CITY OF PENSACOLA CLIMATE MITIGATION & ADAPTATION TASK FORCE Thursday, January 4, 2018 ~ 3:30 p.m.

HAGLER/MASON Conference Room 2nd Floor, City Hall

AGENDA

- 1. Call to Order/Welcome/Quorum
- 2. Approval of Minutes—December 7, 2017
- 3. Draft Report Discussion
- 4. Announcements
- 5. Public Forum
- 6. Adjourn

The next meeting of the Climate Mitigation and Adaptation Task Force: Thursday, February 1, 2018, 3:30 p.m.

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3:30 p.m.

Members Present: Elaine Sargent, Chair, Laurie Murphy, Vice Chair, Cynthia Cannon,

Carrie Stevenson, Tim Haag, Mark Gibson (arrived 3:40 p.m.) Dr. Haris

Alabasić (arrived 4:00 p.m.)

Members Absent: Dr. Wade Jeffrey, Christy Johnson, Peggi Smith

Others Present: See attached sign in sheet

Staff: Council Executive Don Kraher, Elaine Mager, Sonja Gaines

1. Call to Order/Quorum: The meeting was called to order by Chair Sargent. A quorum was established.

2. Approval of Minutes: October 5, 2017

Motion to approve the minutes of the October 5, 2017 meeting was made by Member Cannon, seconded by Vice Chair Murphy. The motion passed unanimously. (Member Gibson is a non voting member; Member Alabasic was not present for the vote.)

*For the record, the Task Force agreed to not meet in November.

3. Draft Report Discussion:

The Task Force reviewed the draft report containing changes submitted by Vice Chair Murphy, Members Alibasić, Stevenson and Haag. They discussed models of the Broward County Plan, City of Punta Gorda Adaptation Plan, the Community Resiliency Plan from the City of Satellite Beach and the Coastal Vulnerability Assessment for Escambia County, Florida and perhaps adapting parts of these plans into the final report of the Task Force.

The areas of emphasis were discussed. Motion was made by Vice Chair Murphy to make Public Health a stand alone area of emphasis, seconded by Member Stevenson. The motion passed unanimously 5 - 0 (Member Gibson, non-voting member; Member Alibasić was not present for the vote.)

The Task Force discussed adding Transportation as a separate area of emphasis. Chair Sargent made a motion to add Transportation as a stand alone area of emphasis, seconded by Member Cannon. The motion passed unanimously 5-0 (Member Gibson, non-voting member; Member Alibasic was not present for the vote.)

The current climate of Northwest Florida and the City of Pensacola (Item # II in the table of contents) was adapted from the Punta Gorda Plan where they do a one page description of what the trends have been in their area. It would be nice to include a summary or history of the flood events in our area. Vice Chair Murphy suggested that possibly NASA or NOAA would have some data on flooding, weather and severe storms, etc. Member Stevenson suggested that the Florida Automated Weather Network might have some data that could be used. The County may also have some data that could be used regarding floods and rainfall issues. Also, may want to check with professors in environmental science at the University of West Florida to see if they had any useful data. Vice Chair Murphy volunteered to reach out to representatives from UWF.

Members of the Task Force asked the Council Executive to reach out to Dr. Wade Jeffrey to determine if he was still interested in serving on the Task Force or if he had any suggestions that could be incorporated into the draft document. Also, Chair Sargent noted that the Task Force did not have representation from Gulf Power Company since member Hawkins resigned and asked that contact be made to see if they would like to send a replacement or if they would like to provide input.

(Dr. Alabašić arrived at 4 p.m.)

The Property Assessed Clean Energy Program (PACE) is a program that is an innovative way to finance energy efficiency and improvements in residential homes. There are pros and cons for the program. It offsets the initial financial costs for the homeowners to make those improvements and to pay them off over a certain amount of time. Obviously, highly regulated and can be implemented through a number of governmental entities or through a consortium of governmental entities. It gets into a lot of details and is something that would require a dedicated staff and commitment to run. There are a lot of successful models around Florida that have this type program.

Member Alabasić voiced his concern with the City committing time and staff to manage this program. Another issue with the PACE program is the lien that stays on the property as part of the improvements in energy efficiency.

The Task Force should make recommendations that are the best to be and not based on what's in play now, but to take a long vision of what could be and as the body appointed to make recommendations and striving measures that the Task Force sees for the City and for the region to address climate mitigation and adaptation. The Task Force needs to make policy recommendations rather than writing up policies.

Vice Chair Murphy suggested coming up with goals that could be measurable. Also, one of her biggest suggestions on the list is that the Mayor become a part of the Mayor's

Climate Protection Agreement. The rest of her list are items that could be categorized into the seven areas of emphasis. She is also concerned with looking at things that we now have to adapt too. What is in the pipeline. What is not going to be here in ten years. What is here today is flooding. We have a lot of flooding, lack of coastal resiliency. She is in favor of using natural coastal resiliency programs to help mitigate flooding and storm water run off.

