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 Economic Opportunity 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 design 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, Amended 11-3-11.

NAME OF PERSON ORIGINATING PROPOSED RULE: Christopher Spencer, Interim Secretary, Administration Commission.

NAME OF AGENCY HEAD WHO APPROVED THE PROPOSED RULE: Administration Commission.

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: September 22, 2020.

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAR: June 25, 2020.

ADMINISTRATION COMMISSION

RULE NO.: 28-20.140

RULE TITLE: Comprehensive Plan

PURPOSE AND EFFECT: The Commission intends to amend Rule 28-20.140, F.A.C., Comprehensive Plan, to revise the timing of the adoption of the Tier Zoning Overlay Maps and System, remove obsolete provisions regarding prior Work Program tasks, and to add new Work Program tasks concerning canal restoration in Monroe County, Florida.

SUMMARY: The proposed rule for the Monroe County Comprehensive Plan identify the individual Work Program tasks set forth in Rule 28-20.140, F.A.C., and the completion dates of the Work Program tasks necessary for consideration by the Administration Commission prior to removal of the Area of Critical State Concern Designation. As required by Section 380.0552(4), Florida Statutes, the Work Program tasks specified in Administration Commission rules must be reported annually. The protection of the natural environment of the Florida Keys, and the identification of and progress in accomplishing the tasks under Work Program (as set out in Rule 28-20.140, F.A.C.) is reported to the Department of Economic Opportunity for the preparation of a written annual report to the Administration Commission. The proposed amendment to Rule 28-20.140 removes obsolete provisions regarding the Work Program requirements relating to wastewater treatment and adds Work Program tasks concerning canal restoration activities.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS AND LEGISLATIVE RATIFICATION:

The Agency has determined that this will not have an adverse impact on small business or likely increase directly or indirectly regulatory costs in excess of $200,000 in the aggregate within one year after the implementation of the rule. A SERC has not been prepared by the Agency.

The Agency has determined that the proposed rule is not expected to require legislative ratification based on the statement of estimated regulatory costs or if no SERC is required, the information expressly relied upon and described herein: the nature of the rule and the preliminary analysis conducted to determine whether a SERC was required, determined that a Statement of Estimated Regulatory Costs (SERC) was not necessary and that the rule amendment will not require ratification by the Legislature. The proposed rulemaking will not have an adverse impact or effect regulatory costs in excess of $1 million within five years as established in Sections 120.541(2)(a)1., 2., and 3., F.S. and the preliminary analysis conducted to determine whether a SERC was required, determined that a Statement of Estimated Regulatory Costs (SERC) was not necessary and that the rule amendment will not require ratification by the Legislature.

Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RULEMAKING AUTHORITY: 380.0552(9), 380.05(22) FS.

LAW IMPLEMENTED: 380.0552 FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE DATE, TIME AND PLACE SHOWN BELOW:
DATE AND TIME: Tuesday, Oct 27, 2020 10:00 AM - 1:00 PM (EDT)
PLACE: The Hearing, if requested, will be held through GoToMeeting. Please join the meeting from your computer, tablet or smartphone at the following link.
https://global.gotomeeting.com/join/302972165
You can also dial in using your phone.
United States (Toll Free): 1(866) 899 4679
United States: +1 (571)317-3116
Access Code: 302-972-165
Join from a video-conferencing room or system.
Dial in or type: 67.217.95.2 or inroomlink.goto.com
Meeting ID: 302 972 165
Or dial directly: 302972165@67.217.95.2 or 67.217.95.2#302972165
New to GoToMeeting? Get the app now and be ready when your first meeting starts: https://global.gotomeeting.com/install/302972165
Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: Barbara Powell, Regional Program Administrator Area of Critical State Concern, Department of Economic Opportunity, 107 East Madison Street, MSC #160, Tallahassee, Florida 32399, (850)717-8504, Barbara.Powell@deo.myflorida.com. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).
THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Barbara Powell, Regional Program Administrator Area of Critical State Concern, Department of Economic Opportunity, 107 East Madison Street, MSC #160, Tallahassee, Florida 32399, (850)717-8504, Barbara.Powell@deo.myflorida.com

THE FULL TEXT OF THE PROPOSED RULE IS:

28-20.140 Comprehensive Plan.
(1) through (4) No change.
(5) WORK PROGRAM.
(a) Carrying Capacity Study Implementation.
1. Prior to the County adopting a resolution recommending the removal of the designation of Monroe County as an Area of Critical State Concern, pursuant to Section 380.052(4)(b)3, F.S., Monroe County shall adopt the conservation planning mapping (the Tier Zoning Overlay Maps and System) into the Comprehensive Plan as an overlay to the Future Land Use Map. 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 106.2 to adopt conservation planning mapping (Tier Maps) into the Monroe Comprehensive Plan based upon the recommendations of the Tier Designation Review Committee Work Group.
4. By July 1, 2012, Monroe County shall create Objective 106.2.2 to establish a regular schedule for continued update to coincide with evaluation and appraisal report timelines.
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 Economic Opportunity 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.

27. 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.

340. 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 funding opportunity grant program.

11. through 15. are renumbered 4. through 8. No change.

(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.

25. 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 funding opportunity 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 Economic Opportunity. 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 basins 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;
2. By December 30, 2020, Monroe County shall develop and adopt guidelines to select canals for restoration, including a process to evaluate the feasibility of the project, the proposed restoration design (evaluate long-term cost-effective solutions) and associated funding needs.

3. By December 30, 2020, and each year thereafter until 2030, the Department of Economic Opportunity shall work with each stakeholder, including but not limited to each local government, Environmental Protection Agency (EPA), United States Army Corps of Engineers (ACOE), Florida Department of Environmental Protection (DEP), National Oceanic and Atmospheric Administration (NOAA), Florida Keys National Marine Sanctuary (FKNMS), and the South Florida Water Management District (SFWMD) to facilitate intergovernmental coordination and expedite review of canal restoration projects within the Florida Keys.

4. By July 1, 2021, Monroe County shall identify and evaluate funding sources for the implementation of canal restoration projects and the continual operation and maintenance of canals post restoration.

5. By July 1, 2021, and each year thereafter until 2030, Monroe County shall identify canal restoration projects and implementation plans for each canal project. Monroe County shall provide a list of selected canal restoration projects to the Department of Economic Opportunity by October 1st of each year to be completed during the following work program reporting period.

6. By July 1, 2021, and each year thereafter until 2030, Monroe County shall evaluate its canal restoration needs and state and federal funding opportunities and apply annually to at least one state or federal funding opportunity for canal restoration projects.

7. By July 1, 2021 and each year thereafter until 2030, Monroe County shall annually evaluate and allocate funding for canal restoration implementation. Monroe County shall identify any funding in the annual update to the Capital Improvements Element (CIE) of the Comprehensive Plan.

8. By July 1, 2021, the Department of Economic Opportunity shall work with each stakeholder, including but not limited to each local government, EPA, ACOE, DEP, NOAA/FKNMS, SFWMD, to facilitate intergovernmental coordination and review of alternative solutions, including reduced regulatory costs, for canal systems that are susceptible to receiving large inputs of seagrass and other accumulated organic material from near shore waters.

9. By July 1, 2022, and each year thereafter until 2030, Monroe County shall report which canal restoration projects have been initiated and projects that were completed during the reporting period to the Department of Economic Opportunity for submission to the Administration Commission.

10. By July 1, 2022, the Department of Economic Opportunity shall work with each stakeholder, including but not limited to each local government, EPA, ACOE, DEP, NOAA/FKNMS, SFWMD, to facilitate the permitting approval of the alternative solutions identified for canal systems with accumulated organic material issues to substantially reduce those inputs to levels that do not contribute to eutrophication, hypoxia, or other water and sediment quality issues within the canals.

11. By July 1, 2023, Monroe County shall submit a plan to assess the effectiveness of completed canal restoration projects.
The plan shall describe the methods, timeframes and potential funding sources to monitor the effectiveness of restoration projects based on water quality and ecological response factors. Monroe County shall consult with the DEP Division of Environmental Assessment and Restoration to develop a cost-effective plan. The Department of Economic Opportunity will coordinate review of the completed plan with the DEP. Monroe County shall account for agency review comments and modify the plan as necessary.

12. Beginning July 1, 2024, and annually thereafter until 2030, Monroe County shall assess the effectiveness of canal restoration in accordance with the plan identified in subparagraph (5)(c)11. The DEP will make monitoring information related to Keys water quality available to Monroe County to inform the assessment.

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.

NAME OF PERSON ORIGINATING PROPOSED RULE: Christopher Spencer, Interim Secretary, Administration Commission.

NAME OF AGENCY HEAD WHO APPROVED THE PROPOSED RULE: Administration Commission.

DATE PROPOSED RULE APPROVED BY AGENCY HEAD: September 22, 2020

DATE NOTICE OF PROPOSED RULE DEVELOPMENT PUBLISHED IN FAR: June 25, 2020.

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

Board of Cosmetology

RULE NOS.: 61G5-20.004 Display of Documents

61G5-20.008 Employment of Applicants for Licensure as a Cosmetologist Prior to Licensure; Employment of Applicants for Registration as a Specialist Prior to Registration

PURPOSE AND EFFECT: The rule amendments remove the regulation of Hair Braiders, Hair Wrappers, and Body Wrappers from these Board rules.

SUMMARY: These rule amendments propose to delete regulations of Hair Braiders, Hair Wrappers, and Body Wrappers.

SUMMARY OF STATEMENT OF ESTIMATED REGULATORY COSTS AND LEGISLATIVE RATIFICATION:

The Agency has determined that this will not have an adverse impact on small business or likely increase directly or indirectly regulatory costs in excess of $200,000 in the aggregate within one year after the implementation of the rule. A SERC has not been prepared by the Agency.

The Agency has determined that the proposed rule is not expected to require legislative ratification based on the statement of estimated regulatory costs or if no SERC is required, the information expressly relied upon and described herein: During discussion of the economic impact of this rule at its Board meeting, the Board concluded that this rule change will not have any impact on licensees and their businesses or the businesses that employ them. The rule will not increase any fees, business costs, personnel costs, will not decrease profit opportunities, and will not require any specialized knowledge to comply. This change will not increase any direct or indirect regulatory costs. Hence, the Board determined that a Statement of Estimated Regulatory Costs (SERC) was not necessary and that the rule will not require ratification by the Legislature. No person or interested party submitted additional information regarding the economic impact at that time.

Any person who wishes to provide information regarding a statement of estimated regulatory costs, or provide a proposal for a lower cost regulatory alternative must do so in writing within 21 days of this notice.

RULEMAKING AUTHORITY: 477.016, 477.025(2) FS.

LAW IMPLEMENTED: 477.025, 477.0132(2), 477.019(4), 477.0201(6) FS.

IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE SCHEDULED AND ANNOUNCED IN THE FAR.

THE PERSON TO BE CONTACTED REGARDING THE PROPOSED RULE IS: Krista Woodard, Executive Director, Board of Cosmetology, 2601 Blair Stone Road, Tallahassee, Florida 32399-0783, Krista.Woodard@dbpr.state.fl.us.

THE FULL TEXT OF THE PROPOSED RULE IS:

61G5-20.004 Display of Documents.

(1) No change.

(6) All holders of a cosmetology or specialty salon license shall require and ensure that all individuals engaged in the practice of cosmetology, or any specialty, hair braiding, hair wrapping, or body wrapping display at the individual’s work station their current license or registration at all times when the
New Rule Work Program

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
Economic Opportunity. 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 Economic Opportunity 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.
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. Prior to the County adopting a resolution recommending the removal of the designation of Monroe County as an Area of
Critical State Concern, pursuant to Section 380.0552(4)(b)3., F.S., Monroe County shall adopt the conservation planning mapping
(the Tier Zoning Overlay Maps and System) into the Comprehensive Plan as an overlay to the Future Land Use Map.
2. 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.

3. 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 funding opportunity.

4. By July 1, 2012, Monroe County shall enter into a memorandum of understanding with the Department of Economic Opportunity, 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.

5. 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 Economic Opportunity and each municipality in the Keys.

6. By July 1, 2012, the County and the Department of Economic Opportunity 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.

7. By July 1, 2012, the Department of Economic Opportunity 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 Economic Opportunity shall work with each local government to amend the Comprehensive Plans to reflect revised allocation rates and distributions or propose rulemaking to the Administration Commission.

8. By July 1, 2013, if necessary, the Department of Economic Opportunity 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 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 funding opportunity for wastewater projects and connections.

(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.

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

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).

By July 1, 2013, Monroe County shall complete all remaining connections to the South Lower Keys WWTP.

4. Cudjoe Regional Wastewater Treatment Facility.

By December 1, 2015, Monroe County shall complete remaining hook-ups to Cudjoe Regional WWTP.

(d) Canal Restoration Implementation.

1. By December 30, 2020, Monroe County and its partners shall update the 2013 Canal Management Master Plan (CCMP) to include any updated water quality assessment of canals, a methodology to prioritize need for water quality improvement, appropriate restoration options and revised canal rankings based on new information.
2. By December 30, 2020, Monroe County shall develop and adopt guidelines to select canals for restoration, including a process to evaluate the feasibility of the project, the proposed restoration design (evaluate long-term cost-effective solutions) and associated funding needs.

3. By December 30, 2020, and each year thereafter until 2030, the Department of Economic Opportunity shall work with each stakeholder, including but not limited to each local government, Environmental Protection Agency (EPA), United States Army Corps of Engineers (ACOE), Florida Department of Environmental Protection (DEP), National Oceanic and Atmospheric Administration (NOAA), Florida Keys National Marine Sanctuary (FKNMS), and the South Florida Water Management District (SFWMD) to facilitate intergovernmental coordination and expedite review of canal restoration projects within the Florida Keys.

4. By July 1, 2021, Monroe County shall identify and evaluate funding sources for the implementation of canal restoration projects and the continual operation and maintenance of canals post restoration.

5. By July 1, 2021, and each year thereafter until 2030, Monroe County shall identify canal restoration projects and implementation plans for each canal project. Monroe County shall provide a list of selected canal restoration projects to the Department of Economic Opportunity by October 1st of each year to be completed during the following work program reporting period.

6. By July 1, 2021, and each year thereafter until 2030, Monroe County shall evaluate its canal restoration needs and state and federal funding opportunities and apply annually to at least one state or federal funding opportunity for canal restoration projects.

7. By July 1, 2021 and each year thereafter until 2030, Monroe County shall annually evaluate and allocate funding for canal restoration implementation. Monroe County shall identify any funding in the annual update to the Capital Improvements Element (CIE) of the Comprehensive Plan.

8. By July 1, 2021, the Department of Economic Opportunity shall work with each stakeholder, including but not limited to each local government, EPA, ACOE, DEP, NOAA/FKNMS, SFWMD, to facilitate intergovernmental coordination and review of alternative solutions, including reduced regulatory costs, for canal systems that are susceptible to receiving large inputs of seagrass and other accumulated organic material from near shore waters.

9. By July 1, 2022, and each year thereafter until 2030, Monroe County shall report which canal restoration projects have been initiated and projects that were completed during the reporting period to the Department of Economic Opportunity for submission to the Administration Commission.

10. By July 1, 2022, the Department of Economic Opportunity shall work with each stakeholder, including but not limited to each local government, EPA, ACOE, DEP, NOAA/FKNMS, SFWMD, to facilitate the permitting approval of the alternative solutions identified for canal systems with accumulated organic material issues to substantially reduce those inputs to levels that do not contribute to eutrophication, hypoxia, or other water and sediment quality issues within the canals.

11. By July 1, 2023, Monroe County shall submit a plan to assess the effectiveness of completed canal restoration projects. The plan shall describe the methods, timeframes and potential funding sources to monitor the effectiveness of restoration projects based on water quality and ecological response factors. Monroe County shall consult with the DEP Division of Environmental Assessment and Restoration to develop a cost-effective plan. The Department of Economic Opportunity will coordinate review of the completed plan with the DEP. Monroe County shall account for agency review comments and modify the plan as necessary.

12. Beginning July 1, 2024, and annually thereafter until 2030, Monroe County shall assess the effectiveness of canal restoration in accordance with the plan identified in subparagraph (5)(c)11. The DEP will make monitoring information related to Keys water quality available to Monroe County to inform the assessment.

*Rulemaking Authority 380.0552(9), 380.05(22) FS. Law Implemented 380.0552 FS. History–New 6-17-11, Amended 11-26-20.*
An act relating to growth management; amending s. 163.3167, F.S.; specifying requirements for certain comprehensive plans effective, rather than adopted, after a specified date and for associated land development regulations; amending s. 163.3177, F.S.; requiring local governments to include a property rights element in their comprehensive plans; providing a statement of rights which a local government may use; requiring a local government to adopt a property rights element by the earlier of its adoption of its next proposed plan amendment initiated after a certain date or the next scheduled evaluation and appraisal of its comprehensive plan; prohibiting a local government’s property rights element from conflicting with the statement of rights contained in the act; amending s. 163.3237, F.S.; providing that the consent of certain property owners is not required for development agreement changes under certain circumstances; providing an exception; amending s. 337.25, F.S.; requiring the Department of Transportation to afford a right of first refusal to certain individuals under specified circumstances; providing requirements and procedures for the right of first refusal; amending s. 380.06, F.S.; authorizing certain developments of regional impact agreements to be amended under certain circumstances; providing retroactive applicability; providing a declaration of important state interest; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Subsection (3) of section 163.3167, Florida Statutes, is amended to read:

163.3167  Scope of act.—

(3) A municipality established after the effective date of this act shall, within 1 year after incorporation, establish a local planning agency, pursuant to s. 163.3174, and prepare and adopt a comprehensive plan of the type and in the manner set out in this act within 3 years after the date of such incorporation. A county comprehensive plan is controlling until the municipality adopts a comprehensive plan in accordance with this act. A comprehensive plan for a newly incorporated municipality which becomes effective adopted after January 1, 2016 2019, and all land development regulations adopted to implement the comprehensive plan must incorporate each development order existing before the comprehensive plan’s effective date, may not impair the completion of a development in accordance with such existing development order, and must vest the density and intensity approved by such development order existing on the effective date of the comprehensive plan without limitation or modification.

CODING: Words stricken are deletions; words underlined are additions.
Section 2. Paragraph (i) is added to subsection (6) of section 163.3177, Florida Statutes, to read:

163.3177 Required and optional elements of comprehensive plan; studies and surveys.—

(6) In addition to the requirements of subsections (1)-(5), the comprehensive plan shall include the following elements:

(i)1. In accordance with the legislative intent expressed in ss. 163.3161(10) and 187.101(3) that governmental entities respect judicially acknowledged and constitutionally protected private property rights, each local government shall include in its comprehensive plan a property rights element to ensure that private property rights are considered in local decisionmaking. A local government may adopt its own property rights element or use the following statement of rights:

The following rights shall be considered in local decisionmaking:

1. The right of a property owner to physically possess and control his or her interests in the property, including easements, leases, or mineral rights.

2. The right of a property owner to use, maintain, develop, and improve his or her property for personal use or for the use of any other person, subject to state law and local ordinances.

3. The right of the property owner to privacy and to exclude others from the property to protect the owner’s possessions and property.

4. The right of a property owner to dispose of his or her property through sale or gift.

2. Each local government must adopt a property rights element in its comprehensive plan by the earlier of the date of its adoption of its next proposed plan amendment that is initiated after July 1, 2021, or the date of the next scheduled evaluation and appraisal of its comprehensive plan pursuant to s. 163.3191. If a local government adopts its own property rights element, the element may not conflict with the statement of rights provided in subparagraph 1.

Section 3. Section 163.3237, Florida Statutes, is amended to read:

163.3237 Amendment or cancellation of a development agreement.—A development agreement may be amended or canceled by mutual consent of the parties to the agreement or by their successors in interest. A party or its designated successor in interest to a development agreement and a local government may amend or cancel a development agreement without securing the consent of other parcel owners whose property was originally subject to the development agreement, unless the amendment or
cancellation directly modifies the allowable uses or entitlements of such
owners' property.

Section 4. Subsection (4) of section 337.25, Florida Statutes, is amended
to read:

337.25 Acquisition, lease, and disposal of real and personal property.

(4) The department may convey, in the name of the state, any land,
building, or other property, real or personal, which was acquired under
subsection (1) and which the department has determined is not needed for
the construction, operation, and maintenance of a transportation facility.
When such a determination has been made, property may be disposed of
through negotiations, sealed competitive bids, auctions, or any other means
the department deems to be in its best interest, with due advertisement for
property valued by the department at greater than $10,000. A sale may not
occur at a price less than the department’s current estimate of value, except
as provided in paragraphs (a)-(d). The department may afford a right of first
refusal to the local government or other political subdivision in the
jurisdiction in which the parcel is situated, except in a conveyance
transacted under paragraph (a), paragraph (c), or paragraph (e). Notwith-
standing any provision of this section to the contrary, before any conveyance
under this subsection may be made, except a conveyance under paragraph
(a) or paragraph (c), the department shall first afford a right of first refusal
to the previous property owner for the department’s current estimate of
value of the property. The right of first refusal must be made in writing and
sent to the previous owner via certified mail or hand delivery, effective upon
receipt. The right of first refusal must provide the previous owner with a
minimum of 30 days to exercise the right in writing and must be sent to the
originator of the offer by certified mail or hand delivery, effective upon
dispatch. If the previous owner exercises his or her right of first refusal, the
previous owner has a minimum of 90 days to close on the property. The right
of first refusal set forth in this subsection may not be required for the
disposal of property acquired more than 10 years before the date of
disposition by the department.

(a) If the property has been donated to the state for transportation
purposes and a transportation facility has not been constructed for at least 5
years, plans have not been prepared for the construction of such facility, and
the property is not located in a transportation corridor, the governmental
entity may authorize reconveyance of the donated property for no con-
sideration to the original donor or the donor’s heirs, successors, assigns, or
representatives.

(b) If the property is to be used for a public purpose, the property may be
conveyed without consideration to a governmental entity.

(c) If the property was originally acquired specifically to provide
replacement housing for persons displaced by transportation projects, the
department may negotiate for the sale of such property as replacement
housing. As compensation, the state shall receive at least its investment in such property or the department’s current estimate of value, whichever is lower. It is expressly intended that this benefit be extended only to persons actually displaced by the project. Dispositions to any other person must be for at least the department’s current estimate of value.

(d) If the department determines that the property requires significant costs to be incurred or that continued ownership of the property exposes the department to significant liability risks, the department may use the projected maintenance costs over the next 10 years to offset the property’s value in establishing a value for disposal of the property, even if that value is zero.

(e) If, at the discretion of the department, a sale to a person other than an abutting property owner would be inequitable, the property may be sold to the abutting owner for the department’s current estimate of value.

Section 5. Paragraph (d) of subsection (4) of section 380.06, Florida Statutes, is amended to read:

380.06 Developments of regional impact.—

(4) LOCAL GOVERNMENT DEVELOPMENT ORDER.—

(d) Any agreement entered into by the state land planning agency, the developer, and the local government with respect to an approved development of regional impact previously classified as essentially built out, or any other official determination that an approved development of regional impact is essentially built out, remains valid unless it expired on or before April 6, 2018, and may be amended pursuant to the processes adopted by the local government for amending development orders. Any such agreement or amendment may authorize the developer to exchange approved land uses, subject to demonstrating that the exchange will not increase impacts to public facilities. This paragraph applies to all such agreements and amendments effective on or after April 6, 2018.

Section 6. The Legislature finds and declares that this act fulfills an important state interest.

Section 7. This act shall take effect July 1, 2021.

Approved by the Governor June 29, 2021.

Filed in Office Secretary of State June 29, 2021.
BULK ITEM:  No  DEPARTMENT:  Planning/Environmental Resources

TIME APPROXIMATE:  N/A  STAFF CONTACT:  Christine Hurley (305) 292-4441

AGENDA ITEM WORDING:  Discussion and direction to process Comprehensive Plan and Land Development Code amendments to facilitate the elevation (lifting up) of lawfully-existing residential dwelling units by waiving or reducing certain setback and open space requirements, to allow necessary improvements to provide access (stairs, ramp, etc.) to a house elevated above base flood level to reduce the risk of future flood damage.

ITEM BACKGROUND:  On September 10, 2017, Hurricane Irma made landfall near Cudjoe Key as a Category 4 Hurricane with maximum sustained winds of 130 mph and flooding occurred in various neighborhoods. Hurricane Irma caused significant damage throughout the Florida Keys, particularly to structures built prior to the upgraded Florida Building Code adopted after Hurricane Andrew, to non-elevated structures and to mobile homes.

To provide additional protection to residents that reside in mobile homes in flood hazard areas, reduce the repeated impacts by flooding, and enhance public health, safety and welfare, the County already adopted an amendment to eliminate the ability for a mobile home to be placed at an elevation below base flood elevation.

Further, the County has embarked on proactively assisting property owners with voluntary elevations through FEMA funded grant programs. In order to encourage participation in proactive flood mitigation projects, such as elevations, staff are recommending the BOCC consider allowing owners to elevate their homes, in place (within the existing footprint of the house), without the need for variances to setbacks, etc. If a house was built before current code requirements for setbacks and open space, it is possible the house location on a site is currently nonconforming, and the current code requires that structures undergoing substantial improvement, where work equals or exceeds 50 percent of the structure’s market value, be fully rebuilt to the current code (come into compliance with current requirements).

The County should consider if additional amendments are needed to provide allowances within certain setback and open space requirements, to allow elevations and eliminate impediments to elevating lawfully-existing residential dwelling units, not including mobile homes, above base flood levels.
level to reduce future flood damage. This is particularly important, in light of the impacts of Hurricane Irma, the County’s better understanding of the flood risks associated with structures below base flood elevation, the opportunity for property owners to reduce their insurance premiums by elevating homes, and the County’s ongoing participation in numerous recovery, post disaster and resiliency programs. Further, as the County begins elevating roadways and improving drainage in low lying neighborhoods, it is important to encourage private property owners to elevate their homes.

Property owners may self-fund improvements to their homes to elevate above base flood levels and there may be additional funding opportunities with the County participating in several grant programs to provide for the mitigation of flood risks, such as:

- FEMA Hazard Mitigation Grant Program (HMGP) for mitigation measures
- Flood Mitigation Assistance (FMA) Grant Program to reduce or eliminate the long-term risk of flood damage
- Rebuild Florida Program to demo, repair, reconstruct and elevate primary homes

Considering these programs, and the County’s current effort to prepare for the upcoming FEMA Flood Mitigation Assistance (FMA) Grant Program (typically federal funding is available for up to 75 percent of the eligible activity costs) and similar funding opportunities, the County should consider what steps it can take to further facilitate reducing the risk of future damage, hardship, loss, or flood damage within the community.

__________________

Staff is looking for direction for processing Comprehensive Plan and Land Development Code amendments to further enable elevating lawfully-existing residential dwelling units, not including mobile homes, above base flood level, as follows (draft language only):

Notwithstanding the open space provisions set forth in Policy 101.5.25 and Chapter 130 of the Land Development Code and the minimum required setbacks in Chapters 130 and 131 of the Land Development Code, a lawfully-existing residential dwelling unit, not including mobile homes, may be elevated above base flood level to reduce flood damage, pursuant to:

- The lawfully-existing dwelling unit may maintain its existing setbacks and open space, even if nonconforming, provided the structure is elevated within the original (existing) footprint of the structure.
- Setbacks and open space requirements are waived to allow necessary improvements to a dwelling unit being retrofitted by elevating the unit to meet or exceed flood levels. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.
- Side and rear setback requirements are waived to allow accessory elevated platforms above base flood for equipment (mechanical, plumbing and electrical systems, appliances and components) situated at least two
(2) feet from the side yard property line or at least five (5) feet from the rear yard property line. In no event shall the total combined area of all accessory structures occupy more than 80 percent (80%) of the required side yard setback area or 60 percent (60%) of the required rear yard setback area.

- Maximum shoreline setbacks are to be maintained and, in no event shall a shoreline setback be less than ten (10) feet from mean high water.
- The improvements shall be constructed to avoid off-site discharge of stormwater from the subject parcel, in accordance with Section 114-3 of the Monroe County Land Development Code.
- This Policy does not waive any required minimum vegetated setbacks adjacent to wetlands (see Policy 203.1.2 and Policy 204.2.5) and does not authorize any encroachments to a conservation easement.
- This Policy does not restrict a property owner from proposing other additions or improvements to the elevated house, as long as the additions, enlargements, expansions, and extensions do not create a nonconformity or cause a further violation to an existing nonconformity.

In reviewing the Comprehensive Plan and Land Development Code to identify potential areas that may impact elevating a lawfully-existing residential dwelling unit above base flood level to reduce flood damage, staff has identified setbacks, in particular, as an area to evaluate.

**Example of setback standards:**
<table>
<thead>
<tr>
<th>Land Use District/Land Use</th>
<th>Primary Front Yard (ft.)</th>
<th>Secondary Front Yard (ft.)</th>
<th>Primary Side Yard (ft.)</th>
<th>Secondary Side Yard (ft.)</th>
<th>Rear Yard (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Subdivision (IS)</td>
<td>25</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Sparsely Settled (SS)</td>
<td>25</td>
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<td>5</td>
<td>10</td>
</tr>
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<td>Suburban Residential (SR)</td>
<td>25</td>
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<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Urban Residential (UR)</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Example of setback scenarios with elevated a house in-place (in the existing location):

- House conforming and the necessary improvements to the elevated house do not impact setback. No nonconformity created. No amendment needed.
House conforming and the necessary improvements and ‘desired improvements’ to the elevated house do not impact setback. No nonconformity created. No amendment needed.

House conforming and the necessary improvements to the elevated house DO impact setback. Nonconformity created but necessary to access the home. Amendment needed to allow without a variance approval.

House conforming and the necessary improvements and to the elevated house do not impact setback. ‘Desired improvements’ proposed within the setbacks. Not permissible. Nonconformity created. No amendment proposed.
House already nonconforming and the necessary improvements to the elevated house DO impact setback. Nonconformity expanded but necessary to access the home. Amendment needed to allow without a variance approval.

House already nonconforming and the necessary improvements to the elevated house DO impact setback. Nonconformity expanded but necessary to access the home. Amendment needed to allow without a variance approval.

House already nonconforming and the necessary improvements to the elevated house DO impact setback. Nonconformity expanded but necessary to access the home. Amendment needed to allow without a variance approval.
House conforming and the necessary improvements to the elevated house DO impact setback. Nonconformity created but necessary to access the home. 
Amendment needed to allow without a variance approval.

House conforming and the necessary improvements to the elevated house DO impact setback. Nonconformity created but necessary to access the home. 
Amendment needed to allow without a variance approval.

House conforming but owner proposed ‘desired improvements’ of a wraparound porch within the setbacks. Not permissible. Nonconformity created. Owner can propose access improvements in compliance with setbacks. 
No amendment
**Potential Example Comprehensive Plan Amendments:**

**Objective 101.5** Monroe County shall regulate future development and redevelopment to maintain and enhance the character of the community and protect natural resources by providing for the compatible distribution of land uses consistent with the designations shown on the Future Land Use Map.

* * * * *

**Policy 101.5.34**

Notwithstanding the open space provisions set forth in Policy 101.5.25 and Chapter 130 of the Land Development Code and the minimum required setbacks in Chapters 130 and 131 of the Land Development Code, a lawfully-existing residential dwelling unit, not including mobile homes, may be elevated above base flood level to reduce flood damage, pursuant to:

- The lawfully-existing dwelling unit structure is elevated within the original (existing) footprint of the structure.
- Setbacks and open space requirements are waived to allow necessary improvements to a dwelling unit being retrofitted by elevating the unit to meet or exceed flood levels. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.
- Side and rear setback requirements are waived to allow accessory elevated platforms above base flood for equipment (mechanical, plumbing and electrical systems, appliances and components) situated at least two (2) feet from the side yard property line or at least five (5) feet from the rear yard property line. In no event shall the total combined area of all accessory structures occupy more than 80 percent (80%) of the required side yard setback area or 60 percent (60%) of the required rear yard setback area.
- Maximum shoreline setbacks are to be maintained and, in no event shall a shoreline setback be less than ten (10) feet from mean high water.
- The improvements shall be constructed to avoid off-site discharge of stormwater from the subject parcel, in accordance with Section 114-3 of the Monroe County Land Development Code.
- Development shall maintain compliance to the maximum extent practicable, as determined by the Planning Director.
- This Policy does not waive any required minimum vegetated setbacks adjacent to wetlands (see Policy 203.1.2 and Policy 204.2.5) and does not authorize any encroachments to a conservation easement.
- This Policy does not restrict a property owner from proposing other additions or improvements to the elevated house, as long as the additions,
enlargements, expansions, and extensions do not create a nonconformity or cause a further violation to an existing nonconformity.

Objective 101.9 Monroe County shall eliminate or reduce the frequency of structures which are inconsistent with the applicable provisions of the land development regulations, zoning districts, Future Land Use categories and the Future Land Use Map. In Monroe County, some nonconforming structures are an important part of the community character and the County desires to maintain such character and protect these lawfully established, nonconforming structures and allow them to be repaired or replaced.

Policy 101.9.1 Substantial improvement is defined as any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent of the pre-destruction market value of the structure. Improvements to historic structures, and improvements to meet health, sanitary or safety code specifications are not considered substantial improvements.

Policy 101.9.2 Enlargements and extensions to lawful nonconforming structures outside of the Mixed Use Commercial Fishing District or a Community Center Overlay shall be allowed, provided that:
1. the improvement does not constitute a substantial improvement;
2. a nonconforming use is not located in the nonconforming structure; and
3. the nonconformity is not further violated.

Policy 101.9.3 A nonconforming structure, other than a locally or nationally registered historic structure, shall not be moved unless it thereafter shall conform to the applicable provisions of the Monroe County Code.

Policy 101.9.4 With the following exceptions, nonconforming structures which are damaged or destroyed so as to require substantial improvement shall be repaired or restored in conformance with all applicable provisions of the current Monroe County Code. Substantial improvement or reconstruction of nonconforming single-family dwelling units shall comply with the setback and open space provisions set forth in Policy 101.5.25 and in Chapters 130 and 131 of the Monroe County Land Development Code, except where strict compliance would result in a reduction in lot coverage as compared to the pre-destruction footprint of the dwelling unit. In such cases, the previously approved open space ratio shall be applied; and the maximum shoreline setback shall be maintained and in no event shall the shoreline setback be less than ten (10) feet from mean high water.
To further recovery, post disaster and resiliency, notwithstanding the open space provisions set forth in Policy 101.5.25 and Chapter 130 of the Land Development Code and the minimum required setbacks in Chapters 130 and 131 of the Land Development Code, a lawfully-existing residential dwelling unit, not including mobile homes, may be retrofitted to elevate the structure above base flood level to reduce flood damage, pursuant to:

- The lawfully-existing dwelling unit may maintain its existing setbacks and open space, even if nonconforming, provided the structure is elevated within the original (existing) footprint of the structure.
- Setbacks and open space requirements are waived to allow necessary improvements to a dwelling unit being retrofitted by elevating the unit to meet or exceed flood levels. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.
- Side and rear setback requirements are waived to allow accessory elevated platforms above base flood for equipment (mechanical, plumbing and electrical systems, appliances and components) situated at least two (2) feet from the side yard property line or at least five (5) feet from the rear yard property line. In no event shall the total combined area of all accessory structures occupy more than 80 percent (80%) of the required side yard setback area or 60 percent (60%) of the required rear yard setback area.
- Maximum shoreline setbacks are to be maintained and, in no event shall a shoreline setback be less than ten (10) feet from mean high water.
- The improvements shall be constructed to avoid off-site discharge of stormwater from the subject parcel, in accordance with Section 114-3 of the Monroe County Land Development Code.
- This Policy does not waive any required minimum vegetated setbacks adjacent to wetlands (see Policy 203.1.2 and Policy 204.2.5) and does not authorize any encroachments to a conservation easement.
- This Policy does not restrict a property owner from proposing other additions or improvements to the elevated house, as long as the additions, enlargements, expansions, and extensions do not create a nonconformity or cause a further violation to an existing nonconformity.

* * * * *

**Potential Example Land Development Code Amendments:**

**Sec. 102-57. Nonconforming Structures.**
(a) **Authority to continue.** A nonconforming structure devoted to a use permitted in the land use (zoning) district in which it is located, or devoted to a nonconforming use with authority to continue pursuant to Section 102-56, may be continued in accordance with the provisions of this section.
(b) **Ordinary repair and maintenance.** Normal maintenance and repair of nonconforming structures registered in accordance with section 102-55 may be performed.

(c) **Enlargements, expansions, and extensions.** Lawful nonconforming structures that are used in a manner conforming to the provisions of this Land Development Code and the Comprehensive Plan may be enlarged, expanded, or extended, provided that:
   1. The improvement does not constitute a substantial improvement;
   2. A nonconforming use is not located in the nonconforming structure; and
   3. The nonconformity is not further violated.

(d) **Relocation.** A nonconforming structure, other than a historic structure listed on the National Register of Historic Places, the Florida Inventory of Historic Places, and/or designated as historic by the BOCC, shall not be moved unless it thereafter shall conform to the regulations of the land use (zoning) district in which it is relocated.

(e) **Termination, Damage or Destruction and Retrofits.**
   1. **Abandonment.** Where a nonconforming structure is voluntarily abandoned for 18 consecutive months, then such structure shall be demolished, removed or converted to a conforming structure.
   2. **Damage or destruction.**
      a. A nonconforming structure that is damaged or destroyed to the extent of less than 50 percent of the fair market value of such structure may be restored as of right if a building permit for reconstruction is issued within six months of the date of the damage (such damage or destruction may be voluntarily or due to natural phenomena whose effects could not be prevented by the exercise of reasonable care and foresight).
      b. Except as provided in section 135-5, chapter 122 in regard to mobile homes, and section 130-163, any nonconforming structure that is damaged or destroyed so as to require substantial improvement may be repaired or restored only if the structure conforms to the provisions of the land use (zoning) district in which it is located. Fair market value shall be determined by reference to the official tax assessment rolls for that year or by an appraisal by a qualified independent appraiser. The extent of damage or destruction shall be determined by the building official, in consultation with the Planning Director, by comparing the estimated cost of repairs or restoration with the fair market value.
      c. Substantial improvement or reconstruction of nonconforming single-family dwelling units/structures shall comply with all applicable setback and open space provisions of this Land Development Code set forth in chapters 130 and 131 except where strict compliance would result in a reduction in lot coverage as compared to the pre-destruction footprint of the dwelling unit/structure. In such cases, the previously approved open space ratio shall be applied; and the maximum shoreline setback shall be maintained and in no event shall the shoreline setback be less than ten (10) feet from mean high water.
(3) **Elevation Retrofits.** To further recovery, post disaster and resiliency, as provided in Policy 101.9.4, a lawfully-existing residential dwelling unit, not including mobile homes, may be retrofitted to elevate the structure above base flood level to reduce flood damage, pursuant to:

a. The lawfully-existing dwelling unit may maintain its existing setbacks and open space, even if nonconforming, provided the structure is elevated within the original (existing) footprint of the structure.

b. Setbacks and open space requirements are waived to allow necessary improvements to a dwelling unit being retrofitted by elevating the unit to meet or exceed flood levels. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.

c. Side and rear setback requirements are waived to allow accessory elevated platforms above base flood for equipment (mechanical, plumbing and electrical systems, appliances and components) situated at least two (2) feet from the side yard property line or at least five (5) feet from the rear yard property line. In no event shall the total combined area of all accessory structures occupy more than 80 percent (80%) of the required side yard setback area or 60 percent (60%) of the required rear yard setback area.

d. Maximum shoreline setbacks are to be maintained and, in no event shall a shoreline setback be less than ten (10) feet from mean high water.

e. The improvements shall be constructed to avoid off-site discharge of stormwater from the subject parcel, in accordance with Section 114-3 of the Monroe County Land Development Code.

f. This Policy does not waive any required minimum vegetated setbacks adjacent to wetlands (see Policy 203.1.2 and Policy 204.2.5) and does not authorize any encroachments to a conservation easement.

g. This Policy does not restrict a property owner from proposing other additions or improvements to the elevated house, as long as the additions, enlargements, expansions, and extensions do not create a nonconformity or cause a further violation to an existing nonconformity.

(4) **Amortization.** Any nonconforming structure may be subject to compulsory termination when it is found detrimental to the conservation of the value of surrounding land and improvements, and therefore is tending to deteriorate or blight the neighborhood. In ordering the compulsory termination of a nonconforming structure, the BOCC will establish a definite and reasonable amortization period during which the nonconforming structure may continue while the investment value decrement resulting from termination is amortized. Determination of the amount to be amortized shall be based on the value and condition of the land and improvements for the nonconforming structure less their value and condition for a conforming structure, and such other reasonable
costs as the termination may cause. The rate of amortization shall be in accordance with reasonable economic practice.

(f) Water-dependent and water-related commercial nonconforming structures. Lawfully established water-dependent and water-related nonresidential structures which are identified as a source of economic sustainability within a Livable CommuniKeys Plan may be permitted to be rebuilt even if 100 percent destroyed provided that they are rebuilt to preexisting use and registered in accordance with section 102-55. Development shall be brought into compliance to the maximum extent practicable, as determined by the Planning Director.

Sec. 131-1. Required Setbacks.
(a) Unless otherwise allowed for in this Land Development Code, no structure or land shall be developed, used or occupied except in accordance with the bulk regulations set out in the following table.

<table>
<thead>
<tr>
<th>Land Use District/Land Use</th>
<th>Primary Front Yard (ft.)***</th>
<th>Secondary Front Yard (ft.)***</th>
<th>Primary Side Yard (ft.)***</th>
<th>Secondary Side Yard (ft.)***</th>
<th>Rear Yard (ft.)***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport (AD)</td>
<td>25</td>
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<td>Commercial 1 (C1)</td>
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<td>Commercial 2 (C2)</td>
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<td>Commercial Fishing Area (CFA), Commercial Fishing Special District (CFSD), and Commercial Fishing Village (CFV)</td>
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<td>Conservation (C)</td>
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<td>Destination Resort (DR)</td>
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<td>Improved Subdivision (IS)</td>
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<td>Industrial (I)</td>
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<tr>
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<td>25</td>
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<tr>
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<td>Urban Commercial (UC)</td>
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<td>Urban Residential Mobile Home (URM)**</td>
<td>10</td>
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<tr>
<td>Lots less than 50 feet wide</td>
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<td>Lots 50 feet wide or greater</td>
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</table>
(b) Applicability of required setbacks.

Sec. 131-3. Applicability of Required Setbacks.

(a) Bufferyards. When a bufferyard is required under the provisions of Chapter 114, Article V, compliance with the bufferyard provisions along a property line shall relieve the necessity of complying with the setback provisions along the same property line if the width of the bufferyard is greater than the applicable setback requirement set forth in Section 131-1.

(b) Shoreline setbacks. All development shall be set back from shorelines as required in Section 118-12. Docking and mooring facilities within the shoreline setback shall be set back from side property lines in accordance with Section 118-12. The side yard setback does not apply to a utility pole, utility rack, seawall, fence, retaining wall, or marginal dock.

(c) Front yard setbacks. A front yard is a required setback on a parcel of land that is located along the full length of the front property line of the parcel, is generally the property frontage to which development on the parcel is oriented and is generally adjacent a road. On parcels fronting more than one road, such as corner lots and double frontage parcels, each yard along a road shall be a front yard. The front yard setback does not apply to a utility pole or utility rack.

(1) Single frontage parcels. For a parcel that has only a single road frontage, the primary front yard requirement set forth in Section 131-1 shall be applied.
(2) **Double frontage parcels.** For a parcel that has road frontage along two or more roads, the primary front yard requirement set forth in Section 131-1 shall generally be applied to the front yard to which development on the parcel is oriented. The secondary front yard requirement set forth in Section 131-1 shall be applied to the remaining front yard(s). For parcels located within the median of U.S. Highway 1, the primary front yard requirements shall be applied to both front yards situated along the highway right-of-ways.

(3) **Accessory driveways and walkways.** Accessory structures, limited to driveways and walkways, may be permitted within a required front yard setback provided they do not exceed six (6) inches in height as measured from grade. In no event shall the total combined area of all accessory structures occupy more than 60 percent of the required front yard setback area.

(4) **Off-street parking on residen tally developed parcels.** Any required off-street parking spaces may be located on an accessory driveway within the front yard setback on a parcel developed exclusively with a residential use. Any vehicle utilizing such an off-street parking space shall be properly licensed and operable.

(5) **Signs, fences and landscaping.** Signs as permitted in Chapter 142, fences as permitted in Chapter 114 and landscaping may be permitted in a required front yard setback.

(6) **Ingress and Egress for lawfully established residential dwelling units retrofitted to elevate the structure above base flood level.** Retrofitting a lawfully existing residential dwelling unit, not including mobile homes, to elevate the unit above base flood level to reduce flood damage may encroach the front yard requirement set forth in Section 131-1 to allow necessary improvements to access the dwelling unit. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.

(d) **Side yard setbacks.** A side yard is a required setback on a parcel of land that is located along the full length of the side property line and is generally between the front and rear property lines. The side yard setback does not apply to a utility pole, utility rack, seawall, fence, retaining wall, or marginal dock.

(1) **Side yard requirements (excluding four-sided platted corner lots).** With the exception of four-sided platted corner lots, the primary side yard requirement set forth in Section 131-1 shall be applied to one side yard. The secondary side yard requirement set forth in Section 131-1 shall be applied to any remaining side yards.

(2) **Side yard requirements for four-sided platted corner lots.** On a platted corner lot with only four sides, there shall be a primary front yard, secondary front yard, rear yard, and a single side yard. For such lots, there shall be no primary side yard setback requirement, and the single side yard shall be subject to the secondary side yard setback requirement set forth in Section 131-1.
(3) **Accessory driveways, walkways, patios and decking on residentially developed parcels.** Accessory structures, limited to driveways, walkways, patios, and decks, may be permitted within a required side yard setback on a parcel developed exclusively with a residential use if the structure meets the provisions of this subsection. Such an accessory structure shall a) not exceed six (6) inches in height as measured from grade; b) be situated at least one (1) foot from the side yard property line; and c) be constructed to avoid any off-site discharge of stormwater from the subject parcel in accordance with Section 114-3. In no event shall the total combined area of all accessory structures occupy more than 80 percent of the required side yard setback area.

(4) **Accessory stairs and platforms to elevate mechanical, plumbing and electrical equipment on parcels developed with a residential dwelling unit built prior to March 15, 2012.** Accessory structures, limited to stairs and platforms, may be permitted within a required side yard setback on a parcel developed exclusively with a residential use if the following provisions are met:

a) the residential unit was issued a certificate of occupancy prior to March 15, 2012;

b) the accessory structure is required to elevate mechanical, plumbing and electrical equipment at or above required flood elevations;

c) the accessory structures shall be situated at least two (2) feet from the side yard property line; and

d) the accessory structures must be constructed to avoid any off-site discharge of stormwater from the subject parcel in accordance with Section 114-3. In no event shall the total combined area of all accessory structures occupy more than 80 percent of the required side yard setback area.

(5) **Ingress and Egress for lawfully established residential dwelling units retrofitted to elevate the structure above base flood level.** Retrofitting a lawfully existing residential dwelling unit, not including mobile homes, to elevate the unit above base flood level to reduce flood damage may encroach the primary side yard requirement set forth in Section 131-1 to allow necessary improvements to access the dwelling unit. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.

(e) **Rear yard setbacks.** A rear yard is a required setback on a parcel of land that is located along the full length of the rear property line and is generally on the side opposite to the primary front yard. The rear yard setback does not apply to a utility pole or utility rack or plumbing and electric fixtures for a vessel pumpout.

(1) **Accessory structures on residentially developed parcels.** An accessory structure may be permitted within a required rear yard setback on a parcel developed exclusively with a residential use if the structure meets the provisions of this subsection. An accessory structure not exceeding eighteen (18) inches in height as measured from grade may be permitted if the structure is a) situated at least one (1) foot from the rear yard property line and b)
constructed to avoid any off-site discharge of stormwater from the subject parcel in accordance with Section 114-3. An accessory structure not exceeding twelve feet (12) feet in height as measured from grade may be permitted if the structure is a) situated at least ten (10) feet from the rear property line. In no event shall the total combined area of all accessory structures occupy more than 60 percent of the required rear yard setback area.

(2) Ingress and Egress for lawfully established residential dwelling units retrofitted to elevate the structure above base flood level. Retrofitting a lawfully existing residential dwelling unit, not including mobile homes, to elevate the unit above base flood level to reduce flood damage may encroach the rear yard requirement set forth in Section 131-1 to allow necessary improvements to access the dwelling unit. The necessary improvements are limited to ingress/egress structures (stairs, ramps, landings, elevators, etc.). The waiver provided shall be the minimum necessary to provide access to the structure that is in compliance with fire code requirements.

(3) Accessory stairs and platforms to elevate mechanical, plumbing and electrical equipment on parcels developed with a residential dwelling unit retrofitted to elevate the structure above base flood level. Accessory structures, limited to stairs and platforms, may be permitted within a required rear setback on a parcel developed exclusively with a residential use if the following provisions are met: a) For the rear setback area, the structure is situated at least five (5) feet from the rear yard property line. In no event shall the total combined area of all accessory structures occupy more than 60 percent (60%) of the required rear yard setback area.

PREVIOUS RELEVANT BOCC ACTION:

CONTRACT/AGREEMENT CHANGES:
N/A

STAFF RECOMMENDATION: Staff seeks direction on processing amendments.

DOCUMENTATION:

FINANCIAL IMPACT:

<table>
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<th>Effective Date:</th>
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<tbody>
<tr>
<td>Expiration Date:</td>
<td></td>
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<tr>
<td>Total Dollar Value of Contract:</td>
<td></td>
</tr>
<tr>
<td>Total Cost to County:</td>
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<tr>
<td>Current Year Portion:</td>
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Budgeted:
Source of Funds:
CPI:
Indirect Costs:
Estimated Ongoing Costs Not Included in above dollar amounts:

Revenue Producing: If yes, amount:
Grant:
County Match:
Insurance Required: n/a

Additional Details:

REVIEWED BY:
Assistant County Administrator Christine Hurley Completed 06/30/2021 12:53 PM
Emily Schemper Completed 07/06/2021 9:44 AM
Derek Howard Completed 07/06/2021 10:11 AM
Purchasing Completed 07/06/2021 10:13 AM
Budget and Finance Completed 07/06/2021 4:20 PM
Maria Slavik Completed 07/06/2021 5:47 PM
Liz Yongue Completed 07/07/2021 9:14 AM
Board of County Commissioners Pending 07/21/2021 9:00 AM
County Commission Meeting
March 31, 2021
Agenda Item Number: B.2
Agenda Item Summary #7985

BULK ITEM: No  DEPARTMENT: Planning/Environmental Resources

TIME APPROXIMATE: No  STAFF CONTACT: Emily Schumper (305) 289-2500

AGENDA ITEM WORDING: Presentation of existing and potential actions, policies and programs to address the exhaustion of ROGO allocations and the build-out of the Florida Keys as of 2023 (2026 for Monroe County, after County reduced its annual allocation distribution to extend the build-out date).

ITEM BACKGROUND: Staff is updating the Board of County Commissioners (BOCC) on the existing and potential actions, policies and programs to address issues the County will face as the remaining ROGO allocations are exhausted (from the 2010 Census/hurricane modeling) and build-out approaches, the unknown outcomes of the upcoming 2020 Census/hurricane modeling by the State and the Florida Keys ACSC jurisdictions running-out of ROGO allocations, currently set for the year 2023 (note, the County extended ROGO from 2023 to 2026 by splitting the remaining 3-years’ worth of ROGO allocations). The number of ROGO allocations the County receives from the State of Florida is directly related to the ability to evacuate the Keys in an approaching hurricane. State law and policy mandates the ability to evacuate within a 24 hour time period.

Previously, on January 30, 2019, the BOCC discussed and provided direction to address the exhaustion of ROGO allocations and the build-out of the Florida Keys as of 2023. The discussion involved existing and potential actions, policies and programs; as well as ideas for policy changes to alleviate potential takings liability, if and when the State is no longer able to award ROGO allocations to the County.

Staff has worked on numerous efforts since the January 2019 meeting and has developed a few more options to consider. Staff is updating the BOCC on the existing and potential actions, policies and programs to address issues the County will face as the remaining ROGO allocations are exhausted and hopes to schedule a future agenda item (future BOCC meeting) to receive direction from the BOCC to ensure staff implements the current BOCC’s direction and prioritization.

Note, the Department of Economic Opportunity (DEO) and the Division of Emergency Management (DEM) will run an evacuation model after the compilation of the 2020 Census data. Staff anticipates
this process may take two to three years after the 2020 Census, and will require a new Memorandum of Understanding (MOU) with the DEO, DEM, Marathon, Islamorada, Key West, Key Colony Beach and Layton. This will be the earliest timeframe that the County and other jurisdictions will be able to evaluate the results based on any population/vehicle changes, unit occupancy rate changes and other factors in the inputs and assumptions utilized within the hurricane modeling. Until the results of the upcoming evacuation modeling are known, the Florida Keys ACSC jurisdictions must anticipate that building permit allocations may not be authorized beyond the year 2023. This deficit of building permit allocations could trigger takings suits against both the State, County and cities, if no additional permits are authorized based on the 2020 Census hurricane modeling.

Currently, unincorporated Monroe County has **281** market rate ROGO allocations available through July 2026 and a total of **62** moderate affordable ROGO allocations available for award.

**Current demand for Market Rate allocations:**
The table below shows the ROGO allocations awarded for market-rate units for the previous nine (9) quarters. The current demand for market rate allocations in all three ROGO subareas outpaces the availability of allocations. Note, beginning July 13, 2020 (ROGO YR 29), the available market rate allocations were reduced to 64 from 126 to extend the distribution of ROGO allocations through 2026.

<table>
<thead>
<tr>
<th>ROGO Allocations</th>
<th>Q2 Y27</th>
<th>Q3 Y27</th>
<th>Q4 Y27</th>
<th>Q1 Y28</th>
<th>Q2 Y28</th>
<th>Q3 &amp; 4 Y28</th>
<th>Q1 Y29***</th>
<th>Q2 Y29***</th>
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<tr>
<td>Available for Allocation</td>
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<td>14</td>
<td>15</td>
<td>14</td>
<td>14</td>
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<td><strong>Big Pine Key / No Name Key</strong></td>
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<td>2</td>
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<td>2</td>
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<td>26</td>
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<td>27</td>
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<td>4</td>
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<tr>
<td>Applications remaining in queue</td>
<td>26</td>
<td>25</td>
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<td>23</td>
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<td><strong>Upper Keys</strong></td>
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<tr>
<td>Available for Allocation</td>
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<td>10**</td>
<td>21**</td>
<td>8**</td>
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</tbody>
</table>
Based on data from 2018, the unincorporated County, after utilizing all ROGO allocations granted by the State in 2012 (based on the 2010 Census hurricane modeling), will have approximately 7,000 vacant privately owned parcels remaining, with close to 2,800 of those parcels being located in Tier III.

2018 Inventory of Privately-Owned Vacant Parcels in Florida Keys and Approximate Land Value

<table>
<thead>
<tr>
<th>AREA</th>
<th>2018 NO. VACANT PARCELS</th>
<th>2018 AVERAGE PARCEL VALUE***</th>
<th>2018 APPROXIMATE LAND VALUE (December 2018 MC Property Appraiser data)</th>
<th>ESTIMATED FUNDING Based on Historic Rates For Acquisition of Conservation Lands</th>
<th>YEARS TO GENERATE THE FUNDS EQUAL TO THE TAX ASSESSED VALUE</th>
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</thead>
<tbody>
<tr>
<td>Key West ACSC*</td>
<td>133</td>
<td>$397,235</td>
<td>$52,832,202</td>
<td>$270,000*</td>
<td>196</td>
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<td>Unincorporated MC</td>
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<td>$85,858</td>
<td>$603,840,749</td>
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<td>Marathon</td>
<td>1,349</td>
<td>$100,481</td>
<td>$135,548,863</td>
<td>$2,000,000</td>
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<tr>
<td>Layton</td>
<td>24</td>
<td>$123,928</td>
<td>$2,974,267</td>
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<td>1 *</td>
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<td>Key Colony Beach</td>
<td>81</td>
<td>$347,988</td>
<td>$28,187,020</td>
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<tr>
<td>Islamorada</td>
<td>1,070</td>
<td>$158,061</td>
<td>$169,125,630</td>
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<td>85 *</td>
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<tr>
<td><strong>TOTAL PARCELS</strong></td>
<td>9,690</td>
<td><strong>$102,426</strong></td>
<td><strong>$992,508,731</strong></td>
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<tr>
<td><strong>TOTAL REMAINING ALLOCATIONS</strong></td>
<td>1,421</td>
<td>In 2012, the State authorized 3,550 County wide allocations, including cities, with 1,970 allocations for unincorporated MC.</td>
<td></td>
<td></td>
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<tr>
<td><strong>PARCELS TO PURCHASE (COUNTYWIDE)</strong></td>
<td>8,269**</td>
<td><strong>$102,426</strong>*</td>
<td><strong>$846,961,269</strong></td>
<td><strong>$2,000,000</strong></td>
<td><strong>423</strong>**</td>
</tr>
</tbody>
</table>

* During the 5 year period of FY 2014-2018, 100% of the Monroe County Land Authority expenditures in the Key West ACSC were for affordable housing. Previously, the Monroe County Land Authority 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. $270,000 is used for analysis of Key West.

** The total vacant parcels (9,690) less the 1,421 allocations available results in 8,269 parcels to purchase. At an average cost of $102,426 it will take 423 years to acquire these parcels utilizing $2M.

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

* Land values for each jurisdiction are divided by the $2M estimated funding figure.

As demonstrated in table above, at current dedicated funding levels for land acquisition efforts in the Florida Keys, and the remaining 1,421 allocations for dwelling units through the year 2023 (2026 for the County), it would take approximately 423 years (302 years for the County) 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).
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 and the Key West ACSC. The second recurring revenue is provided through a State Park surcharge.

In anticipation of the significant remaining private, vacant parcels, the Monroe County BOCC authorized staff in 2016, to commence land acquisition programs to supplement the long standing efforts of the Monroe County Land Authority and those of the State of Florida.

