of white pox. Not only do these results show that the unique disease strain is infectious, but that humans are the source.

This study provides direct evidence that our public health policies and practices have impacts on environmental health -- in this case, on the survival of coral reefs. These findings are not only of concern to public health, but to Caribbean economic systems based in fisheries and tourism. The research calls for a review of political and economic investments into wastewater treatment infrastructure to ensure the future of the elkhorn coral and our critically endangered coral reefs.

Share

Original Paper

Sutherland KP, Shaban S, Joyner JL, Porter JW, Lipp EK (2011) "[Human Pathogen Shown to Cause Disease in the Threatened Elkhorn Coral *Acropora palmata*](#)," *PLoS ONE* 6, no. 8 (2011): e23468.
doi:10.1371/journal.pone.0023468

Further Reading

Burke L, Bryant D, McManus J, and Spalding M (1998) "[Reefs at Risk](#)," *World Resources Institute (WRI)*: 56.

Burke L, Reynter K, Spalding M, and Perry A (2011) "[Reefs at Risk Revisited](#)," *World Resources Institute (WRI)*: 130.

Wilkinson C (2004). "Status of Coral Reefs of the World: 2004," *Australian Institute of Marine Science*, vol. 1: p301

Topics

- [Ecosystem Conservation](#)
- [Water Resources](#)

TABLE 13-1: APPROXIMATE LOCAL CONTRIBUTION FROM EACH LOCAL SERVICE AREA

	Project Cost	State and Federal	County-wide	Local	Permitted Capacity	No. EDU's	Local Contribution per EDU
Islamorada	\$ 140,891,290	\$ 33,550,830	\$ -	\$ 107,340,460	1,150,000	7,931	\$ 13,534
Key Largo	\$ 154,500,000	\$ 32,615,218	\$ 24,400,000	\$ 97,484,782	2,300,000	15,862	\$ 6,146
Long Key/Layton	\$ 5,767,786	\$ 4,197,238	\$ -	\$ 1,570,548	96,000	662	\$ 2,372
Marathon	\$ 102,932,190	\$ 29,752,627	\$ -	\$ 73,179,563	1,700,000	11,724	\$ 6,242
Monroe County	\$ 212,814,393	\$ 49,026,845	\$ 105,300,000	\$ 58,487,548	1,811,000	12,490	\$ 4,683
	\$ 616,905,659	\$ 149,142,758	\$ 129,700,000	\$ 338,062,901	7,057,000	48,669	\$ 6,946

** Assume 1 EDU = 145 gpd

FIGURE 13-1: KEYS PROJECT COSTS - ESTIMATED LOCAL SHARE AND EXTERNAL GRANT FUNDING

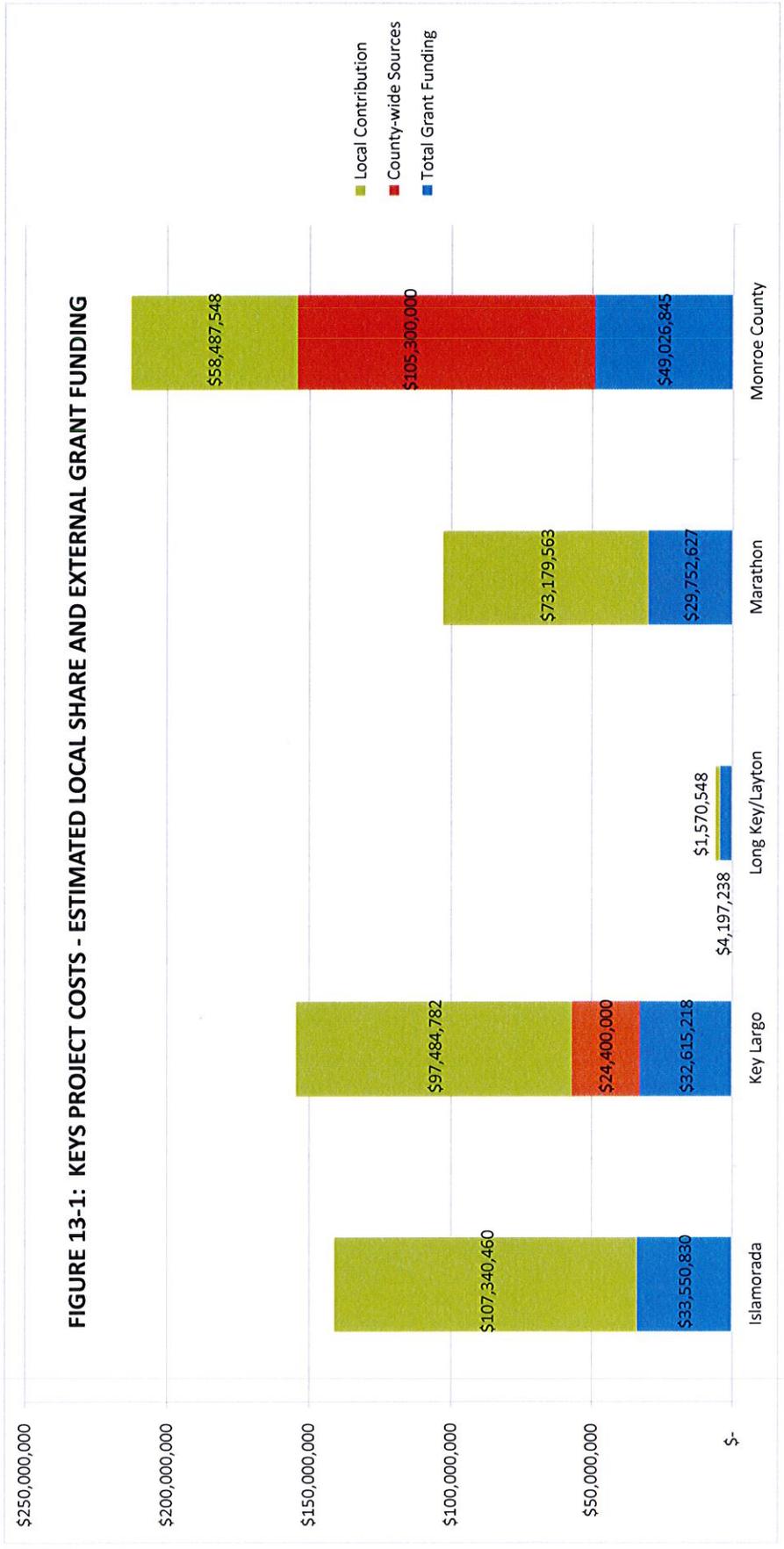


TABLE 15-1: MEDIAN HOUSE HOUSEHOLD INCOME CORRECTED FOR COST OF LIVING

Area	Median		Cost of		Comparable MHI
	Household Income		Living Index		
Florida	\$	47,827	96	\$	49,740
Monroe County	\$	53,889	139	\$	38,769
Islamorada	\$	66,708	136	\$	49,050
Key Largo	\$	51,798	126	\$	41,110
Marathon	\$	49,633	130	\$	38,179
Key Colony Beach	\$	50,250	138	\$	36,413
Layton	\$	52,292	114	\$	45,870
Key West	\$	51,385	141	\$	36,443