Chair Sargent suggested that everyone try to look at the draft and to make written comments by the next meeting.

Member Alabasic stressed the importance of having more action, goal driven recommendations. Further discussion took place regarding formatting the final report, having consistent language from one section to another section.

Identify some of the key stakeholders who would deal with the recommendations, to take a look at the recommendations and share their concerns. Such groups as builders, hoteliers, Gulf Power, the Military, etc. to review and add to it.

Also discussed was the possibility of having individual City Council Members have town hall type meetings in their districts to get citizen concerns, the conducting of on-line surveys, as means of getting more input on the Task Force recommendations.

Member Alabašić indicated that he was not comfortable doing any workshops until the Task Force is clear that the recommendations are good, that the Task Force knows what they are recommending and that they got plenty of input.

Member Cannon made a motion to extend the time line for holding the public workshop until after the Task Force has completed a finalized draft of the Report. Motion was seconded by Chair Sargent.

Member Haag indicated that he had received an email from Christian Wagley asking that the Task Force delay the public comment until later in the Spring.

Discussion took place on having more guest speakers. Member Alabašić indicated that the Task Force did not need to hear from more expert speakers. The Task Force needs to move on with recommendations. There are real experts on the panel and he feels strongly that they did not need any more experts. He did agree that it was beneficial to hear from City representatives on what is and is not being done. Once the Task Force has a final draft report, then it can be sent to these various speakers and stakeholders for their input on the final draft report.

Member Haag called the question.

The motion was passed unanimously 6 - 0. (Member Gibson non-voting member)

Member Gibson indicated that NAS Pensacoala was a member of the Cooperative Invasive Species Management Area (CISMA). It is the Six Rivers CISMA and recently did a popcorn tree removal with the City of Pensacola at the Chimney Park that was successful. He's been in a lot of the wetlands and stormwater areas of the City that the species diversity is gone, it is all invasives. He proposed that the Task Force consider in their recommendations, that the City become a member of the Six Rivers CISMA. Also need to recommend that the City continue to maintain the annual Certification as a Tree City USA to bring attention to the tree management program they are doing.

Member Haag commented on the article forwarded to the Task Force on potential financial and economic impacts on bond ratings due to consequences of government inaction.

Member Alabasić indicated that he would forward to the Council Executive a copy of the article that summarizes the climate change law and changes in the environmental law.

Member Haag also would like to see, under transportation, some language that urges the City to move toward use of natural gas vehicles (CNG vehicles). ECUA transitioned their sanitation fleet approximately 3 or 4 years ago to CNG and realized almost immediately a \$1 million savings on fuel and maintenance costs.

Chair Sargent stated that she was a little reluctant; that it is still dealing with fossil fuels and that's part of the problem. She does agree that you are cutting back by using CNG.

Vice Chair Murphy indicated that it shows that you are moving forward and breaking old habits. That's what we need to see. It is measurable, the public can see it. Give a date, ten years, five years, or a certain percentage towards renewable energy for the City. There are lights in the parking lots that could be solar, these are easy things to do. The hard part is finding the money to change over to renewable energy via grants or whatever.

One of the goals and objectives that was created by the EAB for the Task Force was to develop strategies to obtain federal and state grants, energy cost savings, etc. How can that be developed into recommendations.

Member Alabasić indicated that grant writing was a different parcel. The Task Force's goal should not be to say we are going to write grants or submit grant applications, because that is extremely time consuming. The role of the Task Force is to say here are

some strategies that will help you obtain some of these grants if you apply for them. That is where City staff gets involved. Most cities create their own grant writing departments or have staff dedicated to writing grants. Part of the Task Force's recommendation could be to recommend the City hire a grant writer because there are grant opportunities that are private, public and government supported. Perhaps a general grant data base of opportunities and here's where to apply could be added.

Member Haag suggested that one specific grant opportunity to include would be the Triumph Gulf Coast grant opportunity that would need to combine economic along with climate adaptation. The initial opening date for reception of the grant applications was November 15, it is going to be a rolling application process. There is not going to be a specific deadline for consideration of funding.

Member Cannon addressed the culture change in FDOT this past year and they have completely changed the way they have historically done business over the years. They address and are 100 percent champions of walkable communities. That is something that could be noted in the Transportation emphasis. Also need to add in complete streets.

Member Stevenson mentioned that Escambia County just received funding for the Pensacola Bay Perdido Bay Estuary Program for \$2 million. It is a consortium of regional municipalities. Needs to be someone from the City there. It is really on water quality but it also ties in with these recommendations.

Task Force members further discussed the draft report, getting action items included, and getting areas of emphasis defined, key components included and elements plugged into them. This draft document becomes a resource document for the Task Force to develop the final "Blueprint of Recommendations".

(Member Alabasić had prior commitment and left at 5:05 p.m.)

Member Stevenson mentioned developing a survey tool that could be sent out to the community to see what some of the biggest concerns are and agreed to see if there was an appropriate existing survey that could be adapted for use by the Task Force.

