

Government Operations

Recomme		STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvement Items	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
Goal 1: De	velop better data and monitoring to increase the	resilience of	f County infrastructu	re to sea level rise.						
GO 1.1	Develop site level assessments that characterize resistance of above ground structures and associated electrical components to damage from extreme event flooding.							Short Term (1-3 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Coordination with FKAA
GO 1.2	Develop and maintain recording protocols and, as necessary, engineering assessments to assess resilience of below-grade pipes and pump infrastructure to increased saltwater incursion associated with sea level rise.		M-3.1					Short Term (1-3 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Coordination with FKAA
GO 1.3	Analyze available infrastructure and sustainability rating systems (e.g. Envision, Infrastructure Voluntary Evaluation Sustainability Tool ("INVEST") or other design-related systems that consider sustainability and resiliency factors to optimize planning for infrastructure, transportation, facilities and assets.						Potential Budgetary Implication (accommodate with existing funds/staff)	Short Term (1-3 yrs.)		150 hrs. or \$50,000
GO 1.4	Develop more accurate elevation data (LIDAR) County-wide.		M-2.1	WS-11			New Budget Item	Short Term (1-3 yrs.)		Countywide - \$400,000 - \$425,000 Key Largo - \$160,000 - \$175,000 Key West/Stock Island - \$130,000 - \$140,000 Staff Time - 120 hrs.

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GO 1.5	Update vulnerability assessments on Monroe County buildings based upon GreenKeys! modeling data and updated LIDAR data.						Future New Budget Item	Short Term (1-3 yrs.)		Staff time - 100 hrs. or \$50,000- \$100,000
GO 1.6	Develop a public education campaign to inform residents about energy and water efficiency and future flood risk and potential for environmental change.		E-1.1, E-1.2		New Policy under draft Objective 1503.3 in Energy and Climate Element to specifically require new public education campaign.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 100 hrs.
GO 1.7	Support Fair Insurance Rates in Monroe ("FIRM") in building partnerships with engineering companies willing to provide discounted elevation certificates to promote better elevation data.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
GO 1.8	Create a database of all elevation data for County and utility facilities and assets.						Future New Budget Item	Medium Term (3-5 yrs.)		<u>Staff time</u> – 100 hrs. plus \$50,000
GO 1.9	Create detailed site investigations to better resolve the extreme event flood risks of all critical infrastructure within defined special flood hazard areas, with near-term prioritization of such investigations recommended for all critical infrastructure with LIDAR elevation estimates below 6.89' above MHHW.							Long Term (>5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	
GO 1.10	Enhance monitoring of County buildings and create a database for flood risk to detect potential access and structural issues associated with increased tidal flooding exposure.		M-3.1		New Policy under draft Objective 1501.1 in Energy and Climate Element to specifically require monitoring County buildings.		Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		
GO 1.11	Coordinate with utilities to complete large-scale digitization of Elevation Certificates that contain specific information about the siting and elevation of equipment to develop comprehensive information about the scale of the risk, and to inform development of appropriate policy options for preventing and mitigating future risks.		M-2.1, M-2.2	WS-11			Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Coordination with Utilities: FKAA, FKEC, FEC, etc.
GO 1.12	Begin implementing results from studies and analyses conducted in earlier years.						Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Coordination

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Goal 2: De	evelop specific adaptation strategies and increase	resilience fo	r County facilities wi	th risk to sea level ris	e.					
GO 2.1	Address sea level rise and climate change resilience in annual County budgeting process.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 40 hrs.
GO 2.2	Change Sustainability Director position title to Resiliency Director.									
GO 2.3	Update annual legislative package to include sustainability and sea level rise practices.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs. Coordination
GO 2.4	For the West Martello Tower, which shows potential exposure to first floor nuisance flooding by 2060, consultation with historic preservation specialists in Monroe County and FEMA guidelines for retrofit of historic structures.				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise projections.		Future New Budget Item	Short Term (1-3 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility
GO 2.5	For the Monroe County Animal Shelter in Key West, which shows access concerns and first floor flooding under the 2060 scenario, consider potential relocation to a more elevated site as part of any future plans to renovate the Animal Shelter facilities.				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise projections.		Future New Budget Item	Short Term (1-3 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility
GO 2.6	Perform further analysis with improved elevation data for the Bayshore Manor assisted living retirement home.				F - 7		Future New Budget Item	Short Term (1-3 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost for Facility; \$15,000 Grant, \$15,000 match

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GO 2.7	Work with the Florida Keys Aqueduct Authority to ensure that siting and design of any new wastewater facilities include resilience to future sea level rise as a primary engineering consideration.		W-2.1		Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise projections for improvements and renovations to Countyowned buildings local water and wastewater		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Coordination with FKAA
GO 2.8	Require that significant maintenance, upgrade, or expansion of any existing wastewater facilities, including Bay Point Wastewater Treatment Plant, consider stressors from sea level rise within the life-cycle design framework.		W-2.1		facilities. Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise for improvements and renovations to County buildings, local water and wastewater facilities.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Coordination with FKAA
GO 2.9	Conduct site-specific analyses of particularly vulnerable wastewater infrastructure that include survey quality elevation data of sensitive components and engineering assessments of potential floodwaters to determine the present and future vulnerability to extreme flood events.						Future New Budget Item	Medium Term (3-5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility

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GO 2.10	For the Marathon electric substation, which shows vulnerability to an extreme storm surge by 2060 under a high sea level rise scenario, coordinate with Florida Keys Electric Cooperative Association to determine true risk exposure and alternatives to reduce that risk.				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise for improvements and renovations to County buildings, local water and wastewater facilities.		Future New Budget Item	Medium Term (3-5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility
GO 2.11	For the Roth Building (50 High Point Road), Radio Transmission Shop (88770 U.S. Highway 1) and County Offices (MM 88.5, U.S. Highway 1), which show potential risk to an extreme flooding event by 2060, take into account both the rate of sea level rise over the next two decades and the overall lifecycle of the buildings in making flood adaptation decisions to reduce risk.				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise for improvements and renovations to County buildings, local water and wastewater facilities.		Future New Budget Item	Medium Term (3-5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility
GO 2.12	For Clarence Higgs Beach, which shows risk of current or future flooding from a Wilma-sized event, incorporate appropriate hazard mitigation design features into any retrofits or upgrade projects.				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise for improvements and renovations to County buildings, local water and wastewater facilities.		Future New Budget Item	Medium Term (3-5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility

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GO 2.13	For East Martello Tower, which shows risk of current or future flooding from a Wilma-sized event, consider flood adaptation measures (more mid to long-term because of fort construction and historic nature).				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise for improvements and renovations to County buildings, local water and wastewater facilities.		Future New Budget Item	Medium Term (3-5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility
GO 2.14	For the Monroe County Sheriff's Office Freeman substation structure on Cudjoe Key, which shows moderate risk concern, develop adaptation strategies as a likely priority for flood mitigation and emergency preparedness.				Currently contemplated in draft Policies under Objective 1502.1 in Energy and Climate Element. Revision to criteria #3 in Policy 1401.1.2 in Capital Improvements Elements requiring consideration of sea level rise for improvements and renovations to County buildings, local water and wastewater facilities.		Future New Budget Item	Long Term (>5 yrs.)	FEMA's Pre-Disaster Mitigation Grant Program; FEMA's Hazard Mitigation Grant Program; FEMA's Flood Mitigation Assistance Program	Alternatives Analysis to Determine Cost \$15,000-30,000 per major Facility
Goal 3: Inc	crease energy efficiency in County operations.									
GO 3.1	Establish criteria and specifications that require energy efficiency in all new public construction, facility improvements, renovations or additions. These should go into bid and contract documents with designers, contractors, and engineers. These should include requirements for high efficiency HVAC equipment, efficient lighting, EnergyStar or similarly certified appliances, thermal resistance values (R-value and U-value) for insulation and windows, motor efficiency, controls and settings, and others.			SP-1, SP-2		Update to LDC Chapter 114, Article II, Section 114-45 to include criteria and specifications for energy efficiency.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 150 hrs.

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GO 3.2	Develop energy saving policies for County facilities and hire, assign or contract for a County-wide Energy Manager.						Future New Budget Item	Short Term (1-3 yrs.)		Staff time – 150 hrs. and \$70,000 annually
GO 3.3	Track utility data through FacilityDude program to target and further reduce energy inefficiencies.				Revisions draft Policy 1501.2.3 of Energy and Climate Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	Energy Foundation	Staff time - 40 hrs.
GO 3.4	Start implementing an employee training program on energy efficiency, water conservation and sustainable office practices.	CE-5(7)	E-2.1, E-2.2		New policy under draft Objective 1503.3 of Energy and Climate Element to require County employee training program.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	Energy Foundation	Staff time – 100 hrs.
GO 3.5	Promote energy usage reductions in County facilities. Provide education and outreach; create competitive programs to achieve energy reductions; and publish or post County utility bills for the public to view.				31 3		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 25 hrs.
GO 3.6	Increase lighting efficiency and promote retrofits for efficiency on County maintained and controlled roads.			SP-1, SP-2, EF-5			Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 100 hrs.
GO 3.7	Conduct next phase of energy auditing on County facilities and link upgrades to capital asset improvements. Install low-flow water conserving fixtures and energy saving features throughout County facilities.	CE-5(10) BE-2(8)	E-2.3, B-3.1		Currently proposed in draft Policy 1502.1.1 and 1502.1.2 of Energy and Climate Element. New Policy under draft Objective 1501.2 of Energy and Climate Element to require audits at County facilities on set basis.		Future New Budget Item	Short Term (1-3 yrs.)	Renewable Energy and Energy-Efficient Technologies Grant Program; Energy Foundation	Audits - range per square foot from \$0.04/ft² (system specific) to \$0.20/ft² (entire building) Staff time – 150 hrs.
Goal 4: Re	duce greenhouse gas ("GHG") emissions and expa	nd alternativ	ve energy usage Cou	nty-wide.						
GO 4.1	Use baseline GHG emissions data moving forward for forecasting energy emissions reductions and for setting additional municipal and community reduction targets.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 0 hrs.
GO 4.2	Establish an interim GHG target for 2030, consistent with the timeframe of the County's latest Comprehensive Plan, for a 40% reduction by 2030 as compared to the 2012 baseline.			SP-2	Update to draft Objective 1501.2 in Energy and Climate Element to establish interim target.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 50 hrs.

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GO 4.3	Adopt a target for energy use from renewable sources for County buildings and facilities such as 10% by 2025 and explore financing alternatives such as leasing. Conduct feasibility studies for alternative energy at County facilities. Partner with electric utilities for creative ways to deploy more solar. To monitor progress, develop a baseline for current renewable energy use.			SP-2	New Policy under draft Objective 1501.2 in Energy and Climate Element to establish renewable energy targets.	Update to LDR Chapter 114, Article II, Section 114-45 to include renewable energy targets.	Future New Budget Item	Short Term (1-3 yrs.)		Staff time – 50 hrs. Feasibility analysis - \$50,000-75,000
GO 4.4	Implement policies and programs to enhance electric vehicle infrastructure and make the Florida Keys "EV Ready." This could include providing electric vehicle charging stations at community parking lots and/or working with vehicle manufacturers to install publicly accessible electric vehicle charging stations.		B-4.3, B-4.4	SP-2, EF-7	Currently proposed in draft Policy 1503.2.2 of Energy and Climate Element.		Future New Budget Item	Short Term (1-3 yrs.)	Energy Foundation	<u>Staff time</u> – 150 hrs. or \$50,000
GO 4.5	Engage public works and infrastructure managers in voluntary GHG reporting. This could include making materials available online to assist managers in this reporting or creation of a one page fact sheet for inclusion in the Monroe County Personnel Policies and Procedures Manual (November 18, 2014).	CE-6(5)			Update to draft Policy 1501.2.1 of Energy and Climate Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 50 hrs.
GO 4.6	Inventory GHG emissions for County and Community-wide sectors every three (3) years beginning in 2016.				New Policy under draft Objective 1501.2 in Energy and Climate Element to require routine GHG emissions inventorying.		Future New Budget Item	Medium Term (3-5 yrs.)		Estimated at \$20,000 per inventory
GO 4.7	Upgrade to solar lighting at County parks and beaches consistent with GO 4.3. Expand the use of solar panels in County parking lots to further reduce energy use in County operations.	CE-5(10)	E-2.3	EF-5	New Policy under draft Objective 1501.2 in Energy and Climate Element to expressly require use of solar equipment at County facilities/lots.	New provision in Chapter 114, Article II, Section 114-45 to require use of solar equipment.	Future New Budget Item	Medium Term (3-5 yrs.)	Energy Foundation	LED replacement costs estimated at \$400 per fixture
GO 4.8	Create a green business challenge for local businesses and recognize resource reduction.	EJ-2(9)	S-1.4, E-2.3		Revisions to more explicitly state in Policy 801.7 of Solid Waste Element and draft Policy 1503.3.3 of Energy and Climate Element.	New provision in Chapter 114, Article II, Section 114-45.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)	Energy Foundation	Staff time – 100 hrs.