FIGURE 15-1: MEDIAN HOUSEHOLD INCOME CORRECTED FOR COST OF LIVING DIFFERENCES

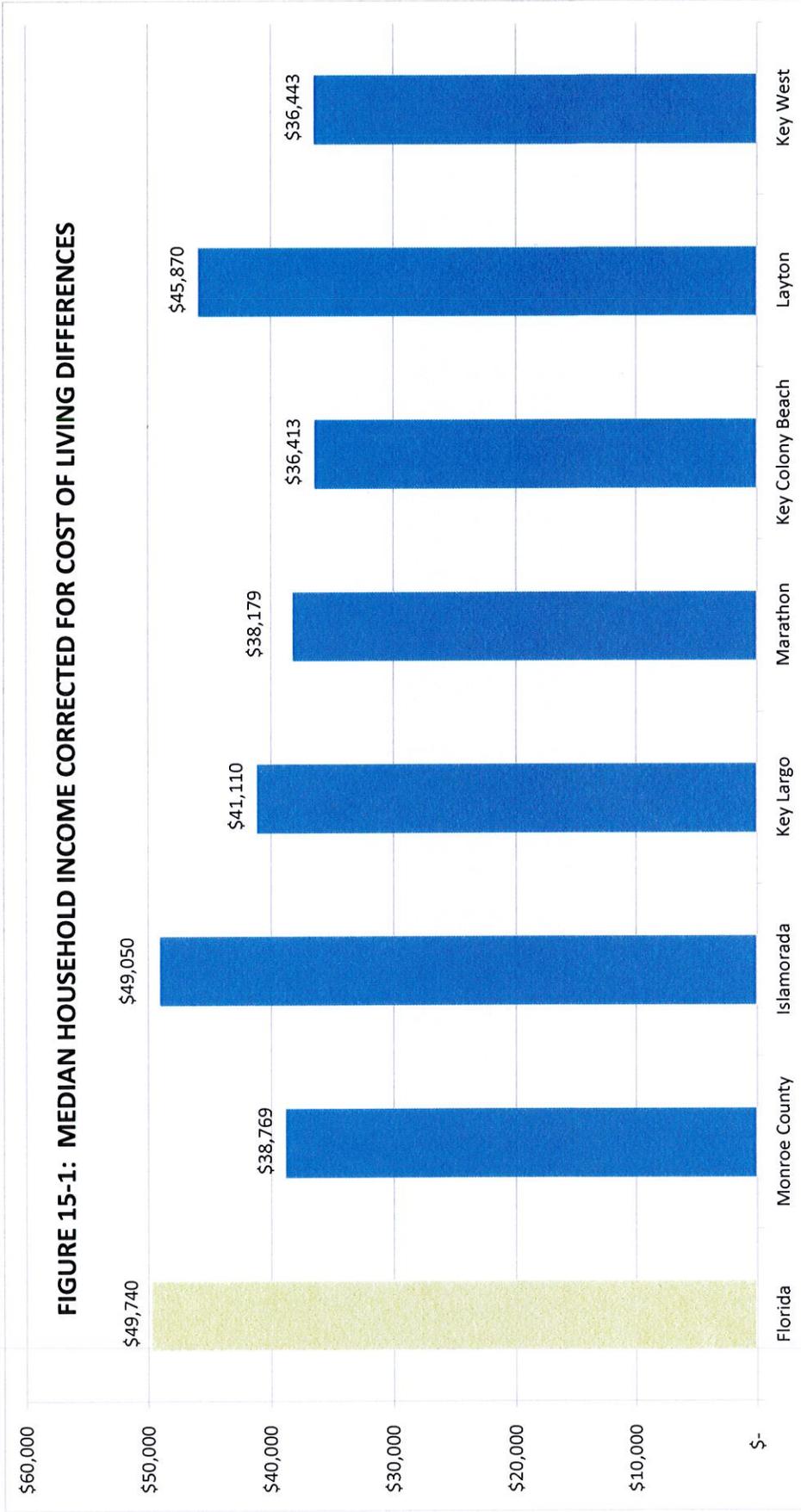


TABLE 21-1: BUSINESS SURVEY PATTERNS DATA FROM THE US CENSUS BUREAU

AREA	NUMBER OF ESTABLISHMENTS			NUMBER OF EMPLOYEES		
	2004	2011	% Increase/(-Decrease)	2004	2011	% Increase/(-Decrease)
Florida	484,938	490,851	1.2%	6,864,987	6,732,639	-1.9%
Monroe County	3,792	3,487	-8.0%	32,471	27,579	-15.1%
Long Key/Layton	21	14	-33.3%	152	51	-66.4%
Marathon	523	519	-0.8%	4,415	3,040	-31.1%
Islamorada	457	400	-12.4%	3,819	3,119	-18.3%
Key Largo	712	626	-12.1%	5,917	4,909	-17.0%
Key Colony Beach	27	24	-11.1%	142	123	-13.4%
Key West	1,617	1,493	-7.7%	15,317	14,085	-8.0%
Lower Keys	371	358	-3.5%	1,959	1,812	-7.5%

FIGURE 21-1: BUSINESS SURVEY PATTERNS (2004 VS. 2011)

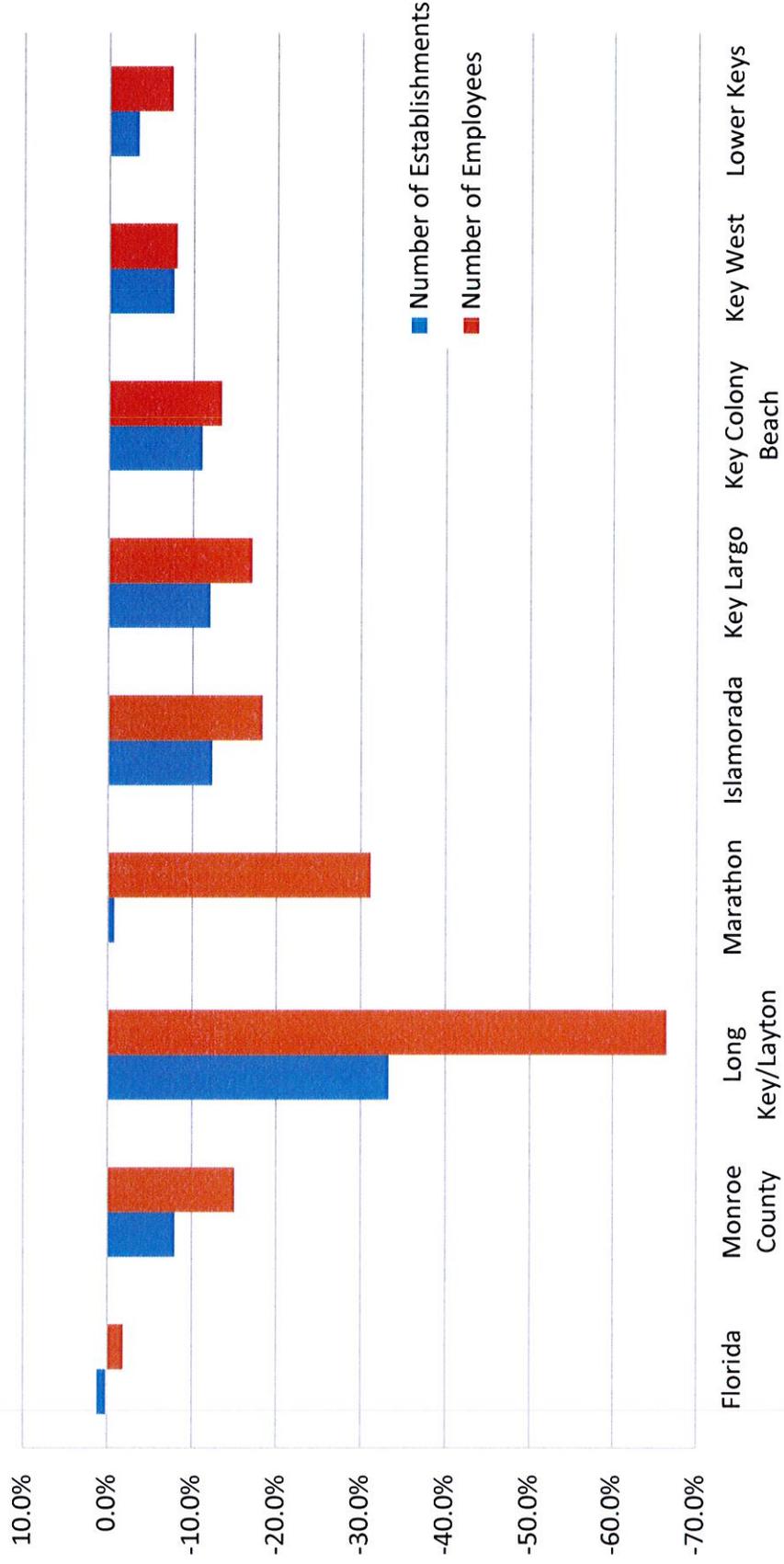


TABLE 21-2: EPA PRELIMINARY AFFORDABILITY SCREEN

Area	Median Household Income	Average Wastewater Bill	Average Assessment	Total Cost per Household	Residential Indicator (RI)
Florida	\$ 47,827	\$ 592	N/A	\$ 592	1.2%
Monroe County	\$ 53,889	\$ 1,062	\$ 210	\$ 1,272	2.4%
Islamorada	\$ 66,708	\$ 1,040	\$ 320	\$ 1,359	2.0%
Key Largo	\$ 51,798	\$ 783	\$ 250	\$ 1,033	2.0%
Marathon	\$ 49,633	\$ 1,012	\$ 234	\$ 1,246	2.5%
Key Colony Beach	\$ 50,250	\$ 1,056	-	\$ 1,056	2.1%
Layton	\$ 52,292	\$ 1,062	\$ 170	\$ 1,232	2.4%
Key West	\$ 51,385	\$ 610	-	\$ 610	1.2%

TABLE 21-3: EPA PRELIMINARY AFFORDABILITY SCREEN - ADAPTED FOR COST OF LIVING

Area	Median Household Income	Cost of Living Index	Comparable MHI	Total Cost per Household	Residential Indicator (RI)
Florida	\$ 47,827	96	\$ 49,740	\$ 592	1.2%
Monroe County	\$ 53,889	139	\$ 38,769	\$ 1,272	3.3%
Islamorada	\$ 66,708	136	\$ 49,050	\$ 1,359	2.8%
Key Largo	\$ 51,798	126	\$ 41,110	\$ 1,033	2.5%
Marathon	\$ 49,633	130	\$ 38,179	\$ 1,246	3.3%
Key Colony Beach	\$ 50,250	138	\$ 36,413	\$ 1,056	2.9%
Layton	\$ 52,292	114	\$ 45,870	\$ 1,232	2.7%
Key West	\$ 51,385	141	\$ 36,443	\$ 610	1.7%

RI < 1% - little economic impact
 RI between 1% and 2% - midrange economic impact
 RI > 2% - large economic impact

Appendix E

APPENDIX C

08-02-12

HURRICANE EVACUATION CLEARANCE TIME MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

THE FLORIDA DEPARTMENT OF ECONOMIC OPPORTUNITY AND THE COUNTY OF MONROE, CITY OF KEY WEST, ISLAMORADA, VILLAGE OF ISLANDS, CITY OF LAYTON, CITY OF KEY COLONY BEACH, CITY OF MARATHON, AND FLORIDA DIVISION OF EMERGENCY MANAGEMENT

This Memorandum of Understanding (“MOU”) is entered into by and between the State of Florida’s Department of Economic Opportunity (the “DEO”), the Florida Division of Emergency Management (the “Division”), and Monroe County, the City of Key West, Islamorada, Village of Islands, the City of Layton, the City of Key Colony Beach, and the City of Marathon (the “Local Governments”) (all collectively known as the “Parties”) for the purpose of complying with Rules 28-18, 28-19, and 28-20, Florida Administrative Code.

