# Memorandum

MIAMI-DADE COUNTY

**Date:** February 2, 2010

Agenda Item No. 12B1

**To:** Honorable Chairman Dennis Moss and Members, Board of County Commissioners

**From:** George M. Burgess
County Manager

**Subject:** Update Report from the Climate Change Advisory Task Force for December 2009

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Pursuant to Ordinance 06-113, the Climate Change Advisory Task Force is required to provide quarterly reports to the Committee designated by the Board, in this case the Budget, Planning, and Sustainability Committee.

Attached please find the quarterly report submitted by Harvey Ruvin, Chair of the Climate Change Advisory Task Force, for your review.

Assistant County Manager

**Update Report from the Climate Change Advisory Task Force**
**December 8, 2009**

Pursuant to Ordinance 06-113, I am pleased to submit this update report of the Climate Change Advisory Task Force (CCATF) to the Chair and Members of the BP&S Committee, and through them to the Chair and Members of the Board of County Commissioners. As you are aware, The CCATF is charged with identifying potential future climate change impacts to Miami-Dade County and then providing recommendations to the Board of County Commissioners regarding actions that should be taken to begin adapting for and mitigating these impacts.

In order to effectively address the overlapping issues important in this mitigation and adaptation planning process, six (6) committees and a Steering Committee were formed in 2007. The committees include the following: The Science Committee, chaired by Dr. Hal Wanless; The Greenhouse Gas (GHG) Reduction Committee, chaired by Mr. Richard Pettigrew; The Built Environment Adaptation Committee, chaired by Ms. Elizabeth Plater-Zyberk; The Natural Systems Adaptation Committee, Chaired by Mr. Dan Kimball; the Economic, Social, & Health Committee, chaired by Captain Dan Kipnis; and The Intergovernmental Affairs Committee, chaired by Ms. Carolyn Dekle. With the complexity of the greenhouse gas reduction issues, the GHG Committee created two subcommittees