The funding status of the various acquisition program efforts are included in the table below and include the efforts by the Land Authority, the County Attorney’s Office, the Planning & Environmental Resources Department, the Building Department and the Florida Department of Environmental Protection.

Significantly, since passage of the Stewardship Act (2016), Monroe County and the Monroe County Land Authority have budgeted over $26M combined for land acquisition and spent/encumbered $19+M, retiring 254.22 development rights (as of February 2021).
In 2012, pursuant to Rule 28-20.140, F.A.C., DEM and 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. Based upon the resulting 24 hour evacuation clearance, DEO determined the remaining allocations for the Florida Keys (3,550 additional permits countywide, 1,970 of these permits would go to Monroe County - excerpt below). In March 2013, the Governor and Cabinet, sitting as the State Administration Commission, approved the recommendation to allocate 10 years’ worth of growth to the Florida Keys.

**Previous Relevant County Actions regarding ROGO allocations:**

- **February 2021 Land Acquisition Funding - Available and Potential Balances**

<table>
<thead>
<tr>
<th>Category</th>
<th>Available Balance</th>
<th>Exceeds or Short $</th>
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<tr>
<td>Monroe County</td>
<td>$0</td>
<td>$15,000,000</td>
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<tr>
<td>Monroe Count</td>
<td>$1,630,242</td>
<td>$3,317,608</td>
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<tr>
<td>Monroe County</td>
<td>$56,748,170</td>
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<tr>
<td>Total County</td>
<td>Funding</td>
<td>$5,578,185</td>
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<tr>
<td>DIP Florida Keys</td>
<td>Stewardship Act*</td>
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</tr>
<tr>
<td>HUD/DEO/CDG</td>
<td>Disaster Recovery</td>
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<tr>
<td>TRMA/DEO</td>
<td>MMR</td>
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</tr>
<tr>
<td>County Attorney’s Office &amp; Planning Dept.</td>
<td>$19,862,104</td>
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<tr>
<td>Planning Dept.</td>
<td>$4,541,913</td>
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</tr>
<tr>
<td>Building Dept.</td>
<td>$5,578,185</td>
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**NOTES:**
- This total includes $990,000 that may be reimbursed by the FHFC CDBG-DR grant for the Conch Trailer Court property
- This total includes $1,379,958 that may be reimbursed by the FHFC CDBG-DR grant for Howards Haven and 12 Lower Keys Scattered Sites properties, and $150,679 representing fifty percent of the Davis judgment that may be reimbursed by the State of Florida
- This total includes $269,685 representing fifty percent of the Galleon Bay judgment that may be reimbursed by the State of Florida

**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
In 2012, the County entered into a Memorandum of Understanding (MOU) with the Department of Economic Opportunity (DEO), the Division of Emergency Management (DEM), Marathon, Islamorada, Key West, Key Colony Beach and Layton. The MOU provided the distribution of allocations among the local governments based upon a vacant land analysis (excerpt below).

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

On April 13, 2016, the BOCC adopted the 2030 Comprehensive Plan and Land Development Code, which included a ROGO allocation distribution through the year 2023 (Policy 101.3.2). This policy also included a re-evaluation of the ROGO allocation distribution schedule, if substantial financial support was provided by July 12, 2018 for land acquisition to retire development rights.

January 30, 2019: The BOCC discussed and provided direction regarding existing and potential actions, policies and programs to address exhaustion of ROGO allocations and build out of the Florida Keys as of 2023 with a substantial number of platted lots remaining. The discussion involved existing and potential actions, policies and programs; as well as ideas for policy changes to alleviate potential takings liability, if and when the DEO is no longer able to award ROGO allocations to the County.

On January 22, 2020; the BOCC adopted Ord. 005-2020 to extend the remaining market rate ROGOs out for an additional three (3) years from 2023 to 2026; providing the County additional time to distribute ROGO allocations while the new evacuation model runs are completed and to implement other strategies to help transition land into public ownership reducing the potential takings claims and addressing the future build-out of the Florida Keys. At the time of the County’s
reevaluation, the State purchased 135 parcels, at an approximate cost of $2,808,220 and retired 61.49 TDRs.

_________________

Staff has developed ideas for policy changes/programs to help alleviate potential takings liability, if and when the State is no longer able to award ROGO allocations to the County. The purpose of this item is to present the existing and potential actions, policies and programs included in the attached ROGO buildout table for future BOCC direction.

PREVIOUS RELEVANT BOCC ACTION:

September 21, 2012: The County approved Resolution 226-2012, entering into a Memorandum of Understanding (MOU) with the Department of Economic Opportunity (DEO), the Division of Emergency Management (DEM), Marathon, Islamorada, Key West, Key Colony Beach and Layton which stipulated to the input variables and assumptions used in the hurricane evacuation model and provided the distribution of allocations among the local governments based upon a vacant land analysis.

April 13, 2016: The BOCC adopted the Monroe County Year 2030 Comprehensive Plan, including Comprehensive Plan Policy 101.3.2 (ROGO distribution policy).

January 30, 2019: The BOCC discussed and provided direction regarding existing and potential actions, policies and programs to address exhaustion of ROGO allocations and build out of the Florida Keys as of 2023 with a substantial number of platted lots remaining. The discussion involved existing and potential actions, policies and programs; as well as ideas for policy changes to alleviate potential takings liability, if and when the DEO is no longer able to award ROGO allocations to the County.

January 22, 2020: The BOCC adopted Ord. 005-2020 to extend the remaining market rate ROGOs out for an additional three (3) years from 2023 to 2026.

January 22, 2020: The BOCC directed staff to prepare an agenda item to discuss and provide direction on whether to direct staff to process Comprehensive Plan and Land Development Code amendments to: 1) move a portion of market-rate Rate Of Growth Ordinance (ROGO) units to the affordable housing allocation pool and/or 2) accept the 300 Workforce Housing units offered by the Department of Economic Opportunity (DEO) required to evacuate in Phase 1 of the Hurricane Evacuation model.

February 19, 2020: The BOCC discussed whether to direct staff to process a comprehensive plan and land development code amendment to: 1) move a portion of the 378 remaining Market Rate - Rate of Growth Ordinance (ROGO) units through 2026 to the Affordable Housing allocation pool and/or 2) accept the 300 Workforce Housing units offered by the Department of Economic Opportunity (DEO) required to evacuate in Phase 1 of the hurricane evacuation model. The BOCC did not decide on the potential shifting of market rate allocations to the affordable housing pool but did direct staff to start the process to accept the 300 workforce housing units.
July 15, 2020: The BOCC discussed potentially shifting market rate allocations to the affordable housing pool (agenda item I5). The BOCC did not decide on the potential shifting of market rate allocations to the affordable housing pool but did direct staff to start the process to accept the 300 workforce housing units. The BOCC directed: accept the 300 workforce housing early evacuation unit building permit allocations to be used in exchange for existing affordable allocations at multifamily developments (for developers that agree to the early evacuation restriction) and the affordable housing allocations returned to the County (returned in the exchange) be set aside and banked for takings cases (bank them within an administrative relief pool).

January 20, 2021: The BOCC directed staff to not move forward on amendments on potentially shifting market rate allocations to the affordable housing pool (agenda item J9).

January 20, 2021: The BOCC voted to transmit the proposed amendments to DEO to review the 300 workforce housing early evacuation unit proposal, with the 300 unit amendment being structured as an exchange program.

**CONTRACT/AGREEMENT CHANGES:**
N/A

**STAFF RECOMMENDATION:** Direction on a future BOCC meeting to review this information again and receive BOCC direction on the existing and future actions, policies and programs presented.

**DOCUMENTATION:**
- Ex. 1 Land Acquisition Funding Status Feb2021
- Ex. 2 ROGO buildout table w_BOcc direction from 2019_updated 3.16.2021
- Ex. 3 Takings Claims Bill Whitepaper January 2020
- Ex. 4 WHITE PAPER_build out_STRATEGIES_POLICY RECOMMENDATIONS_Nov 2020
- Ex. 5 AIS_item B3_BOCC 1.30.2019_ROGO buildout options

**FINANCIAL IMPACT:**

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<tr>
<th>Effective Date:</th>
<th>Expiration Date:</th>
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<table>
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<th>Total Dollar Value of Contract:</th>
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<tr>
<td>Total Cost to County:</td>
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<tr>
<td>Current Year Portion:</td>
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<td>Source of Funds:</td>
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<td>CPI:</td>
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<tr>
<td>Indirect Costs:</td>
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<tr>
<td>Estimated Ongoing Costs Not Included in above dollar amounts:</td>
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</table>

<table>
<thead>
<tr>
<th>Revenue Producing:</th>
<th>If yes, amount:</th>
</tr>
</thead>
</table>
Grant:
County Match: 
Insurance Required:  n/a

Additional Details:

REVIEWED BY:
Emily Schemper  Completed  03/22/2021 12:45 PM
Assistant County Administrator Christine Hurley  Completed  03/22/2021 1:21 PM
Bob Shillinger  Completed  03/24/2021 9:53 AM
Purchasing  Completed  03/24/2021 9:54 AM
Budget and Finance  Completed  03/24/2021 11:11 AM
Maria Slavik  Completed  03/24/2021 11:17 AM
Liz Yongue  Completed  03/24/2021 1:15 PM
Board of County Commissioners  Pending  03/31/2021 10:30 AM
Monroe County Board of County Commissioners
Special Meeting

10:30 A.M. Planning Workshop

March 31, 2021

Marathon Government Center
Background information for the two Planning Workshop Agenda items

1972: Areas of Critical State Concern Program (ACSC) was adopted [Section 380.05, F.S.]

1979: Florida Legislature designates the Florida Keys as an ACSC.

  • Requires each city and county in the state to adopt a local comprehensive plan, which must be consistent with the state and regional plans.

1986: County adopts 1st Comprehensive Plan and implementing Land Development Regulations to satisfy the Growth Management Act.

1990: County transmits its proposed 2010 Comprehensive Plan to the State
  • State has numerous Objections, Recommendations and Comments, including “provides no meaningful direction for the County to coordinate population densities with the Monroe County Hurricane Evacuation Plan...Include in the analyses a consideration of the measures that the County could adopt to maintain or reduce evacuation times.”

1991: County adopts its 2010 Comprehensive Plan

1991: State finds the Comprehensive Plan Not-In-Compliance. DOAH hearing initiated.
  • Multiple challenges. Results in a Settlement Agreement, including “the plan should also establish the general guidelines for a permit allocation system...”

1992: the Rate of Growth Ordinance or ROGO adopted.
Background information for the two Planning Workshop Agenda items

1992: the Rate of Growth Ordinance or ROGO adopted.

- 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 the County, as required by the State of Florida. ROGO established a competitive permit allocation system where those applications with the highest scores are awarded building permits.

<table>
<thead>
<tr>
<th>Positive Points</th>
<th>Negative Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper/Lower</td>
<td>Big Pine Key</td>
</tr>
<tr>
<td>+10 Tier I</td>
<td>+0 Tier I</td>
</tr>
<tr>
<td>+20 Tier III-A</td>
<td>+10 Tier II</td>
</tr>
<tr>
<td>+30 Tier III</td>
<td>+20 Tier III</td>
</tr>
<tr>
<td>+3 to +6 lots/parcel aggregation</td>
<td>+3 to +4 lots/parcel aggregation</td>
</tr>
<tr>
<td>+0.5 to +5 for land dedication</td>
<td>+2 to +5 for land dedication</td>
</tr>
<tr>
<td>+6 for market rate housing with an affordable or employee housing project</td>
<td>+4 central wastewater system availability</td>
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<tr>
<td>Up to +2 for monetary payment to the County’s land acquisition fund</td>
<td>Up to +2 for monetary payment to the County’s land acquisition fund</td>
</tr>
<tr>
<td>+0.5 to +3 for energy and water conservation measures</td>
<td>+0.5 to +3 for energy and water conservation measures</td>
</tr>
<tr>
<td>+2 Perseverance Points for Tier III, par year for the first 4 years (+1 per year after the first 4 years)</td>
<td>+2 Perseverance Points for Tier III, par year for the first 4 years (+1 per year after the first 4 years)</td>
</tr>
</tbody>
</table>

The purpose of this Amendment is to implement goals, objectives, and policies of the Florida Keys’ Comprehensive Plan related to the protection of residents, visitors, and property in the County from natural disasters, specifically including hurricanes, by adopting a Dwelling Unit Allocation Ordinance limiting annual residential development in Monroe County to an amount and rate commensurate with the County’s ability to maintain a reasonable and safe hurricane evacuation clearance time, as determined by policy decisions and recently completed studies. The present hurricane evacuation clearance time in Monroe County is unacceptably high. Based on a continuation of Monroe County’s historic rate of growth, clearance time will continue to increase. Therefore, consistent with its responsibility for protecting the health and safety of its citizens, Monroe County must regulate the rate of population growth commensurate with planned increases in evacuation capacity to prevent further unacceptable increases in hurricane evacuation clearance time. Regulation of the rate of growth will also help to prevent further deterioration of public facility service levels, irreparable environmental degradation, and potential land use conflicts.

It is the mandate of Rule 9J-5 that Monroe County take measures to "maintain or reduce" hurricane evacuation time. The essential provisions of this Ordinance are required by the terms of the Settlement Agreement between the County and the Department of Community Affairs. These state mandates, among others, obligate the State of Florida to bear primary responsibility for the cost of implementing this Ordinance.
Background information for the two Planning Workshop Agenda items

1992: the **Rate of Growth Ordinance or ROGO** adopted.

- ROGO includes a provision for **Administrative Relief** which allows the County to grant the owner of real property relief from the continued application of the rate of growth ordinance restrictions.

- **Applicants to ROGO can apply for Administrative Relief within 180 days of the conclusion of the 16th quarterly allocation period in which they have failed to secure an allocation award.** The regulations provide specific criteria for eligibility for administrative relief including compliance with all county, state and federal regulations.
  
  - The existing regulations require the County to coordinate with the Department of Environmental Protection (DEP) by notifying DEP of any upcoming administrative relief requests at least six months prior to the deadline for administrative relief. This is intended to target Tier I land areas and parcels with the Florida Forever acquisition area.

- **While not part of ROGO, the County also has a Beneficial Use Determination (BUD) process** that allows the granting of relief where the applicant establishes that a court would likely determine a final action or decision by the County has caused a taking of property.
  
  - Forms of relief may include offer to purchase, rezoning, development approval, transfer of development rights (TDRs), etc.
  - Applicant applies for a BUD; a special magistrate holds a hearing and provides a recommendation (not binding) to the County.
  - BOCC holds a hearing, considers the recommendation. At the hearing, the BOCC, by resolution, shall approve, modify, reverse, or approve with conditions – based on criteria in the Land Development Code.
  - Process is essentially a mini-takings trial.
Background information for the two Planning Workshop Agenda items

2012: 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.

Phased Evacuation

Day One
Phase I

- Hour 1: 7 am - 12 hours
  - 7 am: Tourists Ordered to Evacuate
  - 1 am: Site-built Home Residents Ordered to Evacuate
  - 7 am: Predicted Tropical Storm Force Winds

- Hour 2: 1 pm - 5 hours
  - 1 pm: Mobile Home Residents Ordered to Evacuate

Day Two
Phase II

- Hour 1: 7 am - 3.550 allocations
  - 7 am: Site-built evacuation

- Hour 2: 7 pm - 24 hours
  - 7 pm: 22 hours 30 minutes

Policy 101.2.4

In the event of a pending major hurricane (Category 3-5) Monroe County shall implement the following staged/phased evacuation procedures to achieve and maintain an overall 24-hour hurricane evacuation clearance time for the resident population.

1. Approximately 48 hours in advance of tropical storm winds, a mandatory evacuation of non-residents, visitors, recreational vehicles (RVs), travel trailers, live-aboard vessels (transit and non-transit), and military personnel from the Florida 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 shall 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 (MDM 1-6)
   b. Zone 2 - Boca Chica Bridge to West end of 7-mile Bridge (MDM 6-90)
   c. Zone 3 - West end of 7-Mile Bridge to West end of Long Key Bridge (MDM 60-85)
   d. Zone 4 - West end of Long Key Bridge to CR 905 and CR 905A intersection (MDM 63-106.5 and MDM 1.9-5.5 of CR 905)
   e. Zone 5 - 905A to, and including Ocean Reef (MDM 105-126.5)

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 County 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.

For the purpose of implementing Policy 101.2.4, this Policy shall not increase the number of allocations to more than 197 residential units a year, except for affordable housing. Any increase in the number of allocations shall be for affordable housing.
Background information for the two Planning Workshop Agenda items

2012: hurricane evacuation clearance time modeling task finds that with 10 years’ worth of building permits, the Florida Keys would be at a 24-hour evacuation clearance.

2013: the Governor and Cabinet, sitting as the State Administration Commission, approved the recommendation to allocate 10 years’ worth of growth to the Florida Keys.

• Based upon the resulting 24-hour evacuation clearance, DEO determined the remaining allocations for the Florida Keys (3,550 additional permits countywide, **1,970 of these permits are assigned to Monroe County**).

• First time hurricane modeling shows a 24-hour permanent resident evacuation. Indicates reaching the build-out of the Florida Keys.

• **County starts analyzing the implications of a potential build-out scenario** – knowing this may result in a significant balance of privately held vacant parcels at risk of not obtaining permits in the future. This deficit of building permit allocations could trigger takings suits against both the State and the County, if no additional permits are allowed beyond the year 2023 (2026 for unincorporated County).
Based on data from 2018, the unincorporated County, after utilizing all ROGO allocations granted by the State in 2012 (based on the 2010 Census hurricane modeling), the unincorporated County will have approximately 7,000 vacant privately owned parcels remaining, with close to 2,800 of those parcels being in Tier III.

Currently, the County has 345 Market Rate and 65 Affordable Allocations remaining through 2026.
In anticipation of the significant remaining private, vacant parcels, the Monroe County BOCC authorized staff in 2016, to commence land acquisition programs to supplement the long-standing efforts of the Monroe County Land Authority and those of the State of Florida.
Background information for the two Planning Workshop Agenda items

Current demand for Market Rate allocations:
The table below shows the ROGO allocations awarded for market-rate units for the previous nine (9) quarters. The current demand for market rate allocations in all three ROGO subareas outpaces the availability of allocations.

Note, beginning July 13, 2020 (ROGO YR 29), the available market rate allocations were reduced to 64 from 126 to extend the distribution of ROGO allocations through 2026.

To date, the County has 345 Market Rate and 65 Affordable Allocations remaining through 2026.

<table>
<thead>
<tr>
<th>ROGO Allocations</th>
<th>Q2 Y27</th>
<th>Q3 Y27</th>
<th>Q4 Y27</th>
<th>Q1 Y28</th>
<th>Q2 Y28</th>
<th>Q3 &amp; 4 Y28</th>
<th>Q1 Y29+++</th>
<th>Q2 Y29+++</th>
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<td>5</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

*Includes 7 unused Allocations from Quarters 1 and 2.
**Did not distribute all allocations due to limitation of the number of Dar 1 properties that may receive an allocation per ROGO year.
***Beginning July 13, 2020 (ROGO YR 29), the available market rate allocations were reduced to 64 from 126 to extend the distribution of ROGO allocations through 2026.
Background information for the two Planning Workshop Agenda items

2022/2023: the Department of Economic Opportunity (DEO) and the Division of Emergency Management (DEM) will run an evacuation model after the compilation of the 2020 Census data.

• A new Memorandum of Understanding (MOU) with the DEO, DEM, Marathon, Islamorada, Key West, Key Colony Beach and Layton will be required. MOU stipulates, based on professionally acceptable data and analysis, the input variables and assumptions, including regional considerations, for utilizing the Florida Keys Hurricane Evacuation Model.

• This will be the earliest timeframe that the County and other jurisdictions will be able to evaluate the results based on any population/vehicle changes, unit occupancy rate changes and other factors in the inputs and assumptions utilized within the hurricane modeling.

• Until the results of the upcoming evacuation modeling are known, the Florida Keys ACSC jurisdictions must anticipate that building permit allocations may not be authorized beyond the year 2023.

• Again, this deficit of building permit allocations could trigger takings suits against both the State, County and cities, if no additional permits are authorized based on the 2020 Census hurricane modeling.
Legal Liability

• Inverse Condemnation Claims (Takings) –
  • U.S. & Florida Constitutions each require government to pay property owners the fair market value of their properties when “taken” by regulation
  • Claim asserts that government enacted regulation has same effect of government condemning property through eminent domain
  • 2 types
    • Facial
    • As-Applied
  • Taking can be permanent or temporary

• Bert J. Harris Act Private Property Rights Protection Act Claim –
  • Florida statutory claim adopted because takings cases are usually hard to prove
  • “Takings Lite”
Background information for the two Planning Workshop Agenda items

Facial Takings Cases

- Look at text of rule to see if it rule prohibits all development of property and deprives owner of all reasonable economic use of property (no chance = taking)

- no permit application required

- 4 year statute of limitations begins to run as of effective date of rule

- No facial claims to ROGO have been successful so far because there’s still a chance to get an allocation.
Background information for the two Planning Workshop Agenda items

As-Applied Takings Cases

- When applied to property, regulation results in all or substantially all economically beneficial use of property has been taken
- Requires denial of meaningful permit application (unless application would be futile)
- Fact intensive review of following factors:
  - Economic impact of regulation on claimant
  - Extent to which regulation has interfered with distinct, *reasonable* investment-backed expectation(s)
  - Character of government action
- Reduction in property value alone cannot establish a taking
- 4 year statute of limitations begins to run as of final decision
- Galleon Bay & Davis are examples of as-applied claims
Background information for the two Planning Workshop Agenda items

Bert J. Harris Private Property Rights Protection Act

- Standard: “When a specific action of a governmental entity has inordinately burdened an existing use of real property or a vested right to a specific use of real property, the property owner of that real property is entitled to relief, which may include compensation for the actual loss to the fair market value of the real property caused by the action of government . . .” Sec. 70.001(2), Fla. Stat.
  - Lesser standard compared to facial and as-applied takings
  - “Inordinately burdened” does not include temporary impacts; regulatory restriction or limitation must be permanent
- Requires mandatory notice from property owner to government
- 150 days for government to respond (legislation to reduce to 90 days pending)
- Opportunity to avoid liability by waiving rule or granting variance
- As-applied claims only (legislation to include facial claims pending)
Background information for the two Planning Workshop Agenda items

**Takings & Harris Act Litigation**

- 2 Phases
  - Bench trial on Liability
    - (is there a taking / did rule inordinately burden property right?)
  - Jury Trial on Compensation
    - (how much government pays owner)

- Government can appeal liability finding in Harris Act Claim before compensation trial but not with takings claims.

- Attorney’s Fees – prevailing property owner entitled to fees
Legal Liability

- Important to note that not every owner of a vacant parcel will choose to seek compensation when the ROGO supply runs out.
  - Some parcels have such low value that there is little incentive to file suit
  - Some parcels have passed from generation to generation so gathering the entire ownership group will be challenging
  - We can’t predict with accuracy how many lots will fall into this group

- Valid defenses will remain for some who chose to file suit
  - We can bolster those defenses with some of the options discussed later
Agenda item B1.

- Presentation of a potential minor modification to the Incidental Take Permit (ITP) to extend the expiration date to June 30, 2026, without an increase in development or take, but to simply request a 3-year extension of the expiration date to be consistent with the recently adopted Comprehensive Plan and Land Development Code amendments extending the time period for the Rate of Growth Ordinance (ROGO) through 2026.
Agenda item B2.

- Presentation of existing and potential actions, policies and programs to address the exhaustion of ROGO allocations and the build-out of the Florida Keys as of 2023 (2026 for Monroe County, after County reduced its annual allocation distribution to extend the build-out date).

Staff is updating the Board of County Commissioners (BOCC) on the existing and potential actions, policies and programs to address issues the County will face as the remaining ROGO allocations are exhausted (from the 2010 Census/hurricane modeling) and build-out approaches, the unknown outcomes of the upcoming 2020 Census/hurricane modeling by the State and the Florida Keys ACSC jurisdictions running-out of ROGO allocations, currently set for the year 2023 (note, the County extended ROGO from 2023 to 2026 by splitting the remaining 3-years’ worth of ROGO allocations). The number of ROGO allocations the County receives from the State of Florida is directly related to the ability to evacuate the Keys in an approaching hurricane. State law and policy mandates the ability to evacuate within a 24 hour time period.

Previously, on January 30, 2019, the BOCC discussed and provided direction to address the exhaustion of ROGO allocations and the build out of the Florida Keys as of 2023. The discussion involved existing and potential actions, policies and programs; as well as ideas for policy changes to alleviate potential takings liability, if and when the State is no longer able to award ROGO allocations to the County.

Staff has worked on numerous efforts since the January 2019 meeting and has developed a few more options to consider. Staff is updating the BOCC on the existing and potential actions, policies and programs to address issues the County will face as the remaining ROGO allocations are exhausted and hopes to schedule a future agenda item (future BOCC meeting) to receive direction from the BOCC to ensure staff implements the current BOCC’s direction and prioritization.
### Existing Policy and Programs

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<tr>
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<tbody>
<tr>
<td>1 Less Than Fee Program</td>
<td>The Monroe County Commission has limited residential building permits it can issue to those seeking to build a house on a vacant lot. In order to eliminate potential residential building rights on vacant land that would otherwise affect our environment, roads and hurricane evacuation, the County Commission created a voluntary program to retire building rights called the “Less than Fee” (LTF) program. For residential property owners that own an adjacent vacant lot, the County will purchase the right to build a house on the vacant lot. This willing seller program allows owners to retain ownership of their vacant lot and use it for legally allowed accessory uses like a pool, open yard or garage in exchange for selling the right to build a home on that lot. The offer price for the residential building right on the adjacent lot is the current Market Land Value (MLV) as calculated by the Monroe Property Appraiser. Under the Florida Constitution, the Property Appraiser is independent from the County Commission and is elected by the voters of Monroe County. The County will offer to pay 100% of the MLV provided that the owner agrees to a deed restriction permanently retiring the right to build a home on the vacant lot in perpetuity. All willing seller purchase offers come before the BOCC for final approval.</td>
<td>Yes</td>
<td>CP Policy 102.4.6 &amp; 105.2.5</td>
<td>Continue</td>
<td>Program initiated in 2018. Suspended as of April 2020 due to fiscal downturn from COVID-19. As of February 2021, County has spent or encumbered $3,692,899 from 304/316 Funds on the less than fee program. Funding source 304/316 Funds $0 available 304/316 balance ~$3.7M used for program 73 of parcels acquired 72 development rights retired ~$50k average cost of development right ~160 of interested parties on waiting list for the program Recommend refunding - LTF &amp; DR 304/316 proposed budget &amp; FTE in County Attorney’s Office; requesting the suspended funding from FY21 adopted budget ($711,548) plus an additional $2,500,000 be allocated for FY22 and $2,500,000 be allocated for FY23 for the Density Reduction and Less Than Fee non-conservation programs for a total combined request through FY23 of $5,711,548. Note, due to capacity issues, 304 fund will need to be extended by referendum in 2022.</td>
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<td>2 Fee Simple Acquisition Programs: Conservation program &amp; Density Reduction program</td>
<td>In 1986, the Land Authority was established by the BOCC to acquire and dispose of real and personal property or any interest therein within areas of critical state concern (ACSC). The Land Authority purchases land (fee simple) for conservation/preservation/lot consolidation purposes, which assists in reducing development rights. In addition to the Land Authority acquisition program, the County Commission created another fee simple acquisition program, called the “Density Reduction program” (DR). Residential property owners sell non-conservation parcels with development rights to the County and the County retires the right to develop housing from the lot/parcel. The acquisition protects property rights, reduces density, and reduces the County’s potential liability for takings suits. All willing seller purchase offers come before the BOCC for final approval. Density Reduction (non-conservation) parcels may later be offered for sale with a deed restriction to prohibit the development of the property with new housing units. The revenue derived from the sale of these deed restricted properties can help replenish the funds necessary to retire more development rights. State law permits the BOCC to sell County owned property whenever the BOCC determines that it is in the best interests of the County to do so [F.S. 125.35(1)(a)]. That statute requires that the County solicit bids for each excess parcel which must be sold to the highest and best bidder. The BOCC retains the discretion to rejects all bids. The statute requires that the solicitation of bids be published in a newspaper of general circulation within the County at least once a week for two weeks. F.S. 125.35(1)(c). All offers come before the BOCC for final approval.</td>
<td>Yes</td>
<td>CP Policy 102.4.3</td>
<td>n/a</td>
<td>DR Program initiated in 2016. Suspended as of April 2020 due to fiscal downturn from COVID-19. From July 2016 to February 2021, County has spent or encumbered $1,407,722 from 304/316 Funds on the density reduction program and the Land Authority has spent or encumbered $7,202,228 ACSC Funds on conservation. Funding source 304/316 Funds &amp; Land Authority FL Keys ACSC Fund $0 available 304/316 balance ~$3,630,242 LA available balance 240 of parcels acquired 182.2 development rights retired ~$45k average cost of development right 8 density reduction (non-conservation) parcels sold &amp; $169,185 funds replenished with the resale Recommend refunding - LTF &amp; DR 304/316 proposed budget &amp; FTE in County Attorney’s Office; requesting the suspended funding from FY21 adopted budget ($711,548) plus an additional $2,500,000 be allocated for FY22 and $2,500,000 be allocated for FY23 for the Density Reduction and Less Than Fee non-conservation programs for a total combined request through FY23 of $5,711,548. Note, due to capacity issues, 304 fund will need to be extended by referendum in 2022.</td>
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<td><strong>3 Florida Forever</strong></td>
<td>The County works with Florida Department of Environmental Protection (DEP) to identify ideal properties that would fit the Florida Forever mission, as well as eliminate potential takings liability by retiring development rights (focus on parcels with at least one TDR). The partnership with DEP is to continue to acquire lands within the Florida Forever projects with cost share responsibilities (Memorandum of Agreement with DEP to acquire &amp; retire development rights). The State’s long-standing acquisition efforts in the Florida Keys are essential to reducing future liability. The County encourages DEP to aggressively pursue land acquisition in the Florida Keys because over 3,500 privately-owned vacant, undeveloped parcels lie within the Florida Forever project boundaries. Since 2016, with the passage of the Stewardship Act, Florida DEP has spent/encumbered $4.5+M, retiring 81.89 development rights (as of January 2021).</td>
<td>Yes</td>
<td>CP Objective 105.2 &amp; Policy 105.2.7 &amp; 205.4.1</td>
<td>n/a</td>
<td>From July 2016 to February 2021, Florida DEP has spent/encumbered $4,541,913, retiring 81.89 development rights. County continues to request funding pursuant to Florida Keys Stewardship Bill, which authorizes an annual $5M set-aside of Florida Forever funding for the next ten years, dedicated specifically to enable DEP to renew an aggressive land acquisition program in the Florida Keys. The County’s legislative priority is to secure a $25M appropriation through the Florida Keys Stewardship Act (FKSA), of which $5M is for land acquisition and $20M is to fund water quality projects. Recommend continued support of an appropriation through the Florida Keys Stewardship Act.</td>
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<td><strong>4 CDBG-DR Voluntary Home Buyout Program</strong></td>
<td>After Hurricane Irma, the Department of Economic Opportunity (DEO) developed a Community Development Block Grant - Disaster Recovery (CDBG-DR) Action Plan that detailed how federal disaster funds would be spent on state-wide recovery efforts. The State Action Plan provided $20 Million for Monroe County with a $5 Million maximum award for each applying jurisdiction. Ultimately, and in order to direct these funds to where they were most needed, Marathon was awarded $5 Million and unincorporated Monroe County was awarded the remaining $15 Million. These funds will allow the County to purchase residential property and homes of voluntary sellers who were impacted by Hurricane Irma. The owner must be willing to relinquish all development rights to the property, including any allocations granted under ROGO. The home will be demolished, and the land will serve as green space in perpetuity. If deemed necessary, the land may also be used for stormwater drainage or passive recreational purposes. A homeowner may decline to sell his/her property at any point prior to the closing. The County completed a countywide survey of impacted residents who were interested in housing disaster assistance funds. The County also solicited homeowners of parcels that were deemed “Unsafe” by Code Compliance and the Special Magistrate through Code Compliance proceedings, due to Hurricane Irma. The program application period closed on September 27, 2019. The County submitted a total of 62 properties to DEO. The County also solicited homeowners of parcels that were deemed &quot;Unsafe&quot; by Code Compliance and the Special Magistrate through Code Compliance proceedings, due to Hurricane Irma. The program application period closed on September 27, 2019. The County submitted a total of 62 properties with an initial estimated pre-storm Fair Market Value according to the Property Appraiser’s database of $24 Million to DEO on October 1, 2019. Properties will be prioritized by the most vulnerable populations located in low- and moderate-income areas, and those at highest risk for future flooding. In addition to the State required criteria that prioritized vulnerable populations, Monroe County developed a risk-based local point prioritization system which has been approved through resolutions by the Board of County Commissioners.</td>
<td>Yes</td>
<td>CP Policy 216.1.7 &amp; Goal 1504</td>
<td>n/a</td>
<td>$15M allocated for the program. County submitted a total of 62 properties to DEO. On March 13, 2020, Monroe County received the Sub-recipient agreement detailing the $15 Million program award and program requirements, which was approved by the BOCC on May 20, 2020 and fully executed on June 4, 2020. Since then, the County has completed many benchmarks which comprise the program implementation period coordinated through DEO. The program began the formal application process with the individual property owners at the end of January. The Planning and Environmental Resources Department will be tracking Market Rate ROGO Exemptions on the properties and forwarding a Resolution to the Board of County Commissioners for consideration of moving the Market Rate ROGO Exemptions into the ROGO Administrative Relief pool for market rate allocations. Recommend continued program implementation.</td>
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<td>5 Hazard Mitigation Grant Program (HMGP acquisition 4337-311)</td>
<td>On September 10, 2017, Governor Rick Scott requested an expedited major disaster declaration due to Hurricane Irma beginning on September 4, 2017 and continuing. On September 10, 2017, President Trump declared that a major disaster exists in the State of Florida. This declaration made Hazard Mitigation Grant Program (HMGP) assistance requested by the Governor available for hazard mitigation measures statewide. FEMA’s Hazard Mitigation Grant Program provides funding to local governments so they can rebuild in a way that reduces, or mitigates, future disaster losses in their communities. This grant funding is available after a presidentially declared disaster. On February 5, 2018, the Florida Division of Emergency Management (FDEM) announced the availability of Hazard Mitigation Grant Program (HMGP) funds because of Presidential Disaster Declaration for Hurricane Irma (FEMA 4337-DR-FL). One of the eligible activities that was covered under the HMGP funds was acquisition/demolition or relocation of privately owned hazard-prone structures. As a result, the County applied for grant funding of $10 million to complete acquisition/demolition projects throughout the County, including the incorporated cities. The County developed an application in 2018 with approximately 40 interested properties; however, due to life changing circumstances and the time it has taken for grant allocation, many of the properties have withdrawn from the program. There are now properties with an estimated total project cost of approx. $3.6 million in the acquisition/demolition grant application.</td>
<td>Yes</td>
<td>n/a</td>
<td>There are 8 properties with an estimated total project cost of $3,578,181.00 in the acquisition/demolition grant application. The County continues to work with Florida Department of Emergency Management, which is working with FEMA to reach project approval. Recommend continuing implementation.</td>
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<td>6 Extended ROGO to 2026</td>
<td>Revised ROGO distribution to extend the remaining market rate ROGOs out for an additional three (3) years from 2023 to 2026 to provide additional time to implement other strategies, such as land acquisition and policy amendments as well as additional time to address the outcomes from the next hurricane evacuation clearance time modeling by the State. DEO/DEM will run an evacuation model after the completion of the 2020 Census, using updated data and analysis. Staff anticipates this process may take two to three years, and will require a new MOU with the state and cities. This will be the earliest point in time that the County will be able to evaluate the hurricane evacuation modeling results based on any changes experienced in the inputs and assumptions utilized.</td>
<td>No</td>
<td>CP Policy 101.3.2 &amp; LDC 138-101.7.3</td>
<td>n/a</td>
<td>Revised ROGO distribution to extend the remaining market rate ROGOs out for an additional three (3) years from 2023 to 2026 - provides additional time to implement other strategies, such as land acquisition. On January 22, 2020, the BOCC adopted these Comp Plan and LDC changes (Comp Plan Ord. 005-2020 and LDC Ord. 006-2020). Recommend review for updates after next hurricane modeling occurs with DEO &amp; DEM.</td>
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<td>7 Administrative Relief</td>
<td>Applicants to ROGO have the ability to apply for Administrative Relief within 180 days of the conclusion of the 16th quarterly allocation period in which they have failed to secure an allocation award. The regulations provide specific criteria for eligibility for administrative relief including compliance with all county, state and federal regulations. The existing regulations require the County to coordinate with the Department of Environmental Protection by notifying DEP of any upcoming administrative relief requests at least six months prior to the deadline for administrative relief. This in intended to target Tier 1 land areas and parcels with the Florida Forever acquisition area.</td>
<td>Yes</td>
<td>CP Policy 101.7.1 &amp; 101.7.3 &amp; LDC 138-27</td>
<td>No Comment</td>
<td>Staff is drafting an amendment to address an additional forms of relief (exchange of a County comparable and buildable non-conservation parcels) and to address the basis for denial of an administrative relief request (for example: previous private property rights claim or cause of action or previously received and rejected an offer from the local, state, or federal governmental). Amendment will need to be processed through public amendment process (community meeting, DRC, PC, BOCC adoption, &amp; review by the State). Recommend processing proposed amendment.</td>
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<td>8 Transfer of ROGO Exemptions (TREs)</td>
<td>Monroe County maintains a program that allows for the off-site transfer (from an eligible sender site to an eligible receiver site) of lawfully established dwelling units, hotel rooms, campground/RV spaces and/or mobile homes within the same planning sub-area. Transfers of market-rate ROGO exemptions requires the sender site to be: (1) redeveloped, or retained, with an affordable housing dwelling unit; (2) dedicated to Monroe County for the development of affordable housing and in-lieu fee per unit or (3) an affordable housing unit is developed on a Tier III property and the sender site is demolished and restored. The moratorium on the transfer of market-rate units has been lifted with adoption of Ordinance 007-2020 on January 2, 2020. The amendment allows a market-rate unit to be transferred to a receiver site that is a Tier III designated platted lot within the Improved Subdivision (IS) Land Use District or the Urban Residential Mobile Home (URM) Land Use District, is a platted lot located within the same ROGO planning subarea as the sender site; and is not a working waterfront.</td>
<td>No</td>
<td>CP Policy 101.6.8 &amp; 105.2.4 LDC 138-22(b)</td>
<td>No clear direction. Concern about replacement allocation on sender site.</td>
<td>On January 22, 2020, the BOCC adopted amendments to Section 138-22(b) and Section 139-2(b) to revise the receiver site criteria for the transfer market rate exemptions to another location, incorporating the BOCC direction within interim development ordinances (IDOs) (LDC Ord. 007-2020). Amendment revised Transfer of ROGO exemptions criteria for market rate units - to be developed as a single family detached market rate dwelling unit on a receiver site that is a platted lot, with IS or URM zoning, and is not a working waterfront. Recommend review for updates after next hurricane modeling occurs with DEO &amp; DEM.</td>
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<td>9a ROGO Points Land dedication</td>
<td>Monroe County offers +0.5 to +5 ROGO points to applicants who propose to voluntarily dedicate vacant, buildable land for the purposes of conservation, resource protection, restoration or density reduction and, if located in Tier III outside of Special Protection Areas (SPA), for the purpose of retirement of development rights or providing land for affordable housing where appropriate.</td>
<td>No</td>
<td>CP Policy 101.6.4 &amp; 105.2.4 LDC 138-28(a)(5)</td>
<td>No Comment</td>
<td>Since the Comp Plan and LDC update (2016), three (3) applicants have dedicated land for ROGO points. Combined 10 parcels were dedicated, totaling approx. 9.8 acres. Recommend review for updates after next hurricane modeling occurs with DEO &amp; DEM.</td>
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<td>9b ROGO Points Land aggregation</td>
<td>Monroe County offers +3 to +6 ROGO points to applicants who propose to voluntarily aggregate parcels for the purpose of density reduction through the retirement of development rights. Any lots/parcels that are aggregated require a legally binding unity of title or restrictive covenant, running in favor of, and enforceable by, the County.</td>
<td>No</td>
<td>CP Policy 101.6.4 &amp; 105.2.4 LDC 138-28(a)(4)</td>
<td>No Comment</td>
<td>Since the Comp Plan and LDC update (2016), twelve (12) applicants have aggregated land for ROGO points. Combined 19 lots have been aggregated for the purpose of retirement of development rights (does not include the parcel proposed for development within the aggregation). Recommend review for updates after next hurricane modeling occurs with DEO &amp; DEM.</td>
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<td>9c ROGO Points Payment to the Land Acquisition Fund</td>
<td>Monroe County offers up to two (2) whole points for a monetary payment by the applicant to the County’s land acquisition fund for the purchase of lands for conservation, and retirement of development rights. The monetary value of each point shall be set annually by the County based upon the estimated average fair market value of vacant, privately-owned, buildable IS/URM zoned, platted lots.</td>
<td>No</td>
<td>CP Policy 101.6.4</td>
<td>n/a</td>
<td>Since the Comp Plan and LDC update (2016), two (2) applicants have utilized the monetary payment for ROGO points. Combined the total payment received is $24,392.16. Resolution 394-2020 – setting the monetary value of $31,562.00 for 1 ROGO point. Recommend no changes.</td>
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<td>10 Transfer of Development Rights (TDRs)</td>
<td>The transfer of development rights is a zoning technique that encourages the voluntary transfer of development rights (density) by directing development from certain parcels (sender sites, typically environmentally sensitive) to other parcels deemed to be more appropriate by offering increased density on designated parcels (receiver sites). This mechanism works to protect environmentally sensitive land while maintaining property owners’ development rights.</td>
<td>No</td>
<td>LDC 130-160</td>
<td>No Comment</td>
<td>Since the Comp Plan and LDC update (2016), four (4) applicants have transferred TDRs. Combined 11.66 TDRs were transferred, removing development potential from seven (7) parcels. Recommend review for updates after next hurricane modeling occurs with DEO &amp; DEM.</td>
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<td>1 300 early evacuation allocations</td>
<td>Accept the 300 workforce housing early evacuation unit building permit allocations pursuant to the Workforce-Affordable Housing Initiative authorized by the Florida Administration Commission and the Florida Department Economic Opportunity. The 300 units would be used in exchange for existing affordable allocations/exemptions with developers that agree to the early evacuation restriction and the affordable housing allocations returned to the County (returned in the exchange) will be set aside and banked for potential future takings cases.</td>
<td>No</td>
<td>n/a</td>
<td>BOCC voted to transmit the proposed amendment to DEO on January 21, 2021. The State will review the proposed amendment and provide comments to the County. After State review, BOCC will consider adoption (tentatively April 2021) and, if adopted, State will conduct a compliance review. Recommend reviewing the state agency review comments on the proposed amendment and processing amendment.</td>
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<td>2 Contiguous Land Merger</td>
<td>Adopt Contiguous Land Merger Ordinance, consistent with Murr v. Wisconsin. The ordinance would provide a process by which Monroe County may seek to merge two (2) or more contiguous parcels held in common ownership where one (1) or more of the contiguous parcels does not conform to standards for development due to environmental quality or environmental compatibility.</td>
<td>No</td>
<td>Yes, move forward. Questions about implications to property taxes</td>
<td>Staff is drafting an amendment to address land mergers. Amendment will need to be processed through public amendment process (community meeting, DRC, PC, BOCC adoption, &amp; review by the State). Recommend continued analysis and drafting/processing amendment.</td>
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<td>3 Create a ROGO Category for market-rate workforce housing</td>
<td>Develop a new ROGO category of market-rate workforce allocations for applicants who commit to maintaining the property as market-rate workforce housing (earn 70% of income within Monroe County, but NOT subject to affordability criteria). Prioritization of these units could be enhanced by providing a dedicated allocation pool and providing points through the ROGO system for applicants willing to impose a workforce housing deed restriction on single site market-rate ROGOs.</td>
<td>No</td>
<td>Yes.</td>
<td>Discussed February 19, 2020, July 15, 2020 and January 20, 2021. On January 20, 2021, the BOCC did not direct staff to move forward with these amendments. BOCC discussed potential amendments to move a portion of the remaining Market Rate allocations to other allocation pools (various options presented, including shifting market rate allocations to a new workforce market rate housing pool and awarding positive points in the market rate pool to restricting to workforce). Recommend no change.</td>
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<tr>
<td>4 Create a ROGO Category whereby the ROGOs must be used for owners who will maintain homestead exemption</td>
<td>Develop a new ROGO category of market-rate allocations for applicants who commit to maintaining the property with a homestead exemption to prioritize owner-occupied developments. Prioritization of these units could be enhanced by providing a dedicated allocation pool and providing points through the ROGO system for applicants willing to commit to maintaining a homestead exemption single site market-rate ROGOs.</td>
<td>No</td>
<td>“Ok”</td>
<td>Discussed July 15, 2020. BOCC did not direct staff to move forward with these amendments. BOCC discussed potential amendments to move a portion of the remaining Market Rate allocations to other allocation pools (various options presented, including shifting market rate allocations to an owner-occupied workforce affordable housing pool and an owner-occupied workforce market rate pool). Recommend no change.</td>
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<td><strong>5 Rezone land from residential uses to other uses</strong></td>
<td>Monroe County may identify vacant parcels of land that are currently within a land use (zoning) district that allows residential uses and amend the zoning designation to a zoning district that does not allow residential uses. For example, Commercial 1 and Commercial 2 zoning districts allow for nonresidential use of the parcel, but prohibits any residential use of the parcel. Note, proposed rezonings may also impact Future Land Use Map (FLUM) designations and require Comp Plan FLUM amendments as well. <strong>Alternative:</strong> Offer to redesignate vacant land with certain priorities and/or categories: The County could identify priority areas (for example: vacant locations adjacent to US1 that propose commercial categories) or specific targeted land use categories (for example: Preservation, Conservation, Recreation and/or Public Facilities categories) and offer to process amendments for properties owners that submit an authorization form and that meet the identified criteria.</td>
<td>Yes</td>
<td>Yes.</td>
<td>Yes. Move forward slowly. Disputes with property owners? Investigated implications? Potential broad impacts.</td>
<td>Recommend evaluating rezoning options after implementing other directed actions.</td>
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<td><strong>6 Create climate change adaptation areas and disallow any development on land where sea level rise will put land under water in future.</strong></td>
<td>In 2013, the BOCC adopted the Monroe County Community Climate Action Plan (MCAP). The purpose of the MCAP is to outline a course of action for the County government and communities of Monroe County for a coordinated countywide strategy to minimize climate change impacts and to increase the sustainability of the communities within the Florida Keys. The MCAP is an attempt to mitigate future impacts by reducing communitywide greenhouse gas (GHG) emissions to 20% below 2005 levels by 2020 and to identify local adaptation needs for protection against future sea level rise. The MCAP has been designed to support three primary functions: 1. Provide clear guidance to County staff regarding when and how to implement key provisions of the plan; and 2. Inspire residents and businesses to participate in community efforts to address climate change issues; and 3. Demonstrate Monroe County’s commitment to climate change mitigation and adaptation. The plan contains strategies, objectives, measures, and actions that will direct the County’s efforts. Two recommended actions include: • P-2.1: Revise Monroe County’s Comprehensive Plan to address strategic planning related to climate change mitigation and adaptation needs. • P-2.2: Incorporate the “Adaptation Action Area” designation into local comprehensive plans and regional planning documents to identify those areas deemed most vulnerable to sea level rise and other climate change impacts. The creation of a Climate Change Element as a part of the Monroe County Comprehensive Plan includes strategies to address the impacts of climate change, including Policy 1502.1.4 regarding identifying criteria to define adaptation action areas (AAA), or a similar concept. Adaptive management principles would be used to continually reviewed to revise climate mitigation and adaptation policies, objectives, and Land Development Regulations. The County could designate adaptation action areas to identify areas that experience coastal flooding and are vulnerable to sea level rise, for the purpose of prioritizing funding for infrastructure needs and adaptation planning. This could include both developed and undeveloped areas, and be used as a tool to guide policies and regulations that serve to reduce future risk and economic losses associated with sea level rise.</td>
<td>No</td>
<td>Yes. Need more information, including LIDAR data, to make additional decisions and understand the impacts</td>
<td>County applied for and received a Florida Department of Environmental Protection Resilient Coastlines Program Grant to develop proposals for Adaptation Action Areas and prepare draft comprehensive plan amendments. BOCC approved a contract for this work on September 16, 2020. Grant work is ongoing and is anticipated to be completed in June 2021. Any amendments will need to be processed through public amendment process (community meeting, DRC, PC, BOCC transmittal to the State, review by the State, BOCC adoption, compliance review by the State). Recommend completing the DEP grant, further evaluating grant deliverables and processing any desired/necessary amendment.</td>
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<td><strong>7</strong> Establish an Urban Service District</td>
<td>An urban service district is an area in which urban services will be provided and outside of which such services will not be extended thus discouraging development sprawl. Monroe County may create an Urban Service District (USD) to discourage and disallow development of land outside of the designated area (areas served by existing infrastructure including roadways, sewer, water and electric). Monroe County could seek ACSC legislative changes to disallow any extension of public facilities (electric, water, sewer, cable) into Coastal Barrier Resource System (CBRS), OPAs, urban service district, for example. Monroe County could supplement this strategy to discourage residential development by amending ROGO regulations to either: (1) disallow development without utilities, or (2) give negative points. Currently, negative points in ROGO are obtained for development in Big Pine Key, wetlands, CBRS areas and v-zones (flood plain).</td>
<td>Yes</td>
<td>Yes</td>
<td>Platted areas that are all hammock, wetlands or submerged lands. Anticipated to be pockets, not contiguous areas.</td>
<td>In review. Potential Example: Recommend continued analysis.</td>
</tr>
<tr>
<td><strong>8</strong> Shelter in place</td>
<td>Monroe County may allow sheltering in place as long as structures are built accordingly and resilient. This could mean either individuals sheltering in place, shelters provided by the government, or an impact fee assessed on new development to guarantee space within a government provided shelter.</td>
<td>Yes</td>
<td>Yes</td>
<td>For example, impact fees for future shelter development. Logistics and consideration after the storm. Reduce cars in the evacuation stream.</td>
<td>Recommend discussion and review after next hurricane modeling occurs with DEO &amp; DEM.</td>
</tr>
<tr>
<td><strong>9</strong> Add nonresidential uses to residential zoning districts (community gardens, small business, boat trailer parking)</td>
<td>Monroe County may amend the text of specific land use (zoning) districts to provide for additional nonresidential uses such as community gardens, boat trailer parking, docks, and municipal/private parking, for example. Additionally, Monroe County may consider exempting recreational vehicles from ROGO for vacant lots only. Amending the text of the specific land use (zoning) districts would apply to all land designated with those categories. For example, the residential land use districts (like IS, SR, URM) already allow Parks as a use. For district like these, the County could consider adding another similar nonresidential use such as community gardens.</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program/Idea</td>
<td>Description</td>
<td>Funding Required (Y/N)</td>
<td>CP/LDC Provision</td>
<td>BOCC Direction 01.30.19</td>
<td>Current Status</td>
</tr>
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<tr>
<td>10</td>
<td>Create another Commercial Zoning category for smaller/less intense uses to provide services to the immediate vicinity of a residential neighborhood</td>
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<td></td>
<td>Staff: Mayté Santamaria</td>
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<td>Develop another Commercial zoning category, for example Neighborhood Business (NB) zoning district, with the purpose of providing a nonresidential uses that are for the immediate needs of the neighborhood/existing residential development. Applicant would apply for the zoning category and the designation would be applied to specific parcels, if the map amendment is approved. Category could include parameters, such as:</td>
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<tr>
<td></td>
<td>• Intended for Tier III infill/small areas (&lt;1 acres or ½ acre?) within or adjacent to residentially zoned areas</td>
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<td></td>
<td>• Provides as-of-right uses (approved through a building permit) only,</td>
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<td></td>
<td>• Limit size of structures, for example: commercial retail limited to 2,000 square feet and commercial recreation limited to 1,000 square feet, etc.</td>
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<td>• Could require distancing: may not be located within _______ feet (specify distance?) of another parcel already designated as NB</td>
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<td></td>
<td>• Could exempt the need for NROGO within this zoning category (incentivize zoning change and nonresidential development)</td>
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<td></td>
<td>Potential Example:</td>
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<td>(a) The following uses are permitted as of right in the NB district:</td>
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<tr>
<td></td>
<td>(1) Commercial retail and restaurant uses, or any combination thereof, of low and medium intensity, with a maximum of 2,000 square feet of floor area, limited to:</td>
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<tr>
<td></td>
<td>a. Retail sales of groceries, garden supplies, florist products, arts and crafts, photography supplies, books and newspapers, stationary and gifts, jewelry, apparel, and fabrics.</td>
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<td></td>
<td>b. Personal service shops for barber, beauty parlor, and hair salon.</td>
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<td></td>
<td>c. Restaurant uses of coffee shop, bakery, café, snack shop, ice cream shop, pizzeria, and sandwich/lunch bar.</td>
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<td>(2) Office uses of low and medium intensity with a maximum of 2,000 square feet of floor area, limited to:</td>
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<tr>
<td></td>
<td>a. accounting, finance, insurance, and real estate services;</td>
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<td></td>
<td>b. attorney services; and</td>
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<td></td>
<td>c. management and related services.</td>
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<td></td>
<td>(2) Commercial recreation uses, limited to:</td>
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<td></td>
<td>a. Tennis, racquet ball and pickle ball courts; and</td>
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<td></td>
<td>b. Health and fitness clubs with a maximum of 1,000 square feet of floor area, limited to a gym, yoga studio, Pilates studio, martial arts studio and dance center.</td>
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<td></td>
<td>(3) Neighborhood outdoor parking for operable vehicles and watercraft, provided that:</td>
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<tr>
<td></td>
<td>a. The parcel shall be separated from any established residential use with a solid fence or a class C bufferyard. As determined by the Planning Director, the bufferyard may be required on all property lines adjacent to an established residential principal use to screen the use from view.</td>
<td></td>
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<tr>
<td></td>
<td>b. Stored vehicles and watercraft must not be located within the setbacks.</td>
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<td></td>
<td>(4) Neighborhood parks and community gardens (or Passive recreational/park uses);</td>
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<td>(5) Accessory uses;</td>
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<td>(6) Collocations on existing antenna-supporting structures, pursuant to section 146-5(c);</td>
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<td></td>
<td>(7) Attached wireless communications facilities, as accessory uses, pursuant to section 146-5(d);</td>
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<tr>
<td></td>
<td>(8) Replacement of an existing antenna-supporting structure pursuant to section 146-5(b);</td>
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<tr>
<td></td>
<td>(9) Stealth wireless communications facilities, as accessory uses, pursuant to section 146-5(e);</td>
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<tr>
<td></td>
<td>(10) Satellite earth stations, as accessory uses, pursuant to section 146-5(f);</td>
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<td></td>
<td>(11) Public buildings and uses with a maximum of 2,000 square feet of floor area, and</td>
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<td>(12) Public infrastructure and utilities, provided that:</td>
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<tr>
<td></td>
<td>a. The parcel(s) proposed for development shall be separated from any established residential use by a class C bufferyard. As determined by the Planning Director, the bufferyard may be required on all property lines adjacent to an established residential principal use to screen the use from view.</td>
<td></td>
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<tr>
<td></td>
<td>b. A solid fence may be required upon determination by the Planning Director.</td>
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</tbody>
</table>
The City of Key West has provisions within its Comprehensive Plan and Land Development Code for an Accessory Apartment, or Single Room Occupancy (SRO) as an accessory unit to a principal dwelling unit which can be built utilizing less than one (1) whole ROGO allocation (0.78 of a ROGO). This is based on the equivalency provisions calculated for these residential structure types, as the ratio of the average number of vehicles per unit based on Census data divided by the vehicles per single family units (i.e., 1.28 vehicles per unit). CP Policy 1-1.16.3 (LDC Section 108-994) provides the equivalencies:

<table>
<thead>
<tr>
<th>Residential Structure Type</th>
<th>Equivalent Single-Family Unit Value (ESFU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>1.00</td>
</tr>
<tr>
<td>Accessory Apt./SRO</td>
<td>0.78</td>
</tr>
<tr>
<td>Multi Family</td>
<td>1.00</td>
</tr>
<tr>
<td>Transient Unit</td>
<td>0.86</td>
</tr>
</tbody>
</table>

(1) The equivalent single family unit values are predicated on the ratio of the average number of vehicles per unit based on the 2010 US Census for the respective residential structure types divided by the vehicles per single family units (i.e., 1.28 vehicles per unit). The computations are as follows:

(a) Single Family: $1.28/1.28 = 1.00$

(b) Accessory Apt. or Single Room Occupancy (SRO): $1.00/1.28 = 0.78$. The former FL Department of Community Affairs (now Department of Economic Opportunity) approved the estimated average vehicles per accessory unit or single room occupancy (SRO) as one vehicle per accessory unit or SRO.

(c) Multi-Family: $1.28/1.28 = 1.00$

(d) Transient Unit: $1.10/1.28 ≈ 0.86$ (based on the Hurricane Evacuation Study 1.10 vehicles per transient unit in Monroe County).

The equivalency has been recognized in the City based on the lower ratio of automobiles per unit, the small geographic area of the City, availability of services and the reduced impact on other public facilities.

Accessory units and single room occupancies (SROs) means units that must be deed-restricted as affordable; restricted to occupancy by permanent residents, and cannot be sold separately as a condominium. When an accessory unit occupancy permit is originally initiated, the principal unit must be owned and occupied by a permanent resident. An accessory unit or SRO cannot take up more than 40% of the principal structure nor can it exceed 600 square feet and the minimum size shall be 300 square feet. SROs by definition shall be restricted to one-room efficiencies. No accessory unit shall have more than one bedroom unless an additional bedroom is approved as a variance by the planning board. If such variance is approved, the total square footage shall not exceed 600 square feet. (LDC Section 108-986)

SROs are required to provide 1 parking space for every 2 beds. (LDC Section 108-572)

Prior to the 2010 Census, the City’s comprehensive plan and land development code provisions included a ratio of one (1) accessory unit or single room occupancy (SRO) equaled 0.55 dwelling unit (based on the 1990 Census). Based on 2010 Census, the ratio of one (1) accessory unit or single room occupancy (SRO) now equals 0.78 dwelling unit. The results of the 2020 Census may alter this ratio in the future.