RECITALS:

WHEREAS, the Local Governments of the Florida Keys are within two areas that the Florida Legislature and the Administration Commission have designated as Areas of Critical State Concern (the Florida Keys ACSC and the City of Key West ACSC), pursuant to Sections 380.05 and 380.0552, Florida Statutes, and Florida Administrative Code Chapter 28-36, hereinafter referred to as the “Keys ACSCs”; and

WHEREAS, the Local Governments have adopted state-mandated Comprehensive Plans and Land Development Regulations, which have been approved by the State, as required by law; and

WHEREAS, the State’s Legislative Intent in designating the Local Governments as Areas of Critical State Concern includes:

- (a) Establish a land use management system that protects the natural environment of the Florida Keys;
- (b) Establish a land use management system that conserves and promotes the community character of the Florida Keys;
- (c) Establish a land use management system that promotes orderly and balanced growth in accordance with the capacity of available and planned public facilities and services;
- (d) Provide affordable housing in close proximity to places of employment in the Florida Keys;
- (e) Establish a land use management system that promotes and supports a diverse and sound economic base;
- (f) Protect the constitutional rights of property owners to own, use, and dispose of their real property;

08-02-12

(g) Promote coordination and efficiency among governmental agencies that have permitting jurisdiction over land use activities in the Florida Keys;

(h) Promote an appropriate land acquisition and protection strategy for environmentally sensitive lands within the Florida Keys;

(i) Protect and improve the nearshore water quality of the Florida Keys through the construction and operation of wastewater management facilities that meet the requirements of Sections 381.0065(4)(1) and 403.086(10), Florida Statutes, as applicable; and

(j) Ensure that the population of the Florida Keys can be safely evacuated (Section 380.0552(2) Florida Statutes); and

WHEREAS, the Florida Keys remain one of the most vulnerable areas in the United States to hurricanes; and

WHEREAS, the Florida Legislature and the Administration Commission have mandated that the Local Governments (except the City of Key West) include within the goals, objectives, and policies of their respective Comprehensive Plans measures to protect public safety and welfare in the event of a hurricane by maintaining an evacuation clearance time for permanent residents of no more than 24 hours (Section 380.0552(9)(a)2. Florida Statutes, Rule 28-18.400(5)(a)10., F.A.C., Rule 28-19.310(5)(a)5., F.A.C., and Rule 28-20.140(5)(a)14., F.A.C.); and

WHEREAS, Florida Administrative Code Rule 28-36.003(2)(a)7. requires that the City of Key West prepare and adopt an evacuation plan which is consistent with the regional and County plans; and

WHEREAS, the Florida Legislature further mandated that the hurricane evacuation clearance time for the Florida Keys ACSC shall be determined by a state-approved hurricane evacuation study, conducted in accordance with a professionally accepted methodology; and

WHEREAS, the Division of Emergency Management evacuation study, titled "Statewide Regional Evacuation Studies Program" dated November 2010, which includes Regional Behavioral Surveys Volumes 2-11, and was funded by the state Legislature and the Federal Emergency Management Agency ("FEMA"), provided the State's principal source of professionally acceptable data and analysis, augmented by other sources of data and analysis as referenced herein, for determining input variables and assumptions depicting evacuation clearance times for the population of the Florida Keys; and

WHEREAS, the Administration Commission has directed DEO, by July 1, 2012, to apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys ACSC or identify alternative evacuation strategies that support the 24 hour evacuation clearance time; and

WHEREAS, the Administration Commission has directed DEO, the Division, and the Local Governments to enter into this MOU to stipulate to the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models

08-02-12

acceptable to DEO in order to accurately depict evacuation clearance times for the population of the Florida Keys ACSC; and

WHEREAS, DEO has determined that the Florida Division of Emergency Management's Transportation Interface for Modeling Evacuations ("TIME") Model is the model acceptable to DEO to accurately depict evacuation clearance times for the population of the Keys ACSCs; and

WHEREAS, the Local Governments of the Florida Keys, except the City of Key Colony Beach, have regulated the rate and distribution of growth by implementing permit allocation systems to address hurricane evacuation clearance times; and

WHEREAS, DEO and the Local Governments recognize that significant vacant lands remain in the Florida Keys: Monroe County with 8,758 vacant parcels (77% of total vacant lands), Marathon with 1,281 vacant parcels (11%), Islamorada with 1,109 vacant parcels (10%), Key Colony Beach with 92 vacant parcels (0.81%), Key West with 84 vacant parcels (0.74%), and Layton with 13 vacant parcels (0.11%); and

WHEREAS, DEO and the Local Governments recognize the need to balance limiting the maximum number of building permits for new construction of residential units to be issued annually in the Florida Keys with fairness and consideration of private property rights; and

WHEREAS, to address hurricane evacuation modeling for the Florida Keys ACSCs, DEO established a Hurricane Evacuation Clearance Time Work Group ("Work Group") consisting of elected officials from each Local Government and representatives from DEO and DEM; in addition DEO invited representatives of special interests in the Florida Keys to participate, including the Florida Keys Federation of Chambers of Commerce, the Florida Restaurant and Lodging Association, the Lodging Association of the Florida Keys and Key West, the Monroe County Sheriff's Office, Naval Air Station-Key West, the environmental community, and a citizen's advocacy group; and further DEO requested technical advisors from DEO, the Division, and the Local Governments as well as the Northeast Florida Regional Planning Council, the South Florida Regional Planning Council, Monroe County Emergency Management, the National Weather Service, the National Hurricane Center, and the Florida Department of Transportation to participate in meeting discussion; and

WHEREAS, four advertised public workshops were conducted in the Florida Keys where the Work Group reviewed studies and data from DEO and other agencies related to the occupancy, participation, human behavior, response curves, capacity of the evacuation route, and the number of automobiles that will likely be evacuated, and other factors; and

WHEREAS, the Work Group evaluated information, provided input, and ultimately recommended Scenario M5; and

WHEREAS, from among the scenarios provided by DEO at the June 8, 2012, Work Group meeting, Scenario M5 included the 2010 Census site-built units (43,760 units); the maximum number of residential building permits for new construction for all Local Governments per year for 10 years (annually, County 197, Marathon 30, Islamorada 28, Key West 90, Key Colony Beach 6 and Layton 3); 1,248 mobile home units projected to convert to site-built units; the exclusion of 870 dwelling units on

08-02-12

the Naval Air Station; as well as two (2) functional evacuation lanes from MM 108-126. Further, the Work Group recommended Scenario M5 with the provision that the City of Key West would transfer annually (by July 13th) any remaining or unused (90 allocations) allocations to the other Local Governments based upon the Local Governments' ratio of vacant land; and

WHEREAS, following the June 8, 2012, Work Group meeting, technical corrections were made to the Census site built units revising that number to 43,718 and revising the Key West building permit allocation to 91, which corrections do not affect the hurricane evacuation clearance time for the population of the Florida Keys; and

WHEREAS, the Local Governments acknowledge that the safe and timely evacuation of the population of the Florida Keys in the event of a hurricane requires a consistent and cooperative approach and to that end, having participated as members of the Work Group, acknowledge that the input variables and assumptions identified in this MOU are those which DEO finds accurately depict evacuation clearance times for the population of the Florida Keys for a Category 3-5 hurricane event, as required by Administrative Rule; and

WHEREAS, Marathon, Key West, Layton, Monroe County, and Islamorada requested new participation rate studies be conducted, due principally to the low sample rates primarily for mobile homes relied upon by DEO; and,

WHEREAS, the Work Group accepted the participation rates recommended by DEO, including those for mobile homes, and DEO agreed to seek funding to provide education to mobile home occupants regarding the need to evacuate during Phase I due to the vulnerability of mobile homes; and

WHEREAS, the Local Governments recognize that the data, input variables, and assumptions DEO has incorporated into its hurricane evacuation model and this MOU are subject to change when the 2020 Census data becomes available.

NOW THEREFORE, the parties set forth the following understandings:

PART ONE: RECITALS

The above recitals are incorporated into this MOU and made a part hereof.

PART TWO: DATA, INPUT VARIABLES AND ASSUMPTIONS

The Human Behavioral Studies from the 2010 Statewide Regional Evacuation Study, the 2010 Census as supplemented by the 2006-2010 American Community Survey, Smith Travel Research, and data from the Department of Business and Professional Regulation, Division of Hotels and Restaurants, and Statewide Regional Evacuation Study Program for the South Florida Region are the best available and most relevant data and analysis. The following input variables and assumptions provide the basis, when used in the TIME model, to accurately calculate evacuation clearance times for the population of the Florida Keys, and DEO will recommend same to the Administration Commission to determine the remaining development allocations for the Florida Keys:

A. Number and Occupancy of Units by type of Unit:

1. **Tourist Units:** 13,665 tourist units with 11,287 occupied units for the month of July (the month with highest average number of permanent and seasonal residents and tourists). The data source for the number and type of units and vehicular use is the Statewide Regional Evacuation Study Program for the South Florida Region and the Department of Business and Professional Regulation, Division of Hotels and Restaurants, Licensee File Database, District 1 (March 29, 2010). The data source for occupancy of tourist units is the Smith Travel Research 2012: Historic Trend Report for 2011 for the month of July. A listing of the units is within the Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data: Hotel, Motel and other Vacation Rental Units is attached and incorporated herein as **Exhibit 1**.
2. **Mobile Home Units:** 8,134 Mobile Home units with 4,576 occupied units. The data source for the number and type of units, the vehicular use and occupancy of the units is the 2010 Census supplemented by the 2006-2010 American Community Survey for Monroe County and the Statewide Regional Evacuation Study Program for the South Florida Region. A listing of the units is within the Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data for Site-Built and Mobile Homes, is attached and incorporated herein as **Exhibit 2**.
3. **Site-Built Units:** 43,718 Site-built units with 27,320 occupied units. The data source for the number, type, occupancy, and vehicular use is the 2010 Census supplemented by the 2006-2010 American Community Survey and the Statewide Regional Evacuation Study Program for the South Florida Region. See **Exhibit 2**.

B. Response Curve: The assumed Response Curve for model runs is 12 hours for all unit types as utilized in the 2010 Statewide Regional Evacuation Study Program for the South Florida Region.