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Goal 5: Ex	pand efforts to reduce GHG impacts from County t	fleet.								
GO 5.1	Complete a "right size/right type" fleet analysis.		B-4.3	SP-19	Partially contemplated by Policy 1502.1.3 in Energy and Climate Element. Policy could be updated to include the specific details of this recommendation.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 200 hrs.
GO 5.2	Advocate for incorporation of EVs on the state-approved list.		B-4.3	SP-19, EF-1			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.
	rengthen water conservation efforts in County ope						l			
GO 6.1	Install low-flow water conserving fixtures throughout County facilities. Water-conserving fixtures may include faucet aerators, low-flow showerheads, waterless urinals, low-flush or dual-flush toilets, and irrigation equipment.	BE-2(8)	W-1.3		Currently proposed in draft Policy 1503.1.6 of Energy and Climate Element.		Future New Budget Item	Short Term (1-3 yrs.)		Toilets - \$100-325 each uninstalled Urinals - \$275-375 each uninstalled Showerheads - \$10- 50 each uninstalled Faucets - \$45-100 each uninstalled Staff time - 150 hrs.
GO 6.2	Develop and implement educational materials and a program for employees to ensure water efficiency in operations and maintenance of fleet and facilities. Partner with the Florida Keys Aqueduct Authority to target reductions in the largest water use applications.		E-2.1, E-2.2				Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination with FKAA
GO 6.3	Partner with the Florida Keys Aqueduct Authority to promote water conservation through rebate and public education programs.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 100 hrs.

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Goal 7: Co	ntinue planning for and implementing solid waste	reduction e	fforts in County ope	rations.						
GO 7.1	Improve County waste management policy with tangible goals and baseline to track accomplishments. Track County recycling rates separately from other recycling programs and establish goal for increases. Adopt policy that the County will also achieve a 75% diversion rate of its own solid waste stream. Implement incentives or enforce regulations to ensure progress towards the 75% community waste reduction target.		S-1.1, S-1.2	SP-2	Currently proposed in draft Policy 801.7.2 of Solid Waste Element. Partially contemplated by Objective 801.4 and Policy 801.47 in draft Solid Waste Element. Ensure tracking of targets established in these policies.	Updates to LDC Chapter 138, Article II, Section 138-28 and Article III, Section 138-55 to provide point incentives.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	FDEP Small County Consolidated Grants; Energy Foundation	Staff time – 170 hrs.
GO 7.2	Create a policy and goal to increase material salvage for County-owned full and partial building demolitions.		S-1.2	SP-2	Partially contemplated by Policy 801.45 in draft Solid Waste Element. Update Chapter 11 of Monroe County Purchasing Policy.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 20 hrs.
Goal 8: Ind	rease efforts to promote sustainability in County	operations.								
GO 8.1	Provide annual progress reports on the implementation of the GreenKeys! Sustainability Action Plan.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 20 hrs.
GO 8.2	Develop a policy and implement best practices to reduce pesticide and herbicide use in County operations.			SP-2	Contemplated in Coastal Conservation Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 75 hrs.
GO 8.3	 Conduct an internal employee survey to determine most effective and underutilized sustainability practices and modify policies to increase sustainable practices. Create a "top ten list" of energy, water and waste management efficient practices for County employees and include in the Monroe County Personnel Policies and Procedures document. Create a monthly email blast to employees on successes and case studies for sustainable practices. 						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time - 120 hrs.

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GO 8.4	Create and continually publish an internal and external Sustainability Newsletter for distribution.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 40 hrs.
GO 8.5	Adopt a policy to facilitate and encourage web/telephone conferencing at meetings in lieu of in-person attendance where possible.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs.
GO 8.6	Create an Environmentally Preferable Purchasing ("EPP") program. Develop procurement specifications for materials reuse, reduced packaging, materials with recycled content, and other waste management strategies.	EJ-2(7)	S-3.2				Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 75 hrs.
GO 8.7	Investigate re-certification of STAR.						Future New Budget Item	Medium Term (3-5 yrs.)		\$3,000
GO 8.8	Modify procurement policies in Monroe County's Environmentally Preferable Purchasing program as necessary to further incentivize vendors whose buildings, equipment, products and services meet achievable sustainability targets.				Update Chapter 11 of Monroe County Purchasing Policy to provide incentives.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 250 hrs.
GO 8.9	Update or modify the goals and recommendations in the GreenKeys! Sustainability Action Plan every 3-5 years.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs. per update



Climate & Energy

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Goal 1: Co	ntinually develop better data to best plan for clim	nate change	and sea level rise.							
CE 1.1	Develop a geographic database to document nuisance flooding events.		M-3.1				Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs.
CE 1.2	Ensure that future flood vulnerability assessments in Monroe County build upon the work in the GreenKeys! project and continue efforts to develop a more complete digital record of Elevation Certificates for homes, buildings and facilities. Use, integrate, and improve the Elevation Certificate record to promote higher confidence in flood risk assessments.		M-2.2				Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	FDEP Coastal Partnership Initiative	
CE 2.1	Ensure that all new nuisance flooding data informs future road decisions. These data will also need to be considered for future road decisions. This will require coordination with FDOT for impacts to State Roads (U.S. Highway 1).		M-2.2	SP-15, SP-16	Partially contemplated by Policies 1502.1.7 and 1502.1.8 in Energy and Climate Element.	nanaged roads within the Co	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination with FDOT
CE 2.2	Pilot project to conduct a Comprehensive Feasibility Study for Enhanced Stormwater and Tidewater Criteria (prioritizing areas) for nearterm areas subject to inundation risk, including nuisance flooding (in two locations).			WS-3			Future New Budget Item	Short Term (1-3 yrs.)		\$98,000 <u>Staff time</u> – 100 hrs.
CE 2.3	Develop a ranking process to identify the most vulnerable neighborhoods first. Develop criteria to establish levels of service each road gets subjected to based upon a tolerable level of nuisance flooding.		M-3.3	SP-2, SP-15, SP-16	Update to Policies under Objective 301.2 in Traffic Circulation Element to include ranking process.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 200 hrs.