Note, the City of Key West has limited vacant, privately owned parcels remaining. The County anticipates after utilizing all the ROGO allocations granted by the State in 2012 (1,970), we will have approximately 7,000 vacant privately owned parcels remaining, with close to 2,800 of those parcels being located in Tier III. Potentially, attempting the create a similar accessory dwelling unit policy, would consume more ROGOs (even if fractions of a ROGO) on parcels with existing development (i.e. not distributing ROGO allocations and reducing liability).

Recommend discussion and review after next hurricane modeling occurs with DEO & DEM.
<table>
<thead>
<tr>
<th>Program/Idea</th>
<th>Description</th>
<th>Funding Required (Yes/No)</th>
<th>BOCC Direction 01.30.19</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Future Actions</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>1</strong> Lobby State Legislature</td>
<td>Lobby State legislature to adopt a bill whereby a court must apportion damages for a regulatory taking equally between the State and local government in an Area of Critical State Concern.</td>
<td>No</td>
<td>Continue moving forward. 50/50 Bill</td>
<td>The bill lacked sufficient leadership support during the 2020 Legislative session to warrant further pursuit at this time. The State has appropriated funds to cover its 50% share of the liability on individual cases to date. Recommend reevaluating for future legislative sessions.</td>
</tr>
<tr>
<td><strong>Staff:</strong></td>
<td>Derek Howard Bob Shillinger</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>2</strong> Eminent Domain of Unimproved, Platted Rights-of-Way</td>
<td>Exercise eminent domain to acquire title to unimproved, platted rights-of-way (areas typically covered by right-of-way easements running in favor of the County) for the purpose of conservation and/or takings liability reduction. This would reduce the reasonable investment-backed expectations of development of adjacent-located platted, privately-owned undeveloped parcels currently without access to an improved right-of-way.</td>
<td>Yes</td>
<td>Yes</td>
<td>Potential Example: Recommend ongoing/further research.</td>
</tr>
<tr>
<td><strong>Staff:</strong></td>
<td>Peter Morris</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong> Pursue Code liens</td>
<td>Pursue and foreclose code liens where appropriate.</td>
<td>Yes</td>
<td>Yes</td>
<td>Recommend continuance/ongoing collections.</td>
</tr>
<tr>
<td><strong>Staff:</strong></td>
<td>Bob Shillinger Cynthia McPherson Neecie Scull</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong> Raise taxes</td>
<td>Items 11-16 from original White Paper:</td>
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<tr>
<td><strong>11.</strong> 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.</td>
<td>No</td>
<td>No clear direction.</td>
<td>The half of a 1 cent Tourist Impact tax (pursuant to § 125.0108, F.S.), provides an annual revenue for the Florida Keys ACSC of approximately $1.8 million (5 year average of FY 14-18). This also generates approximately $2.3 million annually for the Key West ACSC (5 year average of FY 14-18). If the County passed by referendum, after amending State legislation, an additional 0.5% to the Tourist Impact Tax, there would be additional dedicated funding for purchasing land within the County.</td>
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<tr>
<td><strong>Staff:</strong></td>
<td>Bob Shillinger</td>
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<tr>
<td><strong>12.</strong> Dedicate 10% of current 1 cent infrastructure sales surtax (§ 212.055(2)(f3., F.S.). Currently the County may designate 10% of this tax for “other purposes,” which could be for land acquisition.</td>
<td></td>
<td></td>
<td>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. Starting in 2016, $6 million dollars were set aside from infrastructure sales tax revenue for the purchase of non-conservation properties for density reduction and the retirement of development rights. $1.25M was allocated in 2020.</td>
<td></td>
</tr>
<tr>
<td><strong>Staff:</strong></td>
<td>Bob Shillinger</td>
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</tbody>
</table>
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.

Staff: Bob Shillinger

If the County passed by referendum, after legislative authorization, adding an additional 1 cent sales tax, an additional funds could be available County-wide.

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.

Staff: Mike Roberts & Cynthia Guerra

Establishing a County-wide Environmental Land Acquisition Ordinance is contingent upon adopting an ad valorem tax designated specifically for the purchase and management of density reduction and conservation lands. This option has had wide application in Florida, with 20+ Counties and 20+ municipalities adopting an environmental lands program based on this model.

Process for Establishing Countywide Taxing Authority by the County (in general):
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.

A top priority for the County is to secure authority from the State to levy an extra 1-penny sales tax, utilizing the revenue raised to implement a road elevation program to respond to the severe and persistent flooding of the County’s roads from sea level rise, King Tides, and storm inundation.

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).

Staff: Bob Shillinger

Requires Federal and State legislation to authorize the imposition of a toll on U.S. 1.

16. Work with non-governmental organizations, such as the Trust for Public Lands and the Nature Conservancy, to supplement governmental acquisition efforts.

Staff: Bob Shillinger

The County previously tried to partner with non-governmental organizations (NGOs) to supplement governmental acquisition efforts; however, the NGOs were not willing to participate and indicated their organizations were no longer targeting purchases within the Florida Keys due to sea level rise impacts.

Example fund generation from a voter referendum for an ad-valorem tax to be dedicated to land acquisition:

<table>
<thead>
<tr>
<th>Millage Rate (mil)</th>
<th>Estimated Annual Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 mil</td>
<td>~$8.3 M</td>
</tr>
<tr>
<td>0.50 mil</td>
<td>~$16.6M</td>
</tr>
<tr>
<td>0.75 mil</td>
<td>~$25 M</td>
</tr>
<tr>
<td>1 mil</td>
<td>~$33.5 M</td>
</tr>
</tbody>
</table>

Example annual average cost by example millage rate based on $500,000 residential property value:

<table>
<thead>
<tr>
<th>Millage Rate (mil)</th>
<th>Average Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25 mil</td>
<td>$125.00</td>
</tr>
<tr>
<td>0.50 mil</td>
<td>$250.00</td>
</tr>
<tr>
<td>0.75 mil</td>
<td>$375.00</td>
</tr>
<tr>
<td>1 mil</td>
<td>$500.00</td>
</tr>
<tr>
<td>Program/Idea</td>
<td>Description</td>
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<td>-------------</td>
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<tr>
<td><strong>Develop purchasing tax deed programs</strong></td>
<td>The acquisition of tax deeds would require separate BOCC authority and development of an internal financing process to make purchases at tax deed auctions. Since government decisions are made at public meetings, it is difficult for government to authorize a maximum bid without tipping its hand to the other bidders in advance of the auction, but program parameters to can be developed to set fixed guidance for bidding. Typically, the bid process requires the successful bidder to make payment within 24 hours, so financial procedures which can deviate from typical procurement processes would have to be developed to allow for prompt payment of winning bids. There may be some challenges related to public perception. Since it is government’s taxing and regulatory powers that give rise to a tax deed sale in the first place, some members of the public may view the government’s purchase of property at tax deed sales as being unfair or inappropriate. Purchasing tax deeds requires scrutiny of appraised value (if available) versus assessed value versus taxes owed (which is usually the opening bid). Nothing should be acquired above appraised/assessed unless addressed in standing BOCC authority. The cost of taxes owed needs to be considered in terms of what is delinquent and what is not delinquent, as the tax deed purchase price may not adequately capture the true purchase price of the parcel. There is also a risk that title acquired through tax deed may not be marketable or insurable, so title reviews are an important step towards managing and assessing this risk. Title searches may be available and on file with the tax deed office. This information may need to be supplemented by a low-cost title update performed by an independent contractor. Liens are not typically cleared by a tax deed sale, so the parcels also need to be reviewed for any liens to determine if the lien liability exceeds the value of the property. Also, with tax deeds the tax delinquency needs to be checked often to make sure owner is not paying them and taking the parcel out of an upcoming auction. Tax deeds present a path forward to acquiring parcels in a cost-efficient manner, but the process can be staff intensive.</td>
</tr>
<tr>
<td><strong>Eminent Domain</strong></td>
<td>Exercise Eminent Domain of environmentally sensitive lands and undeveloped plats, which is a more predictable process as opposed to possible inverse condemnation suits by property owners.</td>
</tr>
<tr>
<td><strong>Lobby Federal government</strong></td>
<td>A. Lobby Federal government to expand boundaries of Coastal Barrier Resources System (CBRS) in Monroe County that would prohibit the issuance of federal flood insurance for new development for properties within the system, thereby decreasing development pressure without additional takings liability.</td>
</tr>
<tr>
<td></td>
<td>B. Lobby Federal government to disallow National Flood Insurance Program (NFIP) policies for new construction.</td>
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<tr>
<td><strong>Raise property taxes</strong></td>
<td>Monroe County could raise property taxes to further fund land acquisition, including payments that may be required as a part of the beneficial use determination process. Currently, the millage rate is set at 2.4 mils; whereas, the maximum is 10 mils. The County could consider: 1. Establishing a new ad valorem (county wide) tax; and 2. Increase 148 fund (unincorporated).</td>
</tr>
<tr>
<td>Program/Idea</td>
<td>Description</td>
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</table>
| 9           | Request FDOT widen roadways | Comprehensive Plan Policy 301.7.2, states that the County will coordinate with FDOT to maintain portions of U.S. 1 as two lanes.  
  **Policy 301.7.2**  
  In recognition of the physical and environmental constraints that may affect the widening of U.S. 1 to four lanes, Monroe County shall coordinate with FDOT on those portions of U.S. 1 that are shown as two lanes on the Future Traffic Circulation Map to maintain them as two lanes for the planning horizon. This policy shall not be construed so as to prohibit the addition of a third lane to be used as a continuous two-way turn lane for those segments with a demonstrated public safety risk, if the third lane has been demonstrated to be the safest alternative.  
  Monroe County may consider amending Policy 301.7.2 to widen portions of U.S. 1 to four lanes, where appropriate, to provide for greater hurricane evacuation capacity.  
  Note, the municipalities may have similar policies limiting the widening of U.S. 1. Also, proposed change would need to balance added capacity with quality of life, habitat impacts and community character. | No | No | No |
| 10          | Conduct carrying capacity study | Monroe County may conduct a carrying capacity study to determine the correct balance and needs of permanent residents and tourism with the environmental and water quality constraints. | Yes | No | No |
| 11          | Lobby Citizens insurance to disallow any new policies for new construction | Lobby Citizen’s Insurance to disallow insurance for any new construction. | No | No | No |
INTERLOCAL AGREEMENT BETWEEN THE MONROE COUNTY LAND AUTHORITY
AND THE BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY REGARDING
THE ADMINISTRATION OF LAND ACQUISITION PROGRAMS

This Interlocal Agreement ("Agreement") is made and entered into this 21st day of July, 2021, by
and between the Board of County Commissioners of Monroe County, Florida ("BOCC") and the Monroe
County Comprehensive Plan Land Authority ("MCLA").

WHEREAS, the State of Florida through the Florida Keys Area Protection Act has identified the
State’s intent to ensure that the population of the Florida Keys can be safely evacuated in the event of a
hurricane and has designated the Florida Keys as an Areas of Critical State Concern. F.S.380.0552.
(“Keys ACSC”); and

WHEREAS, the State of Florida has provided that the land authority may acquire and dispose of
real property or any interest therein when such acquisition is necessary or appropriate to prevent or satisfy
the purposes and provisions of its governing act, including conservation (natural environment and wildlife
habitat), recreation, affordable housing, and private property rights claims resulting from limitations
imposed by the designation of an area of critical state concern. F.S.380.0666(3); and

WHEREAS, Monroe County has adopted such an ordinance creating Monroe County
Comprehensive Plan Land Authority ("MCLA") and granting it the power to do any and all things
necessary or convenient to carry out the purposes of such an ordinance. Monroe County Code Sec. 2-397;
2-398; and

WHEREAS, Monroe County has adopted a Rate of Growth Ordinance ("ROGO"), as set forth in
Chapter 138 of the Monroe County Land Development Code, with the stated purpose of protecting the
residents, visitors and property in the county from natural disasters, specifically including hurricanes by
limiting the annual amount and rate of residential development commensurate with the county’s ability to
maintain a reasonable and safe hurricane evacuation clearance time; and

WHEREAS, ROGO permit allocations are currently limited, by rule promulgated by the Florida
Administrative Code Rule 28-20.140, to 197 permits per year for Monroe County with an anticipated
build out of all available permits for the Florida Keys by the year 2023;

WHEREAS, Monroe County amended its Comprehensive Plan to extend that date to 2026 by
slowing the distribution rates of ROGO permits as set forth in F.A.C. 28-20.140; and

WHEREAS, ROGO is implemented through a tier system whereby real property is divided into
three tiers establishing criteria for the evaluation of real property for the building permit application
process within Monroe County. The most highly developable infill properties are designated as Tier III
properties. Monroe County Code Sec. 138-28; and

WHEREAS, there are currently approximately 8,000 undeveloped, privately owned parcels, with
over 3,000 of these undeveloped, privately owned parcels designated as Tier III properties in Monroe
County; and

WHEREAS, due to the limitations on the number of ROGO allocations imposed by the State of
Florida, Monroe County may be unable to issue residential building permits for all of the undeveloped
privately owned parcels, in Monroe County; and

Page 1 of 7
WHEREAS, in order to reduce the potential liability of Monroe County for property rights claims and to address the corresponding potential impacts on the County’s hurricane evacuation clearance times, the BOCC desires to implement as many acquisition programs as possible to offset the risk of potential property rights claims; and

WHEREAS, BOCC has:

A. Created the Less Than Fee Acquisition Program;
B. Created the Density Reduction Program by implementing Fund 316 for Acquisition;
C. Authorized the resale of up to eleven (11) lots acquired under the Density Reduction Program with deed restrictions that stripped ability of owner to apply for a rate of growth ordinance (ROGO) allocation;
D. Supported land maintenance of conservation lands including coordination of land maintenance of vacant county owned land from the Monroe County Environmental Land Management and Restoration Fund (Fund 160, aka MCELMRF, a non-ad valorem fund);
E. Supported acquisition programs related to grant funding received by the County including but not limited to:
   a. Community Development Block Grant (CDBG)
   b. Hazard Mitigation Grant Program (HMGP) (currently in application with FDEM)
   c. Flood Mitigation Assistance (FMA) program (currently developing applications);

As well as

F. Authorized County and MCLA staff to coordinate with State Department of Environmental Protection (DEP) and Department of Economic Opportunity (DEO) on Florida Forever project properties by 2017 Memorandum of Agreement and Confidentiality Acknowledgement for the Florida Forever Keys Projects, located in Monroe County, as amended for the 2nd time on May 20, 2020; and

WHEREAS, the BOCC would like to create a program to formalize the disposition of Density Reduction Lots, without development rights, and would like MCLA staff to help create and administer that program; and

WHEREAS, the BOCC also desires to continue to work cooperatively with the DEP to purchase Florida Forever Properties in the Florida Keys for the purposes of preserving environmentally sensitive lands and for the purposes of reducing the State and County’s potential exposure to property rights claims; and

NOW THEREFORE, the parties agree as follows:

SECTION 1 - RECITALS: The above recitals are true and correct and are incorporated herein by reference. The parties intend for this Agreement to address program administration of acquisition programs described below.

SECTION 2 - ADOPTION: The interlocal agreement between MCLA and BOCC dated October 19, 2016, is hereby repealed and replaced by this interlocal agreement. This agreement shall have a phased implementation. Starting on August 22, 2021, the MCLA shall be authorized to begin
implementation and management of the programs set forth in Section 3 along with access and use of the vehicle set forth in Section 8, herein. The remainder of this agreement shall become effective as of October 1, 2021. This agreement shall terminate upon termination of the Florida Keys Area of Critical State Concern designation, unless terminated earlier according to the terms of this agreement.

SECTION 3 - PROGRAMMING: MCLA’s administration will include grant management of the BOCC programs outlined below (hereinafter the “Programs”), including, but not limited to seller and/or buyer coordination; negotiating purchase and sale agreements; ordering due diligence products on behalf of the BOCC including but not limited to appraisals, boundary surveys, environmental assessments and any other inspections required in order to facilitate the BOCC’s acquisition; and ordering closing services, title commitments, and title insurance policies on behalf of the BOCC. The MCLA staff shall be responsible for preparing all agenda items necessary to accomplish the purposes of this agreement, including but not limited to agenda items requiring BOCC approval. MCLA staff shall coordinate with BOCC staff as to placement on the appropriate segment of the BOCC portion of the agenda. Lands acquired under said Programs shall be purchased with funds from either the BOCC or the referenced grant Programs and shall be titled in the BOCC. MCLA’s administration shall include land stewardship activities pursuant to Program IV below when the acquired properties are suited for management as conservation land. Otherwise, the BOCC agrees to maintain the acquired properties and MCLA’s administration shall include coordinating with BOCC staff (Facilities Maintenance or Project Management) regarding maintenance activities such as mowing, trash removal, etc. when needed.

PROGRAMS:

I. Less Than Fee Acquisition Program: This is a less than fee acquisition program to retire the rights to build dwelling units where the subject lot is owned by the adjoining homeowner. The program was established by BOCC Resolution 175-2018 and amended by BOCC Resolutions 438-2018 and 063-2020.

II. Density Reduction Acquisition Program: This is a fee simple acquisition program for those lots that are not suited for management as conservation land. The program was established to retire the rights to build dwelling units on said lots pursuant to the 2016 Interlocal Agreement between MCLA and the BOCC.

III. Density Reduction Resale Program: A program to resell Density Reduction Lots (lots not suited for management as conservation land) subject to deed restrictions prohibiting development with dwelling units needs to be formally established with criteria and processes as provided for in F.S. 125.35(3). The Board has previously approved of offering eleven Duck Key lots for sale through Resolutions 379-2019 and 122-2021; neither resolution contemplated or authorized further dispositions.

IV. Conservation Land Stewardship Program: This is a program to manage conservation lands using the Monroe County Environmental Land Management and Restoration Fund (Fund 160, aka MCEL/MRF), a non-ad valorem fund established pursuant to BOCC Resolution 112-2004 and BOCC Resolution 111-2010. Said lands consist of conservation lands owned by the BOCC, conservation lands leased to the BOCC by the Board of Trustees of the Internal
Improvement Trust Fund of the State of Florida, and conservation lands owned by MCLA.

V. Community Development Block Grant – Disaster Recovery (CDBG-DR) Voluntary Home Buyout Program: This is a program to purchase and demolish improved properties that were damaged during Hurricane Irma and to acquire the associated ROGO exemptions pursuant to BOCC Resolution 150-2020, thereby amended on March 17, 2021. Properties acquired under this program must be maintained for open space, recreation, or stormwater management.

VI. Hazard Mitigation Grant Program (HMGP) Acquisition and Demolition: This is a program to purchase and demolish improved properties that were damaged during Hurricane Irma to acquire the associated ROGO exemption, and to maintain the acquired properties as open space. The BOCC authorized submitting a grant application for this program on July 18, 2018 (Item D-4).

VII. Flood Mitigation Assistance (FMA) Acquisition and Demolition: This is a program to purchase and demolish improved properties that were damaged during Hurricane Irma or other flood events, to acquire the associated ROGO exemption, and to maintain the acquired properties as open space. The BOCC authorized submitting a grant application for this program on May 19, 2021 (Item K-6).

VIII. Florida Forever Program: MCLA will coordinate with Florida Department of Environmental Protection (DEP) and Department of Economic Opportunity (DEO) regarding the State’s acquisition of property within Florida Forever projects. MCLA will serve as the BOCC’s agent in implementing the 2017 Memorandum of Agreement, as subsequently amended, between Monroe County and the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida and will assist DEP in identifying willing sellers within Florida Forever projects. Nothing in this agreement shall prevent the MCLA from working cooperatively with the DEP on acquisitions of qualifying properties under the existing statutes, regulations, and ordinances governing land acquisitions by both entities.

SECTION 4 - FINANCING: The BOCC will continue to handle the financial services and funding (including, but not limited to: budgeting, purchasing/bids/procurement, payment to vendors and applicants, and auditing) for the Programs referenced above. The current funds include: Fund 316 Acquisition Fund; Fund 160 Monroe County Environmental Land Management and Restoration Fund (MCELMRF); CDBG-DR; HMGP; and FMA.. The Clerk of the Court will continue to issue vendor payments, and BOCC FTE payroll. The Clerk will maintain Board financial statements including annual single audit report and audit function of BOCC.

SECTION 5 – EMPLOYMENT: The positions referenced below will be BOCC payroll positions and to the extent not funded by the referenced grants, will be funded by the BOCC, as long as the persons currently within the positions remain employed in that position. Such funding shall include all ancillary funding necessary for such employee, including, but not limited to office space, technology, cell phone, insurance benefits, retirement benefits and vehicle(s) necessary to implement each position. Additionally, MCLA Executive Director, to the extent possible, will bill the grant Programs for time expended by the
MCLA Executive Director. When grant funds are no longer available to fund personnel services, BOCC will continue to fund the positions, subject to annual appropriation, unless otherwise agreed to.

STAFFING:

Land Steward
Land Steward Assistant
New FTE Land Steward Employee
Acquisition Manager
Mitigation Administrator

POSITION NUMBERS:

GMGM-005
GMENV-020
TBD
GMPLN-032
GMBLG-053

The positions listed above will be managed by and report to the MCLA Executive Director, according to the BOCC adopted Personnel Policies and Procedures (PPP), as may be amended from time to time, as well as the Career Service Council Act and corresponding rules and regulations. In the case of any suspension, discharge, reduction in pay, or demotion of such employees, the Executive Director shall be required to obtain County Administrator approval with a review by the Employee Services Director and County Attorney to assure the Executive Director followed the PPP.

SECTION 6:
Any new positions that will be added will be MCLA positions. If, at any time, any of the employees currently occupying the positions listed above leaves the position or separates from employment with Monroe County, the position will from that point forward be an MCLA employee, and MCLA will be the employer for all purposes for that position. In this case, the parties will work in good faith to amend this agreement to fund the position appropriate to the program.

For each of the five (5) positions listed above, while the position is held by a BOCC employee but managed by the MCLA Executive Director, MCLA agrees to indemnify and hold harmless the BOCC for any and all employment claims filed by the employee arising out of the employment, including but not limited to: workers' compensation; unemployment; and any claims arising out of federal, state or local laws including but not limited to alleged violations of Americans with Disabilities Act as amended, Title VII, and Section 504 of the Rehabilitation Act of 1973, to the extent the costs of such claims exceed any insurance coverage provided to the MCLA through the County. The term “claim” shall include liability or potential liability for wages and all other forms of damages, as well as attorneys’ fees and costs.

As long as BOCC funded employees are assigned work under the MCLA pursuant to this Section, the parties shall review this section no later than July 1 of each year to determine if any BOCC funded positions should be transitioned to the MCLA. The parties shall work cooperatively to seek any legislative changes to the MCLA enabling statute and/or ordinance that are necessary to formalize the transfer of the BOCC funded positions and programs to the MCLA.

SECTION 7 - GIS SERVICES: The BOCC will provide GIS services related to land acquisition, and access and maintenance of related GIS layers. In addition, the BOCC will continue to support and provide access to systems, files, and data bases to support the Programs, including but not limited to Alchemy, Community PLUS, county data servers and file directories, and permitting software platforms.

SECTION 8 - EXECUTIVE DIRECTOR VEHICLE: The BOCC will provide the Executive Director with use of the 1001/9384 vehicle. The vehicle covered in this interlocal agreement will be maintained by the County fleet management and included in the replacement program, which provides benefits, such as,
bulk purchasing. The MCLA will pay the county’s annual maintenance, repair, and replacement cost of the vehicle, estimated by the budget office by invoice.

SECTION 9 - MISCELLANEOUS:

A. Modifications to this Agreement shall be valid only when reduced to writing and duly signed by all parties. If any term or provision of this Agreement shall be invalid or unenforceable to any extent, the parties agree to comply with the 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. Either party may terminate this Agreement at any time, with or without cause. Termination shall take effect upon receipt of written notification by a party to the other party.

B. Notification under this Agreement shall be made by hand delivery, U.S. certified mail, return receipt requested, or an express mail with proof of delivery. Notification by a party shall be delivered as follows:

Monroe County Administrator
1100 Simonton Street
Key West, FL 33040

Monroe County Attorney
1111 12th Street, Suite 408
Key West, FL 33040

Monroe County Comprehensive Plan Land Authority Executive Director
1200 Truman Ave., Suite 207
Key West, FL 33040

Gregory S. Oropeza, Esquire
Attorney for Monroe County Comprehensive Plan Land Authority
221 Simonton Street
Key West, FL 33040

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WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized.

KEVIN MADOK, CLERK

MONROE COUNTY BOARD OF
COUNTY COMMISSIONERS

By: Michelle Coldiron. Mayor

By: Sally M.Abrams
As Deputy Clerk 01.21.2021

By: Robert B. Shillinger, County Attorney

Robert B. Shillinger

By: Charles G. Patterson
Charles G. Pattison, Executive Director

MONROE COUNTY
COMPREHENSIVE PLAN
LAND AUTHORITY

By: David P. Rice. Chairman

APPROVED FOR LEGAL SUFFICIENCY:

By: Gregory S. Oropeza. Esq.
County Commission Meeting
September 15, 2021
Agenda Item Number: K.1
Agenda Item Summary #8529

BULK ITEM: Yes
DEPARTMENT: Planning/Environmental Resources

TIME APPROXIMATE: N/A
STAFF CONTACT: Michael Roberts (305) 289-2502

AGENDA ITEM WORDING: Approval to reject all proposals and rebid the Request for Proposals (RFP) for updates of the County's 2009 Geospatial Land Cover Dataset and Tier Overlay District Maps for the Florida Keys, due to a delay in receiving updated 2021 Aerial Photography.

ITEM BACKGROUND: In 2008, Monroe County contracted with Photo Science, Inc. ("Photo Science"), for the development of a geospatial land cover dataset for the Florida Keys. Monroe County required Photo Science to create a land cover dataset developed from 2006 high resolution orthophotographs, combined with field work, to produce an updated land cover geospatial dataset. This geospatial dataset is referred to as the “Habitat” layer in the County’s Geographical Information System ("GIS"). The Habitat layer is used in part to determine the cover of native upland habitat and is a key tool in the development of the Tier Overlay District maps.

The Monroe County Comprehensive Plan requires the updating the “Habitat” layer and utilizing this data to review and determine if the Tier Overlay District map amendments are needed to further protect and enhance native upland vegetation.

On April 21, 2021, the BOCC approved an Interlocal Agreement (agenda item U5, #7969) with the Monroe County Property Appraiser (MCPA) to acquire updated Aerial Photography of a Six Inch (6”) Resolution and Oblique Photos of a Four Inch (4”) Resolution, at a Cost of $32,546 to the County. Pursuant to Section 195.022, Florida Statutes, the Florida Department of Revenue is required at least once every three (3) years, to provide property appraisers with aerial photographs; and in counties with a population greater than 25,000, such as Monroe County, such photography is at the property appraiser's expense. The MCPA entered into an agreement with Eagle View, Inc., to provide the updated aerial orthophotography at six-inch (6”) resolution, as well as high-resolution (4”) oblique imagery in the developed areas of the County.

On May 19, 2021, the BOCC approved advertising a Request for Proposals (RFP) for updates of 2009 Geospatial Land Cover Dataset and Tier Maps for the Florida Keys as required by the
Comprehensive Plans to be used by staff, a required Tier Review Committee, and the Board, in the required update of the Land Development Code Tier Overlay District Maps, along with evaluation of the listed, threatened, and endangered species habitat (agenda item K5, #8181). The solicitation specified the use of 2021 digital orthophotography being performed by a vendor for the Monroe County Property Appraiser and included the following Scope of Services:

A. **Updates to the existing land cover classification to meet the needs of the Planning & Environmental Resources Department utilizing the 2021 digital orthophotography described in 1.04.**

B. Perform quality control and quality assurance (including groundtruthing of digital orthophotograph land cover signatures) to determine the accuracy of the final land cover dataset. The quality control and quality assurance and cover and classification delineation techniques will be summarized in a written report.

C. Tier Mapping. Consultant shall review existing Tier Overlay District maps and make recommendations for revisions or amendments in accordance with Comprehensive Plan Policy 106.1.1 and Monroe County Land Development Code Chapter 130-130 (c). Prior to Monroe County processing updates to the Land Development Code Tier (Zoning) Overlay District Map, the Consultant shall evaluate the listed threatened and endangered species (as of 2021) and the criteria included in Policy 205.1.1 (Tier Overlay District designation criteria) to determine if amendments are required to further protect and enhance native upland vegetation.

D. Technical Support for Tier Development Review Committee. Consultant shall provide a professional biologist familiar with the native vegetation and plant communities of the Florida Keys to provide technical support to the County 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, Policy 106.1.1 and LDC Section 130-130(c).

E. Deliverables at a minimum shall include:

1. Habitat mapping: a GIS File Geodatabase containing the land cover dataset compatible with ArcGIS 10.8.1 and ArcGIS Pro 2.7.2 or more recent version and associated metadata file. The data will be in the State Plane Coordinate System, Florida East Zone, in units of US Survey Feet.

2. A Final Report detailing changes in Land Cover by habitat type and reason for the change (e.g.: development, mapping error, environmental conditions, etc). The Final Report shall include a review of the QA/QC procedures and will address issues encountered with polygon classification such as photo quality, signature variance or misinterpretations of mapping units, etc.

3. Preliminary Tier Overlay District map amendment recommendations

   The County shall own the deliverables, and shall have sole rights to reproduce and sell any data or derivative information, and Respondent shall have no copy right or right to sell the data set or derivative of the data set resulting from this RFP.

F. It is anticipated that this project can be completed within eighteen (18) months of authorization to commence work.

The RFP was advertised on May 19, 2021 and proposals were opened on June 29, 2021. Two (2) vendors submitted proposals prior to the proposal opening date and time.
The selection committee met on July 9, 2021 in a virtual public meeting. The selection committee publicly discussed the proposals, received public comment and completed their individual scores.

County staff was intending to seek approval to negotiate with the vendors in rank order but after the selection committee meeting, on July 15, 2021, the Monroe County Property Appraiser’s (MCPA) Office informed County staff that the aerials produced by their vendor, Eagle View, Inc., did not pass the Department of Revenue’s quality control reviews and were rejected. MCPA is coordinating with their vendor and has stated that the vendor is expected to re-fly the images again with a planned start this November, with an anticipated deliverable timeframe by the end of May 2022.

Since the scope of work proposed within the subject RFP requires the use of the 2021 updated aerials (2021 digital orthophotography performed by a vendor for the MCPA) and the aerials are not available, staff believes the appropriate course of action is to reject all proposals and re-issue the solicitation at a future date.

**PREVIOUS RELEVANT BOCC ACTION:**

April 21, 2021: Approval of an Interlocal Agreement with the Monroe County Property Appraiser to acquire updated Aerial Photography of a Six Inch (6”) Resolution and Oblique Photos of a Four Inch (4”) Resolution, at a Cost of $32,546 to the County.

May 19, 2021: Approval to advertise a solicitation for the Updates Of 2009 Geospatial Land Cover Dataset And Tier Overlay District Maps For The Florida Keys.

**CONTRACT/AGREEMENT CHANGES:**

NA

**STAFF RECOMMENDATION:** Approval to reject all proposals and rebid the RFP.

**DOCUMENTATION:**

**FINANCIAL IMPACT:**

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**Additional Details:**

N/A

08/18/21 148-52000 · ENVIRONMENTAL RESOURCES $212,872.00

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**REVIEWED BY:**

Emily Schemper Completed 08/24/2021 11:52 AM
Christine Limbert Completed 08/25/2021 2:08 PM
Assistant County Administrator Christine Hurley Skipped 08/24/2021 9:28 AM
Purchasing Completed 08/25/2021 2:51 PM
Budget and Finance Completed 08/26/2021 3:21 PM
Maria Slavik Completed 08/26/2021 5:31 PM
Liz Yongue Completed 08/30/2021 2:15 PM
Board of County Commissioners Pending 09/15/2021 9:00 AM
MONROE COUNTY, FLORIDA
MONROE COUNTY BOARD OF COUNTY COMMISSIONERS
RESOLUTION NO. 225 - 2021

A RESOLUTION OF THE MONROE COUNTY BOARD OF COUNTY
COMMISSIONERS ("BOCC") ESTABLISHING THE MARINA PUMP
OUT OUTFITTING PROGRAM ("MPOOP") TO PROVIDE ASSISTANCE
TO MARINE FACILITIES AND MARINAS IN COMPLYING WITH THE
PROVISIONS OF THE MONROE COUNTY COMPREHENSIVE PLAN
AND MONROE COUNTY LAND DEVELOPMENT CODE REGULATING
AND REQUIRING PUMP OUT EQUIPMENT TO REDUCE POLLUTANT
DISCHARGES AND IMPROVE WATER QUALITY.

WHEREAS, the Florida Keys are designated as an Area of Critical State Concern to
protect the many significant resources, including the protection and improvement of nearshore
water quality; and

WHEREAS, all state and federal waters of the Florida Keys are federally-designated as a
No Discharge Zone ("NDZ") which prohibits the discharge of both treated and untreated waste
into Keys waters; and

WHEREAS, the Florida Keys National Marine Sanctuary ("FKNMS") established a
Water Quality Protection Program in 1994 to maintain and restore the ideal water quality needed
for the marine ecosystem in the Florida Keys and the sanctuary waters of the FKNMS; and

WHEREAS, the FKNMS Management Plan recommends strategies to eliminate vessel
wastewater discharges by requiring that marinas provide pump-out facilities to increase the total
number and availability of pump out opportunities for both shoreside and anchored vessels; and

WHEREAS, the BOCC supports and requests continued prioritization and technical
assistance from the FKNMS Water Quality Protection Program to ensure water quality protection
and monitoring of the influences of discharges from vessels; and

WHEREAS, Monroe County policies and regulations adopted in the Monroe County
Comprehensive Plan and Land Development Code are to maintain public health, safety, and
welfare of the citizens of the Florida Keys, enhance the quality of life, ensure the safety of County
residents and visitors, and protect valuable natural resources; and

WHEREAS, 2030 Monroe County Comprehensive Plan Objective 202.3 and associated
policies attached as Exhibit "A." hereto specify that Monroe County shall encourage use and
expansion of sewage pump-out facilities throughout Monroe County to reduce pollutant discharges into nearshore surface waters from live-aboard vessels; and

WHEREAS, Monroe County Comprehensive Plan Policy 202.3.1 authorizes living on board a vessel at a shoreside location only if the vessel is at a marine facility, including a marina, or within commercial fishing areas and commercial fishing special districts, that provide fixed pump-out facilities; and

WHEREAS, Monroe County Comprehensive Plan Policy 202.3.1 and Section 118-16 of the Monroe County Land Development Code require new and existing marine facilities, including marinas, with ten (10) slips or more, or one live-aboard slip, provide a fixed pump-out station and require all marinas, regardless of size, to provide signage conspicuously posted at dockage sites educating the live-aboard public about the importance of pumping out and give clear directions to the nearest pump-out stations; and

WHEREAS, Monroe County Comprehensive Plan Policy 202.3.2 and Section 118-16 of the Monroe County Land Development Code require that existing marine facilities, including marinas, as identified through the Monroe County Marine Facility Survey or other best available data sources, which do not have an on-site pumpout station, be notified of the requirements for on-site pumpout facilities, signage, and any available funding assistance, such as the Florida Department of Environmental Protection ("FDEP") Clean Vessel Act ("CVA") grant program; and

WHEREAS, Monroe County Comprehensive Plan Policy 202.3.2 and Section 118-16 of the Monroe County Land Development Code require that all marine facilities and marinas which must provide on-site pumpout stations shall keep those pumpout stations operational, and ensure that pumpout service is available to the patrons of those marine facilities and marinas; and

WHEREAS, there are an estimated 489 marine facilities throughout Monroe County with an estimated 500-1,000 live-aboard vessels at these shoreside locations; and

WHEREAS, data indicates that only 29% of these facilities have pumpout equipment; and

WHEREAS, Monroe County desires to expand the number of vessel sewage pump-out facilities throughout Monroe County to reduce pollutant discharges into nearshore surface waters; and

WHEREAS, the County desires to establish and implement a Marina Pump Out Outfitting Program ("MPOOP") to provide technical and educational assistance to marine facilities and marinas including, but not limited to, assistance with County and State permitting requirements and funding opportunities from the FDEP CVA grant program for the purchase, installation, operation and maintenance of on-site pumpout equipment; and

WHEREAS, the FDEP CVA grant program can fund up to 75% of costs associated with the purchase, installation, operation and maintenance of pumpout equipment; and

WHEREAS, facilities receiving CVA funding must provide public access to the pumpout equipment which will expand the availability of shoreside pumpout facilities for use by the boating public; and
WHEREAS, the FDEP CVA Program also provides resources, tools and technical support to facilities wishing to install a sewage pumpout system including assistance with implementation of a Clean Marina Program; and

WHEREAS, “marine facility” is defined in Section 101-1 of the Land Development Code as a docking facility with ten slips or more, or one live-aboard slip; and

WHEREAS, “marina” is defined in Section 101-1 of the Land Development Code as a facility for the storage, launching and securing of vessels and/or live-aboard vessels, together with accessory retail and/or service uses, including but not limited to commercial retail, restaurants, vessel rentals, charter vessels, vessel repair, sport diving operations and the provision of fuel. The term marina does not include docks accessory to a land-based dwelling unit limited to the use of owners or occupants of the dwelling unit; and

WHEREAS, in determining whether a docking facility has ten slips or more for the purpose of defining the facility as a “marine facility” under Section 101-1 of the Land Development Code, Monroe County staff will utilize best available data such as the Monroe County Marine Facility Survey, information received from the facility, historic aerial imagery, permitting records and other available data sources; and

WHEREAS, only wet storage of vessels will be considered in the total number of slips in determining whether a facility is considered a “marine facility;” and

WHEREAS, for implementation of the MPOOP program, the terms “on-site pumpout station,” “on-site pumpout facilities,” “fixed pump-out facilities” or “fixed pump-out station” identified in the Monroe County Comprehensive Plan Policy and Land Development Code shall herein be referred to as a “fixed pumpout system” which shall mean any type of permanently installed pumpout equipment along with all necessary plumbing, such as a vacuum-based centralized system containing single or multiple pump stations and/or point-of-service station(s), capable of handling all vessel sewage generated at the marine facility or marina; and

WHEREAS, for implementation of the MPOOP program, portable pumpout equipment designed to manually transport waste, such as a mobile pumpout vessel or a mobile pumpout cart with a temporary waste holding tank, shall not constitute a fixed pumpout system due to the lack of State permitting requirements that ensure the treatment system receiving the waste is capable of handling and tracking this concentrated effluent; and

WHEREAS, research suggests that live-aboard slips should be individually plumbed to provide the most suitable means for waste collection to avoid the necessity of frequent vessel relocation which has been identified as a significant hurdle in boater compliance; and

WHEREAS, the fixed pumpout system should be designed to consider the current and future usage, type, and size of vessels at the facility; and

WHEREAS, the Monroe County MPOOP program furthers the goals and objectives of the Monroe County Comprehensive Plan for water quality improvements in our nearshore waters as well as the Florida Keys Area of Critical State Concern designation.
NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY
COMMISSIONERS OF MONROE COUNTY, FLORIDA, THAT:

Section 1. Recitals and Legislative Intent. The foregoing recitals are true and correct, and are hereby incorporated as if fully stated herein.

Section 2. The BOCC does hereby establish the Marina Pump Out Outfitting Program ("MPOOP") and supports the implementation of the MPOOP program to assist marine facilities and marinas by providing technical and educational assistance including, but not limited to, assistance with County and State permitting requirements and grant funding opportunities for the purchase, installation, operation and maintenance of on-site pumpout equipment.

Section 3. In determining whether a docking facility has ten slips or more for the purpose of defining the facility as a "marine facility" under Section 101-I of the Land Development Code, Monroe County staff will utilize best available data such as the Monroe County Marine Facility Survey, information received from the facility, historic aerial imagery, permitting records and other available data sources.

Section 4. Only wet storage of vessels will be considered in the total number of slips in determining whether a facility is considered a "marine facility."

Section 5. The terms "on-site pumpout station," "on-site pumpout facilities," "fixed pump-out facilities" or "fixed pump-out station" identified in the Monroe County Comprehensive Plan Policy and Land Development Code shall herein be referred to as a "fixed pumpout system" which shall mean any type of permanently installed pumpout equipment along with all necessary plumbing, such as a vacuum-based centralized system containing single or multiple pump stations and/or point-of-service station(s), capable of handling all vessel sewage generated at the marine facility or marina.

Section 6. Portable pumpout equipment designed to manually transport waste, such as a mobile pumpout vessel or a mobile pumpout cart with a temporary waste holding tank, shall not constitute a fixed pumpout system due to the lack of State permitting requirements that ensure the treatment system receiving the waste is capable of handling and tracking this concentrated effluent.

Section 7. The BOCC directs staff to launch an educational marketing campaign for the MPOOP program.

Section 8. The BOCC directs staff to collaborate with the FDEP on permitting guidance, CVA funding opportunities and educational outreach to marine facilities and marinas.

Section 9. Construction and Interpretation. This resolution and its interpretation shall be liberally construed and enforced in favor of Monroe County to effectuate its public purpose(s) and policy(ies) of the County. The construction and interpretation of this resolution and all Monroe County
Comprehensive Plan provision(s), Monroe County Code of Ordinances and Monroe County Land Development Code provisions, Florida Building Code, Florida Statutes, and Monroe County Resolution provision(s) whose interpretation arises out of, relates to, or is interpreted in connection with this resolution shall be liberally construed and enforced in favor of Monroe County to effectuate its public purpose(s) and policy(ies) of the County, and shall be construed in favor of the BOCC and such construction and interpretation shall be entitled to great weight in adversarial administrative proceedings, at trial, in bankruptcy, and on appeal.

Section 10. No Liability. Monroe County expressly reserves and in no way shall be deemed to have waived, for itself or for its officer(s), employee(s), or agent(s), any sovereign, governmental, and any other similar defense, immunity, exemption, or protection against any suit, cause-of-action, demand, or liability.

Section 11. Severability. If any provision of this resolution, or any part or portion thereof, is held to be invalid or unenforceable by any administrative hearing officer or court of competent jurisdiction, the invalidity or unenforceability of such provision, or any part or portion thereof, shall neither limit nor impair the operation, enforceability, or validity of any other provision of this resolution, or any remaining part(s) or portion(s) thereof. All other provisions of this resolution, and remaining part(s) or portion(s) thereof, shall continue unimpaired in full force and effect.

Section 12. Conflicting Provisions. All resolutions in conflict with this resolution are hereby repealed to the extent of said conflict. The repeal of a resolution herein shall not repeal the repealing clause of such resolution or revive any resolution which has been repealed thereby.

PASSED AND ADOPTED by the Board of County Commissioners of Monroe County, Florida, at a regular meeting held on the 16th day of June, 2021.

Mayor Michelle Coldiron Yes
Mayor Pro Tem David Rice Yes
Commissioner Craig Cates Absent
Commissioner Eddie Martinez Yes
Commissioner Mike Forster Yes

BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA

By: Mayor Michelle Coldiron

MONROE COUNTY ATTORNEY
APPROVED AS TO FORM

PETER MORRIS
ASSISTANT COUNTY ATTORNEY
Date: 6/1/21
Objective 202.3
Monroe County shall support existing vessel discharge regulations, including the No Discharge Zone regulations of the Florida Keys National Marine Sanctuary, and encourage use and expansion of sewage pump-out facilities throughout Monroe County to reduce pollutant discharges into nearshore surface waters from live-aboard vessels. [§163.3177(6)d.2.b., F.S; §163.3177(6)d.2.e., F.S.]

Policy 202.3.1
Within one (1) year after the adoption of the 2030 Comprehensive Plan, Monroe County shall adopt and maintain regulations pertaining to docked or moored to land live-aboard vessels which:

1. prohibit living on board vessels and floating structures of any type except at marine facilities, including marinas, and within commercial fishing areas and commercial fishing special districts, with fixed pump-out facilities; and

2. require that new and existing marine facilities, including marinas, with ten slips or more, or one live-aboard slip, provide a fixed pump-out station; and

3. require all marinas, regardless of size, to provide signage conspicuously posted at dockage sites educating the live-aboard public about the importance of pumping out and giving clear directions to the nearest pump-out stations. [§163.3177(6)d.2.b., F.S; §163.3177(6)d.2.e., F.S.]

Policy 202.3.2
Existing marine facilities, including marinas, which do not have an on-site pumpout station, as identified through the Monroe County Marine Facility Survey or other best available data sources, shall be notified in writing of the requirements for on-site pumpout facilities and signage (and any available funding assistance, such as the DEP Clean Vessel Act grant program) within 18 months after the adoption of the 2030 Comprehensive Plan. Such marine facilities and marinas shall have 12 months from the written notification to provide an on-site pumpout station and associated signage. All marine facilities and marinas which are required to provide on-site pumpout stations are required to keep those pumpout stations operational, and ensure that pumpout service is available to the patrons of those marine facilities and marinas.

Policy 202.3.3
Development of the management recommendations for live-aboard vessels shall be coordinated with NOAA to ensure consistency with recommendations of the Florida Keys National Marine Sanctuary Revised Management Plan. [§163.3177(6)d.2.b., F.S; §163.3177(6)d.2.e., F.S.]
AGENDA ITEM WORDING: Presentation to the Monroe County Board of County Commissioners on the Florida Department of Environmental Protection Resilient Coastlines Program Grant to Update and Reorganize Elements of the Monroe County Comprehensive Plan to Incorporate Climate Change-Related Vulnerability and Adaptation Information and to Address Recently Enacted "Peril of Flood" Legislation Under Chapter 163, Florida Statutes.

ITEM BACKGROUND:
The Florida Department of Environmental Protection ("FDEP") awarded Monroe County a Resilient Coastlines Program Grant to update and reorganize elements of the Monroe County Comprehensive Plan to incorporate vulnerability and adaptation information, primarily in the County Comprehensive Plan’s Conservation and Coastal Management Element. This grant’s scope of work continues Monroe County’s historical efforts to increase the County’s resiliency through Comprehensive Plan amendments to:

1) Address recent “Peril of Flood” state legislation through organizational and text amendments; and
2) To prepare updates to one or more Comprehensive Plan Elements to incorporate the County’s past county-wide vulnerability work that includes but is not limited to:
   • An initial vulnerability assessment;
   • A pilot road elevation analysis;
   • A set of interim road elevation design criteria; and
   • Recent NOAA-funded Hazus modeling.

Data gaps (and related data needs) must be identified in order to update and reorganize elements of the Comprehensive Plan to incorporate vulnerability and adaptation information, primarily in the Comprehensive Plan’s Conservation and Coastal Management Element. Two questions that must be successfully resolved in order to furnish sound bases for such Comprehensive Plan amendments moving forward are “First, what do we have?” and “Second, what do we need?” Monroe County has
so far completed extensive work in its GreenKeys planning efforts, has gathered county-wide mobile LiDAR, has updated its modeling using Hazus, and has commenced a county-wide adaptation and vulnerability analysis of roads. Analysis of all of these data-sets will be critical to developing the County’s policy priorities in future Monroe County Comprehensive Plan amendments addressing recent “Peril of Flood” legislation under Chapter 163, Florida Statutes. Ultimately, a single deliverable under this task will include providing a “Gap Memorandum” identifying current and needed data necessary for these expected future amendments to the Monroe County Comprehensive Plan’s Conservation and Coastal Management Element.

**Task 2. Draft Amendments to the Monroe County Comprehensive Plan, Including But Not Limited to Addressing the State’s Recently Enacted “Peril of Flood” Legislation.**

This task includes a review of the 2030 Monroe County Comprehensive Plan to formulate a strategy to develop future Comprehensive Plan amendments to address recent “Peril of Flood” legislation under Chapter 163, Florida Statutes. Monroe County has already accomplished much with the adoption of its Energy and Climate Element into the County Comprehensive Plan, all of which pre-dated the state’s recently enacted “Peril of Flood” legislation. Monroe County’s GreenKeys Climate and Sea Level Rise Plan was adopted around that same time, and Monroe County has since then commenced several vulnerability and data initiatives geared toward developing County policy priorities accounting for the warming of global surface temperatures and resulting rising seas being wrought by climate change. Monroe County is, via this grant’s scope of work, seeking to significantly update its Comprehensive Plan, particularly within the Comprehensive Plan’s Conservation and Coastal Management Element, to address recent state “Peril of Flood” legislation under Chapter 163, Florida Statutes, as well as to reorganize Monroe County’s Goals, Objectives, and Policies related to climate change’s effects and impacts of warming the planet and raising the sea level.

**Task 3. Internal and External Engagement with Regional Collaboration.**

The grant’s scope of work includes internal, external, and regional engagement components that will ensure internal vetting as well as strong public involvement. After the initial draft of such amendments, a public workshop series will be undertaken, in three (3) locations in the Upper, Middle, and Lower Keys, in order to maximize public involvement opportunities. A Board of County Commissioners briefing will also occur during the engagement process, in order to provide an additional opportunity for public input.

The public meetings originally scheduled for March 17th, 18th, and 23rd, were all postponed due to executive orders and emergency orders and directives issued in the wake of the ongoing COVID-19 pandemic, and will be rescheduled to a later date.

This briefing shall satisfy the BOCC briefing requirement of this grant.

**PREVIOUS RELEVANT BOCC ACTION:** N/A

**CONTRACT/AGREEMENT CHANGES:**

NA

**STAFF RECOMMENDATION:**
DOCUMENTATION:
Task 1 Gap Analysis FINAL
Task 2.1 Review Memorandum FINAL 102419
Task 2.2 Coastal and Conservation Element POF Amend 120919

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REVIEWED BY:
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Assistant County Administrator Christine Hurley Completed 04/29/2020 1:47 PM
Peter Morris Completed 04/30/2020 9:14 AM
Purchasing Completed 04/30/2020 9:17 AM
Budget and Finance Completed 04/30/2020 10:06 AM
Maria Slavik Completed 04/30/2020 11:19 AM
Kathy Peters Completed 04/30/2020 4:58 PM
Board of County Commissioners Pending 05/20/2020 9:00 AM
Task 2.1: Review of Existing Elements for Strategy Regarding Peril of Flood Amendments

To: Michael Roberts, CEP, PWS, Assistant Director/Environmental Resources  
Monroe County, Florida

From: Erin Deady, Esq., Project Manager

Re: Monroe County, “Review existing elements to determine strategy for Peril of Flood Amendment compliance”, Task 2.1

Date: October 10, 2019

I. Executive Summary

Pursuant to Task 2.1, this memorandum includes a review of existing elements to determine strategies for Peril of Flood Amendment compliance. To provide flexibility, several alternatives are listed within this memorandum. As you know, the primary focus of this effort is to bring the Comprehensive Plan ("Comp Plan") into compliance with requirements added to Section 163.3178(2)(f), Fla. Stat. (Peril of Flood Law).

II. The Peril of Flood Law

Section 163.3178(2)(f), Fla. Stat. was amended in 2015 (known as the “Peril of Flood legislation” and referred to herein as the “Peril of Flood Law”) to protect coastal resources against sea-level rise and other climate change-related impacts. Pursuant to the law, the County’s Conservation and Coastal Management Element must be revised to include “...A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise....” Coastal Management Elements must now:

1. Include development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise (SLR).

2. Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.

3. Identify site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in this state.
4. Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.

5. Require that any construction activities seaward of the coastal construction control lines established pursuant to s. 161.053 be consistent with chapter 161.

6. Encourage local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.¹

III. Monroe County Comprehensive Plan

Monroe County’s current Comprehensive Plan was adopted through Ordinance No. 005-2016 on April 13, 2016 by the Board of County Commissioners. The Comprehensive Plan already contains an “Energy and Climate” Element and GOPs already exist addressing climate change, sea-level rise, hazard mitigation and energy consumption, some of which could likely fulfill the Peril of Flood requirements.

These GOPs addressing climate issues, inclusive of flooding, are located primarily in the “Conservation and Coastal Management” Element and the “Energy and Climate Element” and, to a lesser extent, in the “Future Land Use,” “Traffic Circulation,” “Drainage,” “Natural Groundwater Aquifer Recharge,” and “Capital Improvements” Elements.²

IV. Alternatives for Consideration

The following are alternative approaches for the integration of climate information into the Comprehensive Plan and meeting the Peril of Flood requirements:

**Option #1 Narrow approach:** Add new narrow “Peril of Flood” related Goal into Conservation and Coastal Management with the 6 statutory requirements met through a combination of Objectives and Policies. This could include appropriate GOPs in other elements based on GreenKeys, the Watershed Management Plan and updated modeling etc. (example: addressing new stormwater data from the Watershed Management Plan into the Drainage Element). This would include keeping the bulk of the climate-related provisions within the Energy and Climate Element.

¹ See §163.3178(2)(f), Fla. Stat.

² A list of directly relevant GOPs can be found in Appendix A. The operative Monroe County Comprehensive Plan can be viewed online at [https://www.monroecounty-fl.gov/DocumentCenter/View/4606/2030-MC-Comp-Plan-revision-3?bidid=](https://www.monroecounty-fl.gov/DocumentCenter/View/4606/2030-MC-Comp-Plan-revision-3?bidid=).
The benefit is that new Peril of Flood requirements are narrowly crafted to comply with Section 163.3178, F.S. and thus less susceptible to complaints of “statutory creep” for Coastal Elements. Another benefit is that the approach largely keeps Energy and Climate issues organized in one Element within the Comprehensive Plan. Requirements for optional elements in Chapter 163, F.S. (such as the Energy and Climate) also have less statutory specificity to avoid comments of “statutory creep”.

Option #2 Reorganization approach: Reorganize (1) Energy and Climate and (2) Conservation and Coastal Management and Elements to bifurcate issues into a “mitigation” and “adaptation” approach. The bulk of other GreenKeys and related analytical efforts would be integrated into Conservation and Coastal Management Element (and Drainage, Capital Improvements, etc.) since they are largely adaptation-related. New sea level rise or climate adaptation goals could be developed within Conservation and Coastal Management and/or other related Elements (such as Drainage). Broader Energy and Climate “mitigation” issues (energy, heat, health, outreach, vector borne-disease issues and social vulnerability) would be expanded or remain in that Element based on existing data.

Essentially, this may integrate climate adaptation related issues into more Elements of the Comprehensive Plan rather than keeping those issues predominantly in the Energy and Climate Element, which is not really a benefit or a challenge. For those that are supportive of the County addressing climate change more holistically, this approach may appeal to them. Overall, it may lead to more confusion from an implementation perspective because the issues are scattered throughout the Comprehensive Plan.

Option #3 Reorganization approach: Delete Energy and Climate Element and incorporate into other related elements including but not limited to the Conservation and Coastal Management Element, Drainage, Capital Improvements, etc.

The benefit is that it reduces the number of Elements in the overall Comprehensive Plan. The challenge is that an interpretation will be “lessening” the importance of Energy and Climate issues, something that will not be received well politically. Another challenge is that while Chapter 163, F.S. requirements for Comprehensive Plans are considered “floors” and not “ceilings”, some could comment that adding these issues into multiple elements deviates from the intent of those requirements.

Conclusion: It is our recommendation that the County pursue Option #1.

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3 This approach was recently accepted by DEO for the City of Delray Beach.
APPENDIX A: List of Monroe County’s Comprehensive Plan GOPs relevant to Peril of Flood legislation

In the order the Element appears in the Comprehensive Plan, the following are the GOPs related to climate change, resilience planning, and flooding including, but not limited to, those necessary to meet Peril of Flood legislation. If a Goal or Objective is mentioned below, it concludes the supporting Objectives and Policies are also supportive and are included by reference except for the Energy and Climate Element where all the relevant GOPs are referenced here as it will drive the Peril of Flood Comprehensive Plan amendments.

Future Land Use Element [1]

- Objective 102.4, Monroe County shall maintain a Land Acquisition Master Plan containing strategies for securing funding and containing non-purchase options and strategies. Sub-note within Objective “It should be noted that the science examining the impacts of climate change and sea level rise is still evolving and the County may want to consider postponing the acquisition priorities on this issue until a future date.”
- Policy 105.1.1, Within three (3) years after the adoption of the 2030 Comprehensive Plan, the County will, with input from the business community and other stakeholders, develop an Economic Sustainability Element, which focuses upon and promotes redevelopment, considers the increasing cost of climate adaptation and the protection of property.
- Policy 101.5.32, Within in 1 year of the effective date of this policy, Monroe County shall adopt Land Development Regulations which provide a Flood Protection Height Exception to Policy 101.5.30 to promote public health, safety and general welfare; allow adaptation to coastal flooding, storm surge and other hazards; protect property from flooding and minimize damages; minimize public and private losses due to flooding; minimize future expenditures of public funds for flood control projects and for recovery from flood events; and mitigate rising flood insurance premiums. A Flood Protection Height Exception of up to a maximum of five (5) feet above the 35-foot height limit shall be provided to allow lawfully existing buildings to be voluntarily elevated up to three (3) feet above FEMA base flood elevation; and a flood protection height exception of a maximum of three (3) feet above the 35-foot height limit shall be provided to allow new (new construction or substantially improved) buildings to voluntarily elevate up to three (3) feet above FEMA base flood elevation. These exceptions are in order to promote flood protection, minimize flood damage, reduce flood insurance premiums and minimize future expenditures of public funds for recovery from flood events. In no case shall a Flood Protection Height Exception result in a new building exceeding a maximum height of 38 feet or a lawfully existing building exceeding a maximum height of 40 feet. (Ordinance 016-2017)
- Policy 101.5.33, Within in 1 year of the effective date of this policy, Monroe County shall adopt Land Development Regulations which provide a Flood Protection Height Exception for lawfully established existing buildings which exceed the 35-foot height limit, to promote public health, safety and general welfare; allow adaptation to coastal flooding, storm surge and other hazards; protect property from flooding and minimize damages;
minimize public and private losses due to flooding; minimize future expenditures of public funds for flood control projects and for recovery from flood events; and mitigate rising flood insurance premiums. A lawfully established existing building may be repaired, improved, redeveloped and/or elevated to meet required FEMA base flood elevation (BFE) provided the building does not exceed a total maximum building height of 40 feet, and the building is limited to the existing lawfully established intensity, floor area, building envelope (floor to floor height), density and type of use. For lawfully established existing buildings that are proposed to exceed a total height of 40 feet, a public hearing before the Planning Commission and the Board of County Commissioners shall be required to review and specify the maximum approved height prior to issuance of any county permit or development approval. The Planning Commission shall provide a recommendation to the BOCC on the maximum height of a building. The BOCC shall adopt a resolution specifying the maximum approved height. (Ordinance 016-2017)

Conservation and Coastal Management Element [2]

- Policy 203.3.3, County to continue to support state and federal agencies in development and implementation of management measures to protect coral reefs and hardbottom communities in the waters off the Keys. Protect species vulnerable to climate change from non-climate pressures, involve stakeholders including those industries in climate science, and support/showcase “climate smart” organizations and businesses.
- Policy 212.2.1, Within one (1) year after the adoption of the 2030 Comprehensive Plan, Monroe County shall evaluate the minimum shoreline setbacks currently in use in Monroe County in coordination with DEO, FDEP and FWC. Setbacks shall be identified which will accomplish the following: 1. protect natural shoreline vegetation; 2. protect marine turtle nesting beaches; 3. protect water quality 4. protect structures from the effects of long-term sea level rise; 5. protect beaches and shorelines from erosion; and 6. allow redevelopment of existing waterfront commercial structures consistent with the existing community character and preserve overwater views.
- Objective 216.1, Monroe County shall maintain a program of hazard mitigation in the Coastal High Hazard Area (CHHA) which reduces floodplain alteration and damage or loss due to natural disasters. [§163.3178(2)(h), F.S.]