C. Participation Rates: The assumed Participation Rates are:

- | | |
|-----------------------|----------------------------|
| 1. Tourist units: | 100% |
| 2. Mobile home units: | 100% |
| 3. Site-built units: | 90% for a Category 5 event |

The participation rates are based upon the 2010 Statewide Regional Evacuation Study, Regional Behavioral Analysis Volumes 2-11, prepared for the South Florida Region, which DEO has determined reflect the best available data at this time.

D. Vehicle Usage by Units by type of Unit: A listing of the vehicle count and usage by Traffic Evacuation Zone quantifies the number of vehicles owned (**Exhibit 3**) and the percent of vehicles owned that will be evacuated (**Exhibit 4**). Exhibits 3 and 4 are based upon the 2010 Statewide Regional Evacuation Study and are attached and incorporated herein.

E. Vehicle Usage by the Special Population: **Exhibit 5** represents the number of vehicles that will be contributed by Naval Air Station – Key West and the Florida Keys Community College and is

08-02-12

based upon correspondence from Naval Air Station – Key West and the assumption that each of the 100 dorm beds from the Florida Keys Community College will contribute one evacuating vehicle per bed.

F. Evacuation Stream. The evacuation stream from Monroe County is the only assumed traffic demand considered.

G. Roadway Capacity. The Roadway Capacity, dated July 18, 2010, established by the Florida Department of Transportation is attached and incorporated herein as **Exhibit 6**.

H. Evacuation Procedures. The following evacuation procedures have been adopted or substantially adopted by the Local Governments (except the City of Key West) into their comprehensive plans, and by the City of Key West in Resolution No. 06-244:

1. Approximately 48 hours in advance of tropical storm winds, a mandatory evacuation of non-residents, visitors, recreational vehicles (RV's), travel trailers, live-aboards (transient and non-transient), and military personnel from the Keys shall be initiated. State parks and campgrounds should be closed at this time or sooner and entry into the Florida Keys by non-residents should be strictly limited.
2. Approximately 36 hours in advance of tropical storm winds, a mandatory evacuation of mobile home residents, special needs residents, and hospital and nursing home patients from the Keys shall be initiated.
3. Approximately 30 hours in advance of tropical storm winds, a mandatory phased evacuation of permanent residents by evacuation zone (described below) shall be initiated. Existing evacuation zones are as follows:
 - a) Zone 1 –Key West, Stock Island and Key Haven to Boca Chica Bridge (MM 1-6)
 - b) Zone 2 –Boca Chica Bridge to West end of 7-mile Bridge (MM 6-40)
 - c) Zone 3 –West end of 7-Mile Bridge to West end of Long Key Bridge (MM 40-63)
 - d) Zone 4 –West end of Long Boat Key Bridge to CR 905 and CR 905A intersection (MM 63-106.5)
 - e) Zone 5 –905A to, and including Ocean Reef (MM 106.5–126.5)

The actual sequence of the evacuation by zones will vary depending on the individual storm. The concepts embodied in this staged evacuation procedures should be embodied in the appropriate operational Emergency Management Plans. The evacuation plan shall be monitored and updated on an annual basis to reflect increases, decreases and or shifts in population; particularly the resident and non-resident populations.

PART THREE: MISCELLANEOUS

A. Liability. As this MOU represents only the Parties' acknowledgement of the data, input variables, and assumptions DEO has utilized in its hurricane evacuation model, nothing in this MOU shall be construed to impose any liability on the State of Florida, DEO, the Division, or the Local Governments. Nothing in this MOU may be interpreted as a waiver of sovereign immunity by any

08-02-12

Party. Any provision of this MOU that is inconsistent with the State's sovereign immunity statute shall be considered null and void.

B. **Modification.** Modifications to the Memorandum of Understanding shall be valid only when reduced to writing and duly signed by all parties.

C. **Severability.** If any term or provision of this Memorandum of Understanding shall be invalid or unenforceable to any extent, the Parties agree to comply with remaining terms and provisions, unless compliance with the remaining terms and provisions would prevent the accomplishment of the original intent of the agreement between the Parties.

D. **Termination.** Any Party may terminate this Memorandum of Understanding at any time, with or without cause. Termination shall take effect upon receipt of written notification by a Party to all other Parties.

E. **Notification.** Notifications under this MOU shall be made by hand delivery, U. S. certified mail, return receipt requested, or an express mail service that provides proof of delivery. Notification by a Party to the DEO shall be directed to the Areas of Critical State Concern Administrator, Department of Economic Opportunity, 107 East Madison Street, Tallahassee, FL 32399-4128. Notification to the other parties to this Memorandum of Understanding shall be directed as follows:

1. **Monroe County.** Mayor, Monroe County, 2798 Overseas Hwy. Marathon, FL 33050 with a copy to the Growth Management Division Director, 2798 Overseas Hwy. Marathon, FL 33050.
2. **City of Key West.** Mayor, City of Key West, 3126 Flagler Avenue Key West, FL 33040, with a copy to the Planning Director, 3126 Flagler Avenue Key West, FL 33040.
3. **City of Marathon.** Mayor, City of Marathon, 9805 Overseas Highway Marathon, FL 33050, with a copy to the Planning Director, 9805 Overseas Highway Marathon, FL 33050.
4. **City of Layton.** Mayor, City of Layton, 68260 Overseas Highway, P.O. Box 778 Long Key, FL 33001.
5. **City of Key Colony Beach.** Mayor, City of Key Colony Beach, P.O. Box 510141, Key Colony Beach, FL 33051-0141 with a copy to the City Clerk at P.O. Box 510141, Key Colony Beach, FL 33051-0141.
6. **Islamorada, Village of Islands.** Mayor, Islamorada, Village of Islands, 86800 Overseas Highway Islamorada, FL 33036, with a copy to the Director of Planning and Development Services, 86800 Overseas Highway Islamorada, FL 33036.
7. **Division of Emergency Management.** Director, Florida Division of Emergency Management, 2555 Shumard Oaks Boulevard, Tallahassee, FL 32399-2100, with a copy to the Division's Hurricane Program Manager at the same address.

F. **Effective Date.** This Memorandum of Understanding is effective upon execution by all parties and approval by the Florida Administration Commission and ends upon the termination of the Florida

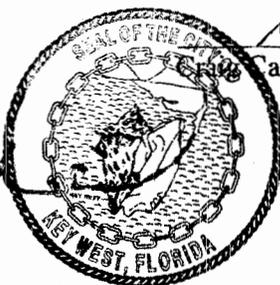
08-02-12

Keys Area of Critical State Concern designations, unless terminated earlier according to Part 4(D) above.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Understanding on the dates below written.

CITY OF KEY WEST, FLORIDA

August 24, 2012
Date



[Signature]
Cates, Mayor

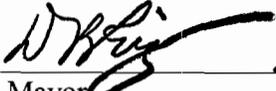
ATTEST Cheryl Smith
Cheryl Smith, City Clerk

Approved as to form and legal sufficiency.
[Signature]
Shawn Smith, City Attorney

08-02-12

BOARD OF COUNTY COMMISSIONERS
OF MONROE COUNTY, FLORIDA

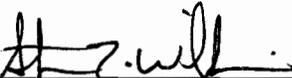
| September 21, 2012
Date


David Rice, Mayor

| ATTEST: **DANNY L. KOLHAGE**, Clerk


Clerk

| Approved as to form and legal sufficiency:


Steven T. Williams, County Attorney

08-02-12

CITY OF MARATHON, FLORIDA

10/4/2012, 2012
Date

Peter Worthington
Peter Worthington, Mayor

ATTEST:

Diane Clavette
Diane Clavette, City Clerk

Approved as to form and legal sufficiency:

John R. Herin
John R. Herin, City Attorney

08-02-12

CITY OF LAYTON, FLORIDA

Sept. 18, 2012
Date

Norman S. Anderson
Norman S. Anderson, Mayor

ATTEST:

Mimi Young
Mimi Young, City Clerk

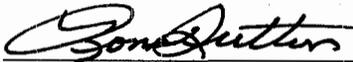
Approved as to form and legal sufficiency:

[Signature]
City Attorney

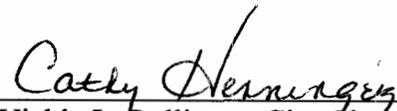
08-02-12

CITY OF KEY COLONY BEACH, FLORIDA

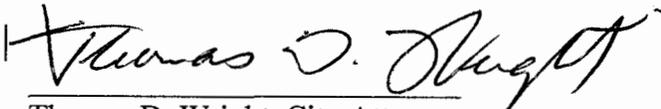
8/27, 2012
Date


Ron Sutton, Mayor

ATTEST:


~~Vickie L. Bollinger, City Clerk~~
Cathy Henninger

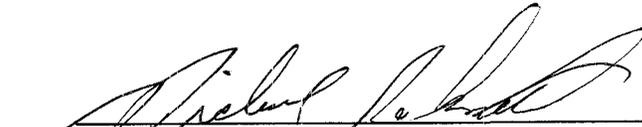
Approved as to form and legal sufficiency:


Thomas D. Wright, City Attorney

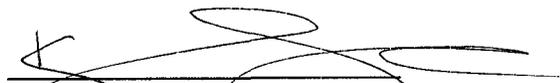
08-02-12

ISLAMORADA, VILLAGE OF ISLANDS, FLORIDA

September 27th, 2012
Date


Michael Reckwerdt, Mayor

ATTEST:


Deputy, Village Clerk

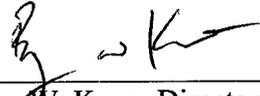
Approved as to form and legal sufficiency:


Nina Boniske, Village Attorney

08-02-12

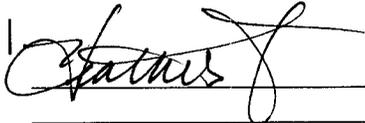
STATE OF FLORIDA
DIVISION OF EMERGENCY MANAGEMENT

September 27, 2012
Date



Bryan W. Koon, Director

|
Approved as to form and legal sufficiency:

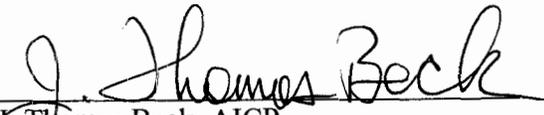


Assistant General Counsel

08-02-12

STATE OF FLORIDA DEPARTMENT
OF ECONOMIC OPPORTUNITY

November 5, 2012


J. Thomas Beck, AICP
Director, Division of Community
Development

Approved as to form and legal
sufficiency, subject only to full and
proper execution by the parties

Office of the General Counsel
Department of Economic Opportunity

By: 
Assistant General Counsel
Approved Date: 11-5-12

08-02-12

Exhibits to
Hurricane Evacuation Clearance Time Memorandum of Understanding

- Exhibit 1 Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data: Hotel, Motel and other Vacation Rental Units
- Exhibit 2 Statewide Regional Evacuation Study Table of Traffic Evacuation Zone Occupancy Data for Site-Built and Mobile Homes
- Exhibit 3 Listing of the vehicle count and usage by Traffic Evacuation Zone (based on the 2010 Statewide Regional Evacuation Study)
- Exhibit 4 Percent of vehicles owned that will be evacuated (based on the 2010 Statewide Regional Evacuation Study)
- Exhibit 5 Identification of contributing vehicles from Naval Air Station–Key West and Florida Keys Community College.
- Exhibit 6 Roadway Capacity, dated July 18, 2010, established by the Florida Department of Transportation

Appendix F

November 30, 2011

The Honorable Ron Sutton, Mayor
City of Key Colony Beach
Post Office Box 510427
Key Colony Beach, Florida 33051

Dear Mayor Sutton:

The Department of Economic Opportunity (Department), pursuant to its role as the State Land Planning Agency, is requesting the designation of a City Commissioner for the City of Key Colony Beach to serve in the Hurricane Evacuation Clearance Time Work Group (Work Group). The Governor and Cabinet, seated as the Administration Commission, directed the State Land Planning Agency and Monroe County to enter into a Memorandum of Understanding (MOU) with the Division of Emergency Management, City of Marathon, Village of Islamorada, City of Key West, City of Key Colony Beach, and City of Layton regarding hurricane evacuation. The MOU will address the input variables and assumptions, including regional considerations, to depict hurricane evacuation clearance times for the population of the Florida Keys. Utilizing recent U.S. Census data, the MOU will be the basis for completing an analysis of maximum build-out capacity and to determine the remaining allocations and distribution of the development potential in the Florida Keys while allowing the permanent population to evacuate within 24 hours. The specific rule language regarding the MOU and associated actions is included as an attachment to this letter.

The Department would like to conduct the first meeting of the Work Group in January 2012. The specific meeting dates and locations will be announced in December. The meeting dates will be scheduled late within each month to avoid local government meeting conflicts. The Department plans to conduct meetings in the Upper, Middle and Lower Keys. At this time, we anticipate conducting three meetings between January and March 2012, followed by the distribution of a draft MOU to each local government for consideration during a public hearing.

The Department will provide the hurricane evacuation model, conduct modeling scenarios, provide data and a draft MOU for the Work Group to evaluate. The local governments will review the hurricane evacuation model assumptions, variables, and other relevant data and make recommendations for model inputs. Planning staff from each local government and other individuals involved in hurricane evacuation planning will be invited to participate.



The Honorable Ron Sutton, Mayor

November 30, 2011

Page 2 of 3

Please contact Rebecca Jetton, Areas of Critical State Concern Program Administrator, at (850) 717-8494 regarding the name of the individual who will represent the City of Key Colony Beach in the Work Group. Thank you for your participation and let us know if there are any questions or concerns.

Sincerely,

J. Thomas Beck, AICP
Director, Division of Community Development

TB/rj

Enclosures: Rule 28-20.140(5)(a), Florida Administrative Code

Rule 28-20.140 (5)(a), Florida Administrative Code

11. By July 1, 2012, Monroe County shall enter into a memorandum of understanding with the Department of Community Affairs, Division of Emergency Management, Marathon, Islamorada, Key West, Key Colony Beach, and Layton after a notice and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the Department to accurately depict evacuation clearance times for the population of the Florida Keys.
12. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding to complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the Department of Community Affairs and each municipality in the Keys.
13. By July 1, 2012, the County and the Department of Community Affairs shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities Survey, Bureau of Economic and Business Research, and other studies). The County shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.
14. By July 1, 2012, the Department of Community Affairs shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The Department will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24 hour evacuation clearance time. If necessary, the Department of Community Affairs shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.
15. By July 1, 2013, if necessary, the Department of Community Affairs shall work with each local government to amend the Comprehensive Plan to reflect revised allocation rates and distribution or propose rule making to the Administration Commission.

Appendix G

28-31.008 Comprehensive Plan.

Policy 1.3.2 Building Permit Allocation

The City of Key Colony Beach shall issue permits for no more than 60 new residential units between adoption of this rule and July 1, 2023. The City may allocate six residential permits per year. Unused allocations may rollover to subsequent years and those units may be added to the six units per year allocation. The City may borrow forward units upon the passage of a resolution by the City Council, provided that no more than 60 units are issued between adoption of this rule and July 1, 2023.

Upon adoption of a resolution by another local government, building permit allocations may be transferred across jurisdictions in order to acquire additional units. Units from existing development may be demolished and transferred to lots within the City. Units from other local governments or units demolished and rebuilt at other locations shall not be included in the 60 units.

Specific Authority 380.05(8), 380.0552(4)(f) FS. Law Implemented 380.05 FS. History–New _____.

Appendix H

28-18.400 Comprehensive Plan.

(1) The Comprehensive Plan of the City of Marathon, as the same exists on January 1, 2011, is hereby amended to read as follows:

(2) Policy 1-3.5.18 Marathon Work Program Conditions and Objectives.

(a) The number of allocations issued annually for residential development under the Residential Building Permit Allocation System (BPAS) shall not exceed a total annual unit cap of 30, plus any available unused BPAS allocations from a previous year. Unused BPAS allocations may be retained and made available only for affordable housing and Administrative Relief from BPAS year to BPAS year. Unused market rate allocations shall be available for Administrative Relief. Any unused affordable allocations will roll over to affordable housing. This BPAS allocation represents the total number of allocations for development that may be issued during a year. A BPAS year means the twelve-month period beginning on July 13. Policy 1-3.5.18 supersedes Policy 1-3.5.2 of the City of Marathon Comprehensive Plan.

(b) No exemptions or increases in the number of allocations may be allowed, other than that which may be expressly provided for in the comprehensive plan or for which there is an existing agreement as of September 27, 2005, for affordable housing between the Department and the local government in the critical areas.

(c) Through the Permit Allocation Systems, Marathon shall direct new growth and redevelopment to areas served by a central sewer system by 2015 that has committed or planned funding sources. Committed or planned funding is funding that is financially feasible and reflected in a Capital Improvements Element approved by the Department of Community Affairs. Prior to the ranking and approval of awards for an allocation authorizing development of new principal structures, Marathon shall coordinate with the central wastewater facility provider and shall increase an applicant's score by four points for parcels served by a collection line within a central wastewater facility service area where a central wastewater treatment facility has been constructed that meets the treatment standards of Sections 381.0065(4)(1) and 403.086(10), F.S., and where treatment capacity is available. The points shall only be awarded if a construction permit has been issued for the collection system and the parcel lies within the service area of the wastewater treatment facility.

(3) Reporting and Oversight.

(a) Beginning November 30, 2011, Marathon and the Department of Community Affairs shall annually report to the Administration Commission documenting the degree to which the work program objectives for the work program year have been achieved. The Commission shall consider the findings and recommendations provided in those reports and shall determine whether progress has been achieved toward accomplishing the tasks of the work program. If the Commission determines that progress has not been made, the unit cap for residential development shall be reduced by 20 percent for the following year.

(b) If the Commission determines that progress has been made for the work program year, then the Commission shall restore the unit cap for residential development for the following year up to a maximum of 30 allocations per BPAS year.

(c) Notwithstanding any other date set forth in this plan, the dates set forth in the work program shall control where conflicts exist.

(d) Wastewater treatment and disposal in Marathon is governed by the requirements of Sections 381.0065(4)(1) and 403.086(10), F.S., as amended. Nothing in this rule shall be construed to limit the authority of the Department of Environmental Protection or Department of Health to enforce Sections 381.0065(4)(1) and 403.086(10), F.S., as amended.

(4) Policy 1-2.2.4 Hurricane Modeling.

For hurricane evacuation clearance time modeling purposes, clearance time shall begin when the Monroe County Emergency Management Coordinator issues the evacuation order for the permanent population for a hurricane that is classified as a Category 3-5 wind event or Category C-E surge event. The termination point shall be the intersection of U.S. Highway One and the Florida Turnpike in Homestead/Florida City.

(5) WORK PROGRAM.

(a) Carrying Capacity Study Implementation.

1. By July 1, 2011, Marathon shall adopt a Comprehensive Plan Policy to require that administrative relief in the form of the issuance of a building permit is not allowed for lands within the Florida Forever targeted acquisition areas unless, after 60 days from the receipt of a complete application for administrative relief, it has been determined the parcel will not be purchased by any city, county, state or federal agency. Marathon shall develop a mechanism to routinely notify the Department of Environmental Protection of upcoming administrative relief requests at least 6 months prior to the deadline for administrative relief.