Vice Chair Murphy recommended to start putting together the "blueprints" for the emphasis components and use the surveys as added values afterward so that there would be something on the table to consider.

Member Cannon suggested that the survey could be included as a model for the City to consider following, to engage further input and make it a recommendation that here is a model to use and adapt and use your resources.

Further discussion was held regarding the survey by members of the Task Force and how it could be used as public education baseline, some of the points that people need to understand, what some of the issues are, and how the community can go about better educating people. The survey could serve as a basis for periodic updates to the "blueprint" and for an ongoing dialogue with the community as a public engagement and education tool.

The Task Force discussed having a decision on some sort of "blueprint" put together based on comments made. Members who have not made comments need to submit their comments before the next meeting and then thoroughly discuss at the next meeting.

Chair Sargent stated that in looking at the areas of emphasis, couldn't begin to talk about greenhouse gas emissions goals, more information is needed on where we are today to make that recommendation.

Member Cannon felt like that was a valid comment to add to the recommendation. That the Task Force didn't have enough information and clear understanding. The Task Force doesn't have the resources to go out and make recommendations on elimination of greenhouse emissions, but we acknowledge and make a recommendation that someone needs to bring in an expert on greenhouse emissions to further develop this element. We have gaps in information that we need to establish measurable goals in some areas.

Member Stevenson mentioned the energy report that was done that audited the city's facilities. They know what the energy consumptions are; they know what the deficiencies are and if the Task Force had that report, then they could use it for a base line to set the measurable goals.

Vice Chair Murphy stated by using what other cities are doing and models that have been successful, that have consistencies and patterns, the Task Force could come up with some "blueprint" ideas. Could do some short term as well as long term goals in the areas of emphasis.

Member Cannon suggested not reinventing the wheel but to build the "blueprint" on the success stories seen by other cities that are similar.

Task Force further discussed action steps and getting all comments and revisions by the Task Force members to assimilate the draft document so that at the January meeting work could begin on establishing the final document. Task Force members were encouraged to reach out to other professionals and contacts in their fields of expertise to gather expert information and advice from other entities.

5. Announcements:

Vice Chair Murphy announced on Saturday, December 9, there will be a headwaters Clean-up for Carpenters Creek from 9 a.m. to 1 p.m. on 715 Olive Road, parking on 675 Olive Road. After one year of clean-up efforts, volunteers from Emerald Coastkeepers have removed 10 tons of trash.

Member Stevenson mentioned the Gulf Tree Workshop on December 13 at her office. This is a NOAA decision tools tree, with hundreds of models, climate related software.

6. Public Forum:

Ryan Bowman, 1642 Eagle Street expressed his concerns about the future, sustainability, and how going to feed the growing population.

Beverly Perry, 622 W. Belmont Street was glad to hear Triumph mentioned. Every penny Triumph puts into anything should involve reducing fossil fuel emissions and climate change. She also asked for as much notice as possible for the public workshop when it is held to get the public and neighborhood associations involved.

City Council Member Sherri Myers stated that it was very important when the Task Force has its public meetings to make sure that people who are interested in transportation get notices, certain professional groups that deal with Real Estate Development and other groups who have an interest in the build environment and real estate development, big property owners, like Simon Properties and big box store owners and small businesses in the commercial core area are included. She also would like to have a public participation meeting in the "Up-Town Area" because it is such a concentrated commercial core.

7. Adjourn: There being no further business to come before the Task Force, the meeting was adjourned at 5:35 p.m.

City of Pensacola Climate Mitigation and Adaptation Task Force Meeting Thursday, December 7, 2017 Hagler/Mason Conference Room, 2nd Floor City Hall, 222 West Main Street

PLEASE SIGN IN

NAME (Please Print)	Agenda Item	Telephone Number	Address
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Ryan Bouman	-	337 494 -82013	1642 Eagle St
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Mank Gubson		820 501 (844	カンケン
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Sign In Sheet

DRAFT Report Climate Mitigation and Adaptation Task Force City of Pensacola

Task Force Members:

Elaine Sargent, Chairman, 350 Pensacola

Laurie Murphy, Vice Chairman, Emerald Coastkeeper

Dr. Haris Alibašić, University of West Florida

Cynthia Cannon, AICP, Santa Rosa County

Carrie Stevenson, Escambia County

Christy Johnson, AICP, FDOT

Tim Haag, Emerald Coast Utilities Authority

Dr. Wade Jeffrey, University of West Florida

Peggi Smith, City of Milton

Mark Gibson – Installation Environmental Program Director, NAS Pensacola

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- III. A Blueprint for Addressing Climate Change at the Municipal Level
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Appendices

Resolution of the Pensacola City Council Creating a Climate Change Task Force Broward County Climate Action Plan - Local Strategy to Address Global Climate Change City of Punta Gorda Adaptation Plan Community Resiliency in the City of Satellite Beach Coastal Vulnerability Assessment: Escambia County, Florida

I. Goals and Objectives

The goals and objectives of the Climate Change Task Force shall include, though are not limited to:

- Develop adaptation and mitigation strategies to enhance the city's (regions) region's
 resilience and preparation for withstanding the likely adverse impacts of climate
 change, including flooding resulting from heavy precipitation, rising sea levels, strong
 hurricanes and other extreme weather events:
- Develop a program of education, incentives, and public outreach to encourage City (region) residents, business owners, government, and organizations to participate in the Climate Adaptation and Mitigation Plan;
- Develop strategies to obtain federal and state grants, energy costs savings make
 investments in energy efficiency and other financial resources to offset program costs
 (for example measures to conserve energy and reduce greenhouse gas (GHG) emissions
 with government operations and incentives for homeowners, businesses and
 organizations to conserve energy, reduce bills and reduce greenhouse gas emissions).