Traffic Circulation Element [3]

- Policy 301.4.1, Plan for an intermodal transportation system that incorporates alternative modes of transportation inclusive of incorporating climate change implications into the Transportation Strategy Master Plan (Long Range Plan) by May 2021.
- Policy 301.5.2, In order to coordinate the traffic circulation system with future land uses as a policy: incorporate climate change implications into the Long Range Transportation Plan.
Mass Transit Element [4]

There are no directly relevant GOPs in this Element.

Ports, Aviation and Related Facilities Element [5]

- Policy 502.3.2, Monroe County shall improve and maintain stormwater facilities on Fourth, Fifth, and Peninsular Avenues on Stock Island in order to prevent flooding.

Housing [6]

There are no directly relevant GOPs in this Element.

Potable Water [7]

There are no directly relevant GOPs in this Element.

Solid Waste [8]

There are no directly relevant GOPs in this Element.

Sanitary Sewer [9]

There are no directly relevant GOPs in this Element.

Drainage Element [10]

- Policy 1001.1.1, ... All projects shall be designed so that the discharges will meet Florida State Water Quality/Quantity Standards as set forth in Chapters 62-3 and 62-302.530, F.A.C, incorporated herein by reference. All projects should be designed in accordance with the Florida Department of Transportation and South Florida Water Management District standards and taking into account projections for climate change. [§163.3177(6)(c), F.S.]...
- Policy 1001.1.6 Within three years of the adoption of the 2030 Comprehensive Plan, Monroe County shall evaluate the need to complete an inventory and analysis of existing public drainage facilities within the County and associated flooding issues. [§163.3177(6)(c)1] 2. F.S.]


- Objective 1101.1, Monroe County shall work cooperatively with Miami-Dade County to encourage land use planning and development controls which shall protect the recharge area of the Florida City Wellfield from potential sources of groundwater contamination,
saltwater intrusion and over-extraction. (See Potable Water Objective 701.4 and related policies.)

Recreation and Open Space [12]

- Policy 1201.7.1, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall prepare a Parks and Recreation Master Maintenance and Management Plan (MMP). The MMP shall evaluate and incorporate, among other factors, the following: 1. Proper management techniques consistent with the updated Future Land Use, Recreation and Open Space and Conservation and Coastal Management Elements;

Intergovernmental Coordination [13]

There are no directly relevant GOPs in this Element.

Capital Improvements [14]

- Policy 1401.1.2, Monroe County shall annually update the Comprehensive Plan Five-Year Schedule of Capital Improvements. Proposed revisions to the Schedule, including those addressing the replacement and renewal of capital facilities, shall be evaluated and updated in accordance with the following considerations (not listed in order of priority): 1. consistency with the relevant elements of the Comprehensive Plan; 2. the elimination of public hazards; 3. consider sea level rise projections as they relate to transportation and bridging projects in particular; 4. the County’s need for financial expenditures for infrastructure improvements within or proximate to vulnerable areas; 5. the elimination of existing deficiencies; 6. financial feasibility including the impact on the annual operating and capital budgets; 7. the location in relation to the Future Land Use Map; 8. accommodation of the demands from redevelopment and new development; 9. the consistency of the improvement relative to the plans of state agencies and the South Florida Water Management District; and 10. the availability of other revenue sources including, but not limited to, FDOT Project funding and FDOT Traffic Operations funds from District Dedicated Revenue (DDR) sources. Revisions to the schedule shall be incorporated into the Capital Improvements Program on an annual basis. [§163.3177(3)(a)5.(b), F.S.]

- Objective 1402.2, ... 2. County public expenditures within the CHHA may be permitted for improvements and expansions to existing public facilities, which improvements or expansions are designed to minimize risk of damage from flooding.

Energy and Climate Element [15]

The Energy and Climate Element lays the foundation for coordination among multiple stakeholders, use of best available science in decision-making, addressing energy and climate issues in the build environment, and policies that protect natural systems and habitats through
land acquisition strategies that incorporate climate adaptation and mitigation strategies. This Element contains the majority of the language required to directly address planning and Peril of Flood in addition to two of the Goals (1502 and 1504) (with minor changes the other two goals, 1501 and 1503, could be made to directly address the legislation as well).

- **Goal 1501** - Monroe County shall coordinate with the municipalities of Key West, Key Colony Beach, Islamorada, Layton and Marathon; regional, State, and federal government agencies, nongovernmental organizations and private organizations to exchange data and develop coordinated strategies to address energy conservation and impacts from climate change.
  
  - Policy 1501.1.5, Monroe County will support local and regional modeling and monitoring programs, as resources permit, to assure the most current locally specific data is considered in the 2030 Comprehensive Plan and Land Development Code updates. This may include but is not be limited to programs designed to monitor surface water quality (including temperature), sea level rise, hydrologic and geologic conditions, groundwater quality and levels, precipitation and groundwater withdrawals from resources that the County depends upon (including those outside County lines). The County shall make such data available to the public.

- **Goal 1502** - Monroe County shall incorporate the best available data and science, into its policy and planning decisions for infrastructure, recognizing the uncertainty associated with long range climate change predictions.
  
  - Objective 1502.1, In conjunction with future updates to the 2030 Comprehensive Plan and land development regulations, the County shall update the data and assumptions related to climate change impacts to infrastructure based on the latest scientific predictions and observed (monitored) impacts. Monroe County shall also consider climate change impacts such as increased temperatures, sea level rise, potentially shifting habitat and ecosystem types and the need to withstand increased storm surge in evaluating public infrastructure decisions.
    
    - Policy 1502.1.1, Prior to incorporating a new project to the Capital Improvements Element, Monroe County shall assure that it is reviewed for recommendations to increase resiliency and account for the impacts from climate change, including but not limited to, sea level rise and storm surge. Monroe County shall evaluate financial expenditures to fund repairs, reconditioning of deteriorating infrastructure and new infrastructure improvements within or proximate to vulnerable areas to manage public investments appropriately. Monroe County shall focus on level of service standards, as one of the points of analysis, to assure that infrastructure useful life and service expectations can be met in the face of climate change impacts.
    
    - Policy 1502.1.4, Adaptation Action Areas – within five (5) years of the adoption of the April 2016 Comprehensive Plan staff would identify criteria to define adaptation actions areas (AAA) or a similar concept and propose locations for AAAs.
Policy 1502.1.5, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall initiate an inventory of existing and planned infrastructure up to the 2030 horizon, based upon the vulnerability mapping identified in Policy 1502.1.4, for capacity to accommodate projected sea-level rise over the life expectancy of that infrastructure. Monroe County shall identify the infrastructure within those areas, its useful life and any retrofits or capital projects necessary to address the impacts of sea level rise. These strategies may include defense, accommodation, or and retreat projects, or not building planned infrastructure in vulnerable locations, to address the impacts of sea level rise. Monroe County will consider developing design criteria, in conjunction with a broader asset management planning process.

Policy 1502.1.6, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall consider incorporating a planning, design and permitting standard for infrastructure and public facilities that may include a sea level rise assumption of 3”-7” by 2030 as developed by the Southeast Regional Climate Compact. The County shall review and update sea level rise projections when new and pertinent data is available. (The 3”-7” by 2030 is based on a 2010 baseline -- if adjusted to a 1992 baseline it would result in 6” to 10” by 2030 above the 1992 mean sea level).

Policy 1502.1.7, Monroe County shall ensure that new, renovated and replacement public facilities and infrastructure, such as streets and bridges, water and wastewater treatment plants, police stations and fire stations, and any other public facilities that the County has authority over, are designed in a manner which considers the useful life of public facilities and infrastructure. The County shall also consider the potential impacts from climate change, including rising sea levels and shoreline stabilization needs, on its infrastructure and public facilities.

Policy 1502.1.9, Monroe County shall coordinate with appropriate agencies to monitor changes to minimum road elevation standards which may be specific to Monroe County due to its unique exposure to climate change and sea level rise impacts. This could also include enhanced stormwater management requirements and resurfacing requirements for certain transportation segments.

Policy 1502.1.10, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall review land development regulations that address stormwater management considerations for sea level rise impacts. To the extent practicable, Monroe County shall incorporate green infrastructure or passive alternatives that maximize land preservation over impervious or “active” infrastructure. Such alternatives could include the reconditioning and reuse of septic tanks, increased use of rainwater harvesting techniques, such as cisterns and other water storage techniques. Monroe County shall determine if land
development regulation amendments are needed to address increased retention requirements and other topographic or infiltration considerations which may influence stormwater management requirements. Monroe County shall also consider the ability to meet water quality requirements related to stormwater management regulations and if there are any impacts from climate change that may jeopardize the County’s ability to meet those requirements.

- **Goal 1503** - Monroe County shall address energy and climate issues in the built environment by: encouraging green development practices; reducing waste; enhancing transportation choices; and educating the community about the need to reduce energy use and prepare for climate change impacts.
  - **Objective 1503.1**, To address the impacts of GHGEs and climate change, Monroe County shall promote energy efficiency across all sectors of energy use, public and private sector, in the built environment.
    - **Policy 1503.1.2**, Within seven (7) years after the adoption of the Comprehensive Plan, Monroe County may include climate change impacts as a factor in determining appropriate levels of development.
    - **Policy 1503.1.4**, Monroe County shall review the most updated FEMA maps within one (1) year of their release and evaluate floor elevation requirements, as necessary, for all new construction in vulnerable areas.
    - **Policy 1503.1.7**, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall determine the appropriate climate change considerations (including but not limited to, emergency management, flood risk, storm surge, threats to potable water supply, the potential for changing habitat and landscapes, the need for shoreline stabilization and the potential impacts to infrastructure necessary to serve proposed uses) to evaluate when reviewing land use amendments.
    - **Policy 1503.1.8**, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall develop a shoreline stabilization strategy to protect and enhance the built and natural environments from erosion and sea level rise impacts prioritizing natural green infrastructure approaches. Monroe County shall assure shoreline stabilization strategies are found to be in the public interest in light of that area’s vulnerability to climate change impacts. Monroe County shall also consider public access to beaches, minimizing adverse impacts to coastal processes and resources, impacts to neighboring properties, and the values and functions of beaches and coastal/marine systems, relative to shoreline stabilization strategies.
  - **Objective 1503.4**, In coordination with the next update to the County’s emergency management policies, Monroe County shall coordinate with municipalities, the Florida Division of Emergency Management, and other applicable agencies to further review and incorporate sea-level rise considerations and climate change.
    - **Policy 1503.4.1**, Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall review its post-disaster
redevelopment plan and land development regulations to include, as appropriate, consideration of climate change impacts, repetitive loss structures and shoreline stabilization needs.

- Policy 1503.4.2, In coordination with the next update to emergency management policies, Monroe County shall determine any impacts to hurricane evacuation timeframes exacerbated by a 3”-7” increase in sea-level rise by 2030 on transportation facilities.

- Goal 1504 - Monroe County shall further protect natural systems and habitats by incorporating climate adaptation and mitigation strategies in its land acquisition policies. This goal will include consideration of the need to address natural resource protection and restoration requirements, the likelihood of natural resource impacts such as shifting habitats from a rising sea, potential threats and loss of marine ecosystems and habitat, ecosystem-based approaches to exotic species and vegetation management and the need to protect, manage and restore native habitat.
GOAL 218
The County shall consider the peril of flooding impact to eliminate inappropriate and unsafe development in redevelopment plans. [F.S. § 163.3178(2)(f)]

Objective 218.1
Monroe County shall include in its planning efforts development and redevelopment principles, strategies, and engineering solutions that reduce flood risk in coastal areas across the community, which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise. [F.S. § 163.3178(2)(f)].

Policy 218.1.1
The County shall develop by 2022, a short, medium and long-term Roads and Stormwater Capital Plan informed by future growth, design levels of service for flooding, future sea level rise projections and other legal and policy analyses.

Policy 218.1.2
Within two years of completing the Roads and Stormwater Capital Plan, the County shall review and update its land development regulations and infrastructure design criteria, to include development and redevelopment principles and strategies that reduce current and future flood risk. Principles shall be based upon considering the ecological, engineering, disaster risk reduction and social elements of resiliency. Strategies may include best practices that prioritize elevation and floodproofing, protection of building mechanical systems, onsite retention and pervious surfaces, shoreline protection and accommodation, site-specific flood management techniques, green infrastructure, maintaining access to services and managed retreat.

Policy 218.1.3
Based upon a Shoreline Stabilization Strategy to be completed pursuant to Policy 1503.1.8, the County shall identify locations to protect and enhance the built and natural environments from erosion and sea level rise impacts prioritizing natural green infrastructure approaches. The County shall also identify locations for new or enhanced natural or living shorelines including strategies for funding, restoring, permitting, and constructing such projects on both public and private properties. [Complete by 2025].

Policy 218.1.4
Identify locations for new or enhanced natural or living shorelines including strategies for funding, restoring, permitting, and constructing such projects on both public and private properties. [Complete by 2025].

Policy 218.1.4
The County shall integrate land development, land acquisition and infrastructure strategies into the Local Mitigation Strategy, Monroe County Recovery Plan (2010) and the Monroe Countywide Post-Disaster Recovery Strategy to respond to current and future flood risk.
Objective 218.2
Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions at the site level that will result in the reduction of losses due to flooding and claims made under flood insurance policies and the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.

Policy 218.2.1
The County shall prioritize land acquisitions for existing structures and vacant lands considering storm damage, repetitive loss, flood risk vulnerability and future sea level rise. Opportunities to demolish existing structures that are acquired, returning the land to its natural state, for the creation of living shorelines, or other purposes, shall be evaluated to provide passive resiliency benefits in vulnerable areas.

Policy 218.2.2 <was Policy 216.1.7>
Monroe County shall consider floodplain management and CHHA issues in making public acquisition decisions. [F.S. § 163.3178(2)(d)]

Policy 218.2.2
The County shall align housing policies focusing on affordability and workforce housing, code compliant reconstruction, elevation, floodproofing, relocation and other mitigation strategies to reduce losses from flooding and claims made under flood insurance policies based upon the work of the Housing Recovery Task Force and Housing Recovery Strategy.

Policy 218.2.3
The County shall pursue funding resources and provide assistance to property owners for weatherization, mitigation, flood-proofing and other flood-resistant improvement projects. The County shall also seek funding to supply relocation assistance for property owners to move to less vulnerable areas.

Policy 218.2.4
The County shall continue to provide public information related to the updates, development and adoption of FEMA’s FIRM Flood Maps as well as strategies to increase resiliency to storm events and flooding in vulnerable areas.

Policy 218.2.5
Within three (3) years of final adoption of FEMA’s Flood Insurance Rate Maps (FIRMs), the County shall review land development and floodplain management regulations to reflect updated flood risk data.

Policy 218.2.6 <was Policy 216.1.6>
Monroe County shall continue to enforce federal, state and local construction, setback and elevation requirements to promote the protection and safety of life and property. Revisions to the existing setback requirements contained in the land development regulations shall be considered as a means of reducing property damage caused by storms. [F.S. § 163.3178(2)(d)]

Policy 218.2.7 <was Policy 216.1.8>
Monroe County shall require that, to the greatest extent practicable, development activity, such as land clearing, grading and filling will not disturb natural drainage patterns.
Objective 218.3
Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable floodplain management regulations set forth in 44 C.F.R. part 60.

Policy 218.3.1
The County shall maintain, review and update, at least every five (5) years, its Floodplain Management Regulations (Chapter 122, Part II, Land Development), designed to:

1. Minimize unnecessary disruption of commerce, access and public service during times of flooding;
2. Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
3. Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
4. Manage the alteration of flood hazard areas and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
5. Minimize damage to public and private facilities and utilities;
6. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
7. Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events;
8. Ensure potential home buyers are notified that property is in a flood hazard area; and
9. Meet the requirements of the National Flood Insurance Program for community participation as set forth in Title 44 Code of Federal Regulations, Section 59.22.

Policy 218.3.2 <was Policy 216.1.4>
Monroe County shall continue its policy of reviewing the current Building Code and, as appropriate, adopting structural standards and site alteration restrictions that meet or exceed the minimum FEMA requirements. The Building Code shall be reviewed and revised at least every five years. The recommendations of the applicable interagency hazard mitigation report shall be considered in revisions to the Code. [F.S. § 163.3178(2)(d)4.]

Policy 218.3.3
The County shall maintain and review regulations in special flood hazard areas to require construction by methods and practices that minimize flood damage, including but not limited to, anchoring by pilings or columns to prevent flotation, collapse and lateral movement of the structure; preventing the expansion, improvement or repair of construction below elevated post-FIRM buildings; prohibiting manmade alteration of sand dunes, dune ridge, mangrove stands or wetlands which would increase the potential of flood damage and elevation or freeboard standards for structures, electrical and mechanical equipment.
**Objective 218.4**
Any coastal construction in Monroe County shall be consistent with Chapter 161, F.S. [ed27]

**Policy 218.4.1 [ed28]**
The County shall require any coastal construction activities to be consistent with the relevant sections of Chapter 161, F.S. including Section 161.55, F.S. establishing that all land area within the Florida Keys located within Monroe County be included within the coastal building zone and subject to the requirements for activities or construction with the coastal building zone.

**Objective 218.5**
Encourage local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.

**Policy 218.5.1<was Policy 216.1.5>**
Monroe County shall continue to participate in the National Flood Insurance Program (NFIP) Community Rating System (CRS) to the maximum extent possible and shall continue to seek to improve its current CRS Class rating. [F.S. § 163.3178(2)(d)(f)].

**Policy 218.5.2**
Monroe County shall continue to develop data and dedicate the funding necessary to maintain or enhance its current CRS Class rating through County resources, grants and/or partnerships.

**Policy 218.5.3**
Monroe County shall continue to coordinate intergovernmental efforts related to participation in CRS, public outreach, sea level rise planning and disaster preparedness and recovery, to maximize County and flood insurance policy holder benefits.
**GOAL 218**
The County shall consider the peril of flooding impact to eliminate inappropriate and unsafe development in redevelopment plans. [F.S. § 163.3178(2)(f)]

**Objective 218.1**
Monroe County shall include in its planning efforts development and redevelopment principles, strategies, and engineering solutions that reduce flood risk in coastal areas across the community, which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise. [F.S. § 163.3178(2)(f)].

**Policy 218.1.1**
The County shall develop by 2022, a short, medium and long-term Roads and Stormwater Capital Plan informed by future growth, design levels of service for flooding, future sea level rise projections and other legal and policy analyses.

**Policy 218.1.2**
Within two years of completing the Roads and Stormwater Capital Plan, the County shall review and update its land development regulations and infrastructure design criteria, to include development and redevelopment principles and strategies that reduce current and future flood risk. Principles shall be based upon considering the ecological, engineering, disaster risk reduction and social elements of resiliency. Strategies may include best practices that prioritize elevation and floodproofing, protection of building mechanical systems, onsite retention and pervious surfaces, shoreline protection and accommodation, site-specific flood management techniques, green infrastructure, maintaining access to services and managed retreat.

**Policy 218.1.3**
Based upon a Shoreline Stabilization Strategy to be completed pursuant to Policy 1503.1.8, the County shall identify locations to protect and enhance the built and natural environments from erosion and sea level rise impacts prioritizing natural green infrastructure approaches. The County shall also identify locations for new or enhanced natural or living shorelines including strategies for funding, restoring, permitting, and constructing such projects on both public and private properties. [Complete by 2025].

**Policy 218.1.4**
Identify locations for new or enhanced natural or living shorelines including strategies for funding, restoring, permitting, and constructing such projects on both public and private properties. [Complete by 2025].

**Policy 218.1.4**
The County shall integrate land development, land acquisition and infrastructure strategies into the Local Mitigation Strategy, Monroe County Recovery Plan (2010) and the Monroe Countywide Post-Disaster Recovery Strategy to respond to current and future flood risk.

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4 Note: This draft includes internal review as incorporated and updated Draft 1. This Draft 2 was provided during the Round 1 Public Meetings.
Objective 218.2
Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions at the site level that will result in the reduction of losses due to flooding and claims made under flood insurance policies and the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.

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The County shall prioritize land acquisitions for existing structures and vacant lands considering storm damage, repetitive loss, flood risk vulnerability and future sea level rise. Opportunities to demolish existing structures that are acquired, returning the land to its natural state, for the creation of living shorelines, or other purposes, shall be evaluated to provide passive resiliency benefits in vulnerable areas.

Policy 218.2.2 <was Policy 216.1.7>
Monroe County shall consider floodplain management and CHHA issues in making public acquisition decisions. [F.S. § 163.3178(2)(d)]

Policy 218.2.2
The County shall align housing policies focusing on affordability and workforce housing, code compliant reconstruction, elevation, floodproofing, relocation and other mitigation strategies to reduce losses from flooding and claims made under flood insurance policies based upon the work of the Housing Recovery Task Force and Housing Recovery Strategy.

Policy 218.2.3
The County shall pursue funding resources and provide assistance to property owners for weatherization, mitigation, flood-proofing and other flood-resistant improvement projects. The County shall also seek funding to supply relocation assistance for property owners to move to less vulnerable areas.

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The County shall continue to provide public information related to the updates, development and adoption of FEMA’s FIRM Flood Maps as well as strategies to increase resiliency to storm events and flooding in vulnerable areas.

Policy 218.2.5
Within three (3) years of final adoption of FEMA’s Flood Insurance Rate Maps (FIRMs), the County shall review land development and floodplain management regulations to reflect updated flood risk data.

Policy 218.2.6 <was Policy 216.1.6>
Monroe County shall continue to enforce federal, state and local construction, setback and elevation requirements to promote the protection and safety of life and property. Revisions to the existing setback requirements contained in the land development regulations shall be considered as a means of reducing property damage caused by storms. [F.S. § 163.3178(2)(d)]

Policy 218.2.7 <was Policy 216.1.8>
Monroe County shall require that, to the greatest extent practicable, development activity, such as land clearing, grading and filling will not disturb natural drainage patterns.
Objective 218.3
Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable floodplain management regulations set forth in 44 C.F.R. part 60.

Policy 218.3.1
The County shall maintain, review and update, at least every five (5) years, its Floodplain Management Regulations (Chapter 122, Part II, Land Development), designed to:

1. Minimize unnecessary disruption of commerce, access and public service during times of flooding;
2. Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
3. Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
4. Manage the alteration of flood hazard areas and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
5. Minimize damage to public and private facilities and utilities;
6. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
7. Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events;
8. Ensure potential home buyers are notified that property is in a flood hazard area; and
9. Meet the requirements of the National Flood Insurance Program for community participation as set forth in Title 44 Code of Federal Regulations, Section 59.22.

Policy 218.3.2 <was Policy 216.1.4>
Monroe County shall continue its policy of reviewing the current Building Code and, as appropriate, adopting structural standards and site alteration restrictions that meet or exceed the minimum FEMA requirements. The Building Code shall be reviewed and revised at least every five years. The recommendations of the applicable interagency hazard mitigation report shall be considered in revisions to the Code. [F.S. § 163.3178(2)(d)(f)4.]

Policy 218.3.3
The County shall maintain and review regulations in special flood hazard areas to require construction by methods and practices that minimize flood damage, including but not limited to, anchoring by pilings or columns to prevent flotation, collapse and lateral movement of the structure; preventing the expansion, improvement or repair of construction below elevated post-FIRM buildings; prohibiting manmade alteration of sand dunes, dune ridge, mangrove stands or wetlands which would increase the potential of flood damage and elevation or freeboard standards for structures, electrical and mechanical equipment.
Objective 218.4  
Any coastal construction in Monroe County shall be consistent with Chapter 161, F.S.

Policy 218.4.1  
The County shall require any coastal construction activities to be consistent with the relevant sections of Chapter 161, F.S. including Section 161.55, F.S. establishing that all land area within the Florida Keys located within Monroe County be included within the coastal building zone and subject to the requirements for activities or construction with the coastal building zone.

Objective 218.5  
Encourage local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.

Policy 218.5.1<was Policy 216.1.5>  
Monroe County shall continue to participate in the National Flood Insurance Program (NFIP) Community Rating System (CRS) to the maximum extent possible and shall continue to seek to improve its current CRS Class rating. [F.S. § 163.3178(2)(d)(f)].

Policy 218.5.2  
Monroe County shall continue to develop data and dedicate the funding necessary to maintain or enhance its current CRS Class rating through County resources, grants and/or partnerships.

Policy 218.5.3  
Monroe County shall continue to coordinate intergovernmental efforts related to participation in CRS, public outreach, sea level rise planning and disaster preparedness and recovery, to maximize County and flood insurance policy holder benefits.
Task 2.4: Energy and Climate Element Amendments

3.15 ENERGY, AND RESILIENCY AND CLIMATE

GOAL 1501 – Data Collection and Coordination
Monroe County shall coordinate with the municipalities of Key West, Key Colony Beach, Islamorada, Layton and Marathon; regional, State, and federal government agencies, nongovernmental organizations and private organizations to exchange data and develop coordinated strategies to address energy conservation and impacts from climate change.

Objective 1501.1
Monroe County shall coordinate and collaborate with municipalities and other public and private entities to address energy conservation strategies and unique climate change impacts, including adaptation and mitigation strategies.

Policy 1501.1.1
Monroe County shall maintain existing mechanisms for exchange of ideas and data, and participate in new forums, to facilitate comprehensive and coordinated strategies promoting energy conservation and addressing climate change impacts. Monroe County will continue to seek support and funding sources to update its vulnerability planning efforts, incorporate new data generated by, or available, to the County, and to exchange data, as necessary.

Policy 1501.1.2
Monroe County will participate in cooperative efforts such as the Southeast Florida Regional Climate Change Compact in order to maximize effort opportunities to facilitate the exchange of ideas and data and coordinate policies promoting energy conservation and climate change resilience.

Policy 1501.1.3
Monroe County will continue to coordinate with, and seek the support of, other counties and State agencies such as the South Florida Water Management District, South Florida Regional Planning Council, Florida Department of Environmental Protection and other State partners, to ensure that the latest data and approaches to energy conservation and climate change resilience are available to the County.

Policy 1501.1.4
Monroe County shall seek the support of agencies, such as the National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS), Federal Emergency Management Agency (FEMA), the U.S. Department of Interior, the U.S. Army Corps of Engineers (ACOE), as well as universities and not-for-profit organizations to coordinate support for updating, exchanging and analyzing data regarding potential changes in climate change vulnerability.

Policy 1501.1.5 <was Policy 1502.1.8>
Monroe County shall exchange data regarding locally-specific vulnerable areas and land use strategies/policies with the Florida Department of Transportation, the U.S. Department of Transportation and the Federal Highway Administration relative to ferry, airport, transit, bridges and transportation systems.
Policy 1501.1.6 <was Policy 1501.1.5>
Monroe County will support local and regional modeling and monitoring programs, as resources permit, to assure the most current locally specific data is considered in the 2030 Comprehensive Plan and Land Development Code updates. This may include but is not limited to programs designed to monitor surface water quality (including temperature), sea level rise, hydrologic and geologic conditions, groundwater quality and levels, precipitation and groundwater withdrawals from resources that the County depends upon (including those outside County lines). The County shall make such data available to the public. Data shall be considered by the County as necessary in its climate mitigation and adaptation planning efforts, and the data shall be available to the public.

Policy 1501.1.7
Monroe County shall collaborate with the Department of Health, the Florida Keys Mosquito Control District and other agencies to exchange and disseminate information related to linkage between climate and health impacts.

GOAL 1502 – GHGEs and Climate Considerations in County Operations and Facilities

Monroe County shall incorporate the best available data and science, into its policy and planning decisions for infrastructure, facilities and emergencies, recognizing the benefits of reducing greenhouse gas emissions (GHGEs) and the uncertainty associated with long range climate change and sea level rise predictions.

Objective 1502.1 – GHGE Reductions, Energy Efficiency and Renewable Energy Use in County Operations and Facilities <was Objective 1501.2>
Recognizing the critical role of Monroe County to promote awareness on energy and climate issues, the County shall encourage collaborative intergovernmental practices that serve as a model for the municipalities and other entities to reduce greenhouse gas emissions (GHGEs) by at least 20% below the 2005 levels by 2020 40% by 2030 as compared to a 2012 baseline for County operations. Monroe County shall measure progress towards achieving reductions in GHGEs for its own facilities and operations every five (5) years and establish new targets as appropriate.

Policy 1502.1.1 <was Policy 1502.1.3>
Monroe County shall promote the adoption of policies and strategies across all County departments to reduce GHGEs and become more resilient to the impacts of climate change. Monroe County shall employ such strategies as establishing video conferencing capabilities to allow residents and employees to participate in meetings without having to drive long distances; evaluating the feasibility for installation of renewable energy systems on County owned facilities; and increasing the use of alternatively fueled vehicles.

Policy 1502.1.2 <was Policy 1502.1.3>
Within five (5) years after the adoption of the 2030 _Comprehensive Plan_, Monroe County shall conduct a feasibility study for alternative energy on existing and new County facilities, identify actions to promote and support increased energy efficiency measures and establish a target for the proportion of electricity generated by alternative and renewable energy, including, but not limited to solar, wind, biofuels and other sources. Monroe County shall incorporate these
actions into its facilities and operations as well as its fleet. Monroe County shall coordinate with Florida Keys Electric Cooperative and Keys Energy.

**Policy 1502.1.3**
Within five (5) years after the adoption of the 20__ Comprehensive Plan, Monroe County shall create, or update its existing, fleet and fuel management planning and procurement process and incorporate new elements such as anti-idling, green driving education, route optimization, vehicle right-sizing and interdepartmental coordination.

**Policy 1502.1.4**<sup>*was Policy 1501.2.2*</sup>
Within one (1) year after the adoption of the 2030xx Comprehensive Plan, Monroe County shall develop and maintain a procurement policy that incorporates energy saving principles for its own buildings, facilities and services. The policy may include provisions for reductions of GHGEs from other sectors of emissions related to materials reuse, reduced packaging, materials with recycled content and other waste management strategies.

**Policy 1502.1.5**<sup>*was Policy 1501.2.3*</sup>
Monroe County shall share information and technical data regarding the most efficient technologies to minimize GHGEs with other agencies and utilities operating within Monroe County.

**Policy 1502.1.6**
Monroe County shall conduct energy and water conservation auditing on County facilities and link upgrades to capital asset improvements.

**Policy 1502.1.7**
Monroe County shall establish criteria and specifications that require energy efficiency components to meet or exceed the Florida Energy Efficiency Code for Building Construction in all public construction, facility improvements, renovations or additions to the greatest extent practicable.

**Policy 1502.1.8**<sup>*was Policy 1502.1.2*</sup>
In the capital improvements planning process infrastructure decisions shall consider the most energy efficient technologies available. This analysis shall include the useful life of the infrastructure and the cost savings related to reduced energy needs, operations and maintenance saved from such efficiency goals.

**Objective 1502.2 – Climate and Sea Level Rise in County Infrastructure**<sup>*was Objective 1502.1*</sup>
In conjunction with future updates to the 2030xx Comprehensive Plan and land development regulations, the County shall update the data and assumptions related to climate change impacts on infrastructure based on the latest scientific predictions and observed (monitored) impacts. Monroe County shall also consider climate change impacts such as increased temperatures, sea level rise, potentially shifting habitat and ecosystem types and the need to withstand increased storm surge in evaluating public infrastructure decisions.
**Policy 1502.2.1** <was Policy 1502.1.1>

Prior to incorporating a new project to the Capital Improvements Element, Monroe County shall assure that it is reviewed for recommendations to increase resiliency and account for the impacts from climate change, including but not limited to, sea level rise and storm surge. Monroe County shall evaluate financial expenditures to fund repairs, reconditioning of deteriorating infrastructure and new infrastructure improvements within or proximate to vulnerable areas to manage public investments appropriately. Monroe County shall focus on level of service standards and financial costs and benefits for adaptation among other considerations, as one of the points of analysis, to assure that infrastructure useful life and service expectations can be met in the face of when considering climate change impacts.

**Policy 1502.2.2** <ed29> <was Policy 1502.1.4>

Within five (5) years after the adoption of the 2030__ Comprehensive Plan, Monroe County shall identify criteria to define adaptation action areas (AAA), or a similar concept to be defined by the County, which may include infrastructure. Within five (5) years after the adoption of the 2030___ Comprehensive Plan, Monroe County shall identify proposed adaptation action areas (AAA), or a similar concept to be defined by the County. Pursuant to Chapter 163, F.S., AAA are those areas that experience coastal flooding due to extreme high tides and storm surge, and that are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning. In the AAAs, strategies will be developed to address vulnerabilities from these effects as well as the rate of impact and available adaptation options. In conjunction with later updates to the 2030 Comprehensive Plan, Monroe County shall update existing, or map new, potential impacts of sea-level rise for consideration in long-term planning decisions.

**Policy 1502.2.3** <was Policy 1502.1.5>

Within five (5) years after the adoption of the 2030__ Comprehensive Plan, Monroe County shall initiate an inventory of existing and planned infrastructure up to the 2030___ horizon, based upon the vulnerability mapping identified in Policy 1502.1.4 data sources including but not limited to, the Countywide Roads and Stormwater Vulnerability Assessment, the Watershed Management Plan, the GreenKeys Plan (2016) and Updates, updated elevation data and any other appropriate vulnerability information, for capacity to accommodate projected sea-level rise over the life expectancy of that infrastructure. Monroe County shall identify the infrastructure within those areas, its useful life and any retrofits or capital projects necessary to address the impacts of sea level rise. These strategies may include defense, accommodation, or retreat relocation projects, or not building planned infrastructure in vulnerable locations, to address the impacts of sea level rise. Monroe County will consider developing design criteria, in conjunction with a broader asset management planning process.
Policy 1502.4 <was Policy 1502.1.6>
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall consider incorporating a planning, design and permitting standard for infrastructure and public facilities that may include a sea level rise projection for a assumption of 3”—7” by 2030 as developed by range of conditions from 8” (IPCC Median) to 12” (NOAA Intermediate High) by 2030 based upon the work of the Southeast Regional Climate Compact, or other appropriate sea level rise projections, as approved by the BOCC on April 15, 2020. The County shall review and update sea level rise projections when new and pertinent data is available. (The 3”—7” by 2030 is based on a 2010 baseline — if adjusted to a 1992 baseline it would result in 6” to 10” by 2030 above the 1992 mean sea level).

Policy 1502.5 <was Policy 1502.1.7>
Monroe County shall ensure that new, renovated and replacement public facilities and infrastructure, such as streets and bridges, water and wastewater treatment plants, police stations and fire stations, and any other public facilities that the County has authority over, are designed in a manner which considers the useful life of public facilities and infrastructure. The County shall also consider the potential impacts from climate change, including rising sea levels and shoreline stabilization needs, on its infrastructure and public facilities projects for the duration of that useful life.

Policy 1502.6 <was Policy 1502.1.9>
Monroe County shall coordinate with appropriate agencies to monitor changes to minimum road elevation standards or other related regulations, which may be specific pertinent to Monroe County due to its unique exposure to climate change and sea level rise impacts. This could also include enhanced updated stormwater management requirements and resurfacing requirements for certain transportation segments.

Objective 1502.3 – Emergency Management and Climate Linkages <was Objective 1503.4>
In coordination with the next updates to the County’s emergency management policies and the Local Mitigation Strategy, Monroe County shall coordinate with municipalities, the Florida Division of Emergency Management, and other applicable agencies to further review and incorporate sea-level rise considerations and climate change.

Policy 1502.3.1 <was Policy 1503.4.1>
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall review its post-disaster redevelopment plan and land development regulations to include, as
appropriate, consideration of climate change impacts, repetitive loss structures and shoreline stabilization needs.

**Policy 1502.3.2**  
In coordination with the next updates to emergency management policies and the Local Mitigation Strategy, Monroe County shall determine any impacts to hurricane evacuation timeframes exacerbated by an 3”—7” increase in sea-level rise by 2030 and anticipated impacts on transportation facilities based upon the sea level rise projections identified in Policy 1502.2.4.

**Policy 1502.3.3**  
Increase the County’s resilience to coastal storms for adaptation projects, considering future sea level rise, through funding partnerships and inter-departmental collaboration, including recovery, resiliency and other emergency management programming, including coordination with State and Federal agencies.

**GOAL 1503 – Energy and Climate Issues in the Built Environment**  
Monroe County shall address energy, resources and climate issues in the built environment by: encouraging green development practices; reducing waste; enhancing transportation choices; and educating the community about the need to reduce energy use and prepare for climate change impacts.

**Objective 1503.1 – Energy & Resources Built Environment**  
To address the impacts of GHGEs and climate change, Monroe County shall promote energy and resource efficiency across all sectors of energy use, public and private sector, in the built environment.

**Policy 1503.1.1**  
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall include more updated energy efficiency requirements into the Land Development Code as appropriate. These practices may include climate change impacts as a factor in determining appropriate levels of development in vulnerable areas.

**Policy 1503.1.2**  
Within seven (7) years after the adoption of the Comprehensive Plan, Monroe County and may include climate change impacts as a factor in determining appropriate levels of development. Within five (5) years after the adoption of the Comprehensive Plan, the County shall promote sustainable and resilient construction rating systems that reduce resource use and increase resiliency. The County shall provide information resources to the development community to encourage the use of such rating systems.

**Policy 1503.1.3**  
Within (5) years after the adoption of the 2030xx Comprehensive Plan, Monroe County shall update the Land Development Code to increase bicycle and pedestrian-friendly development with more transportation options and increase the construction of energy efficient and climate resilient structures.

**Policy 1503.1.4**  
Consistent with the Lower East Coast Regional Water Supply Plan, Monroe County shall encourage FKAA to continue expanding water auditing programs to increase the scope of the
audits and identify opportunities to reduce system leaks and promote water conservation retrofitting. Such changes opportunities could include County promotion for the reconditioning and reuse of septic tanks to provide a water source for landscaping, increased use of rainwater harvesting techniques, such as cisterns and other water storage techniques.

**Policy 1503.1.5** <was Policy 1503.1.6>
Within one (1) year after the adoption of the 2030xx Comprehensive Plan, Monroe County shall develop additional policies to increase water conservation, which may include the adoption of additional recognized standards such as the South Florida Water Management District's "Water Star" or EPA's "Water Sense" programs as incentives within the development approval process.

**Policy 1503.1.7**
Within five (5) years after the adoption of the 2030xx Comprehensive Plan, Monroe County shall determine the appropriate climate change considerations (including but not limited to, emergency management, flood risk, storm surge, threats to potable water supply, the potential for changing habitat and landscapes, the need for shoreline stabilization and the potential impacts to infrastructure necessary to serve proposed uses) to evaluate when reviewing land use amendments and development proposals.

**Policy 1503.1.8**
Within five (5) years after the adoption of the 2030xx Comprehensive Plan, Monroe County shall develop a shoreline stabilization strategy to protect and enhance the built and natural environments from erosion and sea level rise impacts prioritizing natural green infrastructure approaches. Monroe County shall assure shoreline stabilization strategies are found to be in the public interest in light of that area's vulnerability to climate change impacts. Monroe County shall also consider public access to beaches, minimizing adverse impacts to coastal processes and resources, impacts to neighboring properties, and the values and functions of beaches and coastal/marine systems, relative to shoreline stabilization strategies.

**Policy 1503.1.6**
Within one (1) after adoption of the 20 Comprehensive Plan, Monroe County shall review the Land Development Code to determine if permitting obstacles exists for individual or aggregated renewable energy projects including, but not limited to solar projects at the neighborhood or community level. Such obstacles could include uses of vacant lands, site development criteria or limits on infrastructure to support such projects. Upon the conclusion of that review, Monroe County shall amend the Land Development Code as appropriate.

**Objective 1503.2 -- Climate Resiliency Built Environment**
Monroe County shall improve climate resiliency in the built environment and work with property owners to understand climate risk, implement strategies, secure funding sources and reduce the amount of vulnerable properties throughout the County.

**Policy 1503.2.1**
Monroe County shall coordinate across the planning, public works, disaster recovery and resiliency efforts on sea level rise, recovery, floodplain management and resiliency planning, including improvement projects and funding strategies, to prepare for the impacts of climate change and address adaptation within the built environment. Based on this coordination, within five (5) years after the adoption of the 20 Comprehensive Plan, Monroe County shall evaluate
and develop a range of adaptation strategies that may include updated onsite stormwater retention standards, pervious surface requirements, fill material requirements, shoreline hardening options, natural resiliency strategies related to vegetative requirements and open space as well as elevation and floodproofing methods. Upon the development of a range of adaptation strategies feasible, considering the different site characteristics across the County, Monroe County shall amend the Land Development Code as appropriate.

**Policy 1503.2.2** <was Policy 1502.1.10>  
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall review land development regulations the Land Development Code that to address stormwater management considerations for sea level rise impacts. To the extent practicable, Monroe County shall incorporate green infrastructure or passive alternatives that maximize land preservation over impervious or "active" infrastructure. Such alternatives could include the reconditioning and reuse of septic tanks to provide a water source for landscaping, increased use of rainwater harvesting techniques, such as cisterns and other water storage techniques. Monroe County shall determine if land development regulation amendments are needed to address increased retention requirements and other topographic or infiltration considerations which may influence stormwater management requirements on private property. Monroe County shall also consider the ability to meet water quality requirements related to stormwater management regulations and if there are any impacts from climate change that may jeopardize the County's ability to meet those requirements.

**Policy 1503.2.3** <was Policy 1503.1.7>  
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall determine the appropriate climate change considerations (including but not limited to, emergency management, flood risk, storm surge, threats to potable water supply, the potential for changing habitat and landscapes, the need for shoreline stabilization and the potential impacts to infrastructure necessary to serve proposed uses) to evaluate when reviewing land use amendments and development proposals.

**Policy 1503.2.4** <was Policy 1503.1.4>  
Monroe County shall review the most updated FEMA maps within one (1) year of their release and evaluate floor elevation requirements, as necessary, for all new construction in vulnerable areas.

**Policy 1503.2.5** <was Policy 1503.1.8>  
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall develop a shoreline stabilization strategy to protect and enhance the built and natural environments from erosion and sea level rise impacts prioritizing natural green infrastructure approaches, to the extent practicable. Monroe County shall assure shoreline stabilization strategies are found to be in the public interest in light of that area's vulnerability to climate change impacts. Monroe County shall also consider public access to beaches, minimizing adverse impacts to coastal processes and resources, impacts to neighboring properties, and the values and functions of beaches and coastal/marine systems, relative to shoreline stabilization strategies.
Policy 1503.2.6
Monroe County shall disseminate information to the public regarding the future impacts of climate change including but not limited to, sea level rise, flooding, extreme heat, ocean acidification and coral reef threats, changes in vector borne diseases, severe weather events, shifting habitats and other stressors. The County shall also convey the need, coordination and differences between public infrastructure investments and adaptations on private property.

Policy 1503.2.7
Monroe County shall communicate and inform the community on the impacts of climate change and increase the understanding of future vulnerabilities through mechanisms such as outreach on tidal events, project updates and documenting the visible impacts across the community.

Policy 1503.2.8
Monroe County shall coordinate with the business community to increase the understanding of climate threats and the benefits of planning for adaptation to avoid disruptions in services.

Objective 1503.3 -- Transportation Strategies to Reduce GHGEs and Respond to Climate Change
<was Objective 1503.2>
Monroe County shall work cooperatively with municipalities and transportation agencies to identify and evaluate transportation strategies to address energy and climate issues.

Policy 1503.3.1 <was Policy 1503.2.1>
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall evaluate the need and opportunities for additional policies to reduce vehicle miles traveled ("VMT") by 2030. Such policies could include offering a range of transportation choices in new development or redevelopment projects; incentivizing connectivity between differing modes of transportation to increase modal split and linking residential and employment center land uses to reduce the need for single vehicle trips.

Policy 1503.3.2 <was Policy 1503.2.2>
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall determine Upper, Middle and Lower Keys publicly accessible locations appropriate for electric vehicle charging stations and create a strategy to encourage a mix of alternative fuel sources such as electricity and biodiesel for vehicles. Monroe County shall also encourage the inclusion of such charging stations in appropriate zoning categories.

Policy 1503.3.3 <was Policy 1503.2.3>
Monroe County shall continue to coordinate with the City of Key West to increase ridership and reduce wait times on the Lower Keys Shuttle with the goal of promoting energy conservation and reducing GHGEs.

Policy 1503.3.4
Monroe County shall plan for the feasibility of alternative modes of transportation to address the inundation impacts on road facilities from future sea level rise. Such plans shall also include consideration of the opportunities and costs associated with roadway maintenance, upgrades or abandonment.
Objective 1503.4 – Green Industry Growth <was Objective 1503.3>
With the objective of becoming more resilient to climate impacts and promoting new green industries, Monroe County shall promote public awareness of the relationship between energy and resource conservation, and addressing climate impacts and economic benefits derived from these preparation and these linkages.

Policy 1503.4.1 <was Policy 1503.3.1>
Monroe County shall work with the construction industry to assure input on green and energy efficiency standards so that local contractors are informed and can participate in their implementation through development, redevelopment and public infrastructure projects. The County will seek opportunities to partner with other local governments, Florida Keys College, and other agencies to implement this policy.

Policy 1503.4.2 <was Policy 1503.3.2>
Within one (1) year after the adoption of the 2030 Comprehensive Plan, Monroe County shall incorporate appropriate green building or climate resilient specifications into competitive bids which may will include sustainable building or green building code accredited individuals on design teams and incorporation of green building practices, as appropriate, for all projects relying upon County funds consistent with Chapter 255, F.S.

Policy 1503.4.3 <was Policy 1503.3.3>
Monroe County shall seek ways to enhance sustainable business development opportunities focusing on sustainable tourism, educational and institutional research-based tourism, green technologies and construction strategies.

GOAL 1504 - Natural Systems and Climate
Monroe County shall further protect natural systems and habitats by incorporating climate adaptation and mitigation strategies in its land acquisition policies. This goal will include consideration of the need to address natural resource protection and restoration requirements, the likelihood of natural resource impacts such as shifting habitats from a rising sea, potential threats and loss of marine ecosystems and habitat, ecosystem-based approaches to exotic species and vegetation management and the need to protect, manage and restore native habitat.

Objective 1504.1
Within five (5) years after the adoption of the 2030 Comprehensive Plan, the County shall revise its land acquisition and preservation policies to consider the climate change-related values of natural areas for sequestering carbon and providing climate adaptation and mitigation benefits such as the resource's strategic capacity to absorb floodwaters and address coastal ecosystem migration.

Policy 1504.1.1
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall identify and evaluate natural resources, including coastal and marine environmental, resources that may be vulnerable to climate change impacts and consider mitigation and adaptation management strategies to address those vulnerabilities and shall continue to update such analyses when new data is available. The County may use data generated in the GreenKeys Plan (2016) and other related sources to establish a baseline against which to measure future habitat impacts from climate change. Based upon this data, the County shall consider mitigation and adaptation to address vulnerabilities of natural resources as feasible.
Policy 1504.1.2
Within five (5) years after the adoption of the Plan, Monroe County shall determine if any additional or revised land acquisition or land development regulations are needed to implement land acquisition or preservation programs that prioritize the benefits gained from protecting and enhancing natural lands in mitigating the impacts of erosion of shorelines. Monroe County shall encourage the state and federal government to acquire lands which provide natural resource protection for listed species and which address natural resource impacts such as shifting habitats from a rising sea.

Policy 1504.1.3
Recognizing the unique impacts that climate change has on the County's reef system, primarily warming ocean temperatures, ocean acidification and changes in marine estuaries and brackish systems affecting juvenile species, Florida's reef fish and invertebrate populations and associated fisheries, Monroe County shall coordinate on an ongoing basis with Federal, state, regional and research agencies and organizations responsible for monitoring impacts to coral reefs. Monroe County shall work with these agencies to implement land-based strategies to mitigate those impacts such as minimizing sedimentation, storm water runoff, and other water quality impacts to the Florida reef system. The County will also participate in updates to existing programs and strategies (e.g. Florida Keys National Marine Sanctuary Water Quality Protection Program and the existing marine protected areas in the Florida Reef System) to optimize their effectiveness and make them more robust in the context of creating resilience to climate change.

Policy 1504.1.4
In coordination with relevant agencies, including the Florida Keys National Marine Sanctuary, the County will contribute to and participate in the development and implementation of a marine zoning plan(s) or other appropriate tool(s) which incorporate resilience-based concepts to provide maximum protection for all reef types and associated habitats in the Florida Reef System with consideration of the connectivity between reefs and their associated nursery habitats.

Policy 1504.1.5
Within five (5) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall consider revising its natural resource restoration policies based on identification of vulnerable areas to encourage planting and proper long-term maintenance of native flora throughout the County. This will include, but not be limited to, a review of current County buffer requirements within the Land Development Code to encourage a balance of trees, understory, shrubs, and groundcover, reducing pea-rock and turf grass on rights-of-way whenever possible and utilizing native ground cover, plants, and trees.

Policy 1504.1.6
The County shall work to provide and enhance data related to the impacts from climate change on habitat and dependent species, including listed or protected, and to develop strategies for adaptation in coordination with other Federal and State agencies.
Task 2.4: Recommendations to Address Sea Level Rise in Elements of Monroe County Comprehensive Plan

Future Land Use

Policy 101.2.3
The County will consider capital improvements based upon the need for improved hurricane evacuation clearance times incorporating future sea level rise planning. The County will coordinate with the FDOT, the state agency which maintains U.S.1, to ensure transportation projects that improve clearance times are prioritized.

Objective 101.5
Monroe County shall regulate future development and redevelopment to maintain and enhance the character of the community, and protect natural resources and consider future vulnerability by providing for the compatible distribution of land uses consistent with the designations shown on the Future Land Use Map. [F.S. § 163.3177(6)(a)].

Policy 101.5.32 and Policy 101.5.33
Comment: Did the Flood Protection Height Exceptions get adopted?

Objective 101.6
Monroe County shall maintain and implement a Point System based primarily on the Tier system of land classification in accordance with Goal 105, which directs future growth in order to:
1. maintain and enhance the character of the community [F.S. § 163.3177(6)(a)2.c.];
2. protect natural resources [F.S. § 163.3177(6)(a)3.f.];
3. encourage a compact pattern of development [F.S. § 163.3177(6)(a)2.h.];
4. encourage the development of affordable housing;
5. direct future growth to appropriate infill areas and away from inappropriate locations not suitable for development such as environmentally sensitive areas, Coastal Barrier Resource System (CBRS) Units, areas vulnerable to sea level rise and V-zones; and
6. encourage development in areas served by central wastewater treatment systems.

Policy 101.6.4 and Policy 101.6.5
Add point categories related to vulnerability to future inundation from sea level rise?

Policy 101.6.8
Monroe County shall maintain a Transfer of ROGO Exemption (TRE) program, that allows for the transfer off-site of dwelling units, hotel rooms, campground/recreational vehicle spaces and/or mobile homes to another site in the same ROGO subarea, provided that they are lawfully existing and can be accounted for in the County's hurricane evacuation model. Dwelling units may be transferred as follows:
   a. between sites in the Upper Keys ROGO subarea;
   b. between sites in the Lower Keys ROGO subarea;
c. between sites in the Big Pine Key and No Name Key ROGO subarea;
i. units from the Big Pine Key and No Name Key ROGO subarea may also be transferred to the Lower Keys ROGO subarea.

No sender units may be transferred to an area where there are inadequate facilities and services or that is vulnerability to sea level rise by 20xx based on projections adopted by the BOCC.

Sender Site Criteria:
1. Contains a documented lawfully-established sender unit recognized by the County; and
2. Located in a Tier I, II, III, III-A, or III designated area; including any tier within the County's Military Installation Area of Impact (MIAI) Overlay; and
3. Shows vulnerability to sea level rise by 20xx based on projections adopted by the BOCC.

Receiver Site Criteria:
1. The Future Land Use category and Land Use (Zoning) District must allow the requested use;
2. Must meet the adopted density standards;
3. Includes all infrastructure (potable water, adequate wastewater treatment and disposal wastewater meeting adopted LOS, paved roads, etc.);
4. Located within a Tier III designated area; and
5. Structures are not located in a velocity (V) zone or within a CBRS unit; and
6. Is not vulnerability to sea level rise by 20xx based on projections adopted by the BOCC.

Objective 101.10
Monroe County shall provide for maintain drainage and stormwater management so as to protect real and personal property and to protect and improve water quality from precipitation. [F.S. § 163.3177(6)(c)]

Policy 101.10.4
Monroe County shall update stormwater management regulations based on the range of adaptation strategies to be developed in Policy 1503.2.1.

Policy 101.12.2
Monroe County shall require that the following analyses be undertaken prior to finalizing plans for the siting of any new County public facility, excluding electricity over which the Public Services Commission of the State of Florida exercises jurisdiction, or the significant expansion (greater than 25 percent) of an existing public facility, excluding electricity over which the Public Services Commission of the State of Florida exercises jurisdiction:
1. assessment of needs;
2. evaluation of alternative sites and design alternatives for the alternative sites; and,
3. assessment of direct and secondary impacts on surrounding land uses and natural resources; and
4. the vulnerability of the site to future sea level rise within the projected useful life of the facility.

The assessment of impacts on surrounding land uses and natural resources will evaluate the extent to which the proposed public facility involves public expenditures in the coastal high hazard area and within environmentally sensitive areas, including disturbed salt marsh and buttonwood wetlands, undisturbed beach berm areas, units of the Coastal Barrier Resources System, undisturbed uplands (particularly high quality hammock and pinelands), habitats of species considered to be threatened or endangered by the state and/or federal governments, offshore islands, and designated Tier I areas.

Except for passive recreational facilities on publicly-owned land, no new public facilities other than water distribution and sewer collection lines, pump/vacuum/lift stations, cluster systems, or small package plants/treatment facilities shall be allowed within Tier I designated areas or Tier III Special Protection Area unless it can be accomplished without clearing of hammock or pinelands. Exceptions to this requirement may be made to protect the public health, safety, and welfare, if all the following criteria are met:
1. No reasonable alternatives exist to the proposed location; and
2. The proposed location is approved by a supermajority of the Board of County Commissioners.

The site of the Key Largo Wastewater Treatment Facility (located at mile marker 100.5) with an allowed clearing of up to 4.2 acres shall not be subject to this policy.

Policy 101.13.3
Transfer of Development Rights program sender and receiver sites are subject to the following transfer conditions:
Sender Site Criteria:
1. Property has development rights to transfer, and
2. Located in a Tier I, II, III-A, or III designated area; including any tier within the County's Military Installation Area of Impact (MIAI) Overlay.
3. Shows vulnerability to sea level rise by 20xx based on projections adopted by the BOCC.

Receiver Site Criteria:
1. The Future Land Use category and Land Use (Zoning) District must allow the requested use;
   • Liveable CommuniKeys Community Centers shall be encouraged as receiving areas for transfer of development rights.
2. Must have an adopted maximum net density standards;
3. Includes all infrastructure (potable water, adequate wastewater treatment and disposal wastewater meeting adopted LOS, paved roads, etc.)
4. Located within a Tier III designated area; and
5. Is not located within a designated CBRS unit.
6. Is not vulnerability to sea level rise by 20xx based on projections adopted by the BOCC

Objective 101.14
Monroe County shall maintain land development regulations which direct future growth away from areas within the Coastal High Hazard Area (CHHA) or that show a vulnerability to sea level rise by 20__ based on projections adopted by the BOCC.

Policy 101.14.1
Monroe County shall discourage developments proposed within the CHHA or that show a vulnerability to sea level rise by 20__ based on projections adopted by the BOCC.

Objective 102.4
Monroe County shall maintain a Land Acquisition Master Plan containing strategies for securing funding and containing non-purchase options and strategies.

Policy 102.4.2
Comment: It is likely that this overall Policy will need to be reviewed after updated vulnerability analysis and the establishment of Adaptation Action Areas as there may be different types of Adaptation Action Areas that ultimately get established, not just focused on more interior areas as the Policy currently suggests.

Policy 103.2.3
Monroe County shall require that the following analyses be undertaken prior to finalizing plans for the siting of any new public facilities, excluding electricity over which the Public Services Commission of the State of Florida exercises jurisdiction, or the significant expansion (greater than 25 percent) of existing public facilities, excluding electricity over which the Public Services Commission of the State of Florida exercises jurisdiction:
   1. assessment of needs;
   2. evaluation of alternative sites and design alternatives for the selected sites; and
   3. assessment of impacts on surrounding land uses and natural resources;
   4. the vulnerability of the site to future sea level rise within the projected useful life of the facility.

The assessment of impacts on surrounding land uses and natural resources will evaluate the extent to which the proposed public facility involves public expenditures in the coastal high hazard area and within environmentally sensitive areas, including disturbed salt marsh and buttonwood wetlands, undisturbed beach/berm areas, units of the Coastal Barrier Resources System, undisturbed uplands (particularly high quality hammocks and pinelands), habitats of species considered to be threatened or endangered by the state and/or federal governments, offshore islands, and Conservation Land Protection Areas.
Monroe County shall require that public facilities be developed on the least environmentally sensitive lands and shall discourage the location of public facilities on North Key Largo, unless no feasible alternative exists and such facilities are required to protect the public health, safety, or welfare.