2. By July 1, 2011, Marathon shall adopt Land Development Regulations to require that administrative relief in the form of the issuance of a building permit is not allowed for lands within the Florida Forever targeted acquisition areas unless, after 60 days from the receipt of a complete application for administrative relief, it has been determined the parcel will not be purchased by any city, county, state or federal agency.

3. By July 1, 2011, Marathon shall amend the Comprehensive Plan to limit allocations into high quality tropical hardwood hammock.

4. By July 1, 2011, Marathon shall amend the Land Development Regulations to limit allocations into high quality tropical hardwood hammock.

5. By July 1, 2011, Marathon shall adopt a Comprehensive Plan Policy discouraging private applications for future land use map amendments which increase allowable density/intensity on lands in the Florida Keys.

6. By July 1, 2011, and each July thereafter, Marathon shall evaluate its land acquisition needs and state and federal funding opportunities and apply annually to at least one state or federal land acquisition grant program.

7. By July 1, 2012, Marathon shall enter into a memorandum of understanding with the Department of Community Affairs, Division of Emergency Management, Monroe County, Islamorada, Key West, Key Colony Beach, and Layton after a notice and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the Department of Community Affairs to accurately depict evacuation clearance times for the population of the Florida Keys.

8. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding. Marathon and the Department of Community Affairs shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities Survey, Bureau of Business and Economic Research, and other studies). The City shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.

9. By December 1, 2012, Marathon shall complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the Department of Community Affairs, Monroe County and each municipality in the Keys.

10. By December 1, 2012, the Department of Community Affairs shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The Department will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24-hour hurricane evacuation clearance time. If necessary, the Department of Community Affairs shall work with each local government to amend the respective Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.

11. By July 1, 2013, based on the Department of Community Affairs' recommendations, Marathon shall amend the current building permit allocation system (BPAS in the Comprehensive Plan and Land Development Regulations) based on infrastructure availability, level of service standards, environmental carrying capacity, and hurricane evacuation clearance time.

(b) Wastewater Implementation.

1. By July 1, 2011 and each July 1 thereafter, Marathon shall annually evaluate and allocate funding for wastewater implementation. Marathon shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.

2. December 1, 2013, Marathon shall work with the owners of wastewater facilities and onsite systems throughout the City and the Department of Environmental Protection (DEP) and the Department of Health (DOH) to fulfill the requirements of Sections 381.0065(3)(h) and (4)(l) and 403.086(10), F.S., regarding implementation of wastewater treatment and disposal. This will include coordination of actions with DOH and DEP to notify owners regarding systems that will not meet 2015 treatment and disposal requirements.

3. By July 1, 2011, Marathon shall evaluate its wastewater needs and state and federal funding opportunities and apply annually to at least one state or federal grant program for wastewater projects and connections.

4. By July 1, 2011, Marathon shall continue to develop and implement local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement facilities.

5. By July 1, 2011 and each year through 2013, Marathon shall annually draft a resolution requesting the issuance of a portion of the \$200 million of bonds authorized under Section 215.619, F.S., and an appropriation of sufficient debt service for those bonds, for the construction of wastewater projects within the Florida Keys.

6. By July 1, 2011, Marathon shall develop a mechanism to provide accurate and timely information and establish Marathon's annual funding allocations necessary to provide evidence of unmet funding needs to support the issuance of bonds authorized under Section 215.619, F.S., and to assure the timely completion of work as necessary to fulfill any terms and conditions associated with bonds.

7. By December 1, 2012, Marathon shall provide a report of addresses and the property appraiser's parcel numbers of any property owner that fails or refuses to connect to the central sewer facility within the required timeframe to the Monroe County Health Department and the Department of Community Affairs. This report shall describe the status of Marathon's enforcement action and provide the circumstances of why enforcement may or may not have been initiated.

(c) Wastewater Project Implementation.

1. Sub area 1: Knight's Key.

- a. By July 1, 2011, Marathon shall secure plant site;
- b. By December 1, 2011, Marathon shall construct Knight's Key Wastewater Plant;
- c. By May 1, 2012, Marathon shall initiate connections; and
- d. By July 1, 2012, Marathon shall complete connections (100%).

2. Sub area 2: Boot Key (non-service area).

By July 1, 2011, Marathon shall ensure completion of upgrade.

3. Sub area 3: 11 Street – 39 Street (Vaca Key West).

- a. By July 1, 2011, Marathon shall complete construction of plant;
- b. By July 1, 2011, Marathon shall complete construction of collection system;
- c. By July 1, 2011, Marathon shall initiate connections; and
- d. By July 1, 2012, Marathon shall complete connections (100%).

4. Sub area 4: Gulfside 39 Street (Vaca Key Central).

By July 1, 2013, Marathon shall complete connections (100%).

5. Sub area 5: Little Venice (60 Street – Vaca Cut East).

- a. By July 1, 2012, Marathon shall complete construction of collection system;
- b. By July 1, 2012, Marathon shall initiate connections for Phase II;
- c. By July 1, 2013, Marathon shall complete connections (100%) for Phase II.

6. Sub area 6-Vaca Cut-Coco Plum (Fat Key Deer West).

By July 1, 2011, Marathon shall complete connections (100%).

7. Sub area 7: Tom Harbor Bridge-Grassy Key.

- a. By July 1, 2012, Marathon shall complete construction of plant;
- b. By July 1, 2012, Marathon shall bid and award design of collection system;
- c. By July 1, 2012, Marathon shall construction of collection system;
- d. By July 1, 2012, Marathon shall initiate connections; and
- e. By July 1, 2013, Marathon shall complete connections (100%).

(d) Stormwater Treatment Facilities.

1. Beginning July 1, 2011 and each July 1 thereafter Marathon shall annually evaluate and allocate funding for stormwater implementation. Marathon shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.

2. Beginning July 1, 2011 and each July 1 thereafter, Marathon shall annually apply for stormwater grants from the South Florida Water Management District.

3. Sub area 3: 11 Street – 37 Street (Vaca Key West): By July 1, 2011, complete Stormwater Treatment Facilities simultaneously with wastewater projects, including the direct outfall retrofits for 27th Street and 24th Street.

4. Sub area 5: Little Venice (60 Street – Vaca Cut East): By July 1, 2012, complete Stormwater Treatment Facilities simultaneously with wastewater projects.

5. Sub area 7: Tom Harbor Bridge-Grassy Key: By July 1, 2012, complete Stormwater Treatment Facilities simultaneously with wastewater projects.

6. By July 1, 2012, Marathon shall eliminate direct outfall retrofits for: 27th Street, Sombrero Islands, 24th Street, and 52nd Street.

Rulemaking Authority 380.0552(9), 380.05(22) FS. Law Implemented 380.0552 FS. History--New 6-17-11.

28-19.310 Comprehensive Plan.

(1) The Comprehensive Plan of Islamorada, Village of Islands, as the same exists on January 1, 2011, is hereby amended to read as follows:

(2) Policy 1-3.1.1 Islamorada Work Program Conditions and Objectives.

(a) The number of permits issued annually for residential development under the Residential Building Permit Allocation System (BPAS) shall not exceed a total annual unit cap of 22 market rate units and 6 affordable housing units, plus any available unused BPAS allocations from the previous BPAS year. Unused BPAS allocations may be retained and made available only for affordable housing and Administrative Relief from BPAS year to BPAS year. Unused market rate allocations shall be available for Administrative Relief. Any unused affordable allocations will roll over to affordable housing. This BPAS allocation represents the total number of allocations for development that may be issued during a year. A BPAS year means the twelve-month period beginning on July 13.

(b) Beginning November 30, 2011, the Village and the Department of Community Affairs shall annually report to the Administration Commission documenting the degree to which the work program objectives for the work program year have been achieved. The Commission shall consider the findings and recommendations provided in those reports and shall determine whether progress has been achieved toward accomplishing the tasks of the work program. If the Commission determines that progress has not been made, the unit cap for residential development shall be reduced by 20 percent for the following year.

(3) Policy 2-1. 2.10 Hurricane Modeling.

For hurricane evacuation clearance time modeling purposes, clearance time shall begin when the Monroe County Emergency Management Coordinator issues the evacuation order for the permanent population for a hurricane that is classified as a Category 3-5 wind event or Category C-E surge event. The termination point shall be the intersection of U.S. Highway One and the Florida Turnpike in Homestead/Florida City.

(4) Reporting and Oversight.

(a) Through the Permit Allocation Systems, Islamorada shall direct new growth and redevelopment to areas served by or that would be served a central sewer system by December 2015, that has committed funding or planned funding sources. Committed or planned funding is funding that is financially feasible and reflected in a Capital Improvements Element approved by the Department of Community Affairs. Prior to the ranking and approval of awards for an allocation authorizing development of new principal structures, the Village of Islamorada shall coordinate with the central wastewater facility provider and shall increase an applicant's score by two points for parcels served by a collection line within a central wastewater facility service area where a central wastewater treatment facility has been constructed that meets the treatment standards of Sections 381.0065(4)(1) and 403.086(10), F.S., and where treatment capacity is available. The points shall only be awarded if a construction permit has been issued for the collection system and the parcel lies within the service area of the wastewater treatment facility.

(b) If the Commission determines that progress has been made for the work program year, then the Commission shall restore the unit cap for residential development for the following year up to a maximum of 28 allocations per BPAS year.

(c) Wastewater treatment and disposal in Islamorada is governed by the requirements of Sections 381.0065(4)(1) and 403.086(10), F.S. Nothing in this rule shall be construed to limit the authority of the Department of Environmental Protection or Department of Health to enforce Sections 381.0065(4)(1) and 403.086(10), F.S.