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CE 2.4	Establish mitigation as a priority in the near term including engineering interventions to keep tidal water from entering onto the road surface while maintaining stormwater drainage. Work with FDOT to develop site surveys of road bed elevation and, as appropriate, suggest engineering designs to raise portions of U.S. Highway 1 that currently show vulnerability to nuisance tidal flooding.			SP-15, SP-16			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 50 hrs.
CE 2.5	Utilize the tidal flood vulnerability maps for roads as a guide for a public outreach campaign to develop a photographic record that documents the date, time, and severity of nuisance tidal flooding events.		M-2.2, M-3.1, E- 1.1				Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 0 hrs.
Goal 3: Inc	crease efforts to educate residents about energy e	fficiency an	d climate resiliency.							
CE 3.1	Hold at least three (3) community workshops to discuss sea level rise with stakeholders.		E-1.1	SP-3, SP-4, WS-12, PO-1			Future New Budget Item	Short Term (1-3 yrs.)		Staff time – 90 hrs.; \$1,500 Advertisement Cost
CE 3.2	 Build local government capacity to better understand local coastal hazard risks, and analyze the legal and policy factors that impact adaptation responses. (NOAA grant) End products will include: A participatory VCAPS¹ assessment for Monroe County; HAZUS² damage valuations and visualizations for County; Law and policy analysis of issues directly affecting local adaptation capabilities; Regional analysis comparing how the state and local regulatory environment impacts resilience planning and adaptation. 			SP-3, SP-4				Short Term (1-3 yrs.)	NOAA grant	\$350,000 Grant Award, \$30,000 total County match required Staff time – 200 hrs.

¹ Vulnerability, Consequences, and Adaptation Planning Scenarios ("VCAPS") builds on concepts of hazard management and vulnerability and uses participatory modeling techniques to organize and document dialogue and learning. ²HAZUS uses Geographic Information Systems ("GIS") technology to estimate physical, economic and social impacts of disasters. It graphically illustrates the limits of identified high-risk locations.

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CE 3.3	Complete Phase 2 of the NOAA grant creating digital record of Elevation Certificates for homes, buildings and facilities. Create a policy to ensure that the County uses, integrates, and improves the Elevation Certificate record to promote higher confidence in flood risk assessments.							Short Term (1-3 yrs.)	NOAA grant	\$100,000 Grant Award, \$30,000 total County match required Staff time - 200 hrs.
CE 3.4	Highlight available incentives for residents desiring to perform energy retrofits or renewable energy projects on homes or businesses.			PO-3			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 0 hrs. Coordination
CE 3.5	Develop a "best practices" tool kit to educate residents on energy saving and resiliency techniques.		E-1.1	PO-3			Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 120 hrs.
Goal 4: In	centivize energy efficiency, water conservation, cli	imate resilie	ncy and waste reduc	tion efforts.						
CE 4.1	Enforce regulations (i.e. limiting development or redevelopment in particularly vulnerable areas) or offer incentives (i.e. points or permit fee reductions for elevating or floodproofing structures) to encourage residents/businesses to shift behavior to prepare for future climate change impacts.	CE-1(7)	P-1.3, B-3.1	SP-2, SP-10	Currently proposed in draft Policy 1503.1.1 and 1503.1.2 of Energy and Climate Element.	New Article in Chapter 118.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 200 hrs.
CE 4.2	Create a list of incentives to encourage construction of energy and water efficient buildings, through including but not limited to linkages to the Rate of Growth Ordinance ("ROGO") or other means.	CE-5(8)	E-2.3, E-2.4, B-3.1, W-1.2, W-1.3, W-1.4	SP-1, SP-2	Update to draft Policy 1503.1.3 of Energy and Climate Element. Currently proposed in draft Policy 1501.1.2 and 1503.1.6 of Energy and Climate Element.	Updates to LDC Chapter 138, Article II, Section 138-28 and Article III, Section 138-55 to provide point incentives for energy and water efficient buildings. Update to Code of Ordinances Chapter 6, Division 3, Subdivision 2, Section 6-108 to waive permit fees for energy efficient buildings.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 150 hrs.

Recomme	endation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
Goal 5: Pr	omote employee training and reporting on sustain	nability initia	atives.	•						
CE 5.1	Develop training programs for County buildings and facilities operators on energy and water efficiency techniques and train inspectors to enforce water/energy efficiency standards in adopted building codes.	CE-5(7) CE-6(6)	E-2.1		New policy under draft Objective 1503.3 of Energy and Climate Element to require County employee training program. New policy under draft Objective 1503.3 of Energy and Climate Element to require County employee training program.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	Energy Foundation	Staff time – 100 hrs.
Goal 6: In	crease resource efficiency and reduce waste gener	ated in the	County.							
CE 6.1	Adopt a plan (e.g green business plan) designed to improve the resource efficiency of the community's businesses including manufacturing, automotive and marine repair.	CE-4(1)				New provision in LDC Chapter 114, Article II, Section 114-45.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	FDEP Small County Consolidated Grants	Staff time - 75 hrs.
CE 6.2	Encourage specific product bans to significantly advance progress toward waste reduction goals.	CE-7(2)	S-3.1	SP-2	Future New Policy under Objective 801.4 in Solid Waste Element (after Florida legislature legalizes).		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 50 hrs.
CE 6.3	Create or update policies for incentives reducing the generation of fats, oils, and grease and their beneficial reuse.			SP-2	New Policy under Objective 801.4 in Solid Waste Element on reduction and reuse of fats, oils, greases.	New Article in LDC Chapter 114 on Waste Reduction.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
CE 6.4	Create financial incentives or industry-focused challenges to encourage companies to reduce the intensity of their resource consumption (e.g. Nebraska Energy Office's Dollar & Energy Savings Loan, an external revolving loan fund that provides low-interest loans of up to \$750,000 for energy efficiency projects.	CE-4(8)	E-2.3, E-2.4		Revision to Policy 801.7 of the Solid Waste Element.	New provision in LDC Chapter 114, Article II, Section 114-45.	Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time - 150 hrs.