II. The Current Climate of Northwest Florida and the City of Pensacola (UWF to provide)

 See attachment: Florida Department of Economic Opportunity report "Coastal Vulnerability Assessment: Escambia County, Florida" dated July 23, 2016

III. A Blueprint for Addressing Climate Change at the Municipal Level

Local officials are typically the first responders when an extreme weather event affects their community. Coastal communities in particular have long dealt with the aftermath of disastrous hurricanes and flood waters which we know all too well can be devastating to local economies. Continuing the efforts to be better prepared to proactively address these events will result in a highly resilient community.

a. Planning for Energy Efficiency and Climate Change Mitigation

The extent of climate change that we will see in the future really depends, in a great part, on the actions we all take now to reduce our use of fossil fuels. (If we do not reduce the amount of GHGs, we will see a greater degree of climate change, while if we start to significantly reduce GHG emissions, the extent of climate change will be less.) Reworded: GHG emissions are directly related to climate impacts. Their reduction can decrease the extent of climate change, while remaining at the status quo or increasing their use will escalate changes in climate. *Climate change mitigation* refers to the actions that will reduce the ultimate magnitude of climate change. Some of these actions also have the potential to contribute to cost savings, green jobs, and local economic development. The City of Pensacola and surrounding area can take many actions to assess their energy use and GHG emissions and make reductions. See the recommendations below for providing a "blueprint" for moving forward: TASK FORCE MEMBERS TO ADD TO LIST

Adopt a pledge to reduce GHG emissions and join programs that provide planning tools, INSERT
 PROGRAMS HERE: the Northwest Florida Clean Cities Coalition, Transformative Actions Program
 (TAP), Be Ready Alliance Coordinating for Emergencies (BRACE), USGS Sea-level Rise Simulation

- and Inundation Models, USGS Wetland Change Models, USGS Surface Elevation and Shoreline Erosion Models
- Recommend to the mayor to become a part of the Mayors Climate Protection Agreement like
 other cities do including Panama City, FL. This is a mitigation strategy that helps reduce future
 impacts of climate change through pledge reductions in GHG emissions, etc. Another strategy
 that should be considered is the City of Pensacola and other cities should commit to meet a
 100% Renewable energy target by certain year, let's say 2025.
- Invite groups like the American Society of Heating, Refrigerating and Air-conditioning Engineers to discuss changes in energy efficiency, including the *Energy Star* labeling program.
- Encourage the start of a special adaptation action area group like Southeast Florida Regional Compact. We could call ours the Northwest Florida Regional Compact. This group studies the outcome of adaptation strategies.
- Complete an inventory of GHG emissions and prepare a climate adaption plan. For example,
 Broward County completed a "Broward's Climate Change Action Plan" (see attached) that was
 developed by the Broward County Climate Change Task Force in 2010, as have many
 municipalities and counties around the state.
- Incorporate language about climate change in updated comprehensive plans, and pass local laws or codes that uphold those values. For example, the City of Punta Gorda Adaptation Plan includes a vision about steps needed to become a more climate change resilient community.
- Include the following sectors: transportation, water resources/utilities, natural resources, agriculture, and disaster risk (to the built community).
- Reduce GHG emissions from municipal operations, including increasing energy efficiency and
 conservation measures. Make the case that these efforts reduce the overall municipal budget
 and save taxpayer dollars. In addition to reducing negative environmental impact, these efforts
 would provide for cost avoidance and savings.
- Install or purchase renewable energy, such as installing solar panels or purchasing wind renewable power on municipal buildings.
 EXAMPLES OF OTHER FLORIDA COMMUNITIES Gainesville, Sarasota, Miami, Tampa.
- Educate the public about the changing climate, and involve and engage local citizens and volunteers in the processes of adaptation and mitigation. Challenge and/or incentivise incentivize residents to reduce their energy consumption.

b. Planning for Resiliency and Climate Change Adaptation

The City of Pensacola has the opportunity and responsibility to start planning to make sure that their communities its community are is resilient to climate change. The best course of action is to better understand what changes are likely at the local (and regional) level and to continue to make sure we are prepared for these changes. Climate change adaptation refers to the actions that we can adopt that will help to reduce the impacts of the climate changes that will inevitably occur. Climate change adaptation refers to the actions organizations adopt to reduce the impacts of the climate changes that either already occurred or will inevitably occur. [Reworded]. Resiliency refers to the capacity of communities to withstand stress and catastrophe, and to recover and adapt successfully in the face of threats or disaster. Below are some of the actions that the City of Pensacola can take to increase their community's resilience to climate change impacts: TASK FORCE MEMBERS TO ADD TO LIST