(d) Notwithstanding any other date set forth in this plan, the dates set forth in the work program shall control where conflicts exist.

(5) WORK PROGRAM.

(a) Carrying Capacity Implementation.

1. By July 1, 2011 and each July 1 thereafter, Islamorada shall evaluate its land acquisition needs and state and federal funding opportunities and apply to at least one state or federal land acquisition grant program.

2. By July 1, 2012, Islamorada shall enter into a memorandum of understanding with the Department of Community Affairs, Division of Emergency Management, Marathon, Monroe, Key West, Key Colony Beach, and Layton after a notice, public workshop and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the Department to accurately depict evacuation clearance times for the population of the Florida Keys.

3. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding. Islamorada and the Department of Community Affairs shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities Survey, Bureau of Business and Economic Research, and other studies). Islamorada shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.

4. By July 1, 2012, Islamorada shall complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the Department of Community Affairs, Monroe County and each municipality in the Keys.

5. By July 1, 2012, the Department of Community Affairs shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The Department will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24-hour evacuation clearance time. If necessary, Department of Community Affairs shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.

6. By July 1, 2013, based on the Department of Community Affairs' recommendations, Islamorada shall amend the current building permit allocation system (BPAS in the Comprehensive Plan and Land Development Regulations) based on infrastructure availability, level of service standards, environmental carrying capacity constraints, and hurricane evacuation clearance time.

(b) Wastewater Implementation.

1. Beginning July 1, 2011 and each July 1 thereafter, Islamorada shall identify any funding for wastewater implementation. Islamorada shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.

2. By December 1, 2013, Islamorada shall provide a final determination of non-service areas requiring upgrade to meet Sections 381.0065(4)(l) and 403.086(10), F.S., wastewater treatment and disposal standards. This shall be in the form of a resolution including a map of the non-service areas.

3. By December 1, 2013, Islamorada shall work with the owners of wastewater facilities and on site systems throughout the Village and the Department of Environmental Protection (DEP) and the Department of Health (DOH) to fulfill the requirements of Sections 381.0065(3)(h) and (4)(l) and 403.086(10), F.S., regarding implementation of wastewater treatment and disposal systems. This will include coordination of actions with DOH and DEP to notify owners regarding systems that will not meet 2015 treatment and disposal standards.

4. By July 1, 2011 and by July 1 of each year thereafter, Islamorada shall evaluate its wastewater needs and state and federal funding opportunities and apply annually to at least one state or federal grant program for wastewater projects and connections.

5. By September 1, 2011, Islamorada shall develop and implement local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement of facilities.

6. By July 1, 2011 and each July 1 thereafter through 2013, Islamorada shall annually draft a resolution requesting the issuance of a portion of the \$200 million of bonds authorized under Section 215.619, F.S., and an appropriation of sufficient debt service for those bonds, for the construction of wastewater projects within the Florida Keys.

7. By July 1, 2011 and each July 1 thereafter through 2013, Islamorada shall develop a mechanism to provide accurate and timely information and establish Islamorada's annual funding allocations necessary to provide unmet funding needs to support the issuance of bonds authorized under Section 215.619, F.S., and to assure the timely completion of work as necessary to fulfill any terms and conditions associated with bonds.

8. By December 1, 2013, Islamorada shall provide a report of addresses and the property appraiser's parcel numbers of any property owner that fails or refuses to connect to the central sewer facility within the required timeframe to the Monroe County Health Department, Department of Environmental Protection and the Department of Community Affairs. This report shall describe the status of Islamorada's enforcement action and provide the circumstances of why enforcement may or may not have been initiated.

(c) Wastewater Project Implementation.

1. By June 1, 2011, Islamorada shall provide a wastewater financing plan to the Department of Community Affairs and Administration Commission.

2. By July 1, 2011, Islamorada shall conclude negotiations with Key Largo Wastewater Treatment District for treatment capacity.

3. By July 1, 2011, Islamorada shall advertise for proposal for design build operate finance construction of Village-wide wastewater system.

4. By July 1, 2011 submit a copy of contract agreement with Key Largo Wastewater District documenting acceptance of effluent or alternative plan with construction of wastewater treatment plants in Village that ensures completion and connection of customers by December 2015.

5. By July 1, 2011, Islamorada shall make available to its customers an additional 700 connections (Phase II) to the North Plantation Key Wastewater Treatment Plant (WWTP).

6. By September 1, 2011, Islamorada shall select the design build operate finance contractor for the Village-wide wastewater system.

7. By October 1, 2011, Islamorada shall submit a wastewater construction status report to the Department of Community Affairs and the Administration Commission which includes substantial completion of construction prior to January 1, 2015 and final completion prior to July 1, 2015.

8. By September 1, 2013, Islamorada shall complete final design of the Village-wide wastewater system.

9. By December 1, 2013, Islamorada shall commence construction of the Village-wide wastewater system.

10. By June 1, 2014, Islamorada shall make available to its customers 25% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.

11. By December 1, 2014, Islamorada shall make available to its customers 50% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.

12. By June 1, 2015, Islamorada shall make available to its customers 75% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.

13. By December 1, 2015, Islamorada shall make available to its customers 100% of the Equivalent Dwelling Unit (EDU) connections to the Village-wide wastewater system.

Rulemaking Authority 380.0552(9), 380.05(22) FS. Law Implemented 380.0552 FS. History--New 6-17-11.

28-20.140 Comprehensive Plan.

(1) The Monroe County Comprehensive Plan Policy Document, as the same exists on January 1, 2011, is hereby amended to read as follows:

(2) Policy 101.2.13 Monroe County Work Program Conditions and Objectives.

(a) Monroe County shall establish and maintain a Permit Allocation System for new residential development. The Permit Allocation System shall supersede Policy 101.2.1.

(b) The number of permits issued annually for residential development under the Rate of Growth Ordinance shall not exceed a total annual unit cap of 197, plus any available unused ROGO allocations from a previous ROGO year. Each year's ROGO allocation of 197 units shall be split with a minimum of 71 units allocated for affordable housing in perpetuity and market rate allocations not to exceed 126 residential units per year. Unused ROGO allocations may be retained and made available only for affordable housing and Administrative Relief from ROGO year to ROGO year. Unused allocations for market rate shall be available for Administrative Relief. Any unused affordable allocations will roll over to affordable housing. A ROGO year means the twelve-month period beginning on July 13.

(c) This allocation represents the total number of allocations for development that may be issued during a ROGO year. No exemptions or increases in the number of allocations may be allowed, other than that which may be expressly provided for in the comprehensive plan or for which there is an existing agreement as of September 27, 2005, for affordable housing between the Department and the local government in the critical areas.

(d) Through the Permit Allocation Systems, Monroe County shall direct new growth and redevelopment to areas served or that would be served by a central sewer system by December 2015 that has committed or planned funding. Committed or planned funding is funding that is financially feasible and reflected in a Capital Improvements Element approved by the Department of Community Affairs. Prior to the ranking and approval of awards for an allocation authorizing development of new principal structures, Monroe County, shall coordinate with the central wastewater facility provider and shall increase an applicant's score by four points for parcels served by a collection line within a central wastewater facility service area where a central wastewater treatment facility has been constructed that meets the treatment standards of Section 403.086(10), F.S., and where treatment capacity is available. The points shall only be awarded if a construction permit has been issued for the collection system and the parcel lies within the service area of the wastewater treatment facility.

(3) Reporting and Oversight.

(a) Beginning November 30, 2011, Monroe County and the Department of Community Affairs shall annually report to the Administration Commission documenting the degree to which the work program objectives for the work program year have been achieved. The Commission shall consider the findings and recommendations provided in those reports and shall determine whether progress has been achieved. If the Commission determines that progress has not been made, the unit cap for residential development shall be reduced by 20 percent for the following ROGO year.

(b) If the Commission determines that progress has been made for the work program year, then the Commission may restore the unit cap for residential development for the following year up to a maximum of 197 allocations per ROGO year.

(c) Notwithstanding any other date set forth in this plan, the dates set forth in the work program shall control where conflicts exist.

(d) Wastewater treatment and disposal in Monroe County is governed by the requirements of Sections 381.0065(4) and 403.086(10), F.S. Nothing in this rule shall be construed to limit the authority of the Department of Environmental Protection or the Department of Health to enforce Sections 381.0065(4) and 403.086(10), F.S.

(4) Policy 216.1.19. Hurricane Modeling.

For the purposes of hurricane evacuation clearance time modeling purposes, clearance time shall begin when the Monroe County Emergency Management Coordinator issues the evacuation order for permanent residents for a hurricane that is classified as a Category 3-5 wind event or Category C-E surge event. The termination point shall be U.S. Highway One and the Florida Turnpike in Homestead/Florida City.

(5) WORK PROGRAM.

(a) Carrying Capacity Study Implementation.

1. By July 1, 2012, Monroe County shall adopt the conservation planning mapping (the Tier Zoning Overlay Maps and System) into the Comprehensive Plan based upon the recommendations of the Tier Designation Review Committee with the adjusted Tier boundaries.

2. By July 1, 2012, Monroe County shall adjust the Tier I and Tier IIIA (SPA) boundaries to more accurately reflect the criteria for that Tier as amended by Final Order DCA07-GM166 and implement the Florida Keys Carrying Capacity Study, utilizing the updated habitat data, and based upon the recommendations of the Tier Designation Review Committee Work Group.

3. By July 1, 2012, Monroe County shall create Goal 106 to complete the 10 Year Work Program found in Rule 28-20.110, F.A.C., and to establish objectives to develop a build-out horizon in the Florida Keys and adopt conservation planning mapping into the Comprehensive Plan.

4. By July 1, 2012, Monroe County shall create Objective 106.2 to adopt conservation planning mapping (Tier Maps) into the Monroe Comprehensive Plan based upon the recommendations of the Tier Designation Review Committee Work Group.