**Objective 104.1**
Monroe County shall maintain a comprehensive inventory of historical and archaeological resources within unincorporated Monroe County and incorporate information into the inventory regarding the resources’ vulnerability to sea level rise.

**Objective 104.4**
Monroe County shall adopt and implement measures for the protection and preservation of historic resources on public lands including consideration of the resources’ vulnerability to sea level rise. [F.S. § 163.3177(6)(a)3.f.]

**Objective 105.1**
Monroe County shall continue to implement smart growth and resiliency initiatives in conjunction with its Livable CommuniKeys and Land Acquisition Programs which promote innovative and flexible development processes to preserve the natural environment, maintain and enhance the community character and quality of life, redevelop blighted commercial and residential areas, remove barriers to design concepts, reduce sprawl, increase resiliency, and direct future growth to appropriate infill areas. [F.S. § 163.3177(6)(a)2.e.]

**Traffic Circulation**

**Policy 301.2.5**
In order to proceed with development, a parcel shall have legal access to public or private roads, rights of way or easements or such access shall be established.

**Ports, Aviation and Related Facilities**

**GOAL 501**- Monroe County shall provide aviation facilities in a manner that maximizes safety, convenience, economic benefit, environmental compatibility, and consistency with other elements of the comprehensive plan, including exercising its planning and land use authorities on County-owned airport properties within incorporated areas of the County.

**GOAL 502**- All existing and future residents and visitors of Monroe County shall be served with ports in a manner that maximizes safety, convenience, economic benefit, environmental compatibility, and consistency with other elements of the comprehensive plan.
**Housing**

**GOAL 601**- Monroe County shall adopt programs and policies to facilitate access by residents to adequate and affordable housing that is safe, decent, and structurally sound, resilient, and that meets the needs of the population based on type, tenure characteristics, unit size and individual preferences. [F.S. § 163.3177(6)(f)1., 3.]

**Policy 601.1.5**

If Monroe County funding or County-donated land is to be used for any affordable housing project, alternative sites shall be assessed according to the following guidelines:

1. The location of endangered species habitat. Sites within known, probable, or potentially suitable threatened or endangered species habitat shall be avoided.
2. The environmental sensitivity of the vegetative habitat. The habitat sensitivity shall be determined according to the ranking specified in the Environmental Design Criteria section of the Land Development Code. Disturbed sites shall be selected, unless no feasible alternative is available.
3. Sites located within V-Zones, on offshore islands, or within CBRS units, or vulnerable to the impacts of future sea level rise shall be avoided.
4. The level of service provided in the vicinity for all public facilities. Areas which are at or near capacity for one or more public facility should be avoided.
5. Proximity to employment and retail centers. Sites within five miles of employment and retail centers shall be preferred.

**Policy 601.1.11**

The Land Authority shall not list or acquire lands as potential affordable housing sites if the lands exhibit any of the following characteristics:

1. Any portion of the land lies within a known, probable, or potentially suitable threatened or endangered species habitat.
2. The land has a Tier designation other than Tier III.
3. The land is located in a V-Zone, on an offshore island or within a CBRS unit.
4. The land is vulnerable to sea level rise based upon...

**Potable Water**

**GOAL 701**- Monroe County shall support FKAA in the fulfillment of their statutory obligation and authority to provide for a safe, high quality and adequate supply, treatment, distribution, resiliency, and conservation of potable water to meet the needs of present and future residents. [F.S. §§ 163.3177(6)(c), 163.3177(6)(c)2]
Sanitary Sewer

Objective 901.3
Monroe County shall regulate land use and development to conserve potable water, and protect the functions of natural drainage features and groundwater from the impacts of sewer systems considering the future impacts of sea level rise. [F.S. § 163.3177(6)(c)2.]

Drainage

GOAL 1001- Monroe County shall provide a stormwater management system which protects maintains precipitation-based drainage for real and personal properties, public health and safety, and which promotes and protects groundwater and nearshore water quality. [F.S. § 163.3177(6)(c)]

Policy 1001.1.1
Water Quality Level of Service Standards - Minimum Water Quality:
All projects shall be designed so that the precipitation-based discharges will meet Florida State Water Quality/Quantity Standards as set forth in Chapters 62-3 and 62-302.530, F.A.C, incorporated herein by reference. All projects should be designed in accordance with the Florida Department of Transportation and South Florida Water Management District standards and taking into account projections for climate change sea level rise. [F.S. § 163.3177(6)(c)]

Every three years, after the adoption of the 2030 Comprehensive Plan, Monroe County shall review the standards for detention and retention volumes for surface water to ensure they achieve minimum water quality standards.

Policy 1001.1.3
Monroe County shall maintain, implement, review and update, as necessary, the County's stormwater management regulations and Stormwater Master Plan. All improvements for maintenance, replacement, expansion or increase in capacity of drainage facilities shall conform to the adopted level of service criteria pursuant to Policy 1001.1.1. [F.S. § 163.3177(3)(a)3.]

Policy 1001.1.5
Monroe County shall maintain land development regulations which ensure County review of all development permits for compliance with adopted stormwater management design criteria taking into account projections for sea level rise. [F.S. § 163.3177(3)(a)3.]

Policy 1001.1.6
Within three years of the adoption of the 2030 Comprehensive Plan, Monroe County shall evaluate the need to complete an inventory and analysis of existing public drainage facilities within the County and associated flooding issues including the future impacts of sea level rise. [F.S. § 163.3177(6)(c)1, 2.]
**Policy 1001.2.1**

Proposed stormwater capital improvements projects shall be evaluated as follows, with special attention to the position of the project in the Monroe County Seven Year Roadway and Bicycle Path Plan:

a) Whether the project is needed to protect public health and safety, to fulfill the County's legal commitment to provide maintain facilities and services, to protect sensitive environmental areas from documented or anticipated adverse impacts, or to preserve or achieve full use of existing facilities.

b) Whether the project increases efficiency of use of existing facilities, prevents or reduces future improvement costs, provides service to developed areas lacking full service, or promotes infill development.

c) Whether the project represents a logical extension of facilities and services within a designated service area.

d) The projected level of service that can be afforded when considering future sea level rise and the useful life of the project.

**Policy 1001.2.2**

Projects needed to correct existing deficiencies related to precipitation-based flooding shall be given priority in the formulation and implementation of the annual work program for the responsible County department. Specific priority will be given to those existing drainage problems which are determined to have the greatest adverse effect on 1) public health and safety; 2) groundwater and nearshore waters or areas designated as Outstanding Florida Waters; and 3) access. [F.S. § 163.3177(3)(a)1.]

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**Natural Groundwater Recharge**

**Objective 1101.1**

Monroe County shall work cooperatively with Miami-Dade County to encourage land use planning and development controls which shall protect the recharge area of the Florida City Wellfield from potential sources of groundwater contamination, saltwater intrusion, sea level rise and over-extraction.

**Objective 1101.2**

Monroe County shall provide for the protection of groundwater within the unincorporated areas recognizing the future impacts of sea level rise.

**Policy 1101.2.2**

Monroe County shall continue to restrict the percentage of impervious surfaces on development sites through application of the Open Space Requirements in the Land Development Code considering inundation from future sea level rise. These regulations shall be met or exceeded in order to minimize impervious areas and to protect freshwater lens recharge areas. [F.S. § 163.3177(6)(c)]
Policy 1101.2.3
Monroe County shall consider altering the minimum required open space ratios, and other development regulations, to protect the quantity and quality of groundwater in the freshwater lens systems considering inundation from future sea level rise. [F.S. § 163.3177(6)(c)]

Recreation and Open Space

Policy 1201.2.3
Priority shall be given to locating new neighborhood and community parks in communities which demonstrate the greatest deficiencies in parks and recreation, to the extent practicable.

Policy 1201.2.4
In selecting sites for future activity-based neighborhood and community parks, Monroe County shall give priority to sites which have been previously disturbed or scarified. The County shall avoid acquiring sites for activity-based parks which will result in potential disturbances to sensitive natural resources including but not limited to:

1. high quality undisturbed pineland and hammock vegetation;
2. documented habitat of species designated as rare or endangered by the state and federal governments;
3. undisturbed beach/berm; and
4. undisturbed mangrove, salt marsh, buttonwood and freshwater wetlands.
5. its vulnerability to climate impacts and sea level rise

When park sites are acquired which include sensitive natural resources, then the park plan (See Policy 1201.3.5 and 1201.3.7) and the park management plan (See Policy 1201.7.1 and 1201.7.2) shall designate such areas for passive recreation and shall avoid potential adverse impacts of park development and use upon those resources.

Policy 1201.3.5
Park plans shall address the following issues:
1. public uses and facilities;
2. public access;
3. compatibility with adjacent land uses;
4. waterways [F.S. § 163.3177(6)(e)];
5. types of recreational uses;
6. protection of sensitive natural resources; and
7. restoration of disturbed lands.
8. vulnerability to sea level rise
Policy 1201.3.9
Monroe County shall continue to ensure access to publicly-owned recreation and open space areas and accessible facilities, including beach and shoreline areas, for all Monroe County residents and visitors to the extent practicable.

Policy 1201.6.1
The Monroe County Parks and Recreation Master Plan shall update the following:
1. inventory of recreation lands and facilities;
2. demand for recreation lands and facilities;
3. level of service standards and recreational guidelines;
4. development and acquisition;
5. public surveys;
6. public participation programs; and
7. public access.
8. vulnerability to sea level rise

Policy 1201.7.3
For parks which include beaches and shoreline areas, the MMP shall provide for the maintenance and/or improvement of existing levels of beach and shore access to the extent practicable.

Intergovernmental Coordination

Comment: Add a new Goal related to sea level rise planning to address coordination among agencies related sea level rise projections (Southeast Florida Regional Climate Change Compact), natural areas and species management with supportive Objectives and Policies.

Capital Improvements

GOAL 1401- Monroe County shall provide and maintain, in a timely and efficient manner, adequate public facilities for both existing and future populations, consistent with available financial resources and the other elements of the Comprehensive Plan.

Objective 1401.1
Monroe County shall provide the capital improvements necessary to maintain, correct existing deficiencies, to accommodate projected future growth, and to replace obsolete and worn-out facilities, in accordance with an adopted Capital Improvements Program.

Objective 1401.2
With the following exceptions, County public expenditures within the Coastal High Hazard Area (CHHA) shall be limited to the restoration or enhancement of natural resources and parklands, expenditures required to serve existing development such as the maintenance or repair of existing infrastructure, and expenditures necessary for public health and safety:
1. County public expenditures within the CHHA may be permitted where required to meet adopted level of service standards or to maintain or reduce hurricane evacuation clearance times and where no feasible alternatives to siting the required facilities within the CHHA exist.

2. County public expenditures within the CHHA may be permitted for maintenance, improvements and expansions to existing public facilities, which improvements or expansions are designed to minimize risk of damage from flooding when practicable.
GOAL 218
The County shall consider the peril of flooding impact to eliminate inappropriate and unsafe development in redevelopment plans. [F.S. § 163.3178(2)(f)]

Objective 218.1
Monroe County shall include in its planning efforts development and redevelopment principles, strategies, and engineering solutions that reduce flood risk in coastal areas across the community, which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise. [F.S. § 163.3178(2)(f)].

Policy 218.1.1
The County shall develop by 2022, a short, medium and long-term Roads and Stormwater Capital Plan informed by future growth, design levels of service for flooding, future sea level rise projections and other legal and policy analyses.

Policy 218.1.2
Within two years of completing the Roads and Stormwater Capital Plan, the County shall review and update its land development regulations and infrastructure design criteria, to include development and redevelopment principles and strategies that reduce current and future flood risk. Principles shall be based upon considering the ecological, engineering, disaster risk reduction and social elements of resiliency. Strategies may include best practices that prioritize elevation and floodproofing, protection of building mechanical systems, onsite retention and pervious surfaces, shoreline protection and accommodation, site-specific flood management techniques, green infrastructure, maintaining access to services and managed retreat.

Policy 218.1.3
Based upon a Shoreline Stabilization Strategy to be completed pursuant to Policy 1503.1.8, the County shall identify locations to protect and enhance the built and natural environments from erosion and sea level rise impacts prioritizing natural green infrastructure approaches. The County shall also identify locations for new or enhanced natural or living shorelines including strategies for funding, restoring, permitting, and constructing such projects on both public and private properties. [Complete by 2025].

Policy 218.1.4
Identify locations for new or enhanced natural or living shorelines including strategies for funding, restoring, permitting, and constructing such projects on both public and private properties. [Complete by 2025].

Policy 218.1.4
The County shall integrate land development, land acquisition and infrastructure strategies into the Local Mitigation Strategy, Monroe County Recovery Plan (2010) and the Monroe Countywide Post-Disaster Recovery Strategy to respond to current and future flood risk.
Objective 218.2
Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions at the site level that will result in the reduction of losses due to flooding and claims made under flood insurance policies and the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.

Policy 218.2.1
The County shall prioritize land acquisitions for existing structures and vacant lands considering storm damage, repetitive loss, flood risk vulnerability and future sea level rise. Opportunities to demolish existing structures that are acquired, returning the land to its natural state, for the creation of living shorelines, or other purposes, shall be evaluated to provide passive resiliency benefits in vulnerable areas.

Policy 218.2.2 <was Policy 216.1.7>
Monroe County shall consider floodplain management and CHHA issues in making public acquisition decisions. [F.S. § 163.3178(2)(d)]

Policy 218.2.2
The County shall align housing policies focusing on affordability and workforce housing, code compliant reconstruction, elevation, floodproofing, relocation and other mitigation strategies to reduce losses from flooding and claims made under flood insurance policies based upon the work of the Housing Recovery Task Force and Housing Recovery Strategy.

Policy 218.2.3
The County shall pursue funding resources and provide assistance to property owners for weatherization, mitigation, flood-proofing and other flood-resistant improvement projects. The County shall also seek funding to supply relocation assistance for property owners to move to less vulnerable areas.

Policy 218.2.4
The County shall continue to provide public information related to the updates, development and adoption of FEMA’s FIRM Flood Maps as well as strategies to increase resiliency to storm events and flooding in vulnerable areas.

Policy 218.2.5
Within three (3) years of final adoption of FEMA’s Flood Insurance Rate Maps (FIRMs), the County shall review land development and floodplain management regulations to reflect updated flood risk data.

Policy 218.2.6 <was Policy 216.1.6>
Monroe County shall continue to enforce federal, state and local construction, setback and elevation requirements to promote the protection and safety of life and property. Revisions to the existing setback requirements contained in the land development regulations shall be considered as a means of reducing property damage caused by storms. [F.S. § 163.3178(2)(d)]

Policy 218.2.7 <was Policy 216.1.8>
Monroe County shall require that, to the greatest extent practicable, development activity, such as land clearing, grading and filling will not disturb natural drainage patterns.
Objective 218.3
Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable floodplain management regulations set forth in 44 C.F.R. part 60.

Policy 218.3.1
The County shall maintain, review and update, at least every five (5) years, its Floodplain Management Regulations (Chapter 122, Part II, Land Development), designed to:
(1) Minimize unnecessary disruption of commerce, access and public service during times of flooding;
(2) Require the use of appropriate construction practices in order to prevent or minimize future flood damage;
(3) Manage filling, grading, dredging, mining, paving, excavation, drilling operations, storage of equipment or materials, and other development which may increase flood damage or erosion potential;
(4) Manage the alteration of flood hazard areas and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain;
(5) Minimize damage to public and private facilities and utilities;
(6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas;
(7) Minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events;
(8) Ensure potential home buyers are notified that property is in a flood hazard area; and
(9) Meet the requirements of the National Flood Insurance Program for community participation as set forth in Title 44 Code of Federal Regulations, Section 59.22.

Policy 218.3.2 <was Policy 216.1.4>
Monroe County shall continue its policy of reviewing the current Building Code and, as appropriate, adopting structural standards and site alteration restrictions that meet or exceed the minimum FEMA requirements. The Building Code shall be reviewed and revised at least every five years. The recommendations of the applicable interagency hazard mitigation report shall be considered in revisions to the Code. [F.S. § 163.3178(2)(df)4.]

Policy 218.3.3
The County shall maintain and review regulations in special flood hazard areas to require construction by methods and practices that minimize flood damage, including but not limited to, anchoring by pilings or columns to prevent flotation, collapse and lateral movement of the structure; preventing the expansion, improvement or repair of construction below elevated post-FIRM buildings; prohibiting manmade alteration of sand dunes, dune ridge, mangrove stands or wetlands which would increase the potential of flood damage and elevation or freeboard standards for structures, electrical and mechanical equipment.

Objective 218.4
Any coastal construction in Monroe County shall be consistent with Chapter 161, F.S.

Policy 218.4.1
The County shall require any coastal construction activities to be consistent with the relevant sections of Chapter 161, F.S. including Section 161.55, F.S. establishing that all land area within
the Florida Keys located within Monroe County be included within the coastal building zone and subject to the requirements for activities or construction with the coastal building zone.

Objective 218.5
Encourage local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.

Policy 218.5.1<was Policy 216.1.5>
Monroe County shall continue to participate in the National Flood Insurance Program (NFIP) Community Rating System (CRS) to the maximum extent possible and shall continue to seek to improve its current CRS Class rating. [F.S. § 163.3178(2)(d)(f)].

Policy 218.5.2
Monroe County shall continue to develop data and dedicate the funding necessary to maintain or enhance its current CRS Class rating through County resources, grants and/or partnerships.

Policy 218.5.3
Monroe County shall continue to coordinate intergovernmental efforts related to participation in CRS, public outreach, sea level rise planning and disaster preparedness and recovery, to maximize County and flood insurance policy holder benefits.
AGENDA ITEM WORDING: Approval of a resolution in support of traffic flow improvement projects that would alleviate congestion on U.S. 1 and assist in improving the Level Of Service on U.S. 1.

ITEM BACKGROUND: Due to the geography of the Florida Keys and identification as a premier travel destination for tourists and visitors, the Florida Keys has unique traffic characteristics and traffic volumes that vary significantly during different seasons. The traffic issues on U.S. 1 affect the health, safety, welfare, economic sustainability and quality of life of the residents and visitors, alike. The Florida Keys are dependent on a safe, attractive, resilient, sustainable, and efficient access and travel along U.S. 1 throughout Monroe County. Increased congestion and poor traffic flow have consistently been a concern voiced by residents of the County for some time.

The 2021 U.S. 1 Arterial Travel Time and Delay Study (ATTDS) reports an overall LOS C on U.S. 1 with a median speed of 45.5 mph. However, two segments within Islamorada, Village of Islands operate below the adopted LOS standard and the ATTDS has continually identified one or more segments within Islamorada, Village of Islands as operating below the adopted LOS standard.

In 2019, the Board of County Commissioners (BOCC) established the Florida Keys Transportation Coordination Committee to coordinate transportation efforts between the County and its five municipalities, charging the committee with developing recommendations for potential solutions to the traffic issues that exist throughout the Florida Keys.

In addition, in March 2020, the BOCC gave approval to create a Transportation Master Plan to provide recommendations for U.S. 1 improvements to remedy Level of Service issues and to improve traffic flow within Monroe County and recommend multimodal improvements. The development of the U.S. 1 Transportation Master Plan includes reviewing relevant existing data, such as traffic volumes, crash data, transit information; meet with stakeholders to get input on transportation issues and improvement opportunities; public input from numerous sources and public meetings; analyzing these factors to identify potential issues and develop potential high-level solutions, including roadway and multi-modal solutions to address the needs of pedestrians,
bicyclists, public transit, and vehicular traffic.

The U.S. 1 Transportation Master Plan is anticipated to be completed and presented to the Monroe County Board of County Commissioners and the public in October 2021 to review the findings of the study and a recommended potential project list. It is anticipated the U.S. 1 Transportation Master Plan recommended potential project list will be further presented and reviewed by the Monroe County Board of County Commissioners to evaluate the opportunities, constraints and to prioritize the projects into timeframes of near-term (2021-2025), mid-term (2026-2030), long-term (2031-2040), and visionary (2041 and beyond).

Coordinated and comprehensive solutions are necessary for the traffic flow, congestion, safety and other transportation issues that affect the Florida Keys.

Monroe County is requesting the Florida Department of Transportation’s (FDOT’s) partnership to address and solve transportation issues affecting the Florida Keys and recognize the importance of and support for maintaining a safe, resilient and efficient access and travel along U.S. 1.

The proposed resolution includes the following items to communicate the BOCC’s support for traffic flow improvement projects that would alleviate congestion on U.S. 1, assist in improving the Level Of Service on U.S. 1 and requests that FDOT support U.S. 1 improvement projects that accomplish these goals and allocate funding within the five-year work program:

- The Florida Department of Transportation is respectfully requested to support traffic flow improvement projects that would alleviate congestion on U.S. 1 and assist in improving the level of service on U.S. 1 and to allocate funding within the five-year work program to implement these projects.

- The Board of County Commissioners does hereby support and requests the Florida Department of Transportation replace mile marker signs along U.S. 1 and install half mile marker signs (for example MM 88.5) to facilitate traffic flow by residents and visitors.

- The Board of County Commissioners does hereby support further reviewing the recommended potential project list from the U.S. 1 Transportation Master Plan, as well as recommendations from the Florida Keys Transportation Coordination Committee to improve traffic flow improvement projects in areas of marginally adequate or operating below the adopted LOS standard of “C” as identified in the most recent U.S. 1 Arterial Travel Time and Delay Study, for potential submission to the Florida Department of Transportation.

- The Board of County Commissioners respectfully requests that the Florida Department of Transportation dedicate staff to coordinate with the County and its five municipalities to review recommended projects with the local jurisdiction support and assist in evaluating project opportunities and constraints, and recommending prioritization of projects, implementation steps and timelines (such as planning, feasibility and warrant studies) and breakdown of costs.

- The Board of County Commissioners authorizes staff to work with the municipalities and the
Florida Department of Transportation to support this endeavor, particularly in identifying projects that can be funded and implemented within the next Five-Year Work Program.

PREVIOUS RELEVANT BOCC ACTION:
August 18, 2021: The BOCC gave staff direction to draft a resolution in support of traffic flow improvement projects that would alleviate congestion on U.S. 1, assist in improving the Level Of Service on U.S. 1 and request the Florida DOT support U.S. 1 improvement projects that accomplish these goals and allocate funding within the five-year work program.

August 18, 2021: The BOCC approved the 2021 U.S. 1 Arterial Travel Time and Delay Study, which measures Level of Service of U.S. 1 within both the unincorporated and incorporated County.

February 17, 2021: The Monroe County Board of County Commissioners adopted the recommendations of the U.S. 1 LOS Task Force and the 2021 Updated methodology document, A Methodology To Assess Level-Of-Service On US-1 In The Florida Keys for County use.

October 21, 2020: The Monroe County Board of County Commissioners adopted Resolution 355-2020, reconvening the US 1 LOS Task Force and tasking the U.S. 1 LOS Task Force with evaluating the LOS Methodology and potential updates.

March 18, 2020: The Monroe County Board of County Commissioners approved the completion a Transportation Master Plan to provide recommendations for U.S. 1 improvements to remedy Level of Service issues and to improve traffic flow within Monroe County and multimodal improvements.

July 17, 2019: The Monroe County Board of County Commissioners adopted Resolution 201-2019, establishing the Florida Keys Transportation Coordination Committee to coordinate transportation efforts between the County and its five municipalities.

CONTRACT/AGREEMENT CHANGES:
N/A

STAFF RECOMMENDATION: Approval

DOCUMENTATION:
Resolution Supporting US 1 improvement projects stamped

FINANCIAL IMPACT:

Effective Date:  
Expiration Date:  
Total Dollar Value of Contract:  
Total Cost to County:  
Current Year Portion:
Budgeted:
Source of Funds:
CPI:
Indirect Costs:
Estimated Ongoing Costs Not Included in above dollar amounts:

Revenue Producing: If yes, amount:
Grant:
County Match:
Insurance Required: N/A

Additional Details:
N/A

REVIEWED BY:
Emily Schemper Completed 08/31/2021 12:37 AM
Assistant County Administrator Christine Hurley skipped 08/31/2021 12:11 AM
Bob Shillinger Completed 08/31/2021 10:11 AM
Purchasing Completed 08/31/2021 10:43 AM
Budget and Finance Completed 08/31/2021 10:46 AM
Maria Slavik Completed 08/31/2021 10:47 AM
Liz Yongue Completed 08/31/2021 11:11 AM
Board of County Commissioners Pending 09/15/2021 9:00 AM
A RESOLUTION BY THE MONROE COUNTY BOARD OF COUNTY COMMISSIONERS IN SUPPORT OF TRAFFIC FLOW IMPROVEMENT PROJECTS THAT WOULD ALLEVIATE CONGESTION ON U.S. 1. AND ASSIST IN IMPROVING THE LEVEL OF SERVICE ON U.S. 1.; REQUESTING THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) SUPPORT U.S. 1. IMPROVEMENT PROJECTS THAT ACCOMPLISH THESE GOALS AND ALLOCATE FUNDING WITHIN THE FIVE-YEAR WORK PROGRAM; AND DIRECTING STAFF TO COORDINATE WITH FDOT AND THE LOCAL JURISDICTIONS TO IDENTIFY THE PROJECTS THAT CAN BE FUNDED WITHIN THE NEXT FIVE-YEAR WORK PROGRAM.

WHEREAS, the Florida Keys are a chain of islands that are connected to each other and the mainland by 112 miles of US Highway 1 (U.S. 1), extending from Key Largo to Key West; and

WHEREAS, traffic characteristics in the Florida Keys are unique and traffic volumes vary significantly during different seasons; and

WHEREAS, traffic issues on U.S. 1 affect the health, safety, welfare, economic sustainability and quality of life of the residents and visitors to the Florida Keys; and

WHEREAS, the Florida Keys are dependent on a safe, attractive, resilient, sustainable, and efficient access and travel along U.S. 1 throughout Monroe County; and

WHEREAS, Comprehensive Plan Policy 301.1.2 and Land Development Code Sections 114-2 and 114-200 adopt the overall and segment level of service (LOS) standard for U.S. 1 as LOS “C,” represented by a median speed of 45 mph; and

WHEREAS, on October 21, 2020, the Monroe County Board of County Commissioners adopted Resolution 355-2020, reconvening the US 1 LOS Task Force and tasking the U.S. 1 LOS Task Force with evaluating the LOS Methodology and potential updates; and

WHEREAS, on February 17, 2021, the Monroe County Board of County Commissioners adopted the recommendations of the U.S. 1 LOS Task Force and the 2021 Updated methodology document, A Methodology To Assess Level-Of-Service On US-1 In The Florida Keys for County use; and
WHEREAS, the 2021 U.S. 1 Arterial Travel Time and Delay Study (ATTDS) reports an overall LOS C on U.S. 1 with a median speed of 45.5 mph and two (2) segments within the Islamorada, Village of Islands operate below the adopted LOS standard (LOS D for Windley, Segment 20 and LOS E for Upper Matecumbe, Segment 19); and

WHEREAS, the ATTDS has continually identified one or more segments within the Islamorada, Village of Islands as operating below the adopted LOS standard; and

WHEREAS, on July 17, 2019, the Monroe County Board of County Commissioners adopted Resolution 201-2019, establishing the Florida Keys Transportation Coordination Committee to coordinate transportation efforts between the County and its five municipalities; and

WHEREAS, the Florida Keys Transportation Coordination Committee is charged with developing recommendations for potential solutions to the traffic issues that exist throughout the Florida Keys; and

WHEREAS, the Florida Keys Transportation Coordination Committee supports FDOT projects that improve traffic flow in congested areas and supports FDOT’s focus on merge and deceleration lanes, left turn lanes, and right turn only lane projects at certain locations where these can be of most use; and

WHEREAS, on March 18, 2020, the Monroe County Board of County Commissioners approved the completion a Transportation Master Plan to provide recommendations for U.S. 1 improvements to remedy Level of Service issues and to improve traffic flow within Monroe County and multimodal improvements; and

WHEREAS, the development of the U.S. 1 Transportation Master Plan includes reviewing relevant existing data, such as traffic volumes, crash data, transit information; meet with stakeholders to get input on transportation issues and improvement opportunities; public input from numerous sources and public meetings; analyzing these factors to identify potential issues and develop potential high-level solutions, including roadway and multi-modal solutions to address the needs of pedestrians, bicyclists, public transit, and vehicular traffic; and

WHEREAS, the U.S. 1 Transportation Master Plan is anticipated to be completed and presented to the Monroe County Board of County Commissioners and the public in October 2021 to review the findings of the study and recommended potential project list; and

WHEREAS, it is anticipated the U.S. 1 Transportation Master Plan recommended potential project list will be further presented and reviewed by the Monroe County Board of County Commissioners to evaluate the opportunities, constraints and to prioritize the projects into timeframes of near-term (2021-2025), mid-term (2026-2030), long-term (2031-2040), and visionary (2041 and beyond); and

WHEREAS, coordinated and comprehensive solutions are necessary for the traffic flow, congestion, safety and other transportation issues that affect the Florida Keys; and

WHEREAS, the FDOT is tasked with providing a safe statewide transportation system that ensures the mobility of people and goods, enhances economic prosperity, and preserves the quality of our environment and communities, and
WHEREAS, Monroe County requests FDOT's partnership to address and solve transportation issues affecting the Florida Keys and recognizing the importance of and support for maintaining a safe, resilient and efficient access and travel along U.S. 1;

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA:

Section 1. The Florida Department of Transportation is respectfully requested to support traffic flow improvement projects that would alleviate congestion on U.S. 1 and assist in improving the level of service on U.S. 1 and to allocate funding within the five-year work program to implement these projects.

Section 2. The Board of County Commissioners does hereby support and requests the Florida Department of Transportation replace mile marker signs along U.S. 1 and install half mile marker signs (for example MM 88.5) to facilitate traffic flow by residents and visitors.

Section 3. The Board of County Commissioners does hereby support further reviewing the recommended potential project list from the U.S. 1 Transportation Master Plan, as well as recommendations from the Florida Keys Transportation Coordination Committee to improve traffic flow improvement projects in areas of marginally adequate or operating below the adopted LOS standard of "C" as identified in the most recent U.S. 1 Arterial Travel Time and Delay Study, for potential submission to the Florida Department of Transportation.

Section 4. The Board of County Commissioners respectfully requests that the Florida Department of Transportation dedicate staff to coordinate with the County and its five municipalities to review recommended projects with the local jurisdiction support and assist in evaluating project opportunities and constraints, and recommending prioritization of projects, implementation steps and timelines (such as planning, feasibility and warrant studies) and breakdown of costs.

Section 5. The Board of County Commissioners authorizes staff to work with the municipalities and the Florida Department of Transportation to support this endeavor, particularly in identifying projects that can be funded and implemented within the next Five-Year Work Program.

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PASSED AND ADOPTED by the Board of County Commissioners of Monroe County, Florida, at a regular meeting held on the 15th day of September.

Mayor Michelle Coldiron
Mayor Pro Tem David Rice
Commissioner Craig Cates
Commissioner Eddie Martinez
Commissioner District V...

Vacant

BOARD OF COUNTY COMMISSIONERS OF MONROE COUNTY, FLORIDA

BY

MAYOR MICHELLE COLDIRON

ATTEST: KEVIN MADOK, CLERK

Sally M. Abrams
AS DEPUTY CLERK

Approved for form and legal sufficiency:

Robert B. Shillinger
Monroe County Attorney
AGENDA ITEM WORDING: Presentation of update on DEO Community Planning Technical Assistance Grant #P0363 to improve Monroe County's stormwater management guidance and regulations.

ITEM BACKGROUND: In October 2019, Monroe County received a Community Planning Technical Assistance grant from the Department of Economic Opportunity. The grant requires the County to update the Land Development Code for the management of stormwater and update two supporting guidance documents to be used by both County regulators and design professionals working within the County. The update will consider factors such as improving nutrient reduction in stormwater discharges and the effects of sea level rise. Updating the County’s codes and guidance materials will focus on options to eliminate or reduce off-property discharges to decrease discharge to nearshore waters.

The County has demonstrated its commitment to improving water quality through administrative and regulatory policies. The Coastal Management Element of the Comprehensive Plan states that we shall develop a comprehensive development plan that establishes specific goals for safe management and disposal of stormwater and conservation of our water resources. The county adopted Stormwater Management Ordinance Section 114-3 of the Land Development Code, which establishes guidelines for the safe management and disposal of stormwater from developed areas. This project includes the preparation of recommendations for Code amendments to Monroe County Code Sections 114-2(a)(5) and 114-3 to reflect the identified best practices in floodplain management ensuring consistency and streamlining the process.

Monroe County developed a “Manual of Stormwater Management Practices” in 1994 to accompany the Monroe County Stormwater Management Ordinance. The Manual provided Best Management Practices (BMP’s) that were appropriate for the time. The manual has not been updated since 1994 and no longer reflects advancements in stormwater management practices and standards. In conjunction with the Manual, Monroe County developed a “Layman’s Brochure” that provided guidelines for incorporation of BMP’s in the preparation of site plans for single family and duplex lots. The work provided for through this grant has resulted in updates to the Manual and Brochure and revisions for changes to Section 114-2(a)(5) and 114-3 of the Land Development Code.

The drafted documents have been developed by the County’s consultant, Jones Edmunds and
Associates, under the direction and guidance of Mike Roberts, Assistant Director Environmental Resources. To arrive at the recommended revisions, the consultant was required to prepare an analysis of existing principles and guidelines from various sources such as the South Florida Water Management District’s Environmental Resource Permit Applicant’s Handbook as well as stormwater manuals for other jurisdictions in the state with similar stormwater challenges and conditions. Further, the County and the consultant co-hosted two stakeholder engagement forum webinars to solicit the feedback from stormwater design professionals and County stormwater inspection and permit review staff. The forums were intended to gather information on building improved and more resilient stormwater management systems and to solicit ideas on BMP’s for implementation. Information obtained through the analysis of existing principles and the forums were used to inform the draft revised Manual, Brochure and changes to Monroe County Code Sections 114-2(a)(5) and 114-3.

The grant requires a public meeting to communicate the proposed code amendments and the revised Manual and Brochure. This meeting is required by the grant and provides an opportunity for the Board of County Commissioners and interested members of the public to review and provide feedback and direction on the draft documents and proposed Code revisions.

The proposed Code revisions include references to the updated Manual and Layman’s Brochure as appropriate. The code revisions also require that stormwater discharges meet net improvement criteria consistent with state standards or reduce the post-development annual average stormwater total nitrogen and phosphorous load by 95%. Compliance is attained when projects are designed, constructed, operated, and maintained in accordance with the BMPs requirements found in the manual of stormwater management practices. The proposed code revisions further eliminate the use of dry detention and wet retention as best management practices, as these options have been shown to not achieve the required net improvement in water quality. Section 114-3(h)(6) requires BOCC approval of the Manual, so the revised Manual and Brochure are included with this agenda item.

**PREVIOUS RELEVANT BOCC ACTION:**

**CONTRACT/AGREEMENT CHANGES:**
n/a

**STAFF RECOMMENDATION:** Staff requests feedback regarding the proposed updates of the Manual of Stormwater Management Practices, the Layman's Brochure and revised language in Monroe County Code Sections 114-2(a)(5) and 114-3.

**DOCUMENTATION:**
MCC_Sec._114-2_114-3_Final_Draft
SW-Manual_Monroe_Final_Draft
Monroe_County_Laymans_Final_Draft

**FINANCIAL IMPACT:**
Effective Date: 
Expiration Date: 

Total Dollar Value of Contract: 
Total Cost to County: 
Current Year Portion: 
Budgeted: 
Source of Funds: 
CPI: 
Indirect Costs: 
Estimated Ongoing Costs Not Included in above dollar amounts: 

Revenue Producing: If yes, amount:
Grant: DEO CPTA Grant P0363, $40,000
County Match: $0
Insurance Required: n/a

Additional Details:
NA - The work is being funded through DEO CPTA Grant #P0363

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REVIEWED BY:
Michael Roberts Completed 03/24/2020 9:11 AM
Emily Schemper Completed 05/27/2020 5:57 PM
Steve Williams Completed 05/28/2020 2:38 PM
Assistant County Administrator Christine Hurley Completed 05/29/2020 9:32 AM
Purchasing Completed 05/29/2020 9:49 AM
Budget and Finance Completed 05/29/2020 11:40 AM
Maria Slavik Completed 05/29/2020 11:41 AM
Kathy Peters Completed 06/01/2020 8:52 AM
Board of County Commissioners Pending 06/17/2020 9:00 AM
BULK ITEM: No  DEPARTMENT: Planning/Environmental Resources

TIME APPROXIMATE: 1:30 public hearing  STAFF CONTACT: Michael Roberts (305) 289-2502

AGENDA ITEM WORDING: A Public Hearing to Consider Adoption of an Ordinance by the Monroe County Board of County Commissioners Amending Monroe County Land Development Code ("LDC") Chapter 114, Article I, Section 114-2 ("Level of Service Standards") to Update Stormwater Quality Performance Standards; LDC Section 114-3 ("Surface Water Management Criteria") to Require Net Improvement in Stormwater Quality While Providing Flexibility in Achieving Stormwater Quality Standards and Providing Updates to the Stormwater Manual and Layman’s Brochure to Incorporate New Approaches for Managing Stormwater; LDC Section 114-13 ("Fences") to Complement the Clarity of Existing/Pre-Existing Legislative and Regulatory Intent and Providing Criteria for Retaining Walls; Chapter 114, Article IV ("Landscaping") to Complement the Clarity of Existing/Pre-Existing Legislative and Regulatory Intent and Providing for Updated Species Lists; LDC Section 114-163 ("Waterfront Lighting") to Complement the Clarity of Existing/Pre-Existing Legislative and Regulatory Intent; and LDC Section 114-164 ("Nonconforming Lighting") Complement the Clarity of Existing/Pre-Existing Legislative and Regulatory Intent.

ITEM BACKGROUND:
In October 2019, Monroe County received a Community Planning Technical Assistance grant from the Department of Economic Opportunity (“DEO”). The grant required Monroe County to update the Monroe County Land Development Code (“LDC” or “Code”) for the management of stormwater and to update two supporting guidance documents to be used by both County regulators and design professionals working within the County.

Focusing on options to eliminate or reduce off-property discharges to decrease discharge(s) to nearshore waters is a principal purpose of updating Monroe County’s Code(s). In 1994, Monroe County developed a Manual of Stormwater Management Practices (“Manual”) to accompany Monroe County’s stormwater management ordinance. The Manual provided Best Management Practices (“BMPs”) that were appropriate for the time. The Manual had not been updated since 1994 and no longer reflected considerable advancements in stormwater management BMPs and standards. In conjunction with the Manual, Monroe County developed a Layman’s Brochure (“Brochure”) that provided guidelines for incorporation of BMPs in the preparation of site plans for single-family and duplex lots.
The work provided for through the above-referenced grant included updates to the Manual and Brochure and for revisions for changes to LDC Sections 114-2(a)(5) and 114-3 in accordance with Monroe County Comprehensive Plan (“Comprehensive Plan” or “CP”) Policy 1001.1.3.

**Policy 1001.1.3**
Monroe County shall maintain, implement, review and update, as necessary, the County’s stormwater management regulations and Stormwater Master Plan. All improvements for replacement, expansion or increase in capacity of drainage facilities shall conform to the adopted level of service criteria pursuant to Policy 1001.1.1.

The updated Manual and Brochure were presented to the Monroe County Board of County Commissioners (“BOCC”, “Monroe County”, or “County”) at the BOCC’s duly noticed, regularly scheduled June 17, 2020, public meeting, along with the proposed amendment(s) to the Land Development Code. The amendment(s) currently proposed shall implement these updated documents by reference through the LDC.

In addition to the changes regarding stormwater, the Monroe County Planning and Environmental Resources Department (“Department”) professional staff are proposing additional amendment(s) to LDC Chapter 114 complement the existing/pre-existing clarity of Code text in several areas, including but not limited to fences, landscaping, adding criteria for retaining walls, etc.

**Community Meeting and Public Participation/Input**
In accordance with LDC Section 102-159(b)(3), a virtual community meeting was held on September 23, 2020, to receive public input. There were 24 attendees, inclusive of nine members of the Department’s professional staff. Based upon public input received at and subsequent to that first community meeting, a second community meeting was held on November 4, 2020. Attendance at this meeting consisted of 12 members of the public and eight members of the Department’s professional staff.

**Development Review Committee and Public Participation/Input**
On March 23, 2021, the Monroe County Development Review Committee (“DRC”) conducted a virtual public meeting to review and receive public input.

**Planning Commission**
The Monroe County Planning Commission (“Planning Commission” or “PC”) considered the proposed amendment(s) at a duly noticed regularly scheduled public meeting held on April 28, 2021. The Planning Commission requested certain revisions to the proposed amendment(s) and tabled the item to a future meeting; those recommendations included the following:

1. **Revise language in LDC Section 114-2(5) to reference the new Florida Statute regarding storm-water level of service (“LOS”).**

   State water quality criteria is codified at 62-302.500 Florida Administrative Code. The Department’s professional staff have provided this reference in the Code language.

2. **LDC Section 114-13 in re: fence height ought to be left at highest grade, and also develop additional language to address conflicts with other required fencing and more extreme issues.**

   The Planning and Environmental Resources Department’s professional staff have removed the reference to lowest existing grade; however, the Department’s professional staff have
not found any conflicts or other extreme issues within LDC Chapter 114-13.

3. **LDC Section 114-100(a)(13), remove the prohibition on turf in required landscape areas.**

LDC Section 114-100(a)(13) has been deleted as requested.

4. **LDC Section 114-106, provide additional landscaping incentives.**

The Department’s professional staff have added the following recommendation for additional water conservation incentives:

*In addition to the Low Impact Development (“LID”) strategies outlined in LDC Section 114-100, the addition of managed cisterns or rain barrels may be incorporated into the site stormwater management facilities. A site’s storm water retention requirements may be reduced by the capacity volume of plumbed and managed systems that provide irrigation and/or other non-potable applications.*

The Planning Commission considered the proposed amendments as revised above at a duly noticed public meeting held on July 20, 2021, and recommended approval to the Monroe County BOCC.

**PREVIOUS RELEVANT BOCC ACTION:**

September 2, 2015: The Monroe County BOCC held public hearings to review and discuss proposed amendments to the Monroe County Land Development Code to be consistent with the transmitted Monroe County Year 2030 Comprehensive Plan, the results of the Comprehensive Plan Technical Document Update, the adopted 2012 Evaluation and Appraisal Report (“EAR”), and the 2014 Evaluation and Appraisal Notification Letter. Chapters reviewed at the September public hearing included, *inter alia*, Chapter 114 (“Development Standards”) and Chapter 118 (“Environmental Protection”).

March 1, 2016: At a special public meeting, the Monroe County BOCC held the first of two public hearings to consider adoption of the Monroe County 2030 Comprehensive Plan and the proposed amendments to the Monroe County Land Development Code to be consistent with the Monroe County Year 2030 Comprehensive Plan.

April 13, 2016: At a special public meeting, the Monroe County BOCC adopted Ordinance No. 006-2016, amending the Monroe County Land Development Code to be consistent with the transmitted Monroe County Year 2030 Comprehensive Plan, the results of the Comprehensive Plan Technical Document Update, the adopted 2012 EAR, and the 2014 Evaluation and Appraisal Notification Letter.

June 17, 2020: At a duly advertised regularly scheduled public meeting, the BOCC was presented with updates to the Manual of Stormwater Management Practices and Layman’s Brochure as well as the recommended revisions to the Monroe County Land Development Code as related to
CONTRACT/AGREEMENT CHANGES:
None

STAFF RECOMMENDATION: Approval

DOCUMENTATION:
Ordinance
2019-183 Staff Report - Chapter 114 amendments
Layman's Brochure - March 2020

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Peter Morris      Completed   08/31/2021 4:48 PM
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Maria Slavik      Completed   08/31/2021 5:52 PM
Liz Yongue        Completed   08/31/2021 6:08 PM
Board of County Commissioners Pending   09/15/2021 9:00 AM
MANUAL OF STORMWATER MANAGEMENT PRACTICES
To Be Used In Conjunction With The Monroe County Land Development Code
March 2020
# Table of Contents

1. **Introduction** ........................................................................................................... 1-1
2. **Applicability** ............................................................................................................ 2-1
3. **Contents of a Stormwater Management Plan** ....................................................... 3-1
4. **Methods of Stormwater Treatment** ......................................................................... 4-1
   4.1 **Wet Detention** ...................................................................................................... 4-2
   4.1.1 **Definition** ......................................................................................................... 4-2
   4.1.2 **Requirements as Expressed in this Manual** ..................................................... 4-2
   4.1.3 **Method of Achievement** ................................................................................... 4-3
   4.2 **Retention** .............................................................................................................. 4-3
   4.2.1 **Definition** ......................................................................................................... 4-3
   4.2.2 **Requirements as Expressed in this Manual** ..................................................... 4-3
   4.2.3 **Method of Achievement** ................................................................................... 4-3
   4.3 **Low Impact Development or Design** .................................................................... 4-4
   4.3.1 **Definition** ......................................................................................................... 4-4
   4.3.2 **Requirements as Expressed in this Ordinance** .................................................. 4-4
   4.3.3 **Method of Achievement** ................................................................................... 4-5
5. **Control Structures** ..................................................................................................... 5-1
   5.1 **Definition** ............................................................................................................. 5-1
   5.2 **Purpose** ................................................................................................................. 5-1
   5.3 **Types of Control Structures** .................................................................................. 5-1
6. **Criteria for Single-Family/Duplex Lots** ................................................................. 6-1

## List of Figures

- **Figure 1**: Schematics of Four Basic Detention/Retention Stormwater Runoff Management Systems .......................................................... 4-2
- **Figure 2**: Spreader Swale (Indirect Discharge) .......................................................... 5-2
- **Figure 3A**: Orifice Weirs ............................................................................................ A1-1
- **Figure 3B**: V-Notched Weir ....................................................................................... A1-2
- **Figure 3C**: Rectangular Weir .................................................................................... A1-3
- **Figure 4A**: Pollution Retardant Catch Basin ............................................................. A2-2
- **Figure 4B**: Pollution Retardant Catch Basin with Removable Down-turned Pipe .... A2-3
- **Figure 4C**: Pollution Retardant Catch Basin with Removable Downturned Pipe ...... A2-4
- **Figure 5**: Typical Exfiltration Trench ....................................................................... A4-2
LIST OF TABLES

Table 1    Required Retention Depths for Stormwater Treatment .........................4-4
Table 2    Required Retention Depth for Single Family/Duplex Lots ......................6-2

APPENDICES

Appendix 1    Control Structures
Appendix 2    Catch Basins and Pollutant Retardant Structures
Appendix 3    Wet-Detention Facilities
Appendix 4    Dry-Retention Facilities
Appendix 5    Stormwater Management Plan Checklist
Appendix 6    Sample Calculations for Single Family/Duplex Lots
Appendix 7    Bibliography
1 INTRODUCTION

Monroe County has a unique, water-oriented environment and because of the importance of its aquatic environment, both aesthetic and economic, a Stormwater Management Ordinance (hereinafter referred to as the "Ordinance") has been adopted to help protect these resources from the harmful effects of stormwater runoff.

Stormwater is the water that results from a rain event. Runoff is defined as the portion of stormwater that does not percolate into the ground, evaporate, and is not intercepted before reaching a stormwater management system. Stormwater runoff from undeveloped lands usually does not present a management problem since it is relatively clean, and the volume usually is minimal. When natural land is converted to some other land uses, stormwater becomes a problem and should be managed. Soil is often paved over and impervious surfaces are created. When impervious surfaces are created, stormwater is no longer able to percolate into the ground and accumulates on the surface causing flooding in some areas. These impervious areas also allow for pollution accumulation, degrading the quality of stormwater runoff and rendering it a pollution source. For these two reasons, flooding (water quantity) and pollution (water quality), stormwater management practices are implemented in developed areas.

Stormwater runoff quality varies with land use. A multitude of pollutants exist in stormwater runoff as well as the sources for these pollutants. These pollutants can consist of nutrients, solid waste, litter, lead, petroleum products (from automobiles), chemicals, fertilizers, and herbicides applied to lawns, and atmospheric deposition. Higher nutrient loads are generated by residential and industrial land uses and commercial, mixed urban, and roadways generate higher concentrations of metal contamination. Heavy metals are of concern because several are known to be toxic to many aquatic plant and animal species. Motor vehicles and road surfaces are the main sources of heavy metals in stormwater runoff. Nutrients and pesticides from lawn fertilizers and atmospheric deposition can cause algal blooms and similar occurrences if untreated runoff is allowed to enter surface waters. During a rainfall event, stormwater runoff flows over these surfaces, picking up pollutants, and carrying them to surface waters.

Stormwater not only causes adverse environmental impacts, but economic impacts as well. An increase in the number of impervious surfaces increases the potential for flooding and property damage. Stormwater can also lead to reduced fisheries production because of the degradation of water quality. For these reasons, stormwater management practices have been implemented throughout Florida and the United States. This manual is designed as a guide to Best Management Practices (BMP's) for stormwater management in Monroe County.

A stormwater management practice is one that shapes and improves the quality and quantity of stormwater runoff being discharged to receiving waters. BMPs for stormwater are those that meet discharge quantity and quality criteria at a minimal cost (Wanielista and Yousef, 1985).

Section 114-3 of the Monroe County Code addresses the issue of flood protection and water quantity management. Although this stormwater management ordinance does have general
criteria for water quantity and flood protection, the purpose is to control stormwater-generated pollution and is water quality based.

The practices and procedures described in this manual are those in common usage throughout Florida and also apply to Monroe County. The bibliography at the end of this manual lists some of the relevant sources of additional information on this subject. This manual will be used to review and approve stormwater management systems permitted by the County and will be modified as appropriate technology dictates.
2 APPLICABILITY

This manual is to accompany the Monroe County Stormwater Management Ordinance. This Ordinance was incorporated into the Monroe County Land Development Code by amendment to the Comprehensive Plan. A Stormwater Management Plan will be required as part of all building permit applications (except those projects exempted pursuant to Section 114-3(c) of the Land Development Code). The definitions used in this manual are consistent with those in the Land Development Code and the Monroe County Stormwater Management Ordinance.
3 CONTENTS OF A STORMWATER MANAGEMENT PLAN

A stormwater management plan is required pursuant to Section 114-3 (g) of the Land Development Code for those projects not exempted pursuant to Section 114–3 (c). A Plan is to be submitted as part of the Monroe County building permit application. The Plan will indicate how project design will incorporate the required stormwater treatment criteria. The following is an outline of those elements that may be required as part of a stormwater management plan. Appendix 5 contains a check-list of these elements. This will allow County staff to determine which of the elements a specific plan should or should not require for each site. Some of these elements are required for other parts of a County building permit, but also need to be considered as part of the Stormwater Management Plan. In these instances, specific criteria are the same as those already required by the County and are not discussed further in this Manual.

1. Site Information:

a. Detailed location sketch.
b. Description of vegetative cover, including wetlands.
c. Location and size of preservation or mitigation areas.
d. Paving, grading, and drainage plan.
e. Vegetation protection plan.
f. Soils map and percolation test results.
g. Wet-season water table elevation.
h. Future wet-season water table elevation (30-year).
i. Description of measures to be used during construction to eliminate adverse off-site impacts, such as increased turbidity or siltation, if applicable.
j. Recent aerial photograph.
k. Map of drainage basin boundaries.
l. Map of floodplain and elevations.

2. Master Stormwater Management Plan:

a. Location of all existing and proposed on-site water bodies, including wetlands.
b. Location of all off-site wetlands, water courses, and waterbodies affected by on-site drainage patterns.
c. Location and detail of all major control structures and elevations. Preliminary construction plans may be submitted for conceptual approval.
d. Right-of-way and easement locations for stormwater management systems including all areas reserved for stormwater management purposes.
e. Location and size of on-site stormwater management facilities.
f. Square footages, acreages, and percentage of property proposed as:
   (1) Impervious surface (excluding waterbodies).
   (2) Impervious surface (waterbodies).
   (3) Pervious surface.
   (4) Total square footage or acreage of the project site.
g. Proposed grading plan.
h. Treatment volumes and discharge rates (if applicable) for stormwater runoff.

3. Legal and Institutional Information:

a. Entity responsible for operation and maintenance of surface water management system.

b. If the operational and maintenance entity is to be a public body, a letter from the public body confirming this must be submitted before staff approval. If the entity is a homeowners’ association, documents verifying the existence of such organization and its ability to accept operation and maintenance responsibility must be submitted before staff approval.
4 METHODS OF STORMWATER TREATMENT

Stormwater treatment facilities are designed to treat stormwater runoff to a level that results in the pollutant loads discharged after development either being less than the pollutant loads discharged before development (a net improvement) or that results in pollutant loads being reduced by 95 percent. The volume to be treated depends on the type of stormwater management facility(ies) used and the land use of the property. The two most commonly used methods of stormwater treatment are wet detention and dry retention. A detention facility collects and temporarily stores a treatment volume to provide for treatment through physical, chemical, or biological processes with subsequent gradual release of the stormwater to a surface water system. A retention facility is designed to prevent the discharge of a given volume; however, it is slowly released from the facility. A retention or detention facility built above the groundwater table is "dry." A facility with the bottom below the control elevation is "wet." Figure 1 conceptually illustrates the differences between each. The wet-season water table plays an important part in the functioning of retention systems. To ensure that stormwater practices continue to function, a stormwater design will need to include a determination of the wet-season water table and an estimate of the future wet-season water table. The future wet-season water table will be assumed to be increased by the difference in sea level in the year that the wet-season water table determination was made and the projected sea level 30 years after the permitting. The estimated sea level rise projections adopted the Southeast Florida Climate Change Compact must be used for this determination.

A newer approach to stormwater management is called Low Impact Development or Design (LID). This approach seeks to replicate a more natural hydrologic function on the landscape and uses a combination of stormwater management practices to meet the objective stated above. Some of these practices include pervious pavement, vegetated swales, vegetated filter strips, bioretention systems, cisterns, and green roofs.

Very often a stormwater management system incorporates a combination of treatment methods. It is unfeasible to describe all the possible combinations in this manual. The criteria for each individual type of treatment is detailed. The intent is to ensure that the proper volume of runoff is treated in an appropriate manner for the land use. References to guidelines for LID approaches to stormwater management are also provided.

Appendices 3 through 6 provide the design criteria for each form of management.
4.1 WET DETENTION

4.1.1 DEFINITION

Wet detention is the collection and temporary storage of stormwater runoff—before controlled discharge into receiving waters—in a permanently wet impoundment in such a manner as to provide for treatment through physical, chemical, and biological processes with subsequent gradual release of the stormwater. A wet detention facility is a basin or pond with a bottom elevation below the wet-season water table or control elevation.

4.1.2 REQUIREMENTS AS EXPRESSED IN THIS MANUAL

Stormwater designs must demonstrate a net improvement in nutrient loads or a 95 percent reduction in pollutant loads. This can be demonstrated through methods that are accepted by the South Florida Water Management District (SFWMD). An example of one of these methods is using BMP Trains, which is freely available from the University of Central Florida Stormwater Management Academy (https://stars.library.ucf.edu/bmptrains/).

As an alternative to demonstrating net improvement or 95-percent reduction, wet detention with pretreatment that meets the following criteria can be used as a stormwater practice and will be presumed to meet the County stormwater treatment objectives:

- Provide a treatment volume sized to the first 1 inch of runoff from the site or the total of 2.5 inches times the percent of impervious area, whichever is greater.
- One-half inch of the detained volume must be released through a control structure within 24 hours.
- Wet detention cannot be used as the sole form of stormwater treatment. Projects using wet detention must provide at least 2.5 inch of runoff pre-treatment in dry retention before discharging into a wet detention facility.
4.1.3 Method of Achievement

Man-made lakes or ponds on the site are generally used for wet detention. These lakes or ponds must meet the design criteria in Appendix 3 of this manual. The retention volume can be achieved using the guidelines in Section 4.2 and Section 4.3 of this manual.

4.2 Retention

4.2.1 Definition

Dry retention is a stormwater system designed to prevent the discharge of a given volume of stormwater runoff into surface waters by complete on-site storage of that volume. A dry-retention facility has a bottom elevation at least 1 foot above the future condition wet-season water table and is usually dry. Stormwater is released only during times of heavy rainfall or flooding.

4.2.2 Requirements as Expressed in This Manual

Stormwater designs must demonstrate a net improvement or a 95 percent reduction in pollutant loads in nutrient loads. This can be demonstrated through methods that are accepted by the SFWMD. An example of one of these methods is using the BMP Trains, which is freely available from the University of Central Florida Stormwater Management Academy (https://stars.library.ucf.edu/bmptrains/).

As an alternative to demonstrating net improvement or 95-percent nutrient load reduction, dry-retention systems that retain the retention depth listed in Table 1 multiplied by the total project area will be presumed to meet the County stormwater treatment objectives.

4.2.3 Method of Achievement

Examples of dry-retention facilities include infiltration systems (vegetated swales, bioretention systems), and seepage systems (exfiltration trenches, pervious pavement, exfiltration vaults). Of these two, infiltration systems provide better pollution attenuation. The vegetation takes up a percentage of the nutrients commonly found in stormwater runoff. Most heavy metals bind with the soils above the water table, and the potential for them entering the groundwater is reduced.

Seepage systems consist of an underground facility which that relies on a mostly outward dispersion of stormwater from the facility to the groundwater. These structures are constructed a minimum of 1 foot above the future wet-season water table. These systems are most suitable for areas where the aquifer has a high transmissivity, such as Monroe County. However, they do not provide the nutrient uptake that is offered with vegetated infiltration systems.