 Develop emergency management plans or FEMA all-hazard mitigation plans that include climate change projections and adaptation strategies, and participate in the National Flood Insurance Program as well as FEMA's Community Rating System (CRS). HOW DOES THE CITY RANK? The City of Pensacola is currently ranked 7 out of 10 on the FEMA CRS scale, resulting in a 15% annual discount in flood insurance for all insured properties. Surrounding communities have reached levels 5 (Pensacola Beach, Santa Rosa County) and 6 (Escambia County). The City should continue making concerted effort to improve the CRS rating. Acting on the suggestions made in this report would contribute significantly to improving this rating.

- Consider current sea level rise (SLR) projections to inventory and map municipal infrastructure
 that may be vulnerable to climate change, and make plans and budget to replace, move or
 harden infrastructure over time.
- Utilize local authority to protect open space, wetlands, and riparian buffers to increase resiliency to extreme weather events. WHAT DOES THE CITY OF PENSACOLA ALREADY HAVE IN PLACE?
- Incorporate Better Site Design, Low Impact Development (LID), and Green Infrastructure
 principles into local codes and planning decisions to increase resiliency of streams, bayous and
 floodplains to heavy precipitation events. Protect the riparian (natural shoreline) zones of these
 water bodies and incentivize restoration of living shorelines instead of hardening (wooden and
 concrete seawalls). Utilize Escambia County's LID Reference Manual and create incentives for its
 use within the City and region. https://myescambia.com/our-services/natural-resources-management/water-quality-land-management/low-impact-design.
- Establish a Property Assessed Clean Energy (PACE) Program [HA: Why? What are the benefits?]

IV. Areas of Emphasis - Comprehensive Plan Climate Adaption Element

CLIMATE ADAPTATION ELEMENT

Goal: Achieve a sustainable, climate resilient community by: promoting energy efficiency and greenhouse gas reduction strategies; protecting and adapting public infrastructure, services, natural systems and resources from climate change impacts; and continuing to coordinate and communicate locally and regionally to monitor and address the changing needs and conditions of the community.

Greenhouse Gas Emissions Reduction Goals

Objective: Mitigate the causes of climate change while providing for cleaner energy solutions and a more energy efficient way of life for visitors and residents.

Policy 1.1. The City of Pensacola shall mitigate its contribution to global climate change by reducing government operations greenhouse gas emissions to X% below 1997 levels by 2020. and city-wide greenhouse gas emissions to 17% below 2005 levels by 2025 and 82% below 2010 levels by 2050. (UWF to provide & update percent & dates?) The City will continue to regularly monitor and track progress of programs and initiatives that contribute to the ultimate reaching of these goals.

Policy 1.2. The City of Pensacola shall encourage research for increasing the proportion of electricity generated by alternative and renewable energy sources within the City, such as solar, wind, geothermal and ocean energy technologies.

Policy 1.3. The City of Pensacola should plan for and facilitate the development of infrastructure that provides public access to alternative fuels and electric vehicle charging stations by 2020. Actions should include:

a) Planning for deployment and optimal distribution of a regional system;

- b) Negotiating inter-local agreements with County, State, and private entities to share existing and proposed infrastructure; and
- Developing expedited permitting processes for private installation of alternative fuel and electric vehicle charging infrastructure (including City-owned parking lots and buildings).

Transportation System (SHOULD WE COMBINE THIS WITH BUILT ENVIRNOMENT?)

Objective: Advance transportation and land-use choices that: reduce fossil fuel use and vehicle miles travelled; improve the mobility of people, goods and services; provide a diverse, efficient and equitable choice of transportation options; and increase the City's resiliency to the impacts of climate change.

Policy 1.1 The City of Pensacola shall continue to encourage mixed land uses which promote functional, walkable mixed-use development designs and projects by providing flexibility in development review for these projects, revising the zoning and land development codes to support such projects, and promoting the adoption of land development codes that support and establish sustainable development patterns, especially in areas identified as high risk to sea level rise. Encourage the reduction of ANY development in flood zones, areas of social vulnerability, near wetlands, fish hatcheries and coastal areas. Property damage (built and environmental) and environmental justice issues create economic losses. Reduce future development in established areas of inundation until an infrastructure (roads, stormwater) study and cost benefit analysis of such designs have been completed based on traffic/runoff. Preserve and grow mixed-use and dense development neighborhoods in low hazard (non-historically flooded) areas, making essential services and businesses accessible through multimodal means of transportation.