Natural Systems

Natural Sys	stems									
Recomme	endation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
Goal 1: Co	ontinue cooperative efforts that support natural sy	stems resto	ration and conservat	ion.						
NS 1.1	Continue cooperation with federal, state, and private partners in support of coral reef restoration initiatives to support the implementation of strategies that may promote long-term recovery and resilience of the Florida Keys coral barrier reef system in the face of future climate change.		N-1.1	SP-13, NS-9	Contemplated by Policies under draft Objective 203.3 in Conservation and Coastal Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 100 hrs. Coordination
NS 1.2	Continue cooperation with federal, state, and private efforts to research, implement, and improve seagrass replanting efforts.		N-1.1	NS-9	Contemplated by Policies under draft Objective 203.3 in Conservation and Coastal Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
NS 1.3	Cooperate with the U.S. Fish and Wildlife Service, FWC, and conservation organizations to monitor populations of endangered species, track habitat trends, and, as necessary, implement relocation experiments under conditions of drastic habitat loss for endangered species due to sea level rise.	ral systems	N-1.1		Contemplated by Policies under draft Objective 205.3 in Conservation and Coastal Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 500 hrs.
NS 2.1	Conduct a tree inventory and establish tree canopy goals County-wide to determine opportunities for increasing canopy on public and private lands for carbon sequestration benefits.			NS-14			Future New Budget Item	Short Term (1-3 yrs.)	Florida Urban and Community Forestry Grant Program	<u>Staff time</u> – 200 hrs. or \$100,000
NS 2.2	Calibrate the Sea Level Affecting Marshes ("SLAMM") Model results with historic land cover change and field observations and coordinate with land acquisitions.						Future New Budget Item	Medium Term (3-5 yrs.)		\$30,000
NS 2.3	Identify and map natural inundation buffers which could also provide sea level rise adaptation benefits.			SP-13			Future New Budget Item	Medium Term (3-5 yrs.)	FDEP Coastal Partnership Initiative	<u>Staff time</u> – 150 hrs. or \$50,000

Recomme	endation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
NS 2.4	Update requirements for ecological buffers and provide guidance on how to establish or adjust these buffers to accommodate sea level rise. Buffers should be designed, where site applicable, to provide "habitat migration corridors" that allow sensitive habitats and species to migrate inland or upland as sea level rises. To accommodate sea level rise, the amount of buffer required between development and coastal habitats may need to be increased.			SP-2		Update to LDC Chapter 122.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
Goal 3: Sti	rengthen protection of natural systems within the	County.								
NS 3.1	Continue supporting the implementation of traditional coral reef management actions as strategies for supporting the maintenance of functional coral reef systems under rapid climate change. Such actions should clearly include decreasing nutrient and sediment loads, continued restoration of apex predator populations, and creation of physical reef structures that may enhance recruitment of hard coral species.		N-3.3	NS-8, NS-9	Contemplated by Objective 203.3 of the draft Conservation and Coastal Management Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
NS 3.2	Maintain and enhance programs, like canal restoration, to improve water quality nearshore and offshore to reduce environmental stressors exacerbated by sea level rise and increasing ocean temperatures.						Future New Budget Item	Short Term (1-3 yrs.)		Staff time - 200 hrs.+ cost of canal restorations
NS 3.3	Increase the percentage of funding invested in green infrastructure.	NS-1(7)	N-3.1, N-3.2	SP-13, NS-5	Revision to draft Policy 1502.1.1 and 1502.1.4 of Energy and Climate Element.		Future New Budget Item	Short Term (1-3 yrs.)	Wildlife Conservation Society's Climate Adaptation Fund	
NS 3.4	Maintain natural habitat corridors in low-lying areas that allow for up-gradient colonization of tidal wetlands to promote future coverage of mangroves and other tidal wetland ecosystems.			NS-5	Contemplated in Policies and Objectives under Goal 203 in Conservation and Coastal Element.	Contemplated by LDC Chapter 118, Article I, Section 118-7(6)(d).	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		
NS 3.5	Include marine ecosystem mitigation under accelerated sea level rise as a possible overlay component in future land buying and conservation zoning within the County.			SP-2	Update to draft Objective 101.45 of Future Land Use Element to include marine ecosystem mitigation as new overlay category.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		

Recomme	endation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
NS 3.6	Increase efforts to protect and maintain natural habitats, especially "core areas" with the best chances of persistence during sea level rise.			SP-13, NS-5		Update to LDC Chapter 118, Article I, Section 118- 7 to include protection of "core areas".	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		
Goal 4: Im	prove and increase incentives for residents to con-	serve and p	reserve natural syste	ms.						
NS 4.1	Create or enhance programs aimed at increasing tree canopy through active planting.			NS-14			Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	Five Star & Urban Waters Restoration Project; Wells Fargo Environmental Solutions for Communities Grant Program; Forest Health Protection Grant Program; Urban and Community Forestry Program; Georgetown Climate Center Federal Funding Compendium for Urban Heat Adaptation	
NS 4.2	Provide incentives to residents and developers to protect critical watershed protection areas.		N-1.2	SP-2, SP-13		Updates to LDC Chapter 138, Article II, Section 138-28 and Article III, Section 138-55 to provide point incentives for protection of these areas.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
NS 4.3	Review land development regulations to better incentivize protecting natural resources on sites.			SP-2			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
NS 4.4	Pursue "blue carbon" payments for conserved and restored seagrass areas through international carbon mitigation markets that may begin emerging over the next decade. Such payments could serve as a possible revenue source for adaptive management and, as necessary, assisted migration/colonization of seagrass communities under accelerated climate change scenarios.						Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 50 hrs. Coordination

Recomme	endation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
NS 4.5	Pursue future revenue opportunities from "blue carbon" payments associated with conservation and assisted migration of local mangrove habitats. This revenue source could be used for adaptive management and, as necessary, assisted migration of local mangrove habitats.						Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 50 hrs. Coordination
Goal 5: Est	tablish a framework for evaluating adaptation stra	itegies.								
NS 5.1	Identify intact corridors for future tidal wetland migration corridors as a potential criterion for future land purchase and flood mitigation initiatives within Monroe County. For example, land acquisition priorities.		N-1.2, N-3.1				Future New Budget Item	Short Term (1-3 yrs.)		Staff time - 150 hrs. or \$50,000 Coordination
NS 5.2	Incentivize "soft options" like living shorelines and mangrove restoration as an alternative to traditional bulkheads for near-term stabilization of eroding coastal areas. Require detailed evaluation of soft options in an alternatives analysis and require the use of soft protection where feasible. Incorporate sea level rise and storm surge into the siting and design of any soft protection projects.					Update to LDC Chapter 118, Article 1, Section 118-12 to require.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 200 hrs.
NS 5.3	Specify priority areas where shoreline protection structures should be removed and continue discouraging the use of hard protection unless no other feasible alternative is available.		N-2.1	SP-13, SP-2		Currently contemplated in LDC Chapter 118, Article 1, Section 118-12.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.
Goal 6: Co	ontinue County efforts to control invasive species.									
NS 6.1	Continue invasive exotic species management.			NS-6	Partially contemplated in Policies under draft Objective 209.1 in Conservation and Coastal Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 50 hrs. annually
NS 6.2	Identify areas for habitat maintenance where the removal of exotics could improve the quality of that area to serve as a natural or soft protection option. Establish maintenance schedule that factors in benefits of managing habitats as a natural defense strategy against sea level rise impacts.				Partially contemplated in Policies under draft Objective 209.1 in Conservation and Coastal Element.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
NS 6.3	Establish and enforce regulations to control the use and sale of invasive species. This would expand the County's existing regulations limiting invasive species in site restoration and landscaping.	NS-2(7)			Comprehensive Plan	Land Development Regulations New Ordinance in Code of Ordinances Chapter 12, Article 1.	Improvements Element Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Cost/Level of Effort Staff time – 150 hrs.