Infiltration systems and seepage systems need a highly permeable substratum to allow the stormwater runoff to percolate into the ground. Seepage systems do not require as much land area as infiltration systems, since they can be installed underground. However, the future wet-season water table at the project site must be at least 1 foot below the seepage structure.
4.3 LOW IMPACT DEVELOPMENT OR DESIGN

4.3.1 DEFINITION

LID is an approach to stormwater and land use management that aims to replicate a more natural hydrologic function by promoting infiltration, filtration, storage, and evaporation or stormwater runoff. This approach should focus on conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project’s design, especially its landscaping and open space. Stormwater management through LID often includes a treatment train consisting of several different stormwater management practices that combine to meet the stormwater quality objectives for the site. Examples of practices that are often included in LID are:

- Minimizing clearing, grading, soil disturbance, and compaction on a site.
- Minimizing impervious area on site.
- Pervious pavement.
- Shallow bioretention systems.
- Vegetated or grassed swales.
- Vegetated filter strips.
- Minimizing directly connected impervious area.
- Cisterns.
- Stormwater harvesting.

4.3.2 REQUIREMENTS AS EXPRESSED IN THIS ORDINANCE

Using a LID approach for stormwater management is encouraged in Monroe County. However, stormwater designs must demonstrate a net improvement or 95-percent reduction in pollutant loads. This can be demonstrated through methods that are accepted

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by SFWMD. An example of one of these methods is using BMP Trains, which is freely available from the University of Central Florida Stormwater Management Academy (https://stars.library.ucf.edu/bmptrains/).

4.3.3 METHOD OF ACHIEVEMENT

A LID approach to stormwater management starts during the planning and site evaluation and continues through the selection and design of the most appropriate stormwater treatment practices for the site. The goal of stormwater management should be to retain, detain, recharge, filter, and use as much stormwater as possible on a site. A variety of LID design manuals in Florida describe this approach to stormwater management. These include but are not limited to the following:

- Low-Impact Development and Green Infrastructure: Pollution Reduction Guidance for Water Quality in Southeast Florida
- Sarasota County Low-Impact Development Guidance Document
- Duval County Low-Impact Development Stormwater Manual
- Pinellas County Stormwater Manual

The manuals listed above provide design guidelines for a variety of LID stormwater practices, which include:

- Grassed conveyance swales.
- Shallow bioretention.
- Pervious pavement.
- Stormwater harvesting.
- Green roofs.
- Rainwater harvesting (cisterns).
- Detention with biofiltration.

Monroe County will generally accept the LID practices and design consideration described in the LID manuals referenced above, although it should be noted that the performance curves and tables provided in these manuals do not necessarily apply to Monroe County’s hydrologic conditions. Pollutant load reductions will need to be determined by the appropriate Florida-registered and licensed professional.
5 CONTROL STRUCTURES

5.1 DEFINITION

A control structure is a device through or over which water is discharged from a stormwater management system. Direct discharge occurs when stormwater is released through a control structure to the receiving water body. If the discharge from the stormwater management system is by a means other than a control structure (e.g., sheet flow or spreader swale), it is considered indirect discharge.

5.2 PURPOSE

The primary purpose of a control structure in a detention facility is to release the calculated runoff volume slowly over a specified period. In a retention facility the control structure allows for volumes in excess of the calculated retention volume to leave the system in a manner that provides for adequate downstream flood protection.

5.3 TYPES OF CONTROL STRUCTURES

Direct discharge from a water management facility to the receiving body is usually achieved through control structures such as weirs and orifices. The following criteria must be met for all methods of direct discharge:

1. Trash-collecting gratings must be on the intake of all structures that discharge to surface waters.
2. Detention facilities must be discharged from the mid-depth of the water column.
3. If the property is greater than 50-percent impervious or contains a system with inlets in paved areas, discharge structures must include a baffle, skimmer, or other suitable mechanism for preventing oil and grease from being discharged. (Appendix 2 describes these mechanisms, which are part of a catch basin).
4. Direct discharge will only be allowed to those areas that by virtue of their large capacity or configuration are able to absorb concentrated discharges.

When using indirect discharge to release stormwater, a spreader swale is commonly used. The swale is positioned parallel to the receiving body, and the side adjacent to the receiving body is lower than the side opposite the receiving body. Figure 2 illustrates this form of discharge. The swale allows the water to flow into the receiving body but not flood the adjoining property. This method works well when trying to maintain a proper water level in wetlands that are used for stormwater management. The spreader swale is also a treatment facility for stormwater runoff. Runoff in excess of the first flush is allowed to enter the wetland system via sheet flow.
Figure 2  Spreader Swale (Indirect Discharge)

\[ H = \text{depth of swale required to treat runoff (example—1st half inch of runoff)} \]
6 CRITERIA FOR SINGLE-FAMILY/DUPLEx LOTS

Single family and duplex homes may be exempted from filing a Stormwater Management Plan pursuant to Section 14-3(d), provided guidelines established in the "Layman's Brochure" are used to treat stormwater. The Layman's Brochure and the following design criteria generally use vegetated swales. However, other retention practices may be used. The retention volume specified in these design criteria will provide adequate stormwater treatment on a single-family/duplex lot to meet the criteria of Section 114-3 (f) (2). However, calculations demonstrating a net improvement or 95 percent reduction in nutrient loads may be submitted as an alternative to using the retention volume specified in these design criteria. These stormwater calculations must be completed by an appropriate Florida-registered and -licensed professional.

The retention volume depends on the lot size and the stormwater management system used. Stormwater treatment can also be provided through the use of other retention systems such as pervious pavement, exfiltration trenches, or shallow stormwater vault systems.

Required retention depths for single-family/duplex lost are provided in Table 2.

If swale(s) are used, they must meet the following criteria:

▪ Runoff from site must be drained to swale.
▪ Swale length must be greater than its width.
▪ Swale side slope must be 4:1 or shallower (horizontal to vertical).
▪ Swale must be placed so that any natural areas to be preserved are not disturbed.
▪ Swale must be at least 6 inches deep.
▪ Swales should be vegetated. If a swale is not vegetated, then a 6-inch layer of soil amendment formulated to reduce nutrient loading must be installed directly below the swale. Specifications and published nutrient reduction test results for the media must be provided at the time of testing. Examples of acceptable media are NutriGone™ (distributed by EcoSense International) and Bold and Gold® (distributed by Environmental Conservation Solutions)

Retention systems must discharge off-site to prevent flooding. For retention systems, a control structure will allow runoff in excess of the volume of the swale to be discharged to the receiving body. There may be More than one retention system may be present on the property, provided each meets these criteria and the total volume of the swales is at least the calculated volume. Vegetated swales may be incorporated into the set-back criteria required by the Monroe County Code. Appendix 6 contains sample calculations for single-family/duplex lots. Florida-Friendly Landscaping™ is encouraged for vegetated swales.
### Table 2: Required Retention Depth for Single Family/Duplex Lots

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Appendices

The Appendices contain the specific design criteria for the BMPs discussed in this manual. These criteria are based on best available knowledge in the area of stormwater management. As technology dictates, these criteria will change.
Appendix 1

Control Structures
APPENDIX 1 – CONTROL STRUCTURES

This Appendix contains details on the designs for four types of control structures: a triangular orifice, a circular orifice, a v-notched weir, and a rectangular weir.

Orifices and V-notched weirs are generally used with control structures associated with detention facilities. These structures are commonly referred to as bleed-down mechanisms and allow for controlled release of a portion of detained volume over a specified period (usually 1/2 inch in 24 hours). Rectangular weirs are commonly used with detention and retention facilities. In retention facilities, a rectangular weir allows for the runoff in excess of the retained volume to leave the facility. Rectangular weirs serve the same purpose in detention facilities, using a circular or triangular orifice as the bleed-down device. Figures 3A through 3C illustrate these different types of control structures and their use.

The retained and detained volumes used in the determination of the dimensions of the control structures are calculated from the equations following each drawing.

Figure 3A   Orifice Weirs

\[ A = \frac{Q}{4.8H^{3/2}} \]

Q = discharge (cfs)

A= Area of orifice (square feet)

H=Head above orifice centroid* (feet)

*Centroid for a circular orifice is the center; centroid for a triangular orifice is two-thirds the distance from the vertex.

The first is a circular orifice. As the name and illustration implies, it is a round opening. The bottom of the opening is at the control elevation. In the case of dry detention, the bottom of the circle is at the ground elevation. The most common method for constructing a circular orifice is placing a PVC pipe in the control structure. This pipe then discharges to the receiving body or to a conveyance system discharging to the receiving body.
The second type of orifice is a triangular orifice which is an inverted triangular opening in the control structure. The vertex of the orifice is at the control elevation. If the facility is a dry detention facility, the vertex is at the ground elevation.

For maintenance purposes, the cross-sectional area of the orifice in any control structure must be greater than 6 square inches to ensure that the structure allows for free flow of water and does not become clogged. The above formula is used to calculate the cross-sectional area of the orifice.

The following is an example calculation for an orifice in a control structure which is part of a wet detention facility. The following assumptions are made.

- $H = 3$ feet
- One-half inch of retained stormwater = 400,000 ft$^3$

  - First, the discharge rate ($Q$) must be calculated:

    $Q = \frac{400,000 \text{ ft}^3}{24 \text{ hours} \times \frac{1 \text{ hour}}{8640 \text{ sec}}}$

    $Q = 4.63 \text{ cfs}$

    $A = \frac{Q}{0.52} \text{ ft}^2$

    $A = \frac{4.63}{0.52} \text{ ft}^2$

    $A = 8.93 \text{ ft}^2$

    $A = 0.56 \text{ ft}^2$

This meets the minimum dimensional criteria for orifices in detention facilities.

**Figure 3B  V-Notched Weir**
V-notched weirs are used with wet- and dry- detention facilities. The configuration of the opening allows for slow discharge of detained water over time. The rate of discharge depends on the angle of the V-notch. When designing a control structure with a V-notch weir, the angle is calculated using the above formula. $V_{det}$ refers to 1/2 inch of the detained volume that must be discharged within 24 hours.

For maintenance and functional purposes, the angle of the V-notch should not be less than 20° being the minimum to allow for adequate flow of water and to prevent blockage of the weir.

The following is an example calculation for a V-notched weir, which is part of a 2-foot-deep dry-detention facility, making the following assumptions:

$$H = \text{2.0 feet (depth of detention facility)}$$
$$V_{det} = 500 \text{ ft}^2$$
Therefore, $V_{det} = 0.01 \text{ acre feet}$

$$\theta = 2 \arctan (0.492) ((V_{det}/H^{2.5}))$$
$$\theta = 2 \arctan (0.492) ((0.01/2^{2.5}))$$
$$\theta = 2 \arctan (0.031)$$
$$\theta = 3.19 \text{ degrees}$$

Since the calculated angle is less than 20°, and the angle of the V-notch must be at least 20°, this facility will need a 20° angle. Because most of the stormwater management facilities reviewed by County staff will be small, calculations in which the angle of the notch is less than 20° will be common.

**Figure 3C Rectangular Weir**

A rectangular weir is a structure that allows excess volumes of water to leave a stormwater management facility. A rectangular weir is used with retention facilities to discharge runoff in excess of the retained volume. A rectangular weir can also be used in conjunction with a detention facility that has an orifice for the delayed release of stormwater runoff. The rectangular weir allows for the discharge of excess runoff during severe rain events. The weir is constructed on top of the control structure. Rectangular weirs are used in areas
where a receiving water body exists for excess runoff or a method of conveying excess runoff to a receiving water body.

Control structures can be made of several different types of materials. Those commonly used include concrete, cement, aluminum, and earthen material. Polyvinyl chloride (PVC) pipe is often used as a bleed-down mechanism (circular orifice).

All control structures must discharge to a receiving body of water that has the capacity to handle the discharge. If no receiving water body exists adjacent to the stormwater management facility, some system for conveying the stormwater must be provided and is commonly done by using swales, culverts, or similar mechanisms. However, an assurance that water will not stand in enclosed structures (i.e., culverts) for extended periods must be provided since this may lead to water quality problems.
Appendix 2
Catch Basins and Pollutant-Retardant Structures
APPENDIX 2 – CATCH BASINS AND POLLUTANT-RETARDANT STRUCTURES

Catch basins are often used to collect stormwater from areas with large percentages of impervious surfaces and convey it to a treatment facility. These structures need to be designed and certified by a professional engineer and be equipped with pollutant-retardant structures. The structures in Figures 4A through 4C will allow for pollution control and sedimentation before discharge to the stormwater treatment facility. In Figure 4A, the center column acts as a baffle. Oils, greases, and debris will remain on top of the water column in the right-hand chamber. Only water below the baffle will be able to flow out of the pipe. In Figures 4B and 4C, the down-turned pipe serves the same purpose. This pipe is removable so it can be cleaned and maintained. Periodic cleaning and maintenance are necessary to prevent clogging, ensure adequate treatment, and prolong the life of the facility.
Notes:

1. Figures in Parenthesis are meters.
2. Inverts of pipes, bottom of baffle to be placed to achieve intent of design and to accommodate hydraulic requirements.
3. Adapted from Broward County 1987
Figure 4B  Pollution- Retardant Catch Basin with Removable Down-turned Pipe

Notes:
1. Inverts of pipes to be placed to achieve intent of design and to accommodate hydraulic requirements.
2. Adapted from Broward County, 1987.
Figure 4C  Pollution -Retardant Catch Basin with Removable Downturned Pipe

Notes:
1. Inverts of pipes to be placed to achieve intent of design and to accommodate hydraulic requirements.
2. Adapted from Broward County, 1987.
Appendix 3

Wet-Detention Facilities
A wet -detention facility is usually wet and allows for 1/2 inch of the required detained volume (1 inch or the total of 2.5 inches times the percent of impervious area, whichever is greater) to be discharged through a control structure in no less than 24 hours. Catch basins, pipes, swales, or channels are used in areas with large amounts of impervious surface to collect runoff and convey it to the detention facility. The required design criteria of a wet detention facility are detailed below.: 

- The lakes must be at least 0.25 acre and be at least 50 feet wide for lakes in excess of 100 feet in length.
- Irregularly shaped lakes may be narrower than 50 feet in some portions but should average 50 feet in width.
- Projects with single-owner entities or entities with a full-time maintenance staff with obvious interests in maintaining the areas for water quality purposes may have the area and width criteria waived.
- The lake slopes should be at least 4:1 (horizontal to vertical), to a depth of 2 feet for safety reasons and to allow a littoral habitat to form.
- Discharge should be from the center of the water column.
- The control structure is at one point in the detention facility. Trash collection screens are required on structures discharging to all surface waters.
- The control structure must be opposite from where the runoff enters the facility to prevent hydraulic short-circuiting and ensure full treatment.

Wet detention cannot be used as the sole form of stormwater. If wet detention is used, at least 2.5 inches of dry retention must be provided before discharging into a wet-detention facility.
Appendix 4

Dry-Retention Facilities
APPENDIX 4 – DRY- RETENTION FACILITIES

Two types of dry-retention facilities exist – infiltration facilities and seepage facilities. The most common form of infiltration is vegetated swales or basins. Runoff is routed to a vegetated area, either directly or through a catch basin and conveyance system.

A control structure, usually a rectangular weir, is at one end of the swale or basin to allow for excess runoff to be discharged to a receiving body. A spreader swale can also be used in conjunction with this form of treatment. This type of discharge is most often used to release water through sheet flow to wetland areas or to prevent erosion.

The seepage method of dry retention involves allowing the water to disperse outward from an underground facility. The runoff is routed to a catch basin and is conveyed to a seepage system. Exfiltration trenches are the most commonly used types of seepage systems. They are used in conjunction with catch basins and consist of a perforated pipe surrounded by coarse rock. Figure 5 shows that the system is in the ground, but above the wet-season water table. Water enters the pipe and seeps out. The retained volume will exfiltrate over 1 hour. The length of the pipe is dependent on several factors – the volume of runoff to be treated, the width of the trench, the depth to the water table, and the hydraulic conductivity of the soils. When calculating the volume of an exfiltration trench, a safety factor of 2 is used to allow for geologic uncertainties.

The formula shown in Figure 5 illustrates how to design an exfiltration trench. An overflow system allowing for volumes in excess of the retained volume is usually located at the end of the trench opposite the point where the runoff enters the system and discharges to the receiving waters. Although exfiltration trenches provide adequate stormwater treatment and allow more land for development, they must be inspected regularly and cleaned from time to time. The pipe can become clogged and not allow proper seepage. When this occurs, the pipe acts like a conduit for untreated stormwater. Ensuring that the catch basins are maintained is one way of preventing failure of the trench.

Required retention depth is based on Table 1.
Figure 5  Typical Exfiltration Trench

\[ L = \frac{K(W + 2H_2D_v - D_u^2 + 2D_2D_3) + (1.39 \times 10^{-2})WD_u}{V} \]

- **L**: Length of trench required (feet)
- **V**: Volume treated (acre-inches)
- **W**: Trench width (feet)
- **K**: Hydraulic conductivity (CFS/ft^2-ft.head)
- **H_2**: Depth to water table (feet)
- **D_u**: Non-saturated trench depth (feet)
- **D_3**: Saturated trench depth (feet)

Cubic foot = 2.75 x 10^{-4} acre-inches

Hydraulic conductivity (K) is obtained from the percolation test.
Appendix 5

Stormwater Management Plan Checklist
# APPENDIX 5 – STORMWATER MANAGEMENT PLAN CHECKLIST

<table>
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<th>Required</th>
<th>Not Required</th>
<th>Sufficient</th>
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</thead>
</table>

## A. Site Information
- Detailed location sketch
- Description of vegetative cover
- Location and size of preservation or mitigation areas
- Vegetation protection plan
- Soils map
- Percolation test results
- Current wet season high water table
- Future wet-season water table
- Measures to be taken to eliminate off-site adverse impacts, such as turbidity, flooding, etc.
- Recent aerial photo (if available)
- Map of drainage basin boundaries
- Map of flood plain and elevations

## B. Master Stormwater Management Plan
- Location of all existing and proposed on-site waterbodies (including wetlands)
- Location of all off-site wetlands and waterbodies to be affected by on-site drainage patterns
- Location of all major control structures and elevations (preliminary construction plan may be submitted for conceptual review)
- Right-of-way and easement locations for stormwater management systems, including all areas reserved for stormwater management purposes
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<th>Sufficient</th>
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<td>Location and size of on-site water management facilities</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>▪ Impervious surface (waterbodies)</td>
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<td></td>
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<tr>
<td>▪ Pervious surface</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Total square footage or acreage of project site</td>
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<tr>
<td>Proposed grading plan</td>
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</tr>
<tr>
<td>Treatment volume and discharge rate (if applicable) for stormwater management system</td>
<td></td>
<td></td>
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<tr>
<td><strong>C. Legal and Institutional Information</strong></td>
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</tr>
<tr>
<td>▪ Entity responsible for operation and maintenance of stormwater management facility*</td>
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</table>

* If the operational and maintenance entity is to be a public body, a letter from the public body confirming this must be submitted before staff approval. If the entity is a homeowners’ association, documents verifying the existence of such organization and its ability to accept operation and maintenance ability must be submitted before staff approval.
Appendix 6

Single-Family/Duplex Lot
Sample Calculations
APPENDIX 6 – SINGLE-FAMILY/DUPLEX LOT SAMPLE CALCULATIONS

An orifice is a device that allows for discharge from the center of the control structure. Simply put, it is an opening in the structure that lets water slowly pass. Detention facilities use orifices. The rate that water is discharged depends on the cross-sectional area of the orifice. Figure 6 shows the two types of orifices.

An 8,000-square-foot lot with a house, deck, and driveway using dry-retention swales:

- **House**: 1,600 square feet (800 directly connected and 800 unconnected)
- **Driveway**: 650 square feet
- **Concrete Patio**: 840 square feet

**Total impervious**: 3,000 square feet

**Effective Impervious**: 2,600 square feet

**Total lot size**: 8,000 square feet

**Ration of effective impervious area = 37.5 percent to lot area**: 0.33%

Since the impervious area is less than 40 percent of the total lot size, the following equation is used:

- **Swale volume (cubic feet) = total lot size (square feet) x 0.415-foot required retention depth (feet)**
- **Swale volume = 8,000 x 0.0415.164**
- **Swale volume = 332 ft³ = 1,312 cubic feet**

Assuming a 4:1 (horizontal to vertical) slope for the swales to a 1-foot depth, the cross-sectional area (A) of the swale is 4.0 square feet.

Therefore, the length of the swale is determined as follows:

- **Length of swale (feet) = volume (A).**
- **Length of swale = 1,312/4.**
- **Length of swale = 328 feet.**

In areas where there is a receiving water body adjacent to the property, a rectangular weir should be placed at one end of the swale for discharge of excess runoff. To reduce the required length of the swale opportunities to reduce the directly connected impervious area, replace impervious surfaces with pervious surfaces, and minimize site disturbance could be evaluated. These changes would reduce the required swale length.
Appendix 7

Bibliography
APPENDIX 9 – BIBLIOGRAPHY


South Florida Water Management District (SFWMD). In review. *An Assessment of Land Use and Related Stormwater Runoff Quality Treatment Efficiencies Associated with Selected Stormwater Management Systems*. Resource Planning Department, West Palm Beach, FL.


LAYMAN’S BROCHURE

Guidelines for preparation of a site plan for single family and duplex lots in Monroe County

March 2020

A. Stormwater Management – an important element of the site plan ....... 2
B. Guidelines to prepare your site plan .............................................. 3
C. Guidelines to address stormwater management in your site plan ....... 4
D. Sample construction techniques ...................................................... 7
E. Guidelines for expansion of existing homes .................................... 12
A. Stormwater Management – an important element of the site plan

WHY all the fuss, you ask? Here’s why...

Monroe County is home to the Florida Keys, lush islands surrounded by clear, aquamarine waters, and a myriad of underwater wonders. Most of the year, the Keys enjoy a sunny, near-tropical climate, but there comes a rainy season, from May through October. During these months, frequent thunderstorms last from a few minutes to a few days.

Heavy seasonal rains cause stormwater to run off commercial and residential rooftops, yards, and streets. This stormwater normally collects in the streets and works its way towards the nearest waterway. While street flooding is a temporary nuisance, the pollutants carried in the stormwater create a less visible but longer lasting effect. These pollutants include automobile oil and grease, lawn fertilizers and pesticides, a variety of chemicals from commercial/industrial areas, and silt and floating debris from highways.

Continued pollution of Florida’s coastal area has severely degraded our most valuable resource, the coral reefs. Pollution also has negatively affected the quality and clarity of our waters. It has reduced our fish and wildlife populations.

Stormwater running off into the streets also wastes a valuable resource. After the rainy season come the dry months of November through April. With few exceptions, Monroe County’s drinking water comes from the mainland via a single pipeline. In the event of a hurricane, power and this water supply may be discontinued for days.

Monroe County has adopted a comprehensive development plan that establishes specific goals for safe management and disposal of stormwater and conservation of our water resources. To achieve these goals and to begin reversing the current negative trends, we must significantly reduce the potential pollution from new construction.

Our adopted Stormwater Management Ordinance Sec. 114-2 and 114-3 of the Land Development Code establishes guidelines for the safe management and disposal of stormwater runoff from developed areas. The ordinance is applicable to all developments and requires that all applications for building permits must contain a stormwater management plan.

The guidelines and recommendations in this brochure are designed to help you to address stormwater management in the site plan for your single family or duplex lot. Sample engineering calculations supporting the guidelines of the brochure are available in the current version of Monroe County’s "Manual of Stormwater Management Practices".
B. Guidelines to prepare your site plan

OKAY, what must I do to prepare a site plan for my single family or duplex home?

In order to prepare a site plan, it is necessary to assess the existing site conditions, evaluate the proposed improvements and make provisions for stormwater management. This process begins with the collection of site-specific data, by performing a lot survey. The lot survey is then used as a base to locate the proposed improvements and grade the lot in order to control stormwater runoff. The following steps detail the type of data to be collected for the lot survey and the information to be provided in the site plan.

STEP ONE – SURVEY DRAWING

Obtain a boundary survey and topographic information (either from survey or LiDAR data) for your lot. The survey must be performed by a professional land surveyor licensed to practice in the State of Florida. The survey drawing must provide this information:

a. Legal description of lot.
b. Property line dimensions, bearings and/or angles.
c. Location of existing improvements, to include adjacent street and waterway (if any).
d. Three cross-sections, showing elevations from the street, across lot lines and center of the property.
e. Location and identification of existing trees.
f. Location sketch and identification of a nearby Mile Marker
g. Scale (1”=10’ recommended) and north arrow.
h. LiDAR-based elevations may be used if available.

STEP TWO – SITE PLAN

Prepare a site plan showing the proposed improvements, utilities, site grading and landscaping. The site plan, which must meet the guidelines described later in this brochure, should be prepared at a recommended scale of 1”=10’ and provide the following information:

a. Locations, dimensions, and types of construction materials of the building, roof, patio, screened porch, deck, shed, pool, driveway, septic tank and drainfield.
b. Proposed site grading showing existing and proposed elevations and/or contours.
c. Proposed drainage directions and areas draining to each retention system. Site grading must drain towards retention system.
d. Locations, dimensions, and types of materials to be used in landscaping features, such as planters, walks, privacy walls, fences, trees and shrubs.
e. A cross-section (elevation view) across the center of the lot showing proposed improvements and site grading.
C. Guidelines to address stormwater management in your site plan

HOW do I address stormwater management in my site plan?

Much of Monroe County is beautiful and ecologically sensitive to manmade pollutants, many of which are carried to the ocean by stormwater runoff. Monroe County's objective is to keep the resident coral reef, fish, and animals alive and healthy, while allowing you to occupy the same bit of Florida paradise. To achieve this objective, Monroe County requires your new home to meet the following design and construction guidelines:

- Preserve Roadside Swales (Plate 2)
  1. Maintain the pervious cover of swales.
  2. Preserve existing swale elevations.
- Reduce Lot Fill (Plate 2)
  1. Carefully consider the need to import any fill for the lot.
  2. Limit building pad elevations to eight inches above the adjacent roadway.
- Flood Protection (Plate 3)
  1. Elevate the first habitable floor above the Federal Emergency Management Agency Base Flood Elevation using stilt-construction techniques.
- Reduce Impervious Surfaces
  1. Use pervious materials, such as gravel, pervious pavers on sand, native grasses, grass-covered porous pavement and wood for the construction of other site and landscaping improvements. Florida-Friendly Landscaping™ is encouraged.
  2. Do not place impervious layers, such as roofing paper or plastic under paved or landscaped areas.
- Conserve Water (Plate 4 & 5)
  1. Use cisterns to collect roof runoff and recycle for non-potable water uses.
  2. Use native plant materials for landscaping.
- Reduce Direct Discharges to Waterways (Plate 6)
  1. Use berms to contain runoff onto adjacent waterways.
  2. If your lot has an existing bulkhead, lower the adjacent ground to provide a minimum of 6” difference between the finished lot and the top of the bulkhead.
- Reduce Discharges to Roadway
  1. Use berms to contain runoff from lot onto adjacent roadways.
  2. Use traffic rated trench drains across driveways to reduce discharges to the roadway. These trench drains should be drained to an onsite retention area. Trench drains are not needed where the driveway is below or at the same elevation as the roadway swale.
- Calculate required retention volume using the following steps:
  1. Determine square feet of impervious area on the site that is directly connected to the proposed retention system (typically this would be an onsite swale). Directly connected would be any area when stormwater runoff passes over less than 20 feet on pervious area (e.g. grassed or landscaped area) before entering the onsite retention system. Pervious pavers would not be considered an impervious area.
  2. Determine square feet of impervious area on the site that is unconnected to the proposed retention system and has to drain over 20 feet or more of pervious area before entering the retention system. An example of this would be an area of the roof that is drained from a downspout but flows over 20 feet of landscaped area before reaching the onsite swale.
  3. Calculate the total effective impervious area by summing the directly connected area with half the unconnected area.
4. Determine the square feet of lot area that is disturbed during construction. This is any area that is accessible to construction vehicles or construction staff during construction. Undisturbed areas need to be clearly sign posted and taped off during construction.

5. Calculate the ratio of the effective impervious area to the disturbed area.

6. Use Table 1 below to determine the required retention depth. The effective impervious area to the disturbed area ratio from Step 5 should be rounded to the nearest ratio in Table 1.

7. Determine the required retention volume (cubic feet) by multiplying the required retention depth in feet (Step 6) by the disturbed area in square feet (Step 4).

Table 1. Required Retention Depth

<table>
<thead>
<tr>
<th>Effective Impervious Area to Disturbed Area Ratio (Step 5)</th>
<th>Required Retention Depth (feet)</th>
<th>Required Retention Depth (inches)</th>
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If swale(s) are used they must meet the following criteria:

- Runoff from site must be drained to swale.
- Swale length must be greater than its width.
- Swale side slope must be 4:1 or shallower (horizontal to vertical).
- Swale must not disturb any natural areas.
- Swale must be 6 inches or deeper.
- Swales should be vegetated. If a swale is not vegetated than a 6-inch layer of nutrient sorption soil amendment formulated to reduce nutrient loading must be installed directly below the swale. Specifications and published nutrient reduction test results for the media must be provided for County review at the time of permitting. Examples of acceptable media are NutriGoneTM (distributed by EcoSense International) and Bold and Gold® (distributed by Environmental Conservation Solutions).
If exfiltration trenches or french drains are used on single-family or duplex lots they must meet the following criteria:

- Minimum of 8 inches of cover.
- Use at least a 4 inch or greater perforated pipe. A prefabricated shallow vault or drainage well may be used.
- Inlets to exfiltration system must include a fabric filter.
- Exfiltration system must not be within 10 feet of a building.
- Exfiltration systems cannot be installed under driveways or other areas that may receive frequent vehicular traffic, unless designed by a Florida-registered and licensed professional engineer.
- Bottom of exfiltration system must be more than 12 inches above the wet season water table. Wet season water table can be determined using the USDA Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov), SoilWeb app available on Android or iPhone devices, or determined by an appropriate Florida-registered and licensed professional.
- Volume of an exfiltration trench in cubic feet can be approximated as: \( V = L \times W \times (D - 0.96) \times 0.4 \), where \( L \) = length in feet, \( W \) = average trench width, and \( D \) = average trench depth in feet.

The following diagrams illustrate the above design and construction guidelines and a sample site plan (Plate 7). If you have other questions, call the Planning and Environmental Resources Department at 305-289-2500.

Source: Florida Department of Environmental Protection and Water Management Districts Environmental Resource Permit Stormwater Quality Applicant’s Handbook (March 2010 – Draft)
D. Sample construction techniques

Existing Native Shoreline Vegetation to be Preserved

Existing Ground (Plate 1)

Rear Setback
Swale
Berm
Raised Pad 8" Maximum
Rear lot Swale 6" Deep Minimum
Existing Native Shoreline Vegetation to be Preserved

Lot Grading (Plate 2)

Front Setback
Swale
Original Natural Ground Line
Front lot Swale 6" Deep Minimum
Water Conservation
(Plate 5)

Side and Rear Lot Details
(Plate 6)
Low Density Foliage Lot
N.T.S.
E. Guidelines for expansion of existing homes

**WHAT if I just want to expand my home?**

Any impervious area expansion of existing lot coverage, that is, roofs, decks, patios, pools, and pavements, must provide for the retention of two and half inches of runoff from the expansion area. Typically, this retention requirement can be met by construction of a shallow swale alongside the expansion’s area. However, other approaches to retaining stormwater on the site will be considered. The following table shows the proportional stormwater retention storage required for every 25 feet of new impervious area:

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Provisions for swales must be shown on the site plans submitted with your permit application. Just remember, you should still follow the steps outlined in this brochure, but you don’t need to meet all of the design and construction criteria required for new homes.
2021-2023
MONROE COUNTY
BIENNIAL PUBLIC FACILITIES CAPACITY ASSESSMENT REPORT

GROWTH MANAGEMENT
TRANSPORTATION
POTABLE WATER
SCHOOLS
SOLID WASTE
PARKS AND RECREATION
SANITARY SEWER

Monroe County
Planning and Environmental Resources Department
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>I. Growth Management</td>
<td>14</td>
</tr>
<tr>
<td>II. Transportation/Roadways</td>
<td>26</td>
</tr>
<tr>
<td>III. Potable Water</td>
<td>41</td>
</tr>
<tr>
<td>IV. Education/Schools</td>
<td>48</td>
</tr>
<tr>
<td>V. Solid Waste</td>
<td>51</td>
</tr>
<tr>
<td>VI. Parks and Recreation</td>
<td>55</td>
</tr>
<tr>
<td>VII. Sanitary Sewer</td>
<td>61</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Goal 1401 of the Monroe County Comprehensive Plan requires that Monroe County shall provide and maintain, in a timely and efficient manner, adequate public facilities for both existing and future populations, consistent with available financial resources and the other elements of the Comprehensive Plan. [§163.3177(3)(a), F.S.] Monroe County coordinates land use decisions and fiscal resources with a schedule of capital improvements in order to maintain the adopted level of service (LOS) standards for both issued development orders and future development (Objective 1401.4). Further, Monroe County maintains a Concurrency Management System to ensure that facilities and services needed to support development are available concurrent with the impact of development. The Concurrency Management System ensures that the County shall issue no development order or permit which results in a reduction in the level of service (LOS) below the adopted LOS standards (Policy 1401.4.5).

The Monroe County Land Development (LDC) Section 114-2(b)(3) mandates a biennial assessment of the roadways, solid waste, potable water, sanitary sewer, schools and recreation and open space facilities serving the unincorporated portion of Monroe County. In the event that these public facilities have fallen below or are projected to fall below the level of service (LOS) required by the LDC, development activities must conform to special procedures to ensure that public facilities are not further burdened. The LDC clearly states that building permits shall not be issued unless the proposed use is, or will be, served by adequate public or private facilities.

As required by LDC Section 114-2, the Monroe County Board of County Commissioners (BOCC) shall consider and approve the biennial report, with or without modifications. Any modifications that result in an increase of development capacity must be accompanied by findings of fact, including the reasons for the increase and the funding source to pay for the additional capacity required to serve the additional development. Once approved, this document becomes the official report on public facilities upon which development approvals will be based for the next two years. This report distinguishes between areas of adequate, inadequate and marginally adequate facility capacity. Areas of inadequate facility capacity are those areas with capacity below the adopted LOS standards. Areas of marginally adequate facility capacity are those areas at the adopted level of service standard or which are projected to reach inadequate capacity within the next 12 to 24 months.

2021-2023 ASSESSMENT OF PUBLIC FACILITIES

Transportation/Roadways

Based on the findings of the 2021 U.S. 1 Arterial Travel Time and Delay Study for Monroe County, as prepared by AECOM, U.S. 1 has an overall level of service (LOS) C. The overall median travel speed on US 1 is 45.5 MPH.

Traffic volumes have increased in Big Pine (2.00%) and Upper Matecumbe (3.07%) Keys but have decreased in Marathon Key (-6.30%) as compared to 2017.

Compared to the study results in 2017, there were level of service changes in nine (9) of the 24 segments of US1; five (5) of which resulted in positive level of service changes and four (4) of
which resulted in negative level of service changes. Negative LOS changes are shown in bold text in the table below.

<table>
<thead>
<tr>
<th>Segment Number</th>
<th>Segment</th>
<th>Jurisdiction (county or municipality)</th>
<th>2017 LOS</th>
<th>2021 LOS</th>
<th>Reserve Trips Remaining</th>
<th>5% Allocation below LOS C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stock Island</td>
<td>County</td>
<td>B</td>
<td>A</td>
<td>3,279</td>
<td>3,474</td>
</tr>
<tr>
<td>8</td>
<td>Ramrod</td>
<td>County</td>
<td>B</td>
<td>A</td>
<td>2,285</td>
<td>3,063</td>
</tr>
<tr>
<td>10</td>
<td>Big Pine</td>
<td>County</td>
<td>C</td>
<td>A</td>
<td>4,561</td>
<td>5,511</td>
</tr>
<tr>
<td>11</td>
<td>Bahia Honda</td>
<td>County</td>
<td>B</td>
<td>A</td>
<td>7,998</td>
<td>10,730</td>
</tr>
<tr>
<td>18</td>
<td>Tea Table</td>
<td>Islamorada</td>
<td>D</td>
<td>E</td>
<td>2,222</td>
<td>2,965</td>
</tr>
<tr>
<td>19</td>
<td>Upper Matecumbe</td>
<td>Islamorada</td>
<td>D</td>
<td>E</td>
<td>(3,531)</td>
<td>(2,187)</td>
</tr>
<tr>
<td>20</td>
<td>Windley</td>
<td>Islamorada</td>
<td>C</td>
<td>D</td>
<td>(378)</td>
<td>271</td>
</tr>
<tr>
<td>21</td>
<td>Plantation</td>
<td>Islamorada</td>
<td>B</td>
<td>C</td>
<td>1,921</td>
<td>3,524</td>
</tr>
<tr>
<td>24</td>
<td>Cross</td>
<td>County</td>
<td>B</td>
<td>C</td>
<td>2,259</td>
<td>4,618</td>
</tr>
</tbody>
</table>

Compared to 2017 results, the median segment speeds increased in 13 of the 24 segments, ranging between 0.2 mph and 10.6 mph, and decreased in 11 segments, ranging from -0.1 mph to -5.8 mph.

The largest increase in speed (+10.6 mph) was recorded in Segment # 1 (Stock Island – MM 4.0 to MM 5.0); The largest reduction in speed (-5.8 mph) was recorded in Segment # 21 (Plantation – MM 86.0 to MM 91.5).

**Potable Water**

In March 2008, South Florida Water Management District approved the FKAA’s modification of WUP 13-00005-5-W for a 20-year allocation from the Biscayne and Florida Aquifers. This water use permit (WUP) provides an annual allocation of 23.98 MGD. The recently completed water supply wells and Reverse Osmosis (RO) water treatment facility provides an additional capacity of 6.0 MGD.

The County’s 2020 figures and projections for 2021 indicate a slight increase in annual average daily demand from 18.41 to 20.25 MGD. This provides a 3.73 MGD surplus water allocation based upon the projected 2021 demand. With the construction of the new water supply wells and reverse osmosis (RO) water treatment facility and a projected surplus allocation, there is an adequate supply of water to meet current and future demands, based on current conditions and projections.

**Schools**

The overall 2020-2021 utilization is 74.83% of the school system capacity and is projected for 2024-2025 at 77.58 % utilization of the school capacity. Enrollment figures for 2020-2021 indicate that there is adequate capacity in the Monroe County school system for the next two years.

**Solid Waste**

Monroe County has a contract with Waste Management Inc. (WMI). The contract authorizes the use of in-state facilities through September 30, 2024, thereby providing the County with approximately three (3) years of guaranteed capacity. There is adequate capacity for a solid waste generation for the next 12 to 24 months.
**Parks and Recreation**

There is a surplus of parks and recreational facilities (acreage).

**Sanitary Sewer**

The Monroe County Sanitary Sewer Master Plan was part of the Monroe County Year 2010 Comprehensive Plan. As population and tourism within the Keys have increased over the years have resulted in a significant degradation of water quality in canals and nearshore waters surrounding the keys. The creation of a new Sanitary Sewer System to replace the old system consisting mostly of collecting sewage waters by private septic tanks and small water treatment plants was imperative.

The new Sanitary Sewer System collects the wastewater mainly by a network of pipelines, force mains, pump stations and sewage treatment plants. The majority of the household units of unincorporated areas of the County have been connected to the system.

The sewage collection system operates below the capacity for which it was designed and the quality and disposal of treated waste water is in compliance with requirements established by F.A.C., F.S., and Monroe County Comprehensive Plan. There is sufficient wastewater treatment and disposal facilities and capacity available to satisfy the projected needs of the development for the next two years.

**SUMMARY**

Transportation/roadways (subject to concurrency review at time of development permit), potable water, solid waste, schools, parks and recreation, and sanitary sewer all have adequate capacity to serve the growth anticipated in 2021-2023 at the adopted level of service standard.
INTRODUCTION

The 2021-2023 Biennial Assessment of Public Facilities Capacity is mandated by the Monroe County Land Development Code (LDC) Section 114-2, titled Adequate Facilities and Review Procedures. The State of Florida requires all local jurisdictions to adopt regulations ensuring “concurrency” or providing public facilities in order to achieve and maintain the adopted level of service standard. In other words, local governments must establish regulations to ensure that public facilities and services that are needed to support development are available simultaneously with development impacts.

Section 114-2(a) contains two main sets of requirements: the minimum service standards for the six primary public facilities (roads, potable water, educational facilities, solid waste, parks and recreation, sanitary sewer), and biennial assessment process to determine the available capacity of these public facilities.

Section 114-2(b)(3) requires the Director of Planning to prepare a biennial report to the BOCC on the capacity of available public facilities. This report must determine the potential amount of residential and nonresidential growth expected in the upcoming year and make an assessment of how well the water supply facilities, solid waste, roads, sanitary sewer, and schools will accommodate that growth. The report considers potential growth and public facility capacity for only the next twelve months. In addition, the report must identify areas of unincorporated Monroe County with only marginal and/or inadequate capacity for public facilities.

Section 114-2(b)(4) requires the Monroe County Board of County Commissioners (BOCC) to consider this report and approve its findings either with or without modifications. The BOCC cannot act to increase development capacity beyond that demonstrated in this report without making specific findings of fact as to the reasons for the increase and identifying the source of funds to be used to pay for the additional capacity. Once approved by the BOCC, this document becomes the official assessment of public facilities upon which development approvals will be based for the next year.

In the event public facilities have fallen or are projected to fall below the level of service (LOS) standards required by the Comprehensive Plan or the LDC, development activities must conform to special procedures to ensure that public facilities are not further burdened. The Comprehensive Plan and the LDC clearly state that building permits shall not be issued unless the proposed use is or will be served by adequate public or private facilities.

Comprehensive Plan Objective 101.1 states: “Monroe County shall ensure that all development and redevelopment taking place within its boundaries does not result in a reduction of the level-of-service requirements established and adopted by this comprehensive plan. Further, Monroe County shall ensure that comprehensive plan amendments include an analysis of the availability of facilities and services or demonstrate that the adopted levels of service can be reasonably met”.

The LDC, Section 114-2, “Adequate Facilities and Review Procedures” states: Development application shall include a written evaluation (facilities impact report and traffic report) of the impact of the anticipated development on the level of services are available prior to or concurrent with the impacts of development.
Pursuant to Section 163.3180, F.S., sanitary sewer, solid waste, drainage, and potable water are the public facilities and services subject to the concurrency requirement on a statewide basis and a local government may extend concurrency requirements so that it applies to additional public facilities within its jurisdiction. If concurrency is applied to other public facilities, including transportation facilities, the local government comprehensive plan must provide the principles, guidelines, standards, and strategies, including adopted levels of service, to guide its application. The premise of concurrency is that the public facilities will be provided in order to achieve and maintain the adopted level of service standard.

Accordingly, the Monroe County Comprehensive Plan Policy 101.1.1 provides that the County shall maintain level of service (LOS) standards for the following public facility types required by Chapter 163, F.S.: sanitary sewer, solid waste, drainage, and potable water. Policy 101.1.2 also requires the County maintain a Concurrency Management System.

Further, the following standards have been adopted in the Monroe County Comprehensive Plan:

Policy 101.1.3: Facilities for potable water, sanitary sewer, solid waste and drainage shall be in place and available to serve new development no later than the issuance of the certificate of occupancy or its functional equivalent. If facility improvements are needed to ensure that the adopted level-of-service standards are achieved and maintained, prior to commencement of construction, a developer is required to enter into a binding and legally enforceable commitment to the County to assure construction or improvement of the facility.

Policy 101.1.4: Parks and recreation facilities to serve new development shall be in place or under actual construction no later than one (1) year after issuance by the County of a building permit. The acreage (land) for such facilities shall be dedicated or be acquired by the County prior to issuance of a building permit, or funds in the amount of the developer's fair share shall be committed no later than the County's approval to commence construction. If park and recreation facility improvements are needed to ensure that the adopted level-of-service standards are achieved and maintained, prior to commencement of construction, the developer is required to enter into a binding and legally enforceable commitment to the County to assure construction of the facilities.

Policy 101.1.5: Transportation facilities needed to serve new development shall be in place when the impacts of the development occur. If transportation facilities are needed to ensure that the adopted level-of-service standards are achieved and maintained, prior to commencement of construction, a developer is required to enter into a binding and legally enforceable commitment to the County to assure construction or improvement of proportionate share of required improvements, or to assure the provision of the proportionate share contribution of the costs for the necessary transportation facilities. The development of a single family residential unit shall be considered de minimis and shall not be subject to this requirement.

Policy 101.1.6: Prior to the approval of a building permit, Monroe County shall consult with the Florida Keys Aqueduct Authority (FKAA) to determine whether adequate water
supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

There are Six (6) primary public facilities that must be monitored for adequate capacity according to both the Monroe County Comprehensive Plan and the Land Development Code (LDC). These facilities are roads, solid waste, potable water, sanitary sewer and schools (Comp Plan also includes parks & recreation and drainage. The available capacity for each of these facilities may be either sufficient to accommodate projected growth over the next year, marginally adequate, or inadequate. In situations where public facilities serving an area are projected to be only marginally adequate or inadequate over the next year, the LDC sets out a review procedure to be followed when issuing development permits in that area.

Section 114-2(b)(5)c of the LDC states: “The county shall not approve applications for development in areas of the county that are served by inadequate facilities identified in the biennial assessment of public facility capacity report, except the county may approve development that will have no reduction in the capacity of the facility or where the developer agrees to increase the level of service of the facility to the adopted level of service standard.”

The determination of an additional development’s impact on existing public facilities in areas with marginal or inadequate capacity is determined by a “facilities impact report” which must be submitted with a development application.

**Transportation/Roadways:**

The LOS for roads is regulated by the Traffic Circulation Element of the Comprehensive Plan.

Policy 301.1.1 establishes the LOS for County roads. The policy states:

“For all County roads, Monroe County hereby adopts a minimum peak hour level of service (LOS) standard of D, measured by the methodology identified in the most recent edition of the Highway Capacity Manual, as necessary to determine proposed development impacts. The County shall maintain the level of service on County roads within five percent (5%) of LOS D”

Policy 301.1.2 establishes the LOS for U.S. 1. The policy states:

“For U.S. 1, Monroe County hereby adopts a level of service (LOS) standard of C, as measured by the methodology established by the US-1 LOS Task Force and adopted by the Board of County Commissioners in August 1991. The level of service on US-1 shall be maintained within five percent (5%) of LOS C”

It should be noted in August 2021, the BOCC adopted an update to Policy 301.1.2 as follows:

“For U.S. 1, Monroe County hereby adopts a level of service (LOS) standard of C, as measured by the methodology established by the U.S. 1 LOS Task Force and adopted by the Board of County Commissioners in February 2021 (BOCC Resolution 064-2021). The level of service on U.S. 1 shall be maintained within five percent (5%) of LOS C.”

Section 114-2(a)(1) of the LDC pertains to the minimum LOS standards for Roads:

(1) Transportation/Roadways.
a. U.S. 1 shall have sufficient available capacity to operate at LOS C for the overall arterial length and the 24 roadway segments of U.S.1, as measured by the U.S. 1 Level of Service Task Force Methodology, at all intersections and roadway segments. In addition, all segments of U.S. 1, as identified in the U.S. 1 Level of Service Task Force Methodology, which would be impacted by a proposed development's access to U.S. 1, shall have sufficient available capacity to operate at LOS C.

b. Development may be approved, provided that the development in combination with all other permitted development will not decrease travel speed by more than five percent (5%) below LOS C, as measured by the U.S. 1 Level of Service Task Force Methodology. While development may be approved within 5% of LOS C, the proposed development shall be considered to have an impact that needs mitigation. Development mitigation may be in the form of specific improvements or proportioned shared contribution towards improvements and strategies identified by the County, and/or FDOT to address any level of service degradation beyond LOS C and/or deficiencies.

c. All paved County roads shall have sufficient available capacity to operate at or within 5% of a LOS D as measured by the methodology identified in the most recent edition of the Highway Capacity Manual. While development may be approved within 5% of LOS D, the development shall be considered to have an impact that needs mitigation. Development mitigation may be in the form of specific improvements or proportioned shared contribution towards improvements and strategies identified by the County, and/or FDOT to address any level of service degradation beyond LOS D and/or deficiencies.

d. The development of one single family residence on a single parcel shall be considered de minimis and shall not be considered to impact road capacity established in this subsection.

e. The County shall post on the Monroe County website informing the public of the available transportation capacity for each road segment of U.S. 1 as described in the county's biennial public facilities capacity report. The available capacity shall be expressed in terms of a number of trips remaining until the adequate transportation facilities standard is exceeded.

f. The County, in coordination with the FDOT, shall continue the systematic traffic monitoring program to monitor peak season traffic volumes at permanent count stations and travel speeds on the overall length of U.S.1 and on each of the 24 study segments of U.S.1, and to determine the cumulative impact of development and through traffic. The County shall coordinate with municipalities in the review of the systematic traffic monitoring program to monitor traffic volumes and travel speeds of U.S.1 as well as on each of the 24 study segments on U.S.1. The County and municipalities shall coordinate with FDOT to evaluate segments with deficiencies of LOS to determine necessary improvements and strategies to address any degradation and/or deficiencies.

**Potable Water:**
The Monroe County Comprehensive Plan adopts the LOS standards and further, the LDC regulates the source of potable water for development or use.

**Objective 701.1:** Monroe County shall ensure that at the time a certificate of occupancy or its functional equivalent is issued, adequate potable water supply, treatment, and distribution facilities are available to support the development at the adopted level of service standards.
Policy 701.1.1: Monroe County hereby adopts the following level of service standards to achieve
Objective 701.1 and shall use these standards as the basis for determining facility capacity and the
demand generated by a development. [§163.3180(1)(b), F.S., §163.3180(2), F.S.]

Level of Service Standards
1. Quantity: 100 gal./capita/day*
   *Note Based on historical data through December 2011; provided by FKAA, December 2012.
2. Minimum Pressure: 20 PSI at customer service
3. Minimum Potable Water Quality: Shall be as defined by Chapter 62-550 F.A.C.

The LDC Section 114-2(a)(3) requires sufficient potable water from an approved and permitted
source shall be available to satisfy the projected water needs of a proposed development, or use.
Approved and permitted sources shall include cisterns, wells, FKAA distribution systems,
individual water condensation systems, and any other system which complies with the Florida
standards for potable water.
   a. Overall LOS: 100 gal./capita/day.
   b. Minimum pressure: 20 pounds per square inch at customer service point.
   c. Minimum quality: As defined by Chapter 62-550 F.A.C.

Policy 701.1.2: Monroe County shall maintain land development regulations which provide a
Concurrency Management System (See Capital Improvements Policy 1401.4.5). The Concurrency
Management System shall ensure that no certificate of occupancy or its functional equivalent will
be issued for new development unless adequate potable water supply, treatment, and distribution
facilities needed to support the development at the adopted level of service standards are available.

Solid Waste:
The Comprehensive Plan and the LDC require that "sufficient capacity shall be available at a solid
waste disposal site at a level of services of 11.41 pounds per capita per day. The county solid waste
and resource recovery authority may enter into agreements, including agreements under F.S. Section
163.01, to dispose of solid waste outside of the county. (LDC, Section 114-2(a)(2)).

Objective 801.1: Monroe County shall ensure that solid waste collection service and disposal
capacity is available to serve development at the adopted level of service standards. [§163.3180(2), F.S.]

Policy 801.1.1: Monroe County hereby adopts the following level of service standards to achieve
Objective 801.1, and shall use these standards as the basis for determining facility capacity and the
demand generated by a development. [§163.3180(2), F.S.]

Level of Service Standards:
   Disposal Quantity: 11.41 pounds per capita per day

Policy 801.1.2: Monroe County shall maintain land development regulations which provide a
Concurrency Management System (See Capital Improvements Policy 1401.4.5). The Concurrency
Management System shall ensure that no certificate of occupancy or its functional equivalent will
be issued for new development unless adequate solid waste collection and disposal facilities
needed to support the development at the adopted level of service standards are available
concurrent with the impacts of development.
Sanitary Sewer:
The Comprehensive Plan and LDC establish the capacity LOS and the wastewater treatment level of service standards for sanitary sewers in Policy 901.1.1 of the Monroe County Year 2030 Comprehensive Plan.

Policy 901.1.1: Monroe County shall ensure that at the time a certificate of occupancy, or its functional equivalent is issued, adequate sanitary wastewater treatment and disposal facilities are available to support the development at the adopted level of service standards.

December 31, 2015, Level of Service Standards

(A) The permanent level of service standards for wastewater treatment in Monroe County are as follows:

<table>
<thead>
<tr>
<th>Mg/L</th>
<th>BOD</th>
<th>TSS</th>
<th>TN</th>
<th>TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-site Sewage Treatment and Disposal System</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Design flows less than 100,000 gpd (BAT)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Design flows greater than or equal to 100,000 gpd (AWT)</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>


BOD: Biochemical Oxygen Demand  
TSS: Total Suspended Solids  
TN: Total Nitrogen  
TP: Total Phosphorus  
BAT: Best Available Technology  
AWT: Advanced Wastewater Technology

(B) The County shall support State and Federal educational programs to reduce demand for phosphate products.

(C) The capacity level of service standard: 167 gallons per day per EDU.

Policy 901.1.2: Monroe County shall maintain land development regulations which provide a Concurrency Management System (See Capital Improvements Policy 1401.4.5). The Concurrency Management System shall ensure that a certificate of occupancy or its functional equivalent will not be issued for new development unless adequate sanitary wastewater treatment and disposal facilities needed to support the development at the adopted level of service standards are available.

Parks and Recreation:
The Level of Service standards for parks and recreational facilities are included in Policy 1201.1.1 of the Monroe County Year 2030 Comprehensive Plan.

Policy 1201.1.1: Monroe County hereby adopts the following level of service standards to achieve Objective 1201.1, and shall use these standards as the basis for determining recreation land and facility capacity:

Level of Service Standards for Neighborhood and Community Parks:
1. 1.5 acres per 1,000 functional population of passive, resource-based neighborhood
and community parks; and

2. 1.5 acres per 1,000 functional population of activity-based neighborhood and community parks within each of the Upper Keys, Middle Keys, and Lower Keys subareas.

**Schools:**
The Comprehensive Plan does not establish a LOS standard for schools but does include Policy 1301.5.3 which requires the County to coordinate with the District School Board of Monroe County on the siting and expansion of required facilities. LDC Section 114-2(a)(6) requires that sufficient school classroom capacity shall be available to accommodate all school-age children to be generated by the proposed development.
PERMITTING AND PUBLIC FACILITIES SERVICE AREAS

LDC Section 114-2(b)(2) Adequate Facilities and Review Procedures divides unincorporated Monroe County into three (3) service areas for the purpose of assessing potential growth and how public facilities can accommodate that growth. The boundaries mentioned in the Monroe County Land Development Code have been revised to account for incorporations of the Village of Islamorada and the City of Marathon.

Section 114-2(b)(2) defines the county’s unincorporated public facilities service areas:
- Upper Keys Service Area: north of the Whale Harbor Bridge;
- Middle Keys Service Area: between the Seven Mile Bridge and Whale Harbor Bridge; and
- Lower Keys Service Area: south (west) of the Seven Mile Bridge.

The map shows the three (3) service areas of the Keys as they are currently recognized.
I. GROWTH MANAGEMENT

GROWTH ANALYSIS

This section of the report examines the projected growth of Monroe County’s permanent, seasonal and functional population, occupied and vacant housing data, Rate of Growth Ordinance (ROGO) and Nonresidential Rate of Growth Ordinance (NROGO) allocations and Building Department permit data.

CENSUS DATA

The U.S. Census Bureau released some 2020 demographic information in August 2021. The release of additional data has been delayed due to impacts related to the COVID-19 pandemic.

<table>
<thead>
<tr>
<th></th>
<th>Census 2020</th>
<th>Census 2010</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>82,874</td>
<td>73,090</td>
<td>+9,784</td>
</tr>
<tr>
<td>Total Housing Units</td>
<td>53,892</td>
<td>52,764</td>
<td>+1,128</td>
</tr>
<tr>
<td>Occupied Housing Unit Rate</td>
<td>59.5%</td>
<td>61.8%</td>
<td></td>
</tr>
<tr>
<td>Occupied Housing Units (calculated)</td>
<td>32,066</td>
<td>32,629</td>
<td>-563</td>
</tr>
<tr>
<td>Vacant Housing Units (calculated)</td>
<td>21,826 (40.5%)</td>
<td>20,135 (38.16%)</td>
<td>+1,691</td>
</tr>
</tbody>
</table>

The permanent population for the Florida Keys (unincorporated and incorporated) increased by 13% (9,784 people) from the year 2010 to 2020. Total housing units increased by 1,128 units or 2%. The number of occupied units decreased by 563 units or 2%. Vacant units increased by 1,691 units or 8%. Further analysis will need to be conducted at a later date with the release of additional 2020 Census data.

The following tables provide 2010 summary information for Monroe County and the incorporated municipalities. Information from the 2000 Census has been included for comparison purposes.

<table>
<thead>
<tr>
<th></th>
<th>Census 2000</th>
<th>Census 2010</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POPULATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Key West</td>
<td>25,478</td>
<td>24,649</td>
<td>-829</td>
<td>-3.25%</td>
</tr>
<tr>
<td>City of Marathon</td>
<td>10,255</td>
<td>8,297</td>
<td>-1,958</td>
<td>-19.09%</td>
</tr>
<tr>
<td>City of Key Colony Beach</td>
<td>788</td>
<td>797</td>
<td>+9</td>
<td>1.14%</td>
</tr>
<tr>
<td>City of Layton</td>
<td>186</td>
<td>184</td>
<td>-2</td>
<td>-1.08%</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td>6,846</td>
<td>6,119</td>
<td>-727</td>
<td>-10.62%</td>
</tr>
<tr>
<td>Unincorporated Monroe County</td>
<td>36,036</td>
<td>33,044</td>
<td>-2,992</td>
<td>-8.30%</td>
</tr>
<tr>
<td><strong>Total Population</strong> (Unincorporated County &amp; Cities)</td>
<td>79,589</td>
<td>73,090</td>
<td>-6,499</td>
<td>-8.17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Census 2000</th>
<th>Census 2010</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOUSING UNITS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Key West</td>
<td>13,306</td>
<td>14,107</td>
<td>+801</td>
<td>6.01%</td>
</tr>
<tr>
<td>City of Marathon</td>
<td>6,791</td>
<td>6,187</td>
<td>-604</td>
<td>-8.89%</td>
</tr>
<tr>
<td>City of Key Colony Beach</td>
<td>1,293</td>
<td>1,431</td>
<td>+138</td>
<td>10.67%</td>
</tr>
<tr>
<td>City of Layton</td>
<td>165</td>
<td>184</td>
<td>+19</td>
<td>11.15%</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td>5,461</td>
<td>5,692</td>
<td>+231</td>
<td>4.23%</td>
</tr>
<tr>
<td>Unincorporated Monroe County</td>
<td>24,601</td>
<td>25,163</td>
<td>+562</td>
<td>2.28%</td>
</tr>
<tr>
<td><strong>Total Housing Units</strong> (Uninc. County &amp; Cities)</td>
<td>51,617</td>
<td>52,764</td>
<td>+1,147</td>
<td>2.22%</td>
</tr>
</tbody>
</table>
## POPULATION ESTIMATES

Functional population is the sum of seasonal and permanent population estimates. Permanent residents are people who spend all or most of the year living in Monroe County, and as such, exert a relatively constant demand on all public facilities. Seasonal population figures are the number of seasonal residents and visitors in the Keys on any given evening. They are composed of the tourist population and residents spending less than six months in the Keys. The seasonal population has a higher cyclical demand on public facilities like water, roads and solid waste.