5. By July 1, 2012, Monroe County shall adopt Policy 106.2.1 to require the preparation of updated habitat data and establish a regular schedule for continued update to coincide with evaluation and appraisal report timelines.

6. By July 1, 2012, Monroe County shall adopt Policy 106.2.2 to establish the Tier Designation Work Group Review Committee to consist of representatives selected by the Florida Department of Community Affairs from Monroe County, Florida Fish & Wildlife Conservation Commission, United States Fish & Wildlife Service, Department of Environmental Protection and environmental and other relevant interests. This Committee shall be tasked with the responsibility of Tier designation review utilizing the criteria for Tier placement and best available data to recommend amendments to ensure implementation of and adherence to the Florida Keys Carrying Capacity Study. These proposed amendments shall be recommended during 2009 and subsequently coincide with the Evaluation and Appraisal report timelines beginning with the second Evaluation and Appraisal review which follows the adoption of the revised Tier System and Maps as required above adopted in 2011. Each evaluation and appraisal report submitted following the 2011 evaluation and appraisal report shall also include an analysis and recommendations based upon the process described above.

7. By July 1, 2012 and each July thereafter, Monroe County and the Monroe County Land Authority shall submit a report annually to the Administration Commission on the land acquisition funding and efforts in the Florida Keys to purchase Tier I and Big Pine Key Tier II lands and the purchase of parcels where a Monroe County building permit allocation has been denied for four (4) years or more. The report shall include an identification of all sources of funds and assessment of fund balances within those sources available to the County and the Monroe County Land Authority.

8. By July 1, 2012, Monroe County shall adopt Land Development Regulations to require that administrative relief in the form of the issuance of a building permit is not allowed for lands within the Florida Forever targeted acquisition areas or Tier I lands unless, after 60 days from the receipt of a complete application for administrative relief, it has been determined the parcel will not be purchased by any county, state, federal or any private entity. The County shall develop a mechanism to routinely notify the Department of Environmental Protection of upcoming administrative relief requests at least 6 months prior to the deadline for administrative relief.

9. By July 1, 2012, in order to implement the Florida Keys Carrying Capacity Study, Monroe County shall adopt a Comprehensive Plan Policy to discourage private applications for future land use changes which increase allowable density/intensity.

10. By July 1, 2011, Monroe County shall evaluate its land acquisition needs and state and federal funding opportunities and apply annually to at least one state or federal land acquisition grant program.

11. By July 1, 2012, Monroe County shall enter into a memorandum of understanding with the Department of Community Affairs, Division of Emergency Management, Marathon, Islamorada, Key West, Key Colony Beach, and Layton after a notice and comment period of at least 30 days for interested parties. The memorandum of understanding shall stipulate, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model or other models acceptable to the Department to accurately depict evacuation clearance times for the population of the Florida Keys.

12. By July 1, 2012, the Florida Keys Hurricane Evacuation Model shall be run with the agreed upon variables from the memorandum of understanding to complete an analysis of maximum build-out capacity for the Florida Keys Area of Critical State Concern, consistent with the requirement to maintain a 24-hour evacuation clearance time and the Florida Keys Carrying Capacity Study constraints. This analysis shall be prepared in coordination with the Department of Community Affairs and each municipality in the Keys.

13. By July 1, 2012, the County and the Department of Community Affairs shall update the data for the Florida Keys Hurricane Evacuation Model as professionally acceptable sources of information are released (such as the Census, American Communities

Survey, Bureau of Economic and Business Research, and other studies). The County shall also evaluate and address appropriate adjustments to the hurricane evacuation model within each Evaluation and Appraisal Report.

14. By July 1, 2012, the Department of Community Affairs shall apply the derived clearance time to assess and determine the remaining allocations for the Florida Keys Areas of Critical State Concern. The Department will recommend appropriate revisions to the Administration Commission regarding the allocation rates and distribution of allocations to Monroe County, Marathon, Islamorada, Key West, Layton and Key Colony Beach or identify alternative evacuation strategies that support the 24 hour evacuation clearance time. If necessary, the Department of Community Affairs shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rule making to the Administration Commission.

15. By July 1, 2013, if necessary, the Department of Community Affairs shall work with each local government to amend the Comprehensive Plan to reflect revised allocation rates and distribution or propose rule making to the Administration Commission.

(b) Wastewater Implementation.

1. By July 1, 2011, Monroe County shall annually evaluate and allocate funding for wastewater implementation. Monroe County shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.

2. By December 1, 2013, Monroe County shall work with the owners of wastewater facilities and onsite systems throughout the County and the Department of Health (DOH) and the Department of Environmental Protection (DEP) to fulfill the requirements of Sections 403.086(10) and 381.0065(3)(h) and (4)(l), F.S., regarding implementation of wastewater treatment and disposal. This will include coordination of actions with DOH and DEP to notify owners regarding systems that will not meet the 2015 treatment and disposal standards.

3. By July 1, 2011, Monroe County shall annually draft a resolution requesting the issuance of \$50 million of the \$200 million of bonds authorized under Section 215.619, F.S., and an appropriation of sufficient debt service for those bonds, for the construction of wastewater projects within the Florida Keys.

4. By July 1, 2011, Monroe County shall develop a mechanism to provide accurate and timely information and establish the County's annual funding allocations necessary to provide evidence of unmet funding needs to support the issuance of bonds authorized under Section 215.619, F.S., and to assure the timely completion of work as necessary to fulfill any terms and conditions associated with bonds.

5. By July 1, 2011, Monroe County shall evaluate its wastewater needs and state and federal funding opportunities and apply annually to at least one state or federal grant program for wastewater projects and connections.

6. By July 1, 2011, Monroe County shall develop and implement local funding programs necessary to timely fund wastewater construction and future operation, maintenance and replacement of facilities.

7. By December 1, 2013, the County shall provide a report of addresses and the property appraiser's parcel numbers of any property owner that fails or refuses to connect to the central sewer facility within the required timeframe to the Monroe County Health Department, Department of Environmental Protection, and the Department of Community Affairs. This report shall describe the status of the County's enforcement action.

(c) Wastewater Project Implementation.

1. Key Largo Wastewater Treatment Facility. Key Largo Wastewater Treatment District is responsible for wastewater treatment in its service area and the completion of the Key Largo Wastewater Treatment Facility.

a. By July 1, 2012, Monroe County shall complete construction of the South Transmission Line;

b. By July 1, 2013, Monroe County shall complete design of Collection basin C, E, F, G, H, I, J, and K;

c. By July 1, 2012, Monroe County shall complete construction of Collection basins E-H;

d. By December 1, 2011, Monroe County shall schedule construction of Collection basins I-K;

e. By July 1, 2011, Monroe County shall complete construction of Collection basins I-K;

f. By July 1, 2011, Monroe County shall complete 50% of hook-ups to Key Largo Regional WWTP;

g. By July 1, 2012, Monroe County shall complete 75% of hook-ups to Key Largo Regional WWTP;

h. By July 1, 2013, Monroe County shall complete all remaining connections to Key Largo Regional WWTP.

2. Hawk's Cay, Duck Key and Conch Key Wastewater Treatment Facility.

a. By July 1, 2012, Monroe County shall complete construction of Hawk's Cay WWTP upgrade/expansion, transmission, and collection system;

b. By July 1, 2013, Monroe County shall complete construction of Duck Key collection system;

c. By July 1, 2012, Monroe County shall initiate property connections to Hawk's Cay WWTP;

- d. By December 1, 2012, Monroe County shall complete 50% of hook-ups to Hawk's Cay WWTP;
 - e. By July 1, 2013, Monroe County shall complete 75% of hook-ups to Hawk's Cay WWTP; and
 - f. By July 1, 2014, Monroe County shall complete all remaining connections to Hawk's Cay WWTP.
3. South Lower Keys Wastewater Treatment Facility (Big Coppitt Regional System).
- a. By July 1, 2012, Monroe County shall complete 75% hookups to South Lower Keys WWTP; and
 - b. By July 1, 2013, Monroe County shall complete all remaining connections to the South Lower Keys WWTP.
4. Cudjoe Regional Wastewater Treatment Facility.
- a. By July 1, 2011, Monroe County shall complete planning and design documents for the Cudjoe Regional Wastewater Treatment Facility, the Central Area (Cudjoe, Summerland, Upper Sugarloaf) collection system and the Central Area Transmission Main;
 - b. By October 1, 2012, Monroe County shall initiate construction of Wastewater Treatment Facility, Central Area Collection System and Central Area Transmission Main;
 - c. By July 1, 2014, Monroe County shall initiate construction of Wastewater Treatment Facility, Central Area Collection System and Central Area Transmission Main;
 - d. By February 1, 2012, Monroe County shall complete construction of Wastewater Treatment, Outer Area Collection System and Transmission Main;
 - e. By February 1, 2015, Monroe County shall complete construction of Outer Area collection and transmission main;
 - f. By July 1, 2014, Monroe County shall initiate property connections – complete 25% of hook-ups to Cudjoe Regional WWTP;
 - g. By July 1, 2015, Monroe County shall complete 50% of hook-ups to Cudjoe Regional WWTP; and
 - h. By December 1, 2015, Monroe County shall complete remaining hook-ups to Cudjoe Regional WWTP.
- (d) Stormwater Treatment Facilities.
- 1. By July 1, 2011, Monroe County shall evaluate and allocate funding for stormwater implementation. Monroe County shall identify any funding in the annual update to the Capital Improvements Element of the Comprehensive Plan.
 - 2. By July 1, 2011, Monroe County shall apply for stormwater grants from the South Florida Water Management District.
 - 3. By July 1, 2011, Monroe County shall complete Card Sound Road stormwater improvements.