Built Environment

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
Goal 1: Inc	rease the resilience of structures and buildings w	ithin the Co	unty.							
BE 1.1	Conduct additional study of a freeboard initiative to elevate and floodproof buildings within Monroe County.			WS-11			Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 150 hrs.
BE 1.2	Provide outreach on "demonstration" projects (e.g. Stock Island Fire Station and Bayshore Manor) to provide examples of benefits. Distribute information about GreenKeys! planning efforts at County events.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs.
BE 1.3	Ensure resiliency and energy efficiency design considerations are included in affordable housing projects.					Update to LDC Chapter 130, Article V, Section 130-160 or 130-161.1 to include requirement.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 150 hrs.
BE 1.4	Create a list of funding sources to finance energy-efficiency and resiliency upgrades in residences and businesses (e.g. Property Assessed Clean Energy ("PACE") or other financing strategies).						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 50 hrs.
BE 1.5	Develop criteria for Adaptation Action Areas and adoption in Comprehensive Plan.		P-2.4	SP-3, SP-4	Partially contemplated in draft Policy 1502.1.4 in Energy and Climate Element to be completed within 5 years after adoption of Update.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 200 hrs.
BE 1.6	Maintain and strengthen setback policies to account for sea level rise impacts.		B-2.1	SP-2	Partially contemplated by draft Policy 212.2.1 in Conservation and Coastal Element.	Update to LDC Chapter 118, Article I, Section 118- 12 to strengthen.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.
BE 1.7	Consider imposing use restrictions on development in areas most vulnerable to flooding.		B-2.1	SP-2, SP-10		Update to LDC Chapter 122, Section 122-2 and 122-4.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
BE 1.8	Adopt an ordinance to address "environmentally-challenging locations" and damage to public roads, streets, highways, bridges, sidewalks, curbs and curb ramps, crosswalks, bicycle ways, hiking and walking paths and trails, underpasses, overpasses, and other improved public rights-of-way used for travel and recreation or other appropriate infrastructure.					New Ordinance in Chapter 12 or 19.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.
BE 1.9	Establish triggers for retrofit of a structure impacted by changing site conditions such as when erosion is within a certain distance of the foundation; when monthly high tides are within a certain distance of the finished floor elevation; or when a setback decreases to a certain width. Consider these concepts in development/redevelopment principles: • Address sea level rise in "non-conforming" structure policies. • Address sea level rise in redevelopment or replacement of existing structures. • Use rolling easements in property development and redevelopment strategy. • Enhance Transfer of Development Rights program parameters to account for sea level rise impacts by directing growth to land outside of potentially vulnerable areas.		B-2.1	SP-2, SP-10	New Policy under draft Objective 203.1 in Conservation and Coastal Element to establish triggers.	Update to LDC Chapter 130, Article V, Section 130-160.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs.
BE 1.10	Incentivize available "resiliency" construction standards (e.g. Resilience STAR™, the Institute for Business and Home Safety's FORTIFIED Home™, FORTIFIED Commercial, FORTIFIED Safer Business, FORTIFIED for Safer Living®, RELi or others) to determine which will be most appropriate for County regulations.			SP-2		Updates to LDC Chapter 138, Article II, Section 138-28 and Article III, Section 138-55 to provide point incentives for resiliency.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		
BE 1.11	Enhance coordination with the development and real estate communities to provide information about projected sea level rise impacts and solutions from the GreenKeys! planning process. Schedule annual briefings with the predominant industry associations to increase communication.						Future New Budget Item	Medium Term (3-5 yrs.)		Staff time – 50 hrs. annually or \$15,000

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
BE 1.12	Develop incentive program for developers and property owners who relocate structures landward, develop in less vulnerable tiers, conserve more open space along the shoreline, and/or preserve or restore natural flood buffers.			SP-2, SP-10			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
Goal 2: Co	ntinue making improvements to promote alterna	te modes of	transportation withi	n the County.						
BE 2.1	Analyze pedestrian network to improve safety and continue increasing total mileage of bicycle lanes and shared use paths, including coordination with Oversea Heritage Trail.	BE-7(7)	B-4.2	SP-27	New Policy under draft Objective 401.1 in Mass Transit Element to require increased mileage.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)	People for Bikes Community Grant Program; Map 21 Surface Transportation Program and Transportation Alternative Program	Staff time – 80 hrs.
BE 2.2	Amend the land development regulations to require one out of three following elements for new parking lots over a certain threshold in the number of spaces: (a) 50 percent of the parking lot to be shaded by tree canopy, (b) solar photovoltaic panels, (c) or the use of cooling pavements or pavement coatings with albedos greater than 40 percent if trees and solar panels are impractical due to site considerations. Incorporate sustainable parking practices and design into land development regulations such as increasing stormwater infiltration where applicable, including bike parking, reducing heat island effects, and other strategies to reduce environmental impacts.					Update to LDC Chapter 114, Article III, Section 114-67 to include.	Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 250 hrs.
BE 2.3	Develop a feasibility analysis for a public bike share program in more urbanized areas.	BE-7(9)	B-4.1, B-4.2				Future New Budget Item	Short Term (1-3 yrs.)	People for Bikes Community Grant Program; Map-21 Surface Transportation Program and Transportation Alternative Program	Staff time - 30 hrs. and Consulting Services