The 2020 total population for Monroe County is 82,874 (2020 Census).

### FUNCTIONAL POPULATION PROJECTIONS, 2020-2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Permanent</th>
<th>Seasonal</th>
<th>Functional</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>76,900</td>
<td>82,151</td>
<td>159,051</td>
</tr>
<tr>
<td>2025</td>
<td>76,200</td>
<td>84,503</td>
<td>160,703</td>
</tr>
<tr>
<td>2030</td>
<td>75,500</td>
<td>86,855</td>
<td>162,355</td>
</tr>
</tbody>
</table>


### UNINCORPORATED FUNCTIONAL POPULATION PROJECTIONS, 2020-2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Permanent</th>
<th>Seasonal</th>
<th>Functional</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>35,374</td>
<td>37,120</td>
<td>72,494</td>
</tr>
<tr>
<td>2025</td>
<td>35,052</td>
<td>38,173</td>
<td>73,225</td>
</tr>
<tr>
<td>2030</td>
<td>34,730</td>
<td>39,226</td>
<td>73,956</td>
</tr>
</tbody>
</table>


### UNINCORPORATED FUNCTIONAL POPULATION PROJECTIONS by service area, 2020-2030

<table>
<thead>
<tr>
<th>Year</th>
<th>Unincorporated Functional Population</th>
<th>Total Unincorporated Monroe County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower Keys</td>
<td>Middle Keys</td>
</tr>
<tr>
<td>2020</td>
<td>40,592</td>
<td>2,234</td>
</tr>
<tr>
<td>2025</td>
<td>41,003</td>
<td>2,256</td>
</tr>
<tr>
<td>2030</td>
<td>41,414</td>
<td>2,278</td>
</tr>
</tbody>
</table>

The Fishkind & Associates population projections for the 2010-2030 planning period indicate a loss of permanent population. The data suggests the permanent population losses and associated increase in vacant housing units, shifting into an increase in seasonal population. Fishkind & Associates estimates that while permanent population decreases at an average rate of less than one percent every five years, seasonal population increases at an average rate of 2.57 percent every five years; resulting in a shift in population from permanent to seasonal. Overall, functional population or total population for the unincorporated County will increase at an average rate of less than one percent, every five years, in the twenty year planning period.

The Florida Bureau of Economic and Business Research (BEBR) provides the following estimates:

<table>
<thead>
<tr>
<th></th>
<th>Estimates April 1, 2020</th>
<th>Projections, April 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2025</td>
</tr>
<tr>
<td>MONROE</td>
<td>77,823</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>73,600</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td>78,800</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td>84,300</td>
</tr>
</tbody>
</table>

The Florida Office of Economic and Demographic Research (EDR) provides the following estimates:

<table>
<thead>
<tr>
<th></th>
<th>Estimates April 1, 2020</th>
<th>Projections, April 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2025</td>
</tr>
<tr>
<td>MONROE</td>
<td>77,823</td>
<td>78,799</td>
</tr>
</tbody>
</table>
HOUSING

According to the U.S. Census, housing units are broken down into occupied and vacant units. The Census defines housing units as “a house, apartment, group of rooms, or single room occupied or intended for occupancy as separate living quarters.” Occupied housing units are occupied if there is “at least one person who lives in the unit as a usual resident at the time of the interview, or if the occupants are only temporarily absent, for example, on vacation. However, if the unit is occupied entirely by people with a usual residence elsewhere, the unit is classified as vacant, such as seasonal units.

The table below provides total housing units and occupancy based on the 2020 Census:

<table>
<thead>
<tr>
<th></th>
<th>Census 2020</th>
<th>Census 2010</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Housing Units</td>
<td>53,892</td>
<td>52,764</td>
<td>+1,128</td>
</tr>
<tr>
<td>Occupied Housing Unit Rate</td>
<td>59.5%</td>
<td>61.8%</td>
<td></td>
</tr>
<tr>
<td>Occupied Housing Units (calculated)</td>
<td>32,066</td>
<td>32,629</td>
<td>-563</td>
</tr>
<tr>
<td>Vacant Housing Units (calculated)</td>
<td>21,826 (40.5%)</td>
<td>20,135 (38.16%)</td>
<td>+1,691</td>
</tr>
</tbody>
</table>

The table below shows the housing units by status and tenure from the 2015-2019 American Community Survey.

| HOUSING UNITS BY STATUS AND TENURE BY UNITS IN STRUCTURE (Monroe County-Unincorporated and Incorporated Areas) 2015-2019 |
|--------------------------------------------------------|-----------------|---------------|
| HOUSING OCCUPANCY                                      | Estimates       | Percent       |
| Total housing units                                    | 53,518         | 100.00%       |
| Occupied housing units                                 | 32,068         | 59.9%         |
| Vacant housing units                                   | 21,450         | 40.1%         |
| UNITS IN STRUCTURE                                     | Estimates       | Percent       |
| Total housing units                                    | 53,518         | 100.00%       |
| 1-unit, detached                                       | 29,086         | 54.3%         |
| 1-unit, attached                                       | 3,290          | 6.1%          |
| 2 units                                               | 2,488          | 4.6%          |
| 3 or 4 units                                           | 2,929          | 5.5%          |
| 5 to 9 units                                           | 2,554          | 4.8%          |
| 10 to 19 units                                         | 2,260          | 4.2%          |
| 20 or more units                                       | 4,389          | 8.2%          |
| Mobile home                                            | 6,380          | 11.9%         |
| Boat, RV, van, etc.                                    | 142            | 0.3%          |
| HOUSING TENURE                                         | Estimates       | Percent       |
| Occupied housing units                                 | 30,068         | 100.00%       |
| Owner-occupied                                         | 19,078         | 59.5%         |
| Renter-occupied                                        | 12,990         | 40.5%         |
| Average household size of owner-occupied unit          | 2.26           |               |
| Average household size of renter-occupied unit         | 2.36           |               |

Source: US Census 2019 American Community Survey
RESIDENTIAL RATE OF GROWTH ORDINANCE (ROGO)

Based on the Carrying Capacity and Hurricane Evacuation Studies, the Monroe County Board of County Commissioners adopted Ordinance 016-1992 on June 23, 1992, creating the Residential Dwelling Unit Allocation System known as the Rate of Growth Ordinance or ROGO. ROGO was developed to limit the annual amount and rate of development commensurate with the County’s ability to maintain its hurricane evacuation clearance time; and to deter the deterioration of public facility service levels, environmental degradation, and potential land use conflicts. It is used as a tool to equitably distribute the remaining number of permits available both geographically and over time. ROGO allows development subject to the ability to safely evacuate the Florida Keys (the Keys) within 24 hours.

The annual allocation period, or ROGO year, is the 12-month period beginning on July 13, 1992, (the effective date of the original dwelling unit allocation ordinance), and subsequent one-year periods. The number of dwelling units which can be permitted in Monroe County has consequently been controlled since July of 1992 (adoption of Ordinance 016-92).

Rule 28-20.140, F.A.C., and Comprehensive Plan Policy 101.3.2 regulate the number of permits issued annually for residential development under ROGO. Monroe County can award up to 197 allocations per year within the unincorporated area. These allocations are divided between three geographic subareas and are issued quarterly. Each year’s ROGO allocation of 197 new units is split with a minimum of 71 units allocated for affordable housing in perpetuity and market rate allocations not to exceed 126 new residential units per year.

Rule 28-20.140(b), F.A.C., and Comprehensive Plan Policy 101.2.1 state:
“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”.

LDC, Section 138-24(a)(2) establishes that ROGO allocations are to be awarded quarterly.
“Each subarea shall have its number of market rate housing residential ROGO allocations available per ROGO quarter determined by the following formula:

a. Market rate residential ROGO allocations available in each subarea per quarter is equal to the market rate residential ROGO allocations available in each subarea divided by four.

b. Affordable housing residential ROGO for all four ROGO quarters, including the allocations available for Big Pine Key, shall be made available at the beginning of the first quarter for a ROGO year. Beginning July 13, 2016, the balance of all remaining affordable housing residential ROGO allocations shall be made available for award.

On January 22, 2020, the BOCC adopted Ordinances 005-2020 and 006-2020, amending Comprehensive Plan Policy 101.3.2 and Land Development Code Section 138-24 to extend the time period of the ROGO system through 2026 by distributing the final three (3) years of market rate ROGO allocations over a 6-year period. For ROGO Years 29, 30, and 31, (July 13, 2020 – July 12, 2023), the number of market rate allocations is reduced to 64 per year, rather than 126.
For ROGO Years 32, 33, and 34, (July 13, 2023 – July 12, 2026), the number of market rate allocations will be 62 per year, as follows:

<table>
<thead>
<tr>
<th>ROGO Year</th>
<th>Annual Allocation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Market Rate</td>
<td>Affordable Housing</td>
</tr>
<tr>
<td>July 13, 2013—July 12, 2014</td>
<td>126</td>
<td>71</td>
</tr>
<tr>
<td>July 13, 2014—July 12, 2015</td>
<td>126</td>
<td>71</td>
</tr>
<tr>
<td>July 13, 2015—July 12, 2016</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>July 13, 2016—July 12, 2017</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>July 13, 2017—July 12, 2018</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>July 13, 2018—July 12, 2019</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>July 13, 2019—July 12, 2020</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>July 13, 2020—July 12, 2021</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>July 13, 2021—July 12, 2022</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>July 13, 2022—July 12, 2023</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>July 13, 2023—July 12, 2024</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>July 13, 2024—July 12, 2025</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>July 13, 2025—July 12, 2026</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,260</td>
<td>710</td>
</tr>
</tbody>
</table>

This change reduces the annual rate of additional new market rate residential development, to address multiple purposes, such as hurricane modeling, land acquisition and so forth. Additionally, this change should reduce the demands on public facilities based on new market rate residential development.

**TIER SYSTEM**

On September 22, 2005, the BOCC adopted Ordinance 025-2005 which amended the Comprehensive Plan to revise ROGO to utilize the Tier overlay as the basis for the competitive point system. On March 15, 2006, the BOCC adopted Ordinance 009-2006 to incorporate the Tier System as a basis for implementing ROGO within the Land Development Regulations (LDRs).

The Tier System changed the service areas (subareas boundaries) mentioned in the Introduction. It is the basis for the scoring of NROGO and ROGO applications and administrative relief. The new ROGO and NROGO subareas are the Lower Keys (Middle Keys are not included in the Lower Keys), Upper Keys, and Big Pine / No Name Keys. Tier Ordinance 009-2006 provides vesting provisions and allows for allocation of an annual cap of 197 residential dwelling units.

The Tier System made changes such as subarea boundary districts for allocation distribution, the basis of scoring applications, and administrative relief.

- During ROGO Year 14, Ord. 009-2006 was enacted changing the allocation number to 197 (126 market rate 71 affordable) pursuant to Rule 28-20.110, F.A.C. The same rule also returned 165 allocations to the County to be used for affordable housing.
• By ROGO Year 15, the new Big Pine/No Name Key subarea was created. Of the 197 annual allocations, 8 market rate and 2 affordable allocations were assigned to this subarea.

**BIG PINE KEY AND NO NAME KEYS**

Efforts to address the development impacts on the habitat of the Key Deer, Lower Keys Marsh Rabbit and the Eastern Indigo Snake on Big Pine Key/No Name Key started in the mid-1980s. In 1998, Monroe County, the Florida Department of Transportation (FDOT) and the Department of Community Affairs (DCA) signed a Memorandum of Agreement in which they committed to develop a Habitat Conservation Plan (HCP) for these two Keys. The HCP was completed in April 2003.

The Livable CommuniKeys Program (LCP), Master Plan for Future Development of Big Pine Key and No Name Key was adopted on August 18, 2004, pursuant to Ordinance 029-2004. The LCP envisioned the issuance of 200 residential dwelling units over 20 year horizon at a rate of roughly 10 per year. A minimum of twenty percent (20%) of the 10 units per year is to be set aside for affordable housing development (e.g. 2 units per year set aside for affordable housing.)

On June 9, 2006, a Federal Incidental Take Permit (#TE083411-0, ITP) from the U.S. Federal Fish and Wildlife Commission was issued to three (3) permittees: Monroe County, Florida Department of Transportation, and the Florida Department of Community Affairs. The ITP ensures that development bears its fair share of required mitigation and that the take of the covered species is minimized and mitigated.

**RATE OF GROWTH ORDINANCE (ROGO) ANALYSIS**

<table>
<thead>
<tr>
<th>ROGO Year</th>
<th>Market Rate ROGO Allocations Available</th>
<th>Market Rate ROGO Awarded</th>
<th>Affordable Housing ROGO Allocations Available</th>
<th>Affordable Housing ROGO Awarded*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 (July 14, 1992 –July 13, 1993)</td>
<td>204</td>
<td>204</td>
<td>52</td>
<td>11</td>
</tr>
<tr>
<td>Year 2 (July 14, 1993 –July 13, 1994)</td>
<td>243</td>
<td>231</td>
<td>52</td>
<td>9</td>
</tr>
<tr>
<td>Year 3 (July 14, 1994 –July 13, 1995)</td>
<td>246</td>
<td>249</td>
<td>52</td>
<td>10</td>
</tr>
<tr>
<td>Year 4 (July 14, 1995 –July 13, 1996)</td>
<td>245</td>
<td>263</td>
<td>52</td>
<td>40</td>
</tr>
<tr>
<td>Year 5 (July 14, 1996 –July 13, 1997)</td>
<td>215</td>
<td>218</td>
<td>52</td>
<td>23</td>
</tr>
<tr>
<td>Year 6 (July 14, 1997 –July 13, 1998)</td>
<td>211</td>
<td>197</td>
<td>77</td>
<td>56</td>
</tr>
<tr>
<td>Year 7 (July 14, 1998 –July 12, 1999)</td>
<td>101</td>
<td>102</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>Year</td>
<td>Start Date</td>
<td>End Date</td>
<td>Value 1</td>
<td>Value 2</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Year 8</td>
<td>July 13, 1999 – July 14, 2000</td>
<td></td>
<td>127</td>
<td>136</td>
</tr>
<tr>
<td>Year 9</td>
<td>July 13, 2000 – July 14, 2001</td>
<td></td>
<td>127</td>
<td>129</td>
</tr>
<tr>
<td>Year 10</td>
<td>July 14, 2001 – July 15, 2002</td>
<td></td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td>Year 11</td>
<td>July 16, 2002 – July 14, 2003</td>
<td></td>
<td>127</td>
<td>127</td>
</tr>
<tr>
<td>Year 12</td>
<td>July 13, 2003 – July 14, 2004</td>
<td></td>
<td>127</td>
<td>127</td>
</tr>
<tr>
<td>Year 13</td>
<td>July 14, 2004 – July 13, 2005</td>
<td></td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Year 14</td>
<td>July 14, 2005 – July 13, 2006</td>
<td></td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Year 15</td>
<td>July 14, 2006 – July 13, 2007</td>
<td></td>
<td>126</td>
<td>129</td>
</tr>
<tr>
<td>Year 16</td>
<td>July 14, 2007 – July 14, 2008</td>
<td></td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Year 17</td>
<td>July 15, 2008 – July 13, 2009</td>
<td></td>
<td>206</td>
<td>242</td>
</tr>
<tr>
<td>Year 18</td>
<td>July 14, 2009 – July 12, 2010</td>
<td></td>
<td>126</td>
<td>128</td>
</tr>
<tr>
<td>Year 19</td>
<td>July 13, 2010 – July 12, 2011</td>
<td></td>
<td>126</td>
<td>119</td>
</tr>
<tr>
<td>Year 20</td>
<td>July 13, 2011 – July 13, 2012</td>
<td></td>
<td>126</td>
<td>92</td>
</tr>
<tr>
<td>Year 21</td>
<td>July 13, 2012 – July 13, 2013</td>
<td></td>
<td>126</td>
<td>43</td>
</tr>
<tr>
<td>Year 22</td>
<td>July 13, 2013 – July 13, 2014</td>
<td></td>
<td>126</td>
<td>90</td>
</tr>
<tr>
<td>Year 23</td>
<td>July 13, 2014 – July 13, 2015</td>
<td></td>
<td>126</td>
<td>106</td>
</tr>
<tr>
<td>Year 24</td>
<td>July 13, 2015 – July 13, 2016</td>
<td></td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Year 25</td>
<td>July 12, 2016 – July 12, 2017</td>
<td></td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Year 26</td>
<td>July 13, 2017 – July 12, 2018</td>
<td></td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Year 27</td>
<td>July 13, 2018 – July 12, 2019</td>
<td></td>
<td>126</td>
<td>124</td>
</tr>
<tr>
<td>Year 28</td>
<td>July 13, 2019 – July 12, 2020</td>
<td></td>
<td>126</td>
<td>111</td>
</tr>
<tr>
<td>Year 29</td>
<td>July 13, 2020 – July 12, 2021</td>
<td></td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>4,015</td>
<td>3,886</td>
</tr>
</tbody>
</table>
There is a time lapse which occurs between the ROGO allocation date and the permit issuance date. An allocation award expires when its corresponding building permit is not picked up after sixty (60) days of notification by certified mail of the award, or upon expiration of the issued permit. The historical data presented in the table above do not include allocations issued in Key West, Key Colony Beach, Layton, Islamorada, or Marathon.

### NON-RESIDENTIAL RATE OF GROWTH ORDINANCE (NROGO)

Monroe County adopted the Non-Residential Rate of Growth (NROGO) in 2001 in order to ensure a reasonable balance between the amount of future non-residential development and the needs of a slower growing residential population.

Monroe County Comprehensive Plan Policy 101.4.1 limits the County’s availability of nonresidential square footage that may be permitted. This policy assures that the balance of residential to nonresidential development is maintained.

Policy 101.4.1 states:

“Monroe County shall maintain a Permit Allocation System for new nonresidential floor area, known as the Nonresidential Rate of Growth Ordinance (NROGO) System. Monroe County shall maintain a balance between residential and nonresidential growth by limiting the floor area of new nonresidential development available within the County to maintain a maximum of 47,083 square feet of floor area per NROGO year. The nonresidential allocation allowed by this policy shall be distributed on an annual basis, pursuant to Policy 101.4.3. The NROGO allocation system shall apply within the unincorporated area of the county, excluding areas within the county mainland and within the Ocean Reef planned development (Future development in the Ocean Reef planned development is based upon the December 2010 Ocean Reef Club Vested Development Rights Letter recognized and issued by the Department of Community Affairs).”

Section 138-51 of the LDC establishes the annual award distribution of NROGO allocations.

Sec. 138-51 NROGO allocations.

*Maximum amount of available floor area for the annual nonresidential ROGO allocations.* The annual amount of floor area available for allocation under NROGO shall be 47,083 square feet. Beginning NROGO Year 22 (July 13, 2013), this floor area shall be distributed to each of subareas as provided in the following table:

<table>
<thead>
<tr>
<th>ROGO subarea</th>
<th>Annual NROGO allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper</td>
<td>22,944 SF</td>
</tr>
<tr>
<td>Lower</td>
<td>21,749 SF</td>
</tr>
<tr>
<td>Big Pine/No Name</td>
<td>2,390 SF</td>
</tr>
<tr>
<td>Total</td>
<td>47,083 SF</td>
</tr>
</tbody>
</table>
NON-RESIDENTIAL RATE OF GROWTH ORDINANCE (NROGO) ANALYSIS

A summary of square footage of non-residential floor area previously made available and allocated in the unincorporated Keys from Year 14 (2006) to Year 29 (2021) is shown below.

### NROGO ALLOCATIONS FOR UNINCORPORATED MONROE COUNTY YEAR 14 (2006) TO YEAR 29 (2021)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount Available</th>
<th>Total Allocations Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 14 (2006)</td>
<td>16,000 sq/ft</td>
<td>12,594 sq/ft</td>
</tr>
<tr>
<td>Year 15 (2007)</td>
<td>18,000 sq/ft</td>
<td>12,500 sq/ft</td>
</tr>
<tr>
<td>Year 16 (2008)</td>
<td>35,000 sq/ft</td>
<td>17,938 sq/ft</td>
</tr>
<tr>
<td>Year 17 (2009)</td>
<td>30,000 sq/ft</td>
<td>13,056 sq/ft</td>
</tr>
<tr>
<td>Year 18 (2010)</td>
<td>20,000 sq/ft</td>
<td>6,355 sq/ft</td>
</tr>
<tr>
<td>Year 19 (2011)</td>
<td>20,000 sq/ft</td>
<td>6,116 sq/ft</td>
</tr>
<tr>
<td>Year 20 (2012)</td>
<td>44,700 sq/ft</td>
<td>8,234 sq./ft</td>
</tr>
<tr>
<td>Year 21 (2013)</td>
<td>44,700 sq/ft</td>
<td>2,500 sq/ft</td>
</tr>
<tr>
<td>Year 22 (2014)</td>
<td>47,083 sq/ft</td>
<td>7,395 sq/ft</td>
</tr>
<tr>
<td>Year 23 (2015)</td>
<td>47,083 sq/ft</td>
<td>2,484 sq/ft</td>
</tr>
<tr>
<td>Year 24 (2016)</td>
<td>47,083 sq/ft</td>
<td>1,756 sq/ft</td>
</tr>
<tr>
<td>Year 25 (2017)</td>
<td>47,083 sq/ft</td>
<td>3,558 sq/ft</td>
</tr>
<tr>
<td>Year 26 (2018)</td>
<td>47,083 sq/ft</td>
<td>15,678 sq/ft</td>
</tr>
<tr>
<td>Year 27 (2019)</td>
<td>47,083 sq/ft</td>
<td>11,092 sq/ft</td>
</tr>
<tr>
<td>Year 28 (2020)</td>
<td>47,083 sq/ft</td>
<td>298 sq/ft</td>
</tr>
<tr>
<td>Year 29 (2021)</td>
<td>47,083 sq/ft</td>
<td>10,995 sq/ft</td>
</tr>
</tbody>
</table>

NROGO for the Big Pine/No Name Key subarea is treated differently given the Habitat Conservation Plan (HCP) for the Key Deer and other protected species and the USFWS issued Incidental Take Permit (ITP). Annually the amount of new nonresidential floor area allocated to the Big Pine/No Name Key subarea is 2,390 square feet. A summary of allocations in these environmentally sensitive keys is shown below.

### NROGO ALLOCATIONS FOR BIG PINE/NO NAME KEYS

<table>
<thead>
<tr>
<th>Year</th>
<th>Available</th>
<th>Number of Applicants</th>
<th>Total Allocations Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 15 (2007)</td>
<td>9,082 sq/ft</td>
<td>2</td>
<td>5,000 sq/ft</td>
</tr>
<tr>
<td>Year 16 (2008)</td>
<td>0 sq/ft</td>
<td>2</td>
<td>3,809 sq/ft</td>
</tr>
<tr>
<td>Year 17 (2009)</td>
<td>5,000 sq/ft</td>
<td>0</td>
<td>0 sq/ft</td>
</tr>
<tr>
<td>Year 18 (2010)</td>
<td>2,390 sq/ft</td>
<td>0</td>
<td>0 sq/ft</td>
</tr>
<tr>
<td>Year 19 (2011)</td>
<td>2,390 sq/ft</td>
<td>0</td>
<td>384 sq/ft</td>
</tr>
<tr>
<td>Year 20 (2012)</td>
<td>2,390 sq/ft</td>
<td>4</td>
<td>7,500 sq/ft</td>
</tr>
<tr>
<td>Year 21 (2013)</td>
<td>6,729 sq/ft</td>
<td>3</td>
<td>5,240 sq/ft</td>
</tr>
<tr>
<td>Year 22 (2014)</td>
<td>2,390 sq/ft</td>
<td>1</td>
<td>1,011 sq/ft</td>
</tr>
<tr>
<td>Year 23 (2015)</td>
<td>2,390 sq/ft</td>
<td>2</td>
<td>728 sq/ft</td>
</tr>
<tr>
<td>Year 24 (2016)</td>
<td>2,390 sq/ft</td>
<td>0</td>
<td>0 sq/ft</td>
</tr>
<tr>
<td>Year</td>
<td>Single Family</td>
<td>Duplex</td>
<td>Multi Family</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>--------</td>
<td>--------------</td>
</tr>
<tr>
<td>January 1, 2000-December 31, 2000</td>
<td>169</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>January 1, 2001-December 31, 2001</td>
<td>153</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>January 1, 2002-December 31, 2002</td>
<td>200</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>January 1, 2003-December 31, 2003</td>
<td>228</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>January 1, 2004-December 31, 2004</td>
<td>241</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>January 1, 2005-December 31, 2005</td>
<td>361</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>January 1, 2006-December 31, 2006</td>
<td>376</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>January 1, 2007-December 31, 2007</td>
<td>380</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>January 1, 2008-December 31, 2008</td>
<td>168</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>January 1, 2009-December 31, 2009</td>
<td>197</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>January 1, 2010-December 31, 2010</td>
<td>222</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>January 1, 2011-December 31, 2011</td>
<td>162</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>January 1, 2012-December 31, 2012</td>
<td>109</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>January 1, 2013-December 31, 2013</td>
<td>174</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>January 1, 2014-December 31, 2014</td>
<td>256</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>January 1, 2015-December 31, 2015</td>
<td>209</td>
<td>0</td>
<td>44</td>
</tr>
</tbody>
</table>

BUILDING PERMIT DATA

There were 5,620 dwelling units that received a building permit from January 1, 2000, to December 31, 2020. Of these units, approximately 86.6 percent were single family homes and 7.8 percent were mobile homes and recreational vehicles (RV). An average of 268 new and replacement dwelling units per year were permitted from 2000 to 2020. Of the 5,620 dwelling unit permits issued, 2,324 were the result of obtaining a ROGO allocation. Of the 5,620 dwelling units permits issued, a total of 5,207 dwelling units received a certificate of occupancy.
A total of 4,057 dwelling units were demolished from 2000 to December 31, 2020. The highest demolition rate occurred in years 2018 and 2019 with 693 units demolished, presumably in response to damage incurred by Hurricane Irma in September, 2017. An average of 193 dwelling units were demolished per year between 2000 and 2020. At this time it is not possible to determine, whether a demolition was for a single family, a mobile home, etc.

### HOUSING DEMOLITION PERMITS

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential Demolitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2000-December 31, 2000</td>
<td>98</td>
</tr>
<tr>
<td>January 1, 2001-December 31, 2001</td>
<td>157</td>
</tr>
<tr>
<td>January 1, 2002-December 31, 2002</td>
<td>140</td>
</tr>
<tr>
<td>January 1, 2003-December 31, 2003</td>
<td>143</td>
</tr>
<tr>
<td>January 1, 2004-December 31, 2004</td>
<td>218</td>
</tr>
<tr>
<td>January 1, 2005-December 31, 2005</td>
<td>341</td>
</tr>
<tr>
<td>January 1, 2006-December 31, 2006</td>
<td>336</td>
</tr>
<tr>
<td>January 1, 2007-December 31, 2007</td>
<td>241</td>
</tr>
<tr>
<td>January 1, 2008-December 31, 2008</td>
<td>146</td>
</tr>
<tr>
<td>January 1, 2009-December 31, 2009</td>
<td>129</td>
</tr>
<tr>
<td>January 1, 2010-December 31, 2010</td>
<td>239</td>
</tr>
<tr>
<td>January 1, 2011-December 31, 2011</td>
<td>96</td>
</tr>
<tr>
<td>January 1, 2012-December 31, 2012</td>
<td>106</td>
</tr>
<tr>
<td>January 1, 2013-December 31, 2013</td>
<td>120</td>
</tr>
<tr>
<td>January 1, 2014-December 31, 2014</td>
<td>132</td>
</tr>
<tr>
<td>January 1, 2015-December 31, 2015</td>
<td>140</td>
</tr>
<tr>
<td>January 1, 2016- December 31, 2016</td>
<td>152</td>
</tr>
<tr>
<td>January 1, 2017- December 31, 2017</td>
<td>262</td>
</tr>
<tr>
<td>January 1, 2018- December 31, 2018</td>
<td>348</td>
</tr>
<tr>
<td>January 1, 2019- December 31, 2019</td>
<td>345</td>
</tr>
<tr>
<td>January 1, 2020- December 31, 2020</td>
<td>180</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,057</strong></td>
</tr>
</tbody>
</table>
II. TRANSPORTATION FACILITIES

Roads are one of the critical public facilities identified for biennial assessment in the Monroe County Land Development (LDC). The Comprehensive Plan and LDC regulations require U.S. 1 to remain at a LOS C or higher and that all county roads to remain at a LOS D or higher. The Monroe County Division of Public Works is charged with maintaining and improving secondary roads within the boundaries of unincorporated Monroe County. The Florida Department of Transportation (FDOT) is responsible for maintaining U.S. 1.

Monroe County has conducted travel time and delay studies of U.S. 1 on an annual or biennial basis since 1991. The data collection for years 1991 through 1996 was conducted by the Monroe County Planning Department, with assistance from the Monroe County Engineering Department, and the Florida Department of Transportation. URS has collected the data for years 1997 through 2017, on behalf of the Monroe County Planning Department with assistance from the agencies identified above. Beginning in 2019, data for the biennial US1 Arterial Travel Time and Delay Study has been collected by AECOM, the County’s current transportation consultant.

The following are the travel time/delay data and findings from the 2021 US1 Arterial Travel Time and Delay Study.

The U.S.1 Arterial Travel Time and Delay Study’s primary objective is to monitor the level of service on U.S. 1 for concurrency management purposes pursuant to Chapter 163, Florida Statutes and Section 114 of the Monroe County Land Development Code. The study utilizes an empirical relationship between the volume-based capacities and the speed-based LOS methodology developed for U.S. 1 in Monroe County, by the U.S. 1 Level of Service Task Force.

A county-imposed building moratorium results when the measured speeds of a segment OR the overall travel speeds of the entire U.S. 1 fall below the adopted level of service thresholds; segment level failure results in building moratorium specific to the area served by that particular segment and the overall failure would result in a countywide moratorium. Although there has never been a countywide moratorium, Big Pine Key between 1994 and 2002 experienced a localized development moratorium. Due to the significant role of this study in the County’s growth management process, the accuracy of data collection and the results of this study are significant.

U.S. 1 (the Overseas Highway) is the only principal arterial serving people and visitors in the Keys. The unique geography, land use patterns and trip making characteristics of the Florida Keys present a challenge in developing and applying a reasonable and acceptable method to assess LOS. Although U.S. 1 in the Florida Keys is predominantly an uninterrupted-flow, two-lane roadway, its uniqueness warrants an alternative LOS evaluation process than found in the Highway Capacity Manual.

A uniform method was developed in 1993 and amended December 1997 and February 2021 by the U.S. 1 Level of Service Task Force to assess the level of service on U.S. 1. The adopted method considers both the overall level of service from Key West to the mainland and the level of service on 24 selected segments (See Table 1). The methodology was developed from basic criteria and principles contained in Chapter 7 (Rural Multilane Highways), Chapter 8 (Rural Two-Lane Highways) and Chapter 11 (Urban and Suburban Arterials) of Highway Capacity Manual. The methodology establishes a procedure for using travel speeds as a means of assessing the level of service and reserve capacity of U.S. 1 in the unique setting of the Florida Keys.
The travel speeds for the entire 108-mile stretch of U.S. 1 and the 24 individual segments are established by conducting travel time runs during the peak season. The peak season, for the purpose of this study, has been established by the task force as the six-week window beginning the second week of February and ending the fourth week of March.

Overall speeds are those speeds recorded over the 108-mile length of the Keys between Key West and Miami-Dade County. Overall speeds reflect the conditions experienced by long distance trips or traffic traveling the entire length of the Keys. Given that U.S. 1 is the only principal arterial in unincorporated Monroe County, the movement of long distance traffic is an important consideration.

Monroe County has adopted a LOS C Standard for U.S. 1. Further, 45 mph has been adopted as the LOS C Standard for the entire length of U.S. 1 regardless of the posted speed limits. Under the adopted growth management process, if the overall LOS for U.S. 1 falls below the LOS C Standard, then no additional land development will be allowed in the Florida Keys.

Segment speeds are the speeds recorded within individual links of U.S. 1. The segments were defined by the Task Force to reflect roadway cross-sections, speed limits, and geographical boundaries. Segment speeds reflect the conditions experienced during local trips. Given that U.S. 1 serves as the "main street" of the Keys, the movement of local traffic is also an important consideration on this multi purpose highway.

A comparison of average posted speed limits and the average travel speeds for individual segments leads to the level of service on the respective segments along U.S. 1. The difference between the segment travel speeds and the LOS C Standard is called reserve speed. The reserve speed is converted into an estimated reserve capacity of additional traffic volumes and corresponding additional development. If the travel speed falls below the LOS C Standard, additional trips equivalent to 5% of LOS C capacity are allowed, to accommodate a limited amount of land development to continue until traffic speeds are measured again during the next biennial study or until remedial actions are implemented.

### Table 1

<table>
<thead>
<tr>
<th>Segment Number</th>
<th>Mile Marker</th>
<th>Segment Name</th>
<th>Segment Number</th>
<th>Mile Marker</th>
<th>Segment Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4-5</td>
<td>Stock Island</td>
<td>13</td>
<td>47-54</td>
<td>Marathon</td>
</tr>
<tr>
<td>2</td>
<td>5-9</td>
<td>Boca Chica</td>
<td>14</td>
<td>54-60.5</td>
<td>Grassym</td>
</tr>
<tr>
<td>3</td>
<td>9-10.5</td>
<td>Big Coppitt</td>
<td>15</td>
<td>60.5-63</td>
<td>Duck</td>
</tr>
<tr>
<td>4</td>
<td>10.5-16.5</td>
<td>Saddlebunch</td>
<td>16</td>
<td>63-73</td>
<td>Long</td>
</tr>
<tr>
<td>5</td>
<td>16.5-20.5</td>
<td>Sugarloaf</td>
<td>17</td>
<td>73-77.5</td>
<td>Lower Matecumbe</td>
</tr>
<tr>
<td>6</td>
<td>20.5-23</td>
<td>Cudjoe</td>
<td>18</td>
<td>77.5-79.5</td>
<td>Tea Table</td>
</tr>
<tr>
<td>7</td>
<td>23-25</td>
<td>Summerland</td>
<td>19</td>
<td>79.5-84</td>
<td>Upper Matecumbe</td>
</tr>
<tr>
<td>8</td>
<td>25-27.5</td>
<td>Ramrod</td>
<td>20</td>
<td>84-86</td>
<td>Windley</td>
</tr>
<tr>
<td>9</td>
<td>27.5-29.5</td>
<td>Torch</td>
<td>21</td>
<td>86-91.5</td>
<td>Plantation</td>
</tr>
<tr>
<td>10</td>
<td>29.5-33</td>
<td>Big Pine</td>
<td>22</td>
<td>91.5-99.5</td>
<td>Tavernier</td>
</tr>
<tr>
<td>11</td>
<td>33-40</td>
<td>Bahia Honda</td>
<td>23</td>
<td>99.5-106</td>
<td>Key Largo</td>
</tr>
<tr>
<td>12</td>
<td>40-47</td>
<td>7-Mile Bridge</td>
<td>24</td>
<td>106-112.5</td>
<td>Cross Key</td>
</tr>
</tbody>
</table>
The travel time, delay, and distance data were collected by AECOM staff. The data were recorded by date, day of the week, time of the day, and direction. The field data collection took place between March 7, 2021, and March 20, 2021. Fourteen (14) round trips were made to successfully complete the twenty-eight (28) required northbound and southbound runs. These runs represent a sample of two runs of each day of the week. Every one of the twenty-eight travel time run data sheets was quality checked. The seven-day, 24-hour traffic data were collected in Islamorada, Marathon, and Big Pine Key from March 15, 2021, to March 21, 2021, concurrently with the travel time runs.

**Traffic Volumes**

U.S. 1 is predominately a four-lane facility in Marathon and a two-lane facility in Upper Matecumbe and Big Pine Key. Seven-day continuous traffic counts recorded at three locations along U.S. 1 yielded the following average daily traffic (ADT) and annual average daily traffic (AADT) volumes for 2021. These volumes for 5-day and 7-day are averages of the raw volumes counted. The volumes have been adjusted using 2019 seasonal and axle factors to estimate the 2021 AADT’s. The traffic counts were recorded between March 15, 2021, to March 21, 2021.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>5-DAY ADT</th>
<th>7-DAY ADT</th>
<th>AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Pine Key (MM 29)</td>
<td>22,799</td>
<td>22,009</td>
<td>19,427</td>
</tr>
<tr>
<td>Marathon (MM 50)</td>
<td>38,262</td>
<td>36,739</td>
<td>32,430</td>
</tr>
<tr>
<td>Upper Matecumbe (MM 84)</td>
<td>26,152</td>
<td>26,908</td>
<td>23,751</td>
</tr>
</tbody>
</table>

The 2021 AADT increased in Big Pine (1.99%) and Upper Matecumbe (3.07%) Keys but decreased in Marathon Key (-6.30%) compared to 2017.

Similarly, the 2021 AADT increased in Big Pine (3.59%) and Upper Matecumbe (6.48%) Keys but decreased in Marathon Key (-11.67%) as compared to 2019. A detailed historical comparison of the US 1 traffic counts for the period from 1996 to 2021 is presented in Appendix D. A comparison of the most recent data (2009 to 2021) is presented in a Table and graph on pages 29 and 30, respectively.

US 1 historical traffic growth is depicted in a regression analysis on page 31. A linear regression analysis of the AADT at each of the three locations over the last 25 years indicates that there is a slight increase in overall traffic growth at the Marathon and Upper Matecumbe count locations, and an overall decreasing trend in traffic volumes for the Big Pine count location (but the last 13-year data shows an increasing trend).
<table>
<thead>
<tr>
<th>Location</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2015</th>
<th>2017</th>
<th>2019</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>% Change</td>
<td>Count</td>
<td>% Change</td>
<td>Count</td>
<td>% Change</td>
<td>Count</td>
</tr>
<tr>
<td>Big Pine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – Day Average</td>
<td>20,468</td>
<td>-0.88%</td>
<td>21,056</td>
<td>2.87%</td>
<td>20,986</td>
<td>-0.33%</td>
<td>22,833</td>
</tr>
<tr>
<td>7 – Day Average</td>
<td>20,070</td>
<td>-0.22%</td>
<td>20,579</td>
<td>2.53%</td>
<td>20,066</td>
<td>-2.49%</td>
<td>22,106</td>
</tr>
<tr>
<td>AADT</td>
<td>17,684</td>
<td>-0.88%</td>
<td>18,011</td>
<td>1.85%</td>
<td>17,943</td>
<td>-0.38%</td>
<td>20,139</td>
</tr>
<tr>
<td>Marathon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – Day Average</td>
<td>32,156</td>
<td>0.85%</td>
<td>34,145</td>
<td>6.19%</td>
<td>34,097</td>
<td>-0.14%</td>
<td>38,824</td>
</tr>
<tr>
<td>7 – Day Average</td>
<td>31,097</td>
<td>1.79%</td>
<td>32,985</td>
<td>6.07%</td>
<td>32,783</td>
<td>-0.61%</td>
<td>38,144</td>
</tr>
<tr>
<td>AADT</td>
<td>27,782</td>
<td>0.85%</td>
<td>29,208</td>
<td>5.13%</td>
<td>29,153</td>
<td>-0.19%</td>
<td>34,243</td>
</tr>
<tr>
<td>Upper Matecumbe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – Day Average</td>
<td>24,326</td>
<td>7.69%</td>
<td>24,561</td>
<td>0.97%</td>
<td>23,656</td>
<td>-3.68%</td>
<td>26,079</td>
</tr>
<tr>
<td>7 – Day Average</td>
<td>24,508</td>
<td>8.27%</td>
<td>24,936</td>
<td>1.75%</td>
<td>23,164</td>
<td>-7.11%</td>
<td>25,817</td>
</tr>
<tr>
<td>AADT</td>
<td>21,017</td>
<td>7.69%</td>
<td>21,009</td>
<td>-0.04%</td>
<td>20,226</td>
<td>-3.73%</td>
<td>23,043</td>
</tr>
</tbody>
</table>

Source: 2021– U.S. 1 Arterial Travel Time and Delay Study-AECOM
U.S. 1 AADT - HISTORICAL TRAFFIC GROWTH

AADT

Source: 2021 – U.S. 1 Arterial Travel Time and Delay Study-AECOM
**Overall Speeds**

Overall speeds are those speeds recorded over the 108-mile length of US 1 in the Keys between Key West and Miami-Dade County line. Overall speeds reflect the conditions experienced during long distance or through trips. Given that U.S. 1 is the only principal arterial in Monroe County, the movement of through traffic is an important consideration.

The levels of service (LOS) criteria for overall speeds on U.S. 1 in Monroe County, as adopted by the Task Force, are as follows:

- **LOS A**: 51.0 mph or above
- **LOS B**: 50.9 mph to 48 mph
- **LOS C**: 47.9 mph to 45 mph
- **LOS D**: 44.9 mph to 42 mph
- **LOS E**: 41.9 mph to 36 mph
- **LOS F**: below 36 mph

The overall median speed during the 2021 ATTDS was 45.5 mph, which is 0.9 mph higher than the 2019 median speed of 44.6 mph, and 0.5 mph lower than the 2017 median speed of 46 mph. The median speed corresponds to LOS C. The highest overall speed recorded during the 14-day ATTDS was 49.6 mph (0.9 mph lower than the 2019 highest overall speed of 50.5 mph), which occurred on Monday, March 15, 2021 in the southbound direction. The lowest overall speed recorded was 35.5 mph (2.3 mph lower than the 2019 lowest overall speed of 37.8 mph), which occurred on Saturday, March 20, 2021 in the southbound direction.

**Segment Speeds**

Segment speeds are the speeds recorded within individual links of U.S. 1. The segments were defined by the Task Force to reflect roadway cross-sections, speed limits, and geographical boundaries. Segment speeds reflect the conditions experienced during local trips. Given that U.S. 1 serves as the "main street" of the Keys, the movement of local traffic is also an important consideration on this multipurpose highway.

The level of service criteria for segment speeds on U.S. 1 in Monroe County depends on the flow characteristics and the posted speed limits within the given segment. The criteria, listed by type of flow characteristic, are summarized below.

**Interrupted Flow**
- **LOS A**: 35 mph
- **LOS B**: 28 mph
- **LOS C**: 22 mph
- **LOS D**: 17 mph
- **LOS E**: 13 mph
- **LOS F**: < 13 mph
Uninterrupted Flow

LOS A 1.5 mph above speed limit
LOS B 1.5 mph below speed limit
LOS C 4.5 mph below speed limit
LOS D 7.5 mph below speed limit
LOS E 13.5 mph below speed limit
LOS F more than 13.5 mph below speed limit

For all “uninterrupted” segments containing isolated traffic signals, the travel times were reduced by 35 seconds per signalized intersection and 3 seconds per pedestrian signal to account for delay due to signals. The Marathon and the Stock Island segments are considered “interrupted” flow facilities, which are evaluated using the interrupted flow LOS criteria shown above. Therefore, no adjustments (to account for delay at signals) were made to travel times in these segments.

The segment limits, median travel speeds, and Level of Service (for 2017 and 2021) for each segment are presented in Figure 3. The median segment speed ranged from 59.9 mph in the Boca Chica segment to 34.7 mph in the Plantation segment. The following is a summary of LOS changes, as compared to 2017:

Compared to 2017 results, the median segment speeds increased in 13 of the 24 segments, ranging between 0.2 mph and 10.6 mph, and decreased in 11 segments, ranging from -0.1 mph to -5.8 mph. The largest increase in speed (+10.6 mph) was recorded in Segment # 1 (Stock Island – MM 4.0 to MM 5.0); The largest reduction in speed (-5.8 mph) was recorded in Segment # 21 (Plantation – MM 86.0 to MM 91.5).

Compared to 2019 results, the LOS increased in seven of the 24 segments, and decreased in two segments. The LOS did not change in the remaining segments. The most significant LOS changes recorded in Segments # 18 (Tea Table – MM 77.5 to MM 79.5; LOS changed from ‘D’ to LOS ‘A’), # 20 (Windley – MM 84.0 to MM 86.0; LOS changed from ‘D’ to LOS ‘C’), # 21 (Plantation – MM 86.0 to MM 91.5; LOS changed from ‘D’ to LOS ‘C’), # 16 (Long – MM 63.0 to MM 73.0; LOS changed from ‘B’ to LOS ‘C’), and # 24 (Cross – MM 106.0 to MM 112.5; LOS changed from ‘B’ to LOS ‘C’).

Compared to 2019 results, the median segment speeds increased in 15 of the 24 segments, ranging between 0.3 mph and 7.0 mph, and decreased in nine segments, ranging from -0.1 mph to -2.1 mph. The largest increase in speed (+7.0 mph) was recorded in Segment # 1 (Stock Island – MM...
4.0 to MM 5.0); The largest reduction in speed (-2.1 mph) was recorded in Segment # 16 (Long – MM 63.0 to MM 73.0).

**Reserve Capacities**

The difference between the median speed and the LOS C Standard speed gives the reserve speed, which in turn can be converted to an estimated reserve capacity. The overall median speed of 45.5 mph compared to the LOS C standard of 45 mph results in a positive overall reserve speed of 0.5 mph. This reserve speed is converted into an estimated number of reserve trips using the formula below:

\[
\text{Reserve Volume} = \frac{\text{Reserve Speed} \times K \times \text{Overall Length}}{\text{Trip Length}}
\]

\[
\text{Reserve Volume} = \frac{\text{Reserve speed} \times 1656 \text{ daily trips/mph} \times 112 \text{ miles}}{10 \text{ miles}}
\]

Applying the formula for reserve volume to each of the 24 segments of US 1 individually gives maximum reserve volumes for all segments totaling 105,865 trips. These individual reserve volumes may be unobtainable, due to the constraint imposed by the overall reserve volume.

County regulations and FDOT policy allow segments that fail to meet the LOS C standards to receive an allocation not to exceed five percent below the LOS C standard. The so-called five percent allocations were calculated for such segments as follows:

\[
5\% \text{ Allocation} = \frac{(\text{median speed} - 95\% \text{ of LOS C}) \times 1656 \times \text{ Length}}{\text{Trip Length}}
\]

In 2021, there were two (2) segments identified to be functioning below the LOS C threshold - Upper Matecumbe (Segment #19) and Windley (Segment #20). Both segments are in the Village of Islamorada.

The two segments identified above have depleted their reserve capacities, leaving -2,187 trips in Upper Matecumbe (Segment #19) and 271 trips in Windley (Segment #20) based on the 5% below LOS C allocation.

The table on page 34 details the segment levels of service and reserve capacity values for each segment.
## 2021 LEVEL OF SERVICE AND RESERVE CAPACITY

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>LENGTH (miles)</th>
<th>FACILITY TYPE</th>
<th>POSTED SPEED</th>
<th>ADJ. FOR SIGNAL</th>
<th>ADJUSTED LOS C CRITERIA</th>
<th>MEDIAN TRAVEL SPEED</th>
<th>LOS</th>
<th>RESERVE SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Stock Island (4.0 - 5.0)</td>
<td>1.10</td>
<td>4-L/D</td>
<td>30/35/45</td>
<td>N/A</td>
<td>22.0</td>
<td>40.0</td>
<td>A</td>
<td>18.0</td>
</tr>
<tr>
<td>2 Boca Chica (5.0 - 9.0)</td>
<td>3.9</td>
<td>4-L/D</td>
<td>45/55</td>
<td>N/A</td>
<td>50.2</td>
<td>69.9</td>
<td>A</td>
<td>9.7</td>
</tr>
<tr>
<td>3 Big Coppitt (9.0 - 10.5)</td>
<td>1.5</td>
<td>2-L/U</td>
<td>45/55</td>
<td>N/A</td>
<td>41.8</td>
<td>47.5</td>
<td>B</td>
<td>5.6</td>
</tr>
<tr>
<td>4 Saddlebunch (10.5 - 16.5)</td>
<td>5.8</td>
<td>2-L/U</td>
<td>45/55</td>
<td>N/A</td>
<td>49.1</td>
<td>53.5</td>
<td>B</td>
<td>4.3</td>
</tr>
<tr>
<td>5 Sugarloaf (16.5 - 20.5)</td>
<td>3.9</td>
<td>2-L/U</td>
<td>45</td>
<td>6.8</td>
<td>33.7</td>
<td>48.8</td>
<td>A</td>
<td>15.1</td>
</tr>
<tr>
<td>6 Cudjoe (20.5 - 23.0)</td>
<td>2.5</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>47.9</td>
<td>A</td>
<td>7.4</td>
</tr>
<tr>
<td>7 Summerland (23.0 - 25.0)</td>
<td>2.2</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>46.1</td>
<td>B</td>
<td>5.6</td>
</tr>
<tr>
<td>8 Ramrod (25.0 - 27.5)</td>
<td>2.3</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>46.5</td>
<td>A</td>
<td>6.0</td>
</tr>
<tr>
<td>9 Toroh (27.5 - 29.5)</td>
<td>2.1</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>48.8</td>
<td>A</td>
<td>8.3</td>
</tr>
<tr>
<td>10 Big Pine (29.5 - 33.0)</td>
<td>3.4</td>
<td>2-L/U</td>
<td>45</td>
<td>5.9</td>
<td>34.6</td>
<td>42.7</td>
<td>A</td>
<td>8.3</td>
</tr>
<tr>
<td>11 Bahia Honda (33.0 - 40.0)</td>
<td>7.0</td>
<td>2-L/U (70%), 4-L (30%)</td>
<td>45/50/55</td>
<td>N/A</td>
<td>47.9</td>
<td>54.8</td>
<td>A</td>
<td>6.9</td>
</tr>
<tr>
<td>12 7-Mile Bridge (40.0 - 47.0)</td>
<td>6.8</td>
<td>2-L/U</td>
<td>45/55</td>
<td>N/A</td>
<td>49.9</td>
<td>53.2</td>
<td>B</td>
<td>3.3</td>
</tr>
<tr>
<td>13 Marathon (47.0 - 54.0)</td>
<td>7.3</td>
<td>2-L/U (13%), 4-L (87%)</td>
<td>35/45</td>
<td>42.5</td>
<td>22.0</td>
<td>39.6</td>
<td>A</td>
<td>17.6</td>
</tr>
<tr>
<td>14 Grassy (54.0 - 60.5)</td>
<td>6.4</td>
<td>2-L/U</td>
<td>45/55</td>
<td>54.6</td>
<td>48.0</td>
<td>51.4</td>
<td>C</td>
<td>3.4</td>
</tr>
<tr>
<td>15 Duck (60.5 - 63.0)</td>
<td>2.7</td>
<td>2-L/U</td>
<td>55</td>
<td>N/A</td>
<td>50.5</td>
<td>53.2</td>
<td>B</td>
<td>2.7</td>
</tr>
<tr>
<td>16 Long (63.0 - 73.0)</td>
<td>9.9</td>
<td>2-L/U</td>
<td>45/50/55</td>
<td>53.4</td>
<td>48.9</td>
<td>49.9</td>
<td>C</td>
<td>1.0</td>
</tr>
<tr>
<td>17 L Matecumbe (73.0 - 77.5)</td>
<td>4.5</td>
<td>2-L/U</td>
<td>45/50/55</td>
<td>52.5</td>
<td>48.0</td>
<td>48.2</td>
<td>C</td>
<td>0.2</td>
</tr>
<tr>
<td>18 Tea Table (77.5 - 79.5)</td>
<td>2.2</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>46.6</td>
<td>A</td>
<td>6.1</td>
</tr>
<tr>
<td>19 U Matecumbe (79.5 - 84.0)</td>
<td>4.1</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>35.3</td>
<td>E</td>
<td>5.2</td>
</tr>
<tr>
<td>20 Windley (84.0 - 86.0)</td>
<td>1.9</td>
<td>2-L/U</td>
<td>45</td>
<td>N/A</td>
<td>40.5</td>
<td>39.3</td>
<td>D</td>
<td>-1.2</td>
</tr>
<tr>
<td>21 Plantation (86.0 - 91.5)</td>
<td>5.8</td>
<td>2-L/U</td>
<td>35/45</td>
<td>43.0</td>
<td>32.6</td>
<td>34.7</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>22 Tavernier (91.5 - 99.5)</td>
<td>8.0</td>
<td>4-L/D</td>
<td>45/50</td>
<td>47.2</td>
<td>39.6</td>
<td>49.4</td>
<td>A</td>
<td>9.8</td>
</tr>
<tr>
<td>23 Key Largo (99.5 - 106.0)</td>
<td>6.8</td>
<td>4-L/D</td>
<td>45</td>
<td>5.4</td>
<td>35.1</td>
<td>45.0</td>
<td>A</td>
<td>9.9</td>
</tr>
<tr>
<td>24 Cross (106.0 - 112.5)</td>
<td>6.2</td>
<td>2-L/U</td>
<td>45/55</td>
<td>N/A</td>
<td>46.9</td>
<td>49.1</td>
<td>C</td>
<td>2.2</td>
</tr>
<tr>
<td>Overall</td>
<td>108.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45.0</td>
<td>C</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2021 MAXIMUM RESERVE VOLUME (trips)</th>
<th>2021 5% ALLOCATION BELOW LOS C VOLUME (trips)</th>
<th>2017 MAXIMUM RESERVE VOLUME (trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,279</td>
<td>2,791</td>
<td>1,348</td>
</tr>
<tr>
<td>6,265</td>
<td>1,921</td>
<td>6,071</td>
</tr>
<tr>
<td>1,391</td>
<td>4,034</td>
<td>1,341</td>
</tr>
<tr>
<td>4,130</td>
<td>6,513</td>
<td>4,034</td>
</tr>
<tr>
<td>9,752</td>
<td>10,856</td>
<td>7,944</td>
</tr>
<tr>
<td>3,064</td>
<td>3,920</td>
<td>3,188</td>
</tr>
<tr>
<td>2,040</td>
<td>2,791</td>
<td>1,639</td>
</tr>
<tr>
<td>2,285</td>
<td>3,063</td>
<td>2,133</td>
</tr>
<tr>
<td>2,886</td>
<td>3,589</td>
<td>2,504</td>
</tr>
<tr>
<td>4,561</td>
<td>5,511</td>
<td>1,296</td>
</tr>
<tr>
<td>7,998</td>
<td>10,730</td>
<td>6,723</td>
</tr>
<tr>
<td>3,716</td>
<td>6,508</td>
<td>3,603</td>
</tr>
<tr>
<td>21,276</td>
<td>22,590</td>
<td>19,221</td>
</tr>
<tr>
<td>3,603</td>
<td>6,183</td>
<td>3,286</td>
</tr>
<tr>
<td>1,207</td>
<td>2,344</td>
<td>1,252</td>
</tr>
<tr>
<td>1,639</td>
<td>5,619</td>
<td>2,459</td>
</tr>
<tr>
<td>149</td>
<td>1,939</td>
<td>224</td>
</tr>
<tr>
<td>2,222</td>
<td>2,965</td>
<td>(692)</td>
</tr>
<tr>
<td>(3,531)</td>
<td>(2,187)</td>
<td>(883)</td>
</tr>
<tr>
<td>271</td>
<td>157</td>
<td>6.876</td>
</tr>
<tr>
<td>1,921</td>
<td>3,524</td>
<td>3,266</td>
</tr>
<tr>
<td>12,983</td>
<td>15,580</td>
<td>8,676</td>
</tr>
<tr>
<td>11,148</td>
<td>13,095</td>
<td>8,333</td>
</tr>
<tr>
<td>2,259</td>
<td>4,618</td>
<td>5,052</td>
</tr>
</tbody>
</table>

Source: 2021– U.S. 1 Arterial Travel Time and Delay Study-AECOM
SUMMARY

The following is a summary of the 2021 Travel Time and Delay Study results as compared to the 2017 Travel Time and Delay Study:

a) The average traffic volumes have increased in Big Pine (2.00%) and Upper Matecumbe (3.07%) Keys but have decreased in Marathon Key (-6.30%) as compared to 2017.

b) The overall travel speed on US 1 based on the 2021 study is 45.5 mph, which is 0.5 mph lower than the 2017 overall travel speed.

c) As compared to the 2017 data, the median travel speeds in 13 of the 24 segments have increased. They are:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Island</td>
<td>+10.6 mph</td>
</tr>
<tr>
<td>Boca Chica</td>
<td>+0.3 mph</td>
</tr>
<tr>
<td>Big Coppitt</td>
<td>+0.9 mph</td>
</tr>
<tr>
<td>Saddlebunch</td>
<td>+0.2 mph</td>
</tr>
<tr>
<td>Sugarloaf</td>
<td>+0.5 mph</td>
</tr>
<tr>
<td>Summerland</td>
<td>+1.1 mph</td>
</tr>
<tr>
<td>Ramrod</td>
<td>+0.4 mph</td>
</tr>
<tr>
<td>Torch</td>
<td>+1.1 mph</td>
</tr>
<tr>
<td>Big Pine</td>
<td>+3.3 mph</td>
</tr>
<tr>
<td>Bahia Honda</td>
<td>+1.1 mph</td>
</tr>
<tr>
<td>Marathon</td>
<td>+1.7 mph</td>
</tr>
<tr>
<td>Tavernier</td>
<td>+2.0 mph</td>
</tr>
<tr>
<td>Key Largo</td>
<td>+0.6 mph</td>
</tr>
</tbody>
</table>

Median travel speeds in 11 segments have decreased. They are:

<table>
<thead>
<tr>
<th>Segment</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cudjoe</td>
<td>-0.3 mph</td>
</tr>
<tr>
<td>7-Mile Bridge</td>
<td>-0.1 mph</td>
</tr>
<tr>
<td>Grassy</td>
<td>-0.2 mph</td>
</tr>
<tr>
<td>Duck</td>
<td>-0.1 mph</td>
</tr>
<tr>
<td>Long</td>
<td>-0.6 mph</td>
</tr>
<tr>
<td>Cross</td>
<td>-3.6 mph</td>
</tr>
<tr>
<td>L Matecumbe</td>
<td>-1.6 mph</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td></td>
</tr>
<tr>
<td>Tea Table</td>
<td>-1.0 mph</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td></td>
</tr>
<tr>
<td>U Matecumbe</td>
<td>-3.9 mph</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td></td>
</tr>
<tr>
<td>Windley</td>
<td>-1.7 mph</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td></td>
</tr>
<tr>
<td>Plantation</td>
<td>-5.8 mph</td>
</tr>
<tr>
<td>Village of Islamorada</td>
<td></td>
</tr>
</tbody>
</table>

d) As compared to the 2017 study, there are LOS changes in nine of the 24 segments – the LOS for five segments have improved, and the LOS for four segments have degraded.

e) Segment #19 (Upper Matecumbe – MM 79.5 – MM 84.0) changed from LOS ‘D’ to ‘E’. Segment # 20 (Windley – MM 84.0 – MM 86.0) LOS changed from LOS ‘C’ to ‘D’. These two segments have no reserve capacity and should be given special attention.

f) There were two drawbridge delay events during the 2021 study (accounted for 12 minutes, with an average delay of 6 minutes), as compared to no drawbridge delay events during the 2017 study.

g) There were 10 construction delay events in 2021 (accounted for 2 hours 14 minutes and 56 seconds), as compared to no construction delay events in 2017.
h) There were 124 signal related delay events in 2021, resulting in 1 hour and 8 seconds of delay, as compared to 2 hours 10 minutes and 29 seconds in 2017. The signal delay events contributed to an average of 2 minutes and 9 seconds of delay per trip, which is lower than the 2017 average signal delay per trip of 4 minutes and 30 seconds.

i) Segments with reserve speeds of less than or equal to 3 mph should be given particular attention when approving development applications. Based on the 2021 study, there are six segments in this category (same number of segments as in the 2017 study).