Policy 1.2 The City of Pensacola shall continue to seek to diversify fuel options for public transit and fleet vehicles, expand infrastructure for charging electric and hybrid electric vehicles, and incentivize parking for alternative fuel vehicles. Adopt a "no new road construction" policy, focusing instead on maintenance and "vital streets" improvement of existing roads where appropriate.

Built Environment

Objective: Improve the climate resiliency and energy-efficiency of new and existing buildings and public infrastructure, and develop adaptation strategies for areas vulnerable to climate change-related impacts.

Policy 1.1. The City of Pensacola shall encourage greener, more efficient and climate resilient construction practices locally by:

- a) Building all new construction of county-owned city or public facilities to Leadership in Energy and Environmental Design™ (LEED) standards;
- b) Utilizing national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices, as developed by The Sustainable Sites Initiative™ (SITES™);

- Encouraging licensed personnel in each building department to have at least 8
 continuing education units (CEUs) of emerging energy efficiency and renewable
 energy technologies by 2020; [??????]
- d) Reevaluating base finish floor elevation standards with respect to projected sea level rise scenarios and flooding potential; and [Shouldn't this be in some other section?]
- e) Seeking ways to install solar panel demonstration projects on City buildings
- f) Hybrid or compressed natural gas vehicles within the City vehicle fleet
- g) Energy STAR rated appliances and HVAC equipment within City buildings
- h) Incorporating building design specifications that increase resistance to impacts from more intense storm events.
- i) Encourage all building/construction personnel have NPDES training and erosion/sediment control training.
- j) Encourage all designs to produce stormwater drainage impact study.

Policy 1.2. The City of Pensacola should work cooperatively to review and re-evaluate current zoning codes, regulations and policies according to sustainable community development practices, such as those outlined in the criteria recommended by the United States Green Building Council's Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) certification, or by application of a national rating system for local governments, such as the STAR Community Index ™ (STAR).). Include stormwater and drainage.

- a) Identify areas of frequent "nuisance flooding" and create a public database for future reference, which will disincentivize construction in historically and newly flooded areas.
- b) Create an Inland Flooding Adaptation Action Area
- c) Create a mechanism for transfer of ownership for properties in high hazard areas to create green space and mitigate flood risk.

Policy 1.3. The City of Pensacola shall continue to review policies and promote programs which advance greenhouse gas reduction and energy conservation strategies; promote compact, transit-oriented, pedestrian-friendly development; further green construction practices and the design of climate sensitive and energy efficient buildings; encourage cluster development in order to retain or create native vegetative communities; and address the resilience and survivability of buildings and infrastructure to rising sea levels, tropical storms, storm surge, and other climate change impacts.

Policy 1.4. The City of Pensacola shall evaluate the costs and benefits of adaptation alternatives in the location and design of new infrastructure as well as the fortification or retrofitting of existing infrastructure.

Policy 1.5. The City of Pensacola should assess and quantify the multiple environmental, social, and economic benefits of green infrastructure in terms of climate change resiliency, considering that trees, forests, wetlands, and waterways provide natural protection against the forces of climate change by improving air quality, providing shade, reducing heat, storing surface water and filtering stormwater runoff. Furthermore, decisions regarding the conservation and expansion of green infrastructure should include their contribution to meeting greenhouse gas mitigation targets, public health and safety goals, and climate change adaptation priorities.

[Reworded: Assess and quantify the multiple environmental, social, and economic benefits of green infrastructure, as trees, forests, wetlands, and waterways provide natural protection and increase resilience by improving air quality, providing shade, reducing heat, storing surface water and filtering stormwater runoff. Furthermore, conservation and expansion of green infrastructure decisions should include measurements of meeting the Greenhouse Gas mitigation targets, public health and safety goals, and climate change adaptation priorities.

d) Utilize the City Tree Ordinance fund to maximize the benefits of trees throughout the community to absorb carbon dioxide, provide passive cooling for buildings, and provide shade for more walkable streets.

Let's include Roads, railways, airports, ports, utilities and all stormwater mitigation strategies.

Let's also include land loss assessments, erosion and dead zone inundation, biogeochemical cycles and economic impacts.

Emergency Management and Preparedness

Objective: Ensure adequate planning and coordinated response for emergency preparedness and post-disaster management in the context of climate change.

- Policy 1.1. The City of Pensacola shall coordinate with Escambia County to ensure adequate planning and response for emergency management in the context of climate change by maximizing the resilience and self-sufficiency of, and providing access to, public structures, schools, hospitals and other shelters and critical facilities.
- Policy 1.2. The City of Pensacola shall develop plans and monitoring programs to address the impacts of climate change on households and individuals especially vulnerable to health risks attributable to or exacerbated by rising temperatures, to include low income households and the elderly.
- Policy 1.3. The City of Pensacola shall continue to communicate and collaboratively plan with other local, regional, state and federal agencies on emergency preparedness and disaster management strategies. This includes incorporating climate change impacts into updates of local mitigation plans, water management plans, shelter placement and capacity, review of major trafficways and evacuation routes, and cost analysis of post disaster redevelopment strategies.
- Policy 1.4. The City of Pensacola shall work to encourage dialogue between residents, businesses, insurance companies and other stakeholders, through public education campaigns and workshops to increase understanding regarding the potential impacts of climate change on our coastal communities and evaluate the shared costs of action or inaction in human, ecological and financial terms.
- Policy 1.5. The City of Pensacola shall work with the Florida Division of Emergency Management and other agencies to incorporate sea level rise and increasing storm surge impacts into the remapping of potential hazard areas in coastal zones by 2020. Revised hazard area designations should better reflect the risks to communities associated with climate change and allow reevaluation of suitability for development or redevelopment in these areas.