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
BE 2.4	Establish a target to reduce per capita vehicle miles travelled. Create vibrant neighborhoods where a certain percentage of residents can easily walk or bicycle to meet all basic daily, non-work needs and have safe access to transit.			SP-26, SP-27	New Policy under draft Objectives 301.3 or 301.4 of Traffic Circulation Element to establish vehicle miles travelled reduction target.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
BE 2.5	Achieve recognition as a Bicycle Friendly Community or Walk Friendly Community.				New Policy under draft Objective 401.3 of Mass Transit Element.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)	People for Bikes Community Grant Program; Map 21 Surface Transportation Program and Transportation Alternative Program	Staff time – 25 hrs. No cost for application or renewal.
BE 2.6	Include transit incentives in affordable housing projects.					Update to LDC Chapter 130, Article V, Sections 130-161 or 130-161.1 to include transit linkage.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
BE 2.7	Develop a ride sharing program for Monroe County employees to identify potential carpool candidates.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 30 hrs.
BE 2.8	Adopt a complete streets policy for County maintained and controlled roads. Complete Streets improvements support safe, efficient, and convenient mobility for all users (pedestrians, bicyclists, transit, motorists) regardless of age or ability.	BE-7(2)		SP-26	New Policy under draft Objective 301.4 of Traffic Circulation Element.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
BE 2.9	Implement programs to improve pedestrian and bicycle safety (e.g. targeted speed and red light enforcement using radars or cameras in areas where frequent violations or collisions have occurred; targeted crosswalk right-of-way enforcement; targeted bicycle traffic law obedience enforcement; bicycle lane encroachment enforcement; or school zone enforcement).	BE-7(5)	B-4.2	SP-26			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)	People for Bikes Community Grant Program; Map 21 Surface Transportation Program and Transportation Alternative Program	Staff time – 200 hrs.
BE 2.10	Identify strategies to provide better public transportation options through improved connectivity, extended routes, expanded hours, increased reliability and more education of available services.			SP-27			Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 150 hrs.

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
Goal 3: Str	rengthen regulation of noise and light pollution w	ithin the Co	unty.							
BE 3.1	Incorporate Dark Skies best practices into land development regulations to reduce light pollution and minimize bird strike hazards. This could include incorporation of Dark Sky Friendly Lighting into County infrastructure to further reduce light pollution within the County. Establish programs that eliminate existing sources of light pollution coming from Countyowned entities.	BE-1(9)				Revision to sections in LDC Chapter 114, Article VI to incorporate Dark Skies best practices.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.
BE 3.2	Review code enforcement procedures to specifically track noise and light violations so that trends can be monitored to reduce these types of issues.	BE-1(6)				New Article in Chapter 114 to require tracking.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 30 hrs.
Goal 4: Pro	omote urban agriculture within the County.									
BE 4.1	Analyze land development regulations and zoning requirements to determine how to allow and promote sustainable food system including local agriculture, farmers markets, community gardens, Farm-to-School programs, Dock-to-Dish programs, etc.	EAC-2(2) HS-4(2)	B-1.2	SP-17, AG-6		Update to LDC Chapter 130, Article 1, Section 130-5 to allow farmers markets, community gardens, urban agriculture as a temporary use. New land use district in Chapter 130, Article I, Section 130.2. Update to LDC Chapter 130, Article 1, Section 130-5 to allow farmers markets, community gardens, urban agriculture as a temporary use.	Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 150 hrs.



Health & Safety

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort			
Goal 1: Ensure that sea level rise and climate change is being considered in health and safety and emergency preparedness and response planning.													
HS 1.1	Incorporate future sea level rise impacts into emergency management plans including but not limited to the Local Mitigation Strategy and its projects. Ensure that post-disaster redevelopment planning considers sea level rise risks.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs.			
HS 1.2	Discuss emergency prevention and response, including nuisance flooding and sea level rise, with County residents at the neighborhood level.			PO-1			Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs.			
HS 1.3	Analyze health issues caused by extreme heat days and associated poor air quality, especially for populations most vulnerable to these impacts by improving the preparation for and response to heat by health, community service, public safety and emergency response staff and services.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Coordination			
HS 1.4	Partner with Mosquito control agencies to develop better elevation data.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)	Staff time – 40 hrs. Coordination	Staff time – 40 hrs.			
HS 1.5	Partner with Mosquito Control agencies to identify risk areas from vector populations by managing habitat and by working with the community to reduce health risks.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Coordination			
HS 1.6	Ensure that climate change and sea level rise information is available to all groups and in multiple languages.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 80 hrs.			
HS 1.7	Work with local animal services/rescue/control organizations to ensure pet safety health issues in the face of sea level rise.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 40 hrs.			

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
HS 1.8	Incorporate future sea level rise impacts into the 2020 Local Mitigation Strategy Update.			SP-2, RR-3	Currently contemplated in draft policies under Objective 1503.4 in Energy and Climate Element.		Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 20 hrs.
Goal 2: In	crease efforts to consume local food, including sea	food.								
HS 2.1	Support school district participation in Florida's Farm to School program that connects in-state growers with local schools.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		
HS 2.2	Identify appropriate spaces in County Parks and partner with School District to provide opportunities for community gardens.	HS-4(2)					Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		
HS 2.3	Expand Community Supported Agriculture ("CSA") programs throughout the County to promote local agricultural products (e.g. Dockto-Dish and Annie's garden).		B-1.2				Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 30 hrs.
HS 2.4	Encourage the sale of locally-caught fish by charter boat captains and allow sale of locally-caught fish at the docks and/or to local restaurants.					Update to LDC Chapter 130, Article III, Section 130.77(f) to allow sale of locally-caught fish from docks.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 15 hrs.
Goal 3: Inc	corporate active living into County planning and ca	apital impro	vement projects.							
HS 3.1	Improve infrastructure for increased physical activity and design routes that are integrated into the regional park system. Design parks to maximize space for physical activity.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 30 hrs.
HS 3.2	Create guidelines to encourage incorporation of active building design in new buildings. Active building design is a process of consciously incorporating building design features that encourage physical activity (e.g. bicycle storage, highly visible stairways, and showers and locker rooms).	HS-1(3)	P-2.2, B-4.2		New Policy under draft Objective 401.3 of Mass Transit Element.		Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 150 hrs.

Recomme	ndation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
HS 3.3	Adopt a "health in all policies" statement or policy commitment expressing the County's clear commitment to consider community health impacts of local decisions and take policy action to improve public health. This commitment can extend to land use, design, transportation, and other aspects of the built environment that impact the ability for residents to walk or bicycle to destinations.	HS-3(10) HS-2(3)			Consider future Community Health and Wellness Element in next comprehensive update.	New Ordinance in Code Chapter 1 or 9 adopting health in all policies statement.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 20 hrs. Coordination
HS 3.4	Evaluate current policies and regulations to identify appropriate places to include wellness, active living and active building design concepts.	HS-1(1)	P-2.2		New Policy under draft Objective 401.3 of Mass Transit Element.		Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		
Goal 4: Pr	omote wellness and healthy living among resident	s throughou	ut the County.							
HS 4.1	Encourage worksite wellness programs that provide physical activity and weight loss programs at work.				Consider inclusion in any future Community Health and Wellness Element created.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 30 hrs.
	ntinue efforts to reduce the use and impacts of to	xic chemica	ls throughout the Co	unty.			T			
HS 5.1	Identify resources to provide disposal options for toxic materials, such as household hazardous waste.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 20 hrs.
HS 5.2	Develop informational resources on how to properly dispose of unused medicine. Coordinate with health care facilities to offer and promote collection sites or services for unused medicines.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 80 hrs. Coordination
HS 5.3	Create a healthy hazardous product initiative that includes: • Educating residents about proper use and disposal of hazardous products, and making information about more sustainable household products available. • Hosting green cleaning workshops and awareness programs.						Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 100 hrs.







Education, Arts & Community Economy & Jobs Equity & Empowerment

Recomm	endation	STAR Identifier	Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
Goal 1: Ir	corporate sustainability into ongoing education ar	nd arts progi	rams in the County.							
M 1.1	Continue to promote arts, cultural, entertainment, and historic preservation amenities to residents and local, national and international audiences. Create a County-wide "art and design week" that coordinates with existing arts events to promote local arts and culture and attract artists and innovators from art, design, architecture, fashion, and related fields.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 150 hrs. Coordination
M 1.2	Encourage sustainable practices in Monroe County's Art in Public Places Program.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
M 1.3	Use County libraries as a platform to promote environmental and social engagement.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 20 hrs.
M 1.4	Encourage and partner with municipalities to expand "arts districts" and events to promote them.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
M 1.5	Continue to attract and sponsor major arts, design, music and cultural events as a way of bringing tourists into the County.						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
M 1.6	Build on the County's success in its commitment to public art to create opportunities along prominent streets and in public spaces. Take residents' preferences into account and use local artists where possible to build neighborhood pride as well as identity to reinforce their uniqueness, image, and branding, and attract additional visitors.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 80 hrs. Coordination

Recomme	Recommendation		Corresponding MCAP Recommendation	Corresponding RCAP Recommendation	Comprehensive Plan	Code of Ordinances and Land Development Regulations	Budget/Capital Improvements Element	Timeframe	Funding Opportunity	Projected Cost/Level of Effort
M 1.7	Target artists and the creative industries to bring economic and community development to neighborhoods and districts by increasing the connections between the arts and cultural sector and other sectors of the economy and providing information about locally available resources and assets.						Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 100 hrs. Coordination
M 1.8	Require art, cultural, and educational organizations to establish recommended sustainability policies and practices as a condition for the receipt of public funds or services.					Update to Code Chapter 2, Article VI.	Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 20 hrs. Coordination
M 1.9	Develop a special "Arts Pass" and/or "Event Pass" that residents and visitors can purchase for a reduced rate for certain County-wide events to supplement existing special ticket price initiatives (e.g. Historic Tourist Discounts).						Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 50 hrs. Coordination
M 1.10	 Develop an "arts, culture, and innovation" policy or plan clearly defining County's role based on: A survey of the location of arts amenities throughout the County. Ensure Plan aligns with County's economic and community development approach including the economic, environmental, and social impact of arts, design, and cultural industry in County. Highlighting the community's existing cultural assets by increasing their presence on the street and in highly visible public forums. Establishing priorities for public art and design projects, events, and locations for the next fifteen years. Encouraging streetscape and public spaces that promote cultural and arts projects throughout the County. 				Consider incorporating policies and objectives from deleted Cultural Resources Element into other Comprehensive Plan elements.	New Ordinance in Code Chapter 9 adopting arts, culture and innovation policy.	Accommodate with Existing Funds/Staff	Long Term (>5 yrs.)		Staff time – 100 hrs. Coordination

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Goal 2: En	courage a balanced local economy that is protecti	ve of all sec	tors of the County's p	oopulation.						
M 2.1	Encourage diverse community involvement in County government. Post vacancies and announcements regarding governmental boards in public locations.	EAC-5(3)					Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Coordination
M 2.2	Adopt policies or regulations that increase overall market demand for green buildings and associated materials, renewable energy products or infrastructure, and recyclable products.	EJ-2(2)	S-2.5	SP-2	Currently contemplated by draft Policies 1503.3.2 and 1503.3.3 in Energy and Climate Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 150 hrs.
M 2.3	Provide outreach to increase green and resilient construction practices for retrofits and encourage sustainable business practices and new economic opportunities.		E-2.4	SP-2	Currently contemplated by draft Policy 1503.3.3 in Energy and Climate Element.		Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 100 hrs.
M 2.4	Address impacts of climate change and sea level rise on disadvantaged social groups, values and symbolic places. Target an annual community workshop aimed at underserved and underrepresented populations on sea level rise and resilience.			PO-1			Accommodate with Existing Funds/Staff	Medium Term (3-5 yrs.)		Staff time – 250 hrs.
Goal 3: Pro	omote sustainability in all sectors of the County's	economy.								
M 3.1	Develop and maintain a Sustainability Handbook for business owners on the County's GreenKeys! website.		E-2.3, E-2.4	PO-3			Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time – 120 hrs.
M 3.2	Encourage sustainable business practices such as recycling and use of local and sustainably-grown products. Hold at least one annual briefing with the predominant Chambers of Commerce to discuss opportunities for enhancing sustainability-related incentives and initiatives.		E-2.3, E-2.4				Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 40 hrs.
M 3.3	Create a web-based clearinghouse for best management practices, local data, tools, and tracking for the business community.		E-2.4	PO-3			Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 200 hrs.
M 3.4	Promote local agricultural programs (e.g. bees).						Accommodate with Existing Funds/Staff	Short Term (1-3 yrs.)		Staff time - 20 hrs.

Light blue - Short-term (1-3 yrs.) recommendations Light yellow - Medium-term (3-5 yrs.) recommendations Light pink - Long-term (>5 yrs.) recommendations

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ľ	M 3.5	Work with Florida Keys Community College to expand or create a green jobs program for new	EJ-6(9)	E-2.1				Accommodate with Existing	Short Term (1-3 yrs.)		Staff time – 30 hrs.
		opportunities in green industries and trades						Funds/Staff	(1-3 yis.)		
		such as green buildings and energy management.									
ľ	M 3.6	Create or support promotional campaigns to	1					Accommodate	Medium		Staff time – 150 hrs.
		bank locally, buy locally, or buy from small and						with Existing	Term		
		independent businesses/retailers.						Funds/Staff	(3-5 yrs.)		