Following is a summary of the 2021 Travel Time and Delay Study results compared to the 2019 Travel Time and Delay Study:

a) The average traffic volumes have increased in Big Pine (3.59%) and Upper Matecumbe (6.48%) Keys but have decreased in Marathon Key (-11.67%) as compared to 2019.

b) The overall travel speed on US 1 based on the 2021 study is 45.5 mph, which is 0.9 mph higher than the 2019 overall travel speed.

c) As compared to the 2019 data, the median travel speeds in 15 of the 24 segments have increased. They are:

d) As compared to the 2019 study, there are LOS changes in nine of the 24 segments – the LOS for seven segments have improved, and the LOS for two segments have degraded.
e) Segment #20 (Windley – MM 84.0 – MM 86.0) LOS changed from LOS ‘E’ to ‘D’. The LOS for Segment #19 (Upper Matecumbe – MM 79.5 – MM 84.0) remained at LOS ‘E’. These two segments have no reserve capacity and should be given special attention.

f) There were two drawbridge delay events during the 2021 study, the same as the 2019 study. Drawbridge delays accounted for 12 minutes, with an average delay of 6 minutes.

g) There were 10 construction delay events in 2021 (accounted for 2 hours 14 minutes and 56 seconds), as compared to one construction delay event (accounted for 9 minutes and 55 seconds) in 2019.

h) There were 124 signal related delay events in 2021, resulting in 1 hour and 8 seconds of delay, as compared to 1 hour 51 minutes and 49 seconds in 2019. The signal delay events contributed to 2 minutes and 9 seconds of delay per trip on an average, which is lower when compared to the 2019 average signal delay per trip of 4 minutes.

The following is a list of considerations for review:

1) Under the adopted growth management process, if the overall LOS for US 1 falls below the LOS C Standard, then no additional land development will be allowed unless mitigation measures are implemented. Roadway widening is a typical mitigation measure (or capacity improvement) used by most agencies. However, in Monroe County, road widening (specifically along US 1) is restricted by the adopted comprehensive plan policies to preserve and protect the fragile ecological conditions. There are other remedies that could be explored and evaluated to improve the traffic flow and capacity along US 1. Some examples include:

- Upgrade the traffic signal infrastructure and/or signal timing at signalized intersections along US 1 to enhance traffic flow.

- Provide or improve transit service or other multi-modal transportation alternatives.

- Implement active traffic management and Transportation System Management & Operation type improvements, which include real-time monitoring of traffic flow and implementing measures to address traffic congestion.

- Add turn lanes at strategic locations to improve roadway capacity.

- Implement access management improvements (consolidate driveways/access points, modify median openings, etc.) to reduce interruptions to US 1 traffic.

- Provide and/or improve frontage roads to reduce the impacts to US 1 traffic flow. Improve local roads to minimize US 1 being used as a local street for short trips.

- Do not allow new traffic signals along US 1, if a safe and/or less restrictive alternative (such as indirect left-turns, a roundabout, etc.) can be provided to accommodate traffic movements.
• Conduct speed studies on selected segments of US 1 to confirm if the current posted speed limits are correct and modify, if necessary.

2) This is the first Travel Time and Delay Study conducted after the COVID-19 pandemic. The traffic volumes were observed to increase in some areas and decrease in other areas, as compared to 2019 and 2017 studies. Therefore, the travel time impacts due to the pandemic appear to be very minimal.

U.S. 1 is a state maintained roadway. Therefore, any modifications/improvements to U.S. 1 have to be developed in collaboration with the Florida Department of Transportation.

CONCURRENCY REVIEW - TRANSPORTATION/ROADWAY LEVEL OF SERVICE

The Monroe County Comprehensive Plan and Land Development Code (LDC) require that all development and redevelopment taking place within unincorporated Monroe County do not result in a reduction of the level of service requirements, including transportation facilities. The Monroe County Comprehensive Plan and LDC have adopted level of service (LOS) standards for roads, particularly US Highway 1, which is part of the Florida Department of Transportation (FDOT) State Highway System.

Policy 301.1.2
For U.S. 1, Monroe County hereby adopts a level of service (LOS) standard of C, as measured by the methodology established by the U.S. 1 LOS Task Force and adopted by the Board of County Commissioners in August 1991. The level of service on U.S. 1 shall be maintained within five percent (5%) of LOS C.

(a) Level of Service Standards (LOS). All development shall be served by adequate public facilities in accordance with the following standards:

(1) Transportation/Roadways.
   a. U.S. 1 shall have sufficient available capacity to operate at LOS C for the overall arterial length and the 24 roadway segments of U.S. 1, as measured by the U.S. 1 Level of Service Task Force Methodology, at all intersections and roadway segments. In addition, all segments of U.S. 1, as identified in the U.S. 1 Level of Service Task Force Methodology, which would be impacted by a proposed development's access to U.S. 1, shall have sufficient available capacity to operate at LOS C.
   b. Development may be approved, provided that the development in combination with all other permitted development will not decrease travel speed by more than five percent (5%) below LOS C, as measured by the U.S. 1 Level of Service Task Force Methodology. While development may be approved within 5% of LOS C, the proposed development shall be considered to have an impact that needs mitigation. Development mitigation may be in the form of specific improvements or proportioned shared contribution towards improvements and strategies identified by the County, and/or FDOT to address any level of service
degradation beyond LOS C and/or deficiencies.

This LOS standard is used within the County’s Concurrency Management System to review development proposals and ensure that the transportation facilities needed to serve development will be in place when the impacts of the development occur; to evaluate any potential degradation in the adopted LOS; and to determine the need for improvements in order to achieve and maintain the adopted LOS standard.

**Policy 101.1.5**
Transportation facilities needed to serve new development shall be in place when the impacts of the development occur. If transportation facilities are needed to ensure that the adopted level-of-service standards are achieved and maintained, prior to commencement of construction, a developer is required to enter into a binding and legally enforceable commitment to the County to assure construction or improvement of proportionate share of required improvements, or to assure the provision of the proportionate share contribution of the costs for the necessary transportation facilities. The development of a single family residential unit shall be considered de minimis and shall not be subject to this requirement.

**Policy 301.2.3**
Monroe County shall not permit new development which would significantly degrade the LOS below the adopted LOS standards on U.S. 1 (overall) unless the proportionate share of the impact is mitigated. The development of one single family residential unit, on a single parcel, shall be considered de minimis and shall not be subject to this requirement. A five percent projected decrease in travel speeds, below LOS C, is a significant degradation in the level of service on U.S. 1. Traffic volume which exceeds the LOS D standard by more than five percent is a significant degradation in the level of service on any other County road.

Although the 2021 US1 Arterial Travel Time and Delay Study shows that overall US1 and all segments within unincorporated Monroe County are operating at a LOS C or greater, per LDC Section 114-2, concurrency review for proposed development within the unincorporated county takes into account all other permitted development since the time of the 2021 study as well. Development may only be approved if the proposed development in combination with all other permitted development will not decrease travel speed by more than five percent (5%) below LOS C for the overall length of US1 or for any individual segment. While development may be approved within 5% of LOS C, the proposed development shall be considered to have an impact that needs mitigation. Concurrency must be satisfied at the time a development permit is issued; at the time a certificate of occupancy; or through a binding contract or agreement for the necessary facility and/or service improvements or proportionate share contribution.
III. POTABLE WATER

The Florida Keys Aqueduct Authority (FKAA) is the sole provider of potable water in the Florida Keys. FKAA’s primary water supply is the Biscayne Aquifer, a shallow groundwater source. The FKAA’s wellfield is located within an environmentally protected pine rockland forest west of Florida City. The location of the wellfield near Everglades National Park, along with restrictions enforced by state and local regulatory agencies, contributes to the unusually high water quality. These wells contain some of the highest quality groundwater in the state, meeting all regulatory standards prior to treatment. Additionally, the FKAA is continually monitoring, assessing, and working to eliminate potential hazards to our water source, including inappropriate aquifer utilization, unsuitable land uses, and the potential for saltwater intrusion.

The groundwater from the wellfield is treated at the FKAA’s Water Treatment Facility in Florida City, which currently has a maximum water treatment design capacity of 29.8 million gallons per day (MGD). The primary water treatment process is a conventional lime softening/filtration water treatment plant and is capable of treating up to 23.8 MGD from the Biscayne Aquifer. The secondary water treatment process is the newly constructed Reverse Osmosis water treatment plant which is capable of producing 6 MGD from the brackish Floridan Aquifer. The product water from these treatment processes is then disinfected and fluoridated. The FKAA treated water is pumped 130 miles from Florida City to Key West supplying water to the entire Florida Keys.

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

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

At present, Key West and Ocean Reef are the only areas of the County served by a flow of potable water sufficient to fight fires. Outside of Key West, firefighters rely on a variety of water sources, including tankers, swimming pools, and salt water either from drafting sites on the open water or from specially constructed fire wells. Although sufficient flow to fight fires is not guaranteed in the County, new hydrants are being installed as water lines are replaced to make water available for fire-fighting purposes and pump station/tank facilities are being upgraded to provide additional fire flow and pressure. A map of the key FKAA transmission and distribution facilities is shown in Figure 3.1.
Demand for Potable Water

The Figures 3.2, 3.3 and 3.4 provide an overview of the water demands in the FKAA service area including Water Use Permit (WUP) allocation limits, yearly percent changes, and remaining water allocations. In March 2008, South Florida Water Management District (SFWMD) approved the FKAA’s modification of WUP 13-00005-5-W for a 20-year allocation from the Biscayne and Floridan Aquifers. As shown in Figure 3.5, the WUP provides an annual allocation of 8,751 Million Gallons (MG) or 23.98 MGD and a maximum monthly allocation of 809.01 MG with a limited annual withdrawal from the Biscayne Aquifer of 6,492 MG.

In order to meet the requirements of this limitation, the FKAA constructed a new Floridan Aquifer Reverse Osmosis (RO) water treatment system. This RO water treatment system is designed to withdraw brackish water from the Floridan Aquifer, an alternative water source approximately 1,000 feet below the ground surface, and treat the water to drinking water standards. The RO water treatment plant provides added capability to limit Biscayne aquifer withdrawals and is designed to meet current and future water demands. The RO water treatment system provides an additional 6.0 MGD of potable water.

Along with the new reverse osmosis water treatment plant, compliance with withdrawal limits can also be accomplished by using other alternative water sources (blending of the Floridan Aquifer,
reclaimed water and operation of the RO desalination plants), pressure reduction, public outreach, and assistance from municipal agencies in enforcing water conservation ordinances.

![Figure 3.2. Annual Water Withdrawals 2002-2019](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Withdrawal (MG)</th>
<th>% Change</th>
<th>WUP Limit (MG)</th>
<th>WUP +/- Annual Allocation (MG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>6,191</td>
<td>10.03%</td>
<td>7,274</td>
<td>1,083</td>
</tr>
<tr>
<td>2003</td>
<td>6,288</td>
<td>1.57%</td>
<td>7,274</td>
<td>986</td>
</tr>
<tr>
<td>2004</td>
<td>6,383</td>
<td>2.74%</td>
<td>7,274</td>
<td>813</td>
</tr>
<tr>
<td>2005</td>
<td>6,477</td>
<td>0.16%</td>
<td>7,274</td>
<td>803</td>
</tr>
<tr>
<td>2006</td>
<td>6,283</td>
<td>-2.49%</td>
<td>7,274</td>
<td>964</td>
</tr>
<tr>
<td>2007</td>
<td>5,850</td>
<td>-7.35%</td>
<td>7,274</td>
<td>1,428</td>
</tr>
<tr>
<td>2008</td>
<td>5,960</td>
<td>1.89%</td>
<td>8,751</td>
<td>2,791</td>
</tr>
<tr>
<td>2009</td>
<td>5,966</td>
<td>0.09%</td>
<td>8,751</td>
<td>2,785</td>
</tr>
<tr>
<td>2010</td>
<td>5,919</td>
<td>-0.79%</td>
<td>8,751</td>
<td>2,832</td>
</tr>
<tr>
<td>2011</td>
<td>6,327</td>
<td>6.89%</td>
<td>8,751</td>
<td>2,424</td>
</tr>
<tr>
<td>2012</td>
<td>6,042</td>
<td>-4.50%</td>
<td>8,751</td>
<td>2,709</td>
</tr>
<tr>
<td>2013</td>
<td>6,105</td>
<td>1.04%</td>
<td>8,751</td>
<td>2,646</td>
</tr>
<tr>
<td>2014</td>
<td>6,377</td>
<td>4.46%</td>
<td>8,751</td>
<td>2,374</td>
</tr>
<tr>
<td>2015</td>
<td>6,530</td>
<td>2.40%</td>
<td>8,751</td>
<td>2,221</td>
</tr>
<tr>
<td>2016</td>
<td>6,462</td>
<td>-1.04%</td>
<td>8,751</td>
<td>2,289</td>
</tr>
<tr>
<td>2017</td>
<td>6,324</td>
<td>-2.13%</td>
<td>8,751</td>
<td>2,427</td>
</tr>
<tr>
<td>2018</td>
<td>6,526</td>
<td>3.10%</td>
<td>8,751</td>
<td>2,225</td>
</tr>
<tr>
<td>2019</td>
<td>6,809</td>
<td>4.16%</td>
<td>8,751</td>
<td>1,942</td>
</tr>
</tbody>
</table>

Source: Florida Keys Aqueduct Authority, 2021
As shown in Figure 3.3, FKAA expected 2021 water demands for the entire Florida Keys is 6,669 Million Gallons and can be accommodated within the South Florida Water Management WUP annual allocation of 8,751 Million Gallons (MG). For unincorporated Monroe County, the 2020 actual demand was 2,933 MG and this is expected to slightly increase to 2,934 MG for 2021.

Figure 3.4. FKAA Water Supply Available vs. Water Demand Projections through 2030
As shown in Figure 3.4, the FKAA water demand projections through 2030, based on the two projections provided by FKAA, can be fulfilled through the use of the Biscayne permitted water supply of 17.79 MGD, the 6.0 MGD RO water treatment plant, the new reclaimed water systems, and the ability to operate the 3.0 MGD RO desalination plants during emergency situations.

As shown in Figure 3.5, in 2020, the FKAA distributed an annual average of 17.23 MGD from the Biscayne Aquifer plus 0.93 MGD from Floridan RO Production. This table also provides the water treatment capacities of the emergency RO plants. Since the emergency RO plants utilize seawater, a WUP is not required for these facilities.

<table>
<thead>
<tr>
<th>Figure 3.5 - Projected Water Demand in 2021 (in MG)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Allocation (Raw Water)</strong></td>
</tr>
<tr>
<td>Average Daily Demand</td>
</tr>
<tr>
<td>Maximum Monthly Demand</td>
</tr>
<tr>
<td>Annual Demand</td>
</tr>
<tr>
<td><strong>Biscayne Aquifer Annual Allocation/Limitations (Raw Water)</strong></td>
</tr>
<tr>
<td>Average Daily Demand</td>
</tr>
<tr>
<td>Annual Demand</td>
</tr>
<tr>
<td><strong>Floridan RO Production</strong></td>
</tr>
<tr>
<td>Average Daily Demand</td>
</tr>
<tr>
<td><strong>Emergency RO WTP Facilities</strong></td>
</tr>
<tr>
<td>Kermit L. Lewin Design Capacity</td>
</tr>
<tr>
<td>Marathon RO Design Capacity</td>
</tr>
</tbody>
</table>

All figures are in millions of gallons

Source: Florida Keys Aqueduct Authority, 2021

Figure 3.6 provides the amount of water used on a per capita basis. Based on Functional Population and average daily demand, the average water consumption for 2019 was approximately 114 gallons per capita (person), which reflects the entire FKAA service area, including unincorporated Monroe County, Key West, Marathon, Islamorada, Key Colony Beach, and Layton.
### Figure 3.6 - Per Capita Water Use

<table>
<thead>
<tr>
<th>Year</th>
<th>Functional Population¹</th>
<th>Daily Demand (gallons)²</th>
<th>Average Per Capita Water Consumption (gallons)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>153,080</td>
<td>17,016,393</td>
<td>111</td>
</tr>
<tr>
<td>2001</td>
<td>153,552</td>
<td>15,415,616</td>
<td>100</td>
</tr>
<tr>
<td>2002</td>
<td>154,023</td>
<td>16,962,082</td>
<td>110</td>
</tr>
<tr>
<td>2003</td>
<td>154,495</td>
<td>17,228,192</td>
<td>112</td>
</tr>
<tr>
<td>2004</td>
<td>154,924</td>
<td>17,652,596</td>
<td>114</td>
</tr>
<tr>
<td>2005</td>
<td>156,150</td>
<td>17,730,000</td>
<td>114</td>
</tr>
<tr>
<td>2006</td>
<td>155,738</td>
<td>17,287,671</td>
<td>111</td>
</tr>
<tr>
<td>2007</td>
<td>155,440</td>
<td>16,017,315</td>
<td>103</td>
</tr>
<tr>
<td>2008</td>
<td>154,728</td>
<td>16,285,383</td>
<td>105</td>
</tr>
<tr>
<td>2009</td>
<td>155,441</td>
<td>16,345,205</td>
<td>105</td>
</tr>
<tr>
<td>2010</td>
<td>155,288</td>
<td>16,210,959</td>
<td>104</td>
</tr>
<tr>
<td>2011</td>
<td>156,054</td>
<td>17,334,247</td>
<td>111</td>
</tr>
<tr>
<td>2012</td>
<td>156,391</td>
<td>16,508,197</td>
<td>106</td>
</tr>
<tr>
<td>2013</td>
<td>156,727</td>
<td>16,836,164</td>
<td>107</td>
</tr>
<tr>
<td>2014</td>
<td>157,063</td>
<td>17,472,362</td>
<td>111</td>
</tr>
<tr>
<td>2015</td>
<td>157,400</td>
<td>17,890,400</td>
<td>114</td>
</tr>
<tr>
<td>2016</td>
<td>157,730</td>
<td>17,704,100</td>
<td>112</td>
</tr>
<tr>
<td>2017</td>
<td>158,060</td>
<td>17,632,900</td>
<td>112</td>
</tr>
<tr>
<td>2018</td>
<td>158,391</td>
<td>17,643,800</td>
<td>113</td>
</tr>
<tr>
<td>2019</td>
<td>158,721</td>
<td>18,070,000</td>
<td>114</td>
</tr>
</tbody>
</table>

Source: 1. Monroe County Population Projections - Monroe County Planning Department, 2011

2. Florida Keys Aqueduct Authority, 2021

### Improvements to Potable Water Facilities

FKAA has a 20-year Water System Capital Improvement Master Plan for water supply, water treatment, transmission mains and booster pump stations, distribution mains, facilities and structures, information technology, reclaimed water systems, and Navy water systems.

In 1989, FKAA embarked on the Distribution System Upgrade Program to replace approximately 190 miles of galvanized lines throughout the Keys. FKAA continues to replace and upgrade its distribution system throughout the Florida Keys and the schedule for these upgrades is reflected in their long-range capital improvement plan.

Figure 7 provides the schedule and costs projected for the capital improvements to the potable/alternative water systems planned by the FKAA. The total cost of the scheduled improvements is approximately $169,050,000 million over the next 5 years. These projects are to be funded by the water rate structure, long-term bank loans, and grants.
Based on current conditions and projects, an adequate supply of water to meet current and future demands is provided by the following: The Biscayne permitted water supply of 17.79 MGD, the 6.0 MGD RO water treatment plant, the new reclaimed water systems, and the ability to operate the 3.0 MGD RO desalination plants during emergency situations. The FKAA continues to monitor and track conditions and events that could negatively impact the existing water supply. Any such impacts will be evaluated to determine future changes necessary to continue servicing Monroe County with adequate water supply.
### IV. EDUCATION FACILITIES

The Monroe County School Board oversees the operation of 10 traditional and 6 charter public schools located throughout the Keys. School Board data includes both unincorporated and incorporated Monroe County. The system consists of three high schools, one middle school, three middle/elementary schools, and four elementary schools. Each school offers athletic fields, computer labs, bus service and a cafeteria. Seven (7) cafeterias serve as both a cafeteria and an auditorium. In addition to these standard facilities, all high schools and some middle schools offer gymnasiums. All three high schools offer a performance auditorium with a working stage.

The Monroe County school system is divided into three (3) sub-districts (see map below). School concurrency ensures coordination between local governments and school boards in planning and permitting residential developments that affect school capacity utilization rates.

Sub-district 1 covers the Upper Keys from Key Largo to Lower Matecumbe Key and includes the islands that make up Islamorada and Fiesta Key and includes one high school and two elementary/middle schools. Sub-district 2 covers the Middle Keys from Long Key to the Seven Mile Bridge and includes one high/middle school and one elementary school. Sub-district 3 covers the Lower Keys, from Bahia Honda to Key West and includes one high school, one middle school, one elementary/middle school, and three elementary schools.

School concurrency ensures coordination between local governments and school boards in planning and permitting residential developments that affect school capacity utilization rates.
The Florida Inventory of School Houses (FISH) capacity rate is 9,839 students and the Capital Outlay of Full-Time Equivalent (COFTE) is 7,363. The actual utilization during 2020-2021 was 74.83%.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>ACTUAL 2020-2021 FISH CAPACITY</th>
<th>ACTUAL 2019-2020 COFTE</th>
<th>ACTUAL 2020-2021 UTILIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORAL SHORES SENIOR HIGH</td>
<td>960</td>
<td>742</td>
<td>77.00%</td>
</tr>
<tr>
<td>KEY WEST SENIOR HIGH</td>
<td>1,349</td>
<td>1,197</td>
<td>89.00%</td>
</tr>
<tr>
<td>HORACE O'BRYANT MIDDLE</td>
<td>1,152</td>
<td>1,067</td>
<td>93.00%</td>
</tr>
<tr>
<td>MARATHON SENIOR HIGH</td>
<td>1,370</td>
<td>664</td>
<td>48.00%</td>
</tr>
<tr>
<td>GERALD ADAMS</td>
<td>631</td>
<td>523</td>
<td>83.00%</td>
</tr>
<tr>
<td>PLANTATION KEY SCHOOL</td>
<td>647</td>
<td>590</td>
<td>91.00%</td>
</tr>
<tr>
<td>POINCIANA ELEMENTARY</td>
<td>672</td>
<td>525</td>
<td>78.00%</td>
</tr>
<tr>
<td>SUGARLOAF ELEMENTARY</td>
<td>935</td>
<td>597</td>
<td>64.00%</td>
</tr>
<tr>
<td>STANLEY SWITLIK ELEMENTARY</td>
<td>736</td>
<td>564</td>
<td>77.00%</td>
</tr>
<tr>
<td>KEY LARGO SCHOOL</td>
<td>1,243</td>
<td>795</td>
<td>64.00%</td>
</tr>
<tr>
<td>MAY SANDS SCHOOL</td>
<td>144</td>
<td>99</td>
<td>69.00%</td>
</tr>
<tr>
<td>GLYNN ARCHER ELEMENTARY¹</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>BIG PINE ACADEMY¹</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>10,453</strong></td>
<td><strong>7,161</strong></td>
<td><strong>68.51%</strong></td>
</tr>
</tbody>
</table>

¹Data not available in School Work Plan

The projected COFTE for 2024-2025 is 7,633 students with 77.58% of utilization.

Annually, prior to the adoption of the district school budget, each school board must prepare a tentative district facility work program that includes a major repair and renovation projects necessary to maintain the educational and ancillary facilities of the district. Some of the items listed in the 2020-2021 Monroe County School District Work Plan include HVAC, flooring, paint, roofing, safety to life, electrical, parking, fencing, maintenance/repair, fire alarms, telephone/intercom systems and closed circuit television for various schools. Other items include concrete repairs, site work and drainage maintenance, plumbing, ADA updates, elevator repair, carpentry and small construction projects and maintenance and repair.

The 2020-2021 Monroe County School District expenditures from local funding sources were $27,135,024. Additional revenue sources include proceeds from ½ cent sales surtax at $17,000,000 and funds carried forward at $31,762,460 were available for this period.

The total project costs for construction, maintenance, repair and renovation during 2020-2021 was $38,517,735. The projected revenue/expenditures for new construction and remodeling projects
only, for 2021-2022 and 2022-2023 are $46,326,470 and $21,913,847, respectively.

**SUMMARY**
The overall 2020-2021 utilization is 74.83% of the school system capacity and is projected for 2024-2025 at 77.58% utilization of the school capacity. Enrollment figures for 2020-2021 indicate that there is adequate capacity in the Monroe County school system for the next two years.
V. SOLID WASTE FACILITIES

Solid waste management is a critical issue in the Florida Keys. While problems of landfill sitings, facilities, financing, and hazardous waste disposal have increased throughout Monroe County, the unique setting of the Keys makes waste management even more difficult. The geographic isolation, the limited land area, the environmental constraints, and the presence of nationally significant natural resources adds to the challenge of responsibly and efficiently managing the Keys' solid waste stream.

Comprehensive Plan Policy 801.1.1 establishes the level of service for solid waste as 11.41 pounds per capita per day. Policy 801.4.2 establishes within three (3) years after the adoption of the 2030 Comprehensive Plan, Monroe County shall implement a county-wide, mandatory recycling program for residential and commercial locations. The Comprehensive Plan requires sufficient capacity shall be available at a solid waste disposal site to accommodate all existing and approved development for a period of five years from the projected date of completion of the proposed development of use.

The Monroe County Land Development Code (LDC), in compliance with State concurrency requirements, requires that “Sufficient capacity shall be available at a solid waste disposal site at a level of service of 11.41 pounds per capita per day. The county solid waste and resource recovery authority may enter into agreements, including agreements under F.S. Section 163.01, to dispose of solid waste outside of the county” (LDC, Section 114-2(a)(2)). This regulation went into effect on February 28, 1988 and serves as a level of service (LOS) standard for solid waste disposal.

The LDC also requires that solid waste management plans be completed before any proposed development of a Major Conditional Use is reviewed by the Growth Management Department. Solid waste generation rates and capacity assessments must be submitted for review and coordination with the Public Works Division, Department of Solid Waste/Recycling (PWD-DSW/R).

The table below summarizes historical solid waste generation for the service area.

<table>
<thead>
<tr>
<th>FY</th>
<th>FDEP Total</th>
<th>Recycling</th>
<th>Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1999</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2000</td>
<td>158,327</td>
<td>59,798</td>
<td>131,825</td>
</tr>
<tr>
<td>2001</td>
<td>125,893</td>
<td>51,435</td>
<td>96,075</td>
</tr>
<tr>
<td>2002</td>
<td>134,950</td>
<td>68,738</td>
<td>113,071</td>
</tr>
<tr>
<td>2003</td>
<td>134,734</td>
<td>34,619</td>
<td>113,427</td>
</tr>
<tr>
<td>2004</td>
<td>112,102</td>
<td>13,757</td>
<td>110,333</td>
</tr>
<tr>
<td>2005</td>
<td>212,470</td>
<td>73,085</td>
<td>212,470</td>
</tr>
<tr>
<td>2006</td>
<td>200,338</td>
<td>12,206</td>
<td>200,338</td>
</tr>
<tr>
<td>2007</td>
<td>134,467</td>
<td>12,497</td>
<td>134,467</td>
</tr>
<tr>
<td>2008</td>
<td>130,245</td>
<td>13,743</td>
<td>130,245</td>
</tr>
<tr>
<td>2009</td>
<td>116,884</td>
<td>12,099</td>
<td>95,327</td>
</tr>
</tbody>
</table>
The historical solid waste generation values for Monroe County show a steady increase of total solid waste generation between the years 1998-2001. During the period 2005-2006 and 2015-2019, the County’s solid waste generation was significantly higher. These higher values do not correspond to normal solid waste generation trends within the County and in actuality result from a cluster of outliers. The outliers are functions of favorable economic conditions (greater consumption of goods and services) and storm events that cause a significant amount of over generation due to debris. Furthermore, during the period of 2007-2008, an economic recession affected solid waste generation, significantly reducing standard trends for generation growth.

The tourism industry in the Florida Keys is another large factor in solid waste generation that needs to be accounted for in projected demands calculations. The Monroe County Tourist Development Council estimated 4.3 million county-wide tourist visits occurred in 2011. The County and tourist population are expected to continue increasing, which will impact solid waste generation within the County.

Solid waste is collected by franchise and taken to the three historic landfill sites, which serve as transfer facilities. At the transfer stations, the waste is compacted and loaded on Waste Management, Inc. (WMI) trucks for haul out. Recyclable materials, including white goods, tires, glass, aluminum, plastic bottles, and newspaper are included as part of the solid waste haul out contract. A recent (2009) amendment to the contract includes WMI and the County’s commitment to increase annual recycling rate to 40 percent by 2014. Based on the information obtained by Florida Department of Environmental Protection solid waste management this goal was met.
### Solid Waste Transfer Facility Sizes and Capacities

<table>
<thead>
<tr>
<th>Transfer Facility</th>
<th>Acreage</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cudjoe Key Transfer Station</td>
<td>20.2 acres</td>
<td>200 tons/day</td>
</tr>
<tr>
<td>Long Key Transfer Station</td>
<td>29.5 acres</td>
<td>400 tons/day</td>
</tr>
<tr>
<td>Key Largo Transfer Station</td>
<td>15.0 acres</td>
<td>200 tons/day</td>
</tr>
</tbody>
</table>

*Source: Waste Management Inc., 1991*

Any future declines will also reflect the diligent efforts by the citizens of the County to reduce the amount of solid waste they generate, through the conscious consumption of goods, composting, mulching or other sustainability efforts. Additional factors which are less easily quantifiable could also affect solid waste generation. The amount of construction taking place in the County, and thus the amount of construction debris being disposed of, also significantly affects the total amount of solid waste generated. Periods with less construction could have contributed to the decline in total waste generation. Finally, the weather affects the rate of vegetative growth, and therefore affects the amount of yard waste generated. Drier years could result in less total waste generation.

The analysis below represents a general trend of solid waste generation with respect to functional population growth. The LOS creates a conservative rate of solid waste generation in comparison to the increasing trend of solid waste generation between the years 1998-2000, thus predicting a comparative or slightly higher annual solid waste production in relation to population. Limitations on future growth should reduce the amount of construction and demolition debris generation. Recycling efforts in Monroe County have increased and should reduce the amount of solid waste generation.

### Solid Waste Generation Trends

<table>
<thead>
<tr>
<th>Year</th>
<th>GENERATION (Tons/Yr)</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permanent</td>
<td>Seasonal</td>
</tr>
<tr>
<td>2000</td>
<td>158,327</td>
<td>36,036</td>
</tr>
<tr>
<td>2001</td>
<td>125,893</td>
<td>36,250</td>
</tr>
<tr>
<td>2002</td>
<td>134,950</td>
<td>36,452</td>
</tr>
<tr>
<td>2003</td>
<td>134,734</td>
<td>36,543</td>
</tr>
<tr>
<td>2004</td>
<td>112,102</td>
<td>36,606</td>
</tr>
<tr>
<td>2005</td>
<td>212,470</td>
<td>37,164</td>
</tr>
<tr>
<td>2006</td>
<td>200,338</td>
<td>36,466</td>
</tr>
<tr>
<td>2007</td>
<td>134,467</td>
<td>35,749</td>
</tr>
<tr>
<td>2008</td>
<td>130,245</td>
<td>34,788</td>
</tr>
<tr>
<td>2009</td>
<td>116,884</td>
<td>36,268</td>
</tr>
<tr>
<td>2010</td>
<td>156,465</td>
<td>35,368</td>
</tr>
<tr>
<td>2011</td>
<td>125,402</td>
<td>35,917</td>
</tr>
<tr>
<td>2012</td>
<td>145,889</td>
<td>39,371</td>
</tr>
<tr>
<td>2013</td>
<td>173,774</td>
<td>35,806</td>
</tr>
<tr>
<td>2014</td>
<td>177,312</td>
<td>35,751</td>
</tr>
<tr>
<td>---</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>2015</td>
<td>276,710</td>
<td>353,658</td>
</tr>
<tr>
<td>2017</td>
<td>36,067</td>
<td>36,277</td>
</tr>
<tr>
<td>2018</td>
<td>71,763</td>
<td>71,909</td>
</tr>
<tr>
<td>2019</td>
<td>20.43</td>
<td>25.48</td>
</tr>
</tbody>
</table>

Sources:
1. Florida Department of Environmental Protection

**SUMMARY**

Monroe County has a contract with Waste Management (WMI). The contract authorizes the use of in-state facilities through September 30, 2024; thereby, providing the County with approximately three (3) years of guaranteed capacity. There is adequate capacity for solid waste generation for 2021-2023.
VI. PARKS AND RECREATION

The Level of Service standards for parks and recreational facilities is provided in Policy 1201.1.1 and 1201.1.2 of the Monroe County Year 2030 Comprehensive Plan.

Parks and Recreational Facilities Level Of Service Standard

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

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

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

<table>
<thead>
<tr>
<th>LEVEL OF SERVICE ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Plan Policy 1201.1.1, Parks and Recreation</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>1.5 acres per 1,000 functional population of passive, resource-based neighborhood and community parks</td>
</tr>
<tr>
<td>1.5 acres per 1,000 functional population of passive, activity-based neighborhood and community parks</td>
</tr>
</tbody>
</table>

Source: Monroe County Technical Document, Chapter 13, Recreation and Open Space, May 11, 2011, Section 13.5.1.1.2.

There are approximately 10,900 acres of resource-based recreation lands currently available in the County for public use. Removing beaches which are primarily Federal and State owned from the resource-based lands results in approximately 250 acres remaining.

Level of Service Analysis for Activity-Based Recreation Areas

The Year 2030 Comprehensive Plan allows activity-based recreational land found at educational
facilities to be counted towards the park and recreational concurrency. A total of 108.86 acres of
developed resourced-based and 117.23 acres of activity-based recreation areas are either owned or
leased by Monroe County and the Monroe County School Board.

The activity-based recreational facilities that are inventoried include facilities and activities such as
baseball/softball, football/soccer, tennis courts, basketball courts, picnic tables and picnic pavilions,
volleyball courts, handball/racquetball courts, equipped play areas, multi-use areas, benches, tracks,
piers, bike paths, boat ramps, fishing, swimming, swimming pools, barbeque grills, shuffleboard
courts, beaches and restrooms. Additionally, other recreation uses and facilities are indicated such
as historic structures, bandshells, dog parks, skateboard facilities, aquatic parks, museums, and
concessions.

The subareas for park and recreational facilities include the Upper Keys, north of Tavernier;
Middle Keys, between Pigeon Key and Long Key; and the Lower Keys, south of the Seven Mile
Bridge.

The tables below provide resource- and activity-based parks and recreation in acres for the three
subarea planning areas.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Mile Marker</th>
<th>Facilities</th>
<th>Classification (Acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunset Bay Park</td>
<td>Grassy Key</td>
<td>58</td>
<td>Beach</td>
<td>0.6</td>
</tr>
<tr>
<td>Yacht Club (1)</td>
<td>Vaca Key (Marathon)</td>
<td>54</td>
<td>Boat ramp, teen club, 2</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>tennis courts, basketball</td>
<td>2</td>
</tr>
<tr>
<td>Sombrero Beach</td>
<td>Marathon</td>
<td>50</td>
<td>Beach, picnic pavilions, ball field,</td>
<td>0.6</td>
</tr>
<tr>
<td>(Switlik Park)</td>
<td></td>
<td></td>
<td>2 volleyball courts, equipped play</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>area, dog park, pier, fishing, BBQ</td>
<td>8</td>
</tr>
<tr>
<td>Old 7-Mile Bridge</td>
<td>Monroe County</td>
<td>41-47</td>
<td>Fishing, Bicycling, Beaches</td>
<td>5</td>
</tr>
<tr>
<td>7-Mile Bridge</td>
<td>Pigeon Key</td>
<td>45</td>
<td>Historical structures</td>
<td>5</td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Mile Marker</td>
<td>Facilities</td>
<td>Classification (Acres)</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Garden Cove Park</td>
<td>Key Largo</td>
<td>106</td>
<td>Boat ramp</td>
<td>1.5</td>
</tr>
<tr>
<td>Rowell’s Waterfront Park</td>
<td>Key Largo</td>
<td>104.5</td>
<td>Picnic tables, benches, paddlesports launch, swimming area</td>
<td>8</td>
</tr>
<tr>
<td>Murray Nelson Waterfront Park</td>
<td>Key Largo</td>
<td>102</td>
<td>Boat basin, pier, dock, five pavilions, restrooms, picnic tables, benches</td>
<td>1.2</td>
</tr>
<tr>
<td>Hibiscus Park (Buttonwood Lane)</td>
<td>Key Largo</td>
<td>101.5</td>
<td>Vacant, inaccessible waterfront</td>
<td>0.5</td>
</tr>
<tr>
<td>Friendship Park</td>
<td>Key Largo</td>
<td>101</td>
<td>Ball field, 3 basketball courts, picnic shelters, Play equipment, restrooms, trail</td>
<td>NA</td>
</tr>
<tr>
<td>Key Largo Community Park-</td>
<td>Key Largo</td>
<td>99.6</td>
<td>Play equipment, aquatic park, 3 swimming pools, ballfields, soccer field, tennis, pickleball, basketball</td>
<td>1.5</td>
</tr>
<tr>
<td>Jacob's Aquatic Center</td>
<td>Key Largo</td>
<td>99.6</td>
<td>Play equipment, aquatic park, 3 swimming pools, ballfields, soccer field, tennis, pickleball, basketball</td>
<td>1.5</td>
</tr>
<tr>
<td>Sunset Point Park</td>
<td>Key Largo</td>
<td>95.2</td>
<td>Vacant, waterfront access, boat ramp</td>
<td>1.2</td>
</tr>
<tr>
<td>Harry Harris County Park</td>
<td>Key Largo (Tavernier)</td>
<td>93</td>
<td>Beach, two ball fields, play equipment, swimming, boat ramp, BBQs, shuffleboard, beach, picnic tables, restrooms, basketball</td>
<td>2</td>
</tr>
<tr>
<td>Old Settlers Park</td>
<td>Key Largo (Tavernier)</td>
<td>91.9</td>
<td>Play Equipment, picnic, shelter, beach, butterfly garden</td>
<td>NA</td>
</tr>
<tr>
<td>Burr Beach Park (Sunny Haven)</td>
<td>Key Largo</td>
<td>91</td>
<td>Vacant, waterfront access</td>
<td>0.1</td>
</tr>
<tr>
<td>Old State Rte. 4A</td>
<td>Upper Matecumbe Key</td>
<td>82.5</td>
<td>Vacant</td>
<td>0.3</td>
</tr>
<tr>
<td>Old State Rte. 4A, Hurricane Monument</td>
<td>Upper Matecumbe Key</td>
<td>81</td>
<td>Historical Marker</td>
<td>1.2</td>
</tr>
<tr>
<td>Anne's Beach, Lower Matecumbe Beach (5)</td>
<td>Lower Matecumbe Key</td>
<td>73.5</td>
<td>Beach, swimming, bike path, picnic pavilions, boardwalk</td>
<td>6.1</td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Mile Marker</td>
<td>Facilities</td>
<td>Classification (Acres)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Veteran's Memorial Park</td>
<td>Little Duck Key (Ohio Key)</td>
<td>40</td>
<td>Beach, BBQs, swimming temporary port o let restrooms *</td>
<td>0.6 24.9</td>
</tr>
<tr>
<td>Missouri Key/South side US 1</td>
<td>Missouri Key</td>
<td>39</td>
<td>Roadside pull-off, beach</td>
<td>3.5 NA</td>
</tr>
<tr>
<td>Big Pine Key Park</td>
<td>Big Pine Key</td>
<td>31</td>
<td>Pier, Playground, soccer field, baseball, tennis &amp; basketball courts, skate park, bocce courts, shade structures, restrooms</td>
<td>5.5 4.6</td>
</tr>
<tr>
<td>J. Watson Field (Stiglitz Property) (2)</td>
<td>Big Pine Key</td>
<td>30</td>
<td>2 tennis courts, volleyball, play equipment, baseball, picnic, dog park</td>
<td>1.2 2.4</td>
</tr>
<tr>
<td>Blue Heron Park</td>
<td>Big Pine Key</td>
<td>30</td>
<td>Pickleball</td>
<td>NA 5.5</td>
</tr>
<tr>
<td>Bob Evans/Chamber of Commerce</td>
<td>Big Pine Key</td>
<td>30</td>
<td>Vacant</td>
<td>0.3 NA</td>
</tr>
<tr>
<td>Palm Villa Park</td>
<td>Big Pine Key</td>
<td>30</td>
<td>Benches, waterfront,</td>
<td>NA 0.6</td>
</tr>
<tr>
<td>State Road 4</td>
<td>Little Torch Key</td>
<td>28</td>
<td>Boat ramps</td>
<td>0.1 NA</td>
</tr>
<tr>
<td>Ramrod Key Park</td>
<td>Ramrod Key</td>
<td>27</td>
<td>Beach*, swimming</td>
<td>1.2 1.2</td>
</tr>
<tr>
<td>West Summerland Park</td>
<td>West Summerland Key</td>
<td>25</td>
<td>2 Boat ramps</td>
<td>31.8 NA</td>
</tr>
<tr>
<td>Bay Point Park</td>
<td>Saddlebunch Key</td>
<td>15</td>
<td>Play equipment, volleyball, picnic tables, trail, basketball, 2 tennis courts, pavilions,</td>
<td>NA 1.58</td>
</tr>
<tr>
<td>Boca Chica Beach, SR 941 (3)</td>
<td>Boca Chica Key</td>
<td>11</td>
<td>Beach, picnic table *</td>
<td>6 NA</td>
</tr>
<tr>
<td>Wilhelmina Harvey Park</td>
<td>Big Coppitt Key</td>
<td>10</td>
<td>Play equipment, path, shade structure with picnic table</td>
<td>NA 0.65</td>
</tr>
<tr>
<td>Name</td>
<td>Location</td>
<td>Mile Marker</td>
<td>Facilities</td>
<td>Classification (Acres)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Volunteer Fireman’s Park</td>
<td>Big Coppitt Key</td>
<td>10</td>
<td>Pavilion, picnic tables, basketball</td>
<td>Resource: NA Activity: 0.2</td>
</tr>
<tr>
<td>Gulfview Park, Delmar Ave.</td>
<td>Big Coppitt Key</td>
<td>9.7</td>
<td>Boat ramp</td>
<td>Resource: NA Activity: NA</td>
</tr>
<tr>
<td>Rockland Hammock</td>
<td>Rockland Key</td>
<td>9</td>
<td>Vacant</td>
<td>Resource: NA Activity: NA</td>
</tr>
<tr>
<td>Bernstein Park</td>
<td>Raccoon Key</td>
<td>4.5</td>
<td>Play equipment, baseball &amp; soccer fields, basketball, path, fitness center, community rooms, picnic tables, restrooms</td>
<td>Resource: NA Activity: 11</td>
</tr>
<tr>
<td>East Martello Park</td>
<td>Key West Island</td>
<td>1.5</td>
<td>Picnic, Historic Fort, museum</td>
<td>Resource: 14.56 Activity: NA</td>
</tr>
<tr>
<td>Higgs Beach Park, C.B. Harvey, Rest Beach</td>
<td>Key West Island</td>
<td>1</td>
<td>1 beach, concession area, 2 band shells, pier, picnic pavilions and grills, pickleball courts, tennis courts, play equipment, bike path, volleyball, fitness trail, handball court, horseshoes, swimming, Dog Park</td>
<td>Resource: 5 Activity: 12.1</td>
</tr>
<tr>
<td>West Martello Park</td>
<td>Key West Island</td>
<td>1</td>
<td>Historic Fort</td>
<td>Resource: 0.8 Activity: NA</td>
</tr>
<tr>
<td>Whitehead Street Lighthouse</td>
<td>Key West Island</td>
<td>1</td>
<td>Historic Fort, Museum</td>
<td>Resource: 0.8 Activity: NA</td>
</tr>
<tr>
<td>Pines Park (S. Roosevelt)</td>
<td>Key West Island</td>
<td>1</td>
<td>Picnic</td>
<td>Resource: NA Activity: 1.72</td>
</tr>
</tbody>
</table>

(1) The total acreage of the Yacht Club is approximately 6.0 acres. The unique layout of this facility restricts active recreation to approximately 2 acres partially leased to the Marathon Yacht Club by Monroe County.  
(2) House and yard (1.2 acres) owned by Monroe County. Additional 2.4 acres leased by Monroe County from the Big Pine Athletic Association.  
(3) Lands Leased to Monroe County from U. S. Navy.  
(4) Church to west of park has public access 2 basketball, volleyball, and bocce courts.  
(5) Beach leased to Village of Islamorada  
*Denotes approximate acreage; (for beaches the length of the beach x a minimum of 15 ft.)  
Source: Monroe County Technical Document July 2011
Acquisition of Additional Recreation Areas

The Monroe County Year 2030 Comprehensive Plan states in Objective 1201.2 that “Monroe County shall secure additional acreage for use and/or development of resource-based and activity-based neighborhood and community parks consistent with the adopted level of service standards.” The elimination of deficiencies in LOS standards for recreation areas can be accomplished in a number of ways. Policy 1201.2.1 of the Comprehensive Plan provides six (6) mechanisms that are acceptable for solving deficits in park level of service standards, as well as for providing adequate land to satisfy the demand for parks and recreation facilities that result from additional residential development. The six (6) mechanisms are:

1. Development of park and recreational facilities on land which is already owned by the county but which is not being used for park and recreation purposes;
2. Acquisition of new park sites on a limited basis;
3. Interlocal agreements with the Monroe County School Board for use of existing school-based park facilities by county residents;
4. Interlocal agreements with incorporated cities within Monroe County for use of existing city-owned park facilities by county residents;
5. Intergovernmental agreements with agencies of state and federal governments for use of existing publicly-owned lands or facilities by county residents; and
6. Long-term lease arrangements or joint use agreements with private entities for use of private park facilities by county residents.

Objective 1201.2.3 Comprehensive Plan 2030-“Priority shall be given to locating new neighborhood and community parks in communities which demonstrate the greatest deficiencies in parks and recreation”.

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

SUMMARY
The County continues to maintain a surplus of parks and recreational facilities (acreage).
VII. SANITARY SEWER

Over the years several factors have contributed to the water quality degradation of the Florida Keys, among them are stormwater run-off, changes in flow from Florida Bay and the Gulf of Mexico, but one of the most influential factors is the past wastewater practices. Wastewater from cesspits, septic tanks, injection wells and liveaboard vessels add nitrogen and phosphorus to our waters breaking the ecological balance.

The development of the Sanitary Wastewater Master Plan was the BOCC response toward correcting our water quality problems. Their goal was to improve the water quality of canals and confined nearshore waters through a long-term strategy and bring back the clear waters that characterize our coasts and are the source of tourist attraction.

The Monroe County Year 2010 Comprehensive Plan adopted by the BOCC on April 1993 mandated nutrient loading levels be reduced in the keys marine ecosystem by the year 2010. In 1998, the Florida Governor issued Executive Order 98-309 which directed relevant agencies and entities to coordinate with Monroe County to implement the Year 2010 Comprehensive Plan and eliminate cesspits, failing septic tank systems, and revise the existing 246 treatment plants for capacity and quality of treated wastewater. In 1999, the Florida Legislature set statutory effluent standards and associated compliance schedules for wastewater treatment system in Monroe County. These standards address treatment for several water quality constituents and require treatment to achieve advanced wastewater treatment standards for discharge flows in excess of 100,000 gallons per day and best available technology (BAT) standards for flows less than 100,000 gallons per day. Adopted water quality standards are listed below.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>BAT (mg/L)</th>
<th>AWT (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Oxygen Demand (BODS)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Total Nitrogen (TN)</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Previously in 1992, the U.S. Environmental Protection Agency (USEPA) Oceans and Coastal Protection Divisions produced a report entitled “Water Quality Protection Program for the Florida Keys National Marine Sanctuary”. The report provided a list of 84 water quality hot spots with known or suspected water quality degradation. Later in 1999 Monroe County released a new study entitled “Water Quality ‘Hotspots’ in the Florida Keys: Evaluation for Stormwater Contributions”, this study identified 88 hotspots. The definition of “Hot Spots” are areas of known or suspected water quality degradation, with known and unknown unsafe sewage disposal practices, that has to be eliminated and would receive a community wastewater collection and treatment system within the next 10 years. In contrast with “Hot Spots”, “Cold Spots” were defined as areas where the on-site system would continue operating until the whole new system is established.

The Florida Administrative Code created the Rule 28-20.100, which was amended in 1999 to the Year 2010 Comprehensive Plan by the Governor and his cabinet. This rule provided a 5-Year Work
Program to improve water quality emphasizing in the identification and elimination of cesspools required by Objective 901.2 of the Monroe County Comprehensive Plan. Monroe County adopted a new cesspool identification and elimination ordinance, Ordinance 031-1999, which complies with the Work Program. This ordinance establishes an inspection and compliance program for unknown and unpermitted on-site treatment and disposal sewage (OSTDS). The intent of the ordinance is to require operating permits for the (up to) 7,900 existing at that time unpermitted OSTDS.

The Sanitary Wastewater Master Plan was prepared by a multidisciplinary consultant team, under the direction of the Monroe County Department of Marine Resources to determine the acceptable levels of wastewater treatment and the strategy to follow to change the old wastewater collection system for a new modern system in the County. The goals of the Master Plan was to provide responsive, flexible and cost-effective solutions that improve wastewater management practices throughout the keys and must satisfy environmental and regulatory criteria and guidelines.

The implementation of the new wastewater system and the elimination of the old sewer practices in Monroe County has taken years. The planning period used for developing this Master Plan is the 20 years interval between 1998 and 2018. The transition process has been under the supervision of Monroe County, the Florida Keys Aqueduct Authority, Key Largo Wastewater Treatment District, the Municipalities, and special districts established for that purpose. Now the new systems are operating satisfactorily and only a small percentage of households have not been hooked up to the new systems.

At this time there are four entities providing sewer services in the unincorporated areas of the County.

1. Florida Keys Aqueduct Authority (FKAA)
2. Key Largo Wastewater Treatment District
3. North Key Largo Utilities Corporation
4. Key West Resort Utilities

FKAA covers by far more areas of the County than any other operator. The list of their facilities and general services areas are, from south to north:

- **Key Haven Wastewater System**- FKAA acquired this wastewater system in 2009. By 2018, FKAA replaced most of the collection system and redirect the wastewater flows from the Key Haven wastewater treatment plant (WWTP) to the Big Coppitt WWTP for Advanced Wastewater Treatment (AWT). The Key Haven collection system currently serves all 450 Equivalent Dwelling Units (EDUs) in the area, with plans to connect a new development consisting of an additional 26 EDUs.

- **Big Coppitt Regional Wastewater System**- The construction of this wastewater system, with funding provided by Monroe County, began in January 2007 and included service to Rockland Key, Big Coppitt Key, Geiger Key and Shark Key. Connections to the system began in August 2009. Currently, the Big Coppitt collection system contributes 1,601 of 1,746 EDUs (92%) to the AWT system, with the additional 450 EDUs redirected from the Key Haven Wastewater system and an average daily flow of 0.031 million gallons per day (mgd) redirected from Boca Chica Naval Air Station (NAS). The Big Coppitt WWTP will
be expanded to accept flows from a new affordable housing development in the Big Coppitt Key service area and the future capacity needs of the NAS.

- **Bay Point Wastewater System** - The FKAA began construction of the Bay Point Wastewater Treatment Plant and collection system in 2004, to provide central wastewater service to the Bay Point and Blue Water communities (Saddlebunch Keys). The first wastewater connection began in 2005. 424 EDUs of 439 EDUs (97%) have been connected to this Best Available Technology (BAT) treatment plant.

- **Cudjoe Regional Wastewater System** - Construction of this wastewater system began in January 2013, with funding provided by Monroe County. The new WWTP has a capacity of 940,000 gpd, and serves Lower Sugarloaf Key, Upper Sugarloaf Key, Cudjoe Key, Summerland Key, Ramrod Key and Little Torch Key, Middle Torch Key, Big Torch Key, No Name Key and Big Pine Key. Connection to this system was phased over several years and is ongoing. Approximately 9,471 EDUs have been invited to connect and of those 7,469 EDUs have completed their connection (79%).

- **Duck Key Regional Wastewater System** - The FKAA became owner and operator of the Hawk’s Cay WWTP in May 2006. The WWTP, with funding provided by Monroe County, underwent an extensive redesign in 2011 and was upgraded to the rigorous AWT standards. Additionally, the collection system was expanded to serve the remaining residents of Duck Key. The last phase of upgrades was completed in September 2013. The WWTP serves Conch Key, Little Conch Key, Waker’s Island, Hawk’s Cay Resort and Duck Key with a treatment capacity of 275,000 gpd. Currently, 1,445 EDU’s of 1,491 EDUs (98%) have connected to the system.

- **Layton Wastewater System** - The FKAA began construction of the Layton Wastewater System in 2005, to provide central wastewater services to the City of Layton and Long Key State Park with a treatment capacity of 66,000 gpd. Connection to the system began in 2006 and all 351 EDUs were connected to the system. Subsequent expansion of the Layton service area to incorporate the remaining east and west ends of Long Key is complete. With the expansion, the service area now includes 444 EDUs, which currently has 397 EDUs connected (89%).

In summary, as of August 2021, the following connections have been completed:

<table>
<thead>
<tr>
<th></th>
<th>Connected</th>
<th>Yet to be Connected</th>
<th>EDUs in Region</th>
<th>Percent of Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Haven</td>
<td>450</td>
<td></td>
<td>450</td>
<td>100%</td>
</tr>
<tr>
<td>Big Coppitt</td>
<td>1,600</td>
<td>147</td>
<td>1,747</td>
<td>92%</td>
</tr>
<tr>
<td>Bay Point</td>
<td>425</td>
<td>14</td>
<td>439</td>
<td>97%</td>
</tr>
<tr>
<td>Duck Key</td>
<td>1,455</td>
<td>36</td>
<td>1,491</td>
<td>98%</td>
</tr>
<tr>
<td>Layton/Long Key</td>
<td>397</td>
<td>47</td>
<td>444</td>
<td>89%</td>
</tr>
<tr>
<td><strong>Cudjoe Regional</strong></td>
<td><strong>7,469</strong></td>
<td><strong>2,002</strong></td>
<td><strong>9,471</strong></td>
<td><strong>79%</strong></td>
</tr>
</tbody>
</table>
Key Largo Wastewater Treatment Plant and District- This system serves Islamorada and the territory consisting of the island of Key Largo, including all lands east of Tavernier Creek, including Tavernier, Key Largo all in Monroe County, Florida with the exception of: all areas north of Summerland Road on US-1, and all areas north of Charlemagne Blvd on County Road 905 including Ocean Reef. The plant capacity is 3,450,000 gpd and does meet LOS for wastewater treatment quality. The District began taking flow from Islamorada on June 16, 2014. The 2021 average daily flow from Islamorada increased to 815,000 gpd. As parcels in Islamorada continue to connect, flow will increase. The combined average flows from Islamorada and Key Largo for the last 365 days is 1,970,000 gpd. In the District service area (does not include Islamorada) there are 10,625 EDUs with 10,610 (99%) that have been connected to the system and 15 are not connected.

North Key Largo Utilities Corporation- This private utility serves the Ocean Reef Community. This WWTP was constructed with Advanced Wastewater Treatment (AWT) technology with a capacity of 499,000 gpd. The volume of sewage the plant is processing at this time is 250,000 gpd. All dwelling units of the community have been connected to the system with a total of 1,620 EDUs (100%).

Key West Resort Utilities- This investor owned utility serves Stock Island. This WWTP was constructed with Advanced Wastewater Treatment (AWT) technology with a capacity of 849,000 gpd. The volume of sewage the plant is processing at this time is 577,000 gpd. There are currently 4,358 EDU’s connected to the KWRU system.

**SUMMARY**
There is sufficient wastewater treatment and disposal facilities and capacity available to satisfy the projected needs of the development for the next two years.