Policy 1.6. The City of Pensacola shall cooperatively develop model codes and policies to encourage post-hazard redevelopment in areas with less vulnerability to storm surge, inundation, flooding, sea level rise and other impacts of climate change, and incentivize locally appropriate mitigation and adaptation strategies.

Public Utilities (ECUA & GULF POWER TO ADD OR REMOVE CONTENT)

Objective 1.1. Ensure the resiliency of existing water resources, water and wastewater infrastructure to the impacts of climate variability and change in order to protect future water quality and quantity, and minimize the potential for flood damage and water shortages, while improving the energy efficiency of utilities and reducing water-related carbon emissions and climate impacts.

Policy 1.1. The City of Pensacola shall, by 2020, coordinate with local service providers to ensure that water and wastewater service planning and policy development considers methods for reducing utilities' "carbon footprint", including the best management practices recommended in American Waterworks Association Florida Vision 2030, which have been recognized by utilities as appropriate utility responses to climate change. Also, additional means of reducing demand for traditional energy sources at water and wastewater treatment facilities, such as through the production of energy through cogeneration systems, should be explored.

Policy 1.2. The City of Pensacola shall develop, implement and coordinate regional water conservation initiatives, in partnership with water and wastewater utilities, as part of long-term water supply planning, and seek the continued support of the Northwest Florida Water Management District and other agencies.

Policy 1.3. The City of Pensacola shall support recurring and continued development of local integrated models and continuous data collection, to help predict and track the impacts of sea level rise on groundwater levels, saltwater intrusion, and drainage infrastructure through enhanced development and application of local hydrologic aquifer and hydraulic models and the use of down-scaled climate models.

Policy 1.4. The City of Pensacola shall work in coordination with local utilities to maintain and advance infrastructure protection and adaptation through infiltration and inflow program development to reduce the flow of groundwater and stormwater to wastewater collection and treatment facilities.

Policy 1.5. The City of Pensacola shall work with utility services to investigate the feasibility of relocating above-ground utilities underground in areas vulnerable to high winds and frequent power disruption due to storms.

Public Health and Education

Objective: Increase opportunities in the community to learn about climate change, participate in decision-making, engage in a green economy, utilize green infrastructure, study health impacts and reduce population vulnerability.

Green Jobs/Economic Resiliency

Policy 1.1. The City of Pensacola shall encourage the development of "green" industry and business which diversify the local economy and contribute benefits towards a sustainable future.

Policy 1.2. The City of Pensacola shall continue to develop plans and programs in coordination with local municipalities, power companies, and private partners to reduce greenhouse gas emissions and create "green" job opportunities throughout the community, by:

- e) Expanding the market for energy efficient products and services;
- f) Supporting alternative and renewable energy production through innovative financing; and
- g) Promoting and incentivizing energy conservation retrofits.

Policy 1.3. The City of Pensacola shall seek to strengthen the local economy by promoting green economic growth and green-collar work training programs in order to: create resiliency; reduce reliance on fossil-fuel-based economies; provide a positive focus for economic development; advance the use of sustainable materials, technologies and services; and encourage local jobs in sustainable businesses which offer a living wage and make it possible for local climate change goals to be met.

Policy 1.4. The City of Pensacola should review codes and regulations to enable and encourage eco-industrial development and business practices in line with the concept of the circular economy. Specifically, businesses models and land development patterns should be encouraged which promote by-product exchanges (so that one company's waste stream is another's source of raw materials) as to more efficiently use resources (materials, water, energy) throughout society.

Public Education/Community Engagement/Research Partnerships

Policy 1.1. The City of Pensacola shall continue to engage stakeholders, regional, state and federal partners, academia, practitioners and climate scientists, in exchanging information, best practices and policy solutions, regarding local climate change impacts and mitigation and adaptation strategies.

Policy 1.2. The City of Pensacola shall promote partnerships between local government agencies, universities, professionals and practitioners, to foster an environment for connecting scientific research and education with practical applications that will contribute to the resiliency and adaptation within the built and natural environments to the impacts of climate change.

Policy 1.3 The City of Pensacola shall promote partnerships between local middle and high school career and academic academies to encourage student internships and learning opportunities to develop and educate local talent. https://ecsd-fl.schoolloop.com/career

- a) Beulah Middle School Pre-Engineering/STEM
- b) Escambia High Engineering Academy
- Pine Forest High Home Builders Association of West Florida Green Construction Trades Academy

- West Florida High School Academies of Civil Engineering & Architecture, Cox Telecommunications, and Gulf Power
- e) Washington High School Marine Science Academy

V. Community Concerns and Priorities

Gather community feedback on the task force's proposed climate change policies and establish priorities based on that feedback – SOLICIT FEEDBACK AND/OR PRESENTATIONS FROM CITY PLANNING & ENGINEERING STAFF, PLANNING BOARD CHAIR AND CITY COUNCIL CHAIR – WHAT ARE THE BIGGEST CONCERNS YOU'RE HEARING FROM THE COMMUNITY? FLOODING? INFRASTRUCTURE? EMEGENCY MANAMGENT?

Create and implement a community-wide survey (see Satellite Beach report) and prioritize action areas based on resident feedback.

Create a page on City website dedicated to climate resilience information

VI. Task Force Findings and Recommendations TASK FORCE MEMBERS TO ADD TO LIST

- a. Incorporate a Climate Adaptation Element into the City's Comprehensive Plan (as opposed to updating each individual element of the Comp plan with climate adaptation & mitigation policies),
- b. Seek funding to develop a Climate Action Plan (see attached Broward County plan),
- c. Conduct a Vulnerability Assessment and develop resiliency strategies based on those findings, (utilize existing FDEO Vulnerability Assessment of Escambia County-it includes detail related to the City of Pensacola).
- d. Reestablish and fund the City of Pensacola Office of Sustainability (or some other program) to implement the Climate Action Plan and to provide an annual review and assessment of the Climate Adaptation Element and LDC Mitigation & Adaptation Policies,
- Engage the Environmental Advisory Board (or appropriate entity) to work with city council and city planning staff to ensure the city's Land Development Code addresses mitigation and adaptation policies,
- f. Seek grant opportunities to further develop climate adaptation programming,
- g. Key questions going forward:
 - i. What sections of the LDC are difficult to implement and/or enforce that would play a role in climate change, i.e., stormwater design and maintenance requirements for new commercial and residential developments? Is the silt fencing requirement enforced?
 - ii. Are rezonings/upzonings to higher densities in vulnerable areas a common occurrence or trend?
 - iii. Are variances to the LDC frequently approved by the City's Planning Board?
- iv. Has the city identified neighborhoods that are at high risk for vulnerability?
- v. If the City isn't going to work with the task force on this project, or provide feedback, then that probably needs to be noted as a key finding; politics will always play a role in climate change issues.

Including what I mentioned above in specific mitigation and adaptation strategies:

- 1. A focus on NPDES permit mandates, and the current City ordinances on land developmentcode, tree and landscape codes and grant analytics.
 - a) Are we thoroughly evaluating and re-evaluating coastal land use?
 - b) Including traffic studies, drainage and sedimentation due to climate impacts?
 - c) What about utility locations, including, but not limited to sanitary sewers, lift stations, stormwater inlets/ponds/outfalls in hazard areas?
 - d) Limiting public expenditures in coastal high hazard areas? Does this include known flood zones? How do grant opportunities apply? What about BP \$? Develop task force to study impacts?
 - e) Why build stormwater (parks) ponds when there are no pond maintenance plans?
 - f) Is the public involved in updating stormwater master plans?
 - g) Why are building permits being issued that place an increased demand on infrastructure and public facilities?
 - h) How can we plan for better stormwater infrastructure maintenance?
 - i) Coordinate with NWFWMD and the S.W.I.M. plan to discuss natural water impacts.
 - j) Develop a Pensacola Bay Shoreline District.
 - k) Develop permeable/green incentives
 - I) Stronger hazardous materials/toxic chemical requirements in sensitive zones.
 - m) Reduce development density in high flood zones/coastal high hazard areas.
 - n) Re-establishment of diverse forests
 - o) Involve private sector to discuss economic & vulnerability risks with the City. For example: World Business Council for Sustainable Development.
 - p) Assessment of long-term de minimis impacts
 - q) What about other infrastructure, such as bridge design?
 - r) Reduction of urban heat island effect. Less pavement, more green.
 - s) Biological indicators; insects, migration, algal blooms, etc.
 - t) Health indicators; mosquito/vector borne illnesses.
 - u) Heat impacts; water resources, wildfires, livestock, health.
 - v) Aquifer replenishment plan-reduce anthropogenic irrigation.
 - w) Utilize natural buffers in coastal zones
 - x) Coordinate different sectors to work on task force on all infrastructure.
 - Y) Have dead trees and unsafe housing razed to keep roads and people safe.
 - z) Redesign roads to drain safely and design enough stormwater infrastructure to handle increased precipitation based on the Rational Method Q=CIA
- Become an active participant in the newly funded and created Pensacola and Perdido Bay Estuary Program; push for climate resiliency action in addition to water quality improvement.
- 2. Work with UWF and UF IFAS Extension faculty to promote climate education events
- 3. Partner with IHMC and any other innovative construction projects to showcase the changes they incorporate in new construction to mitigate for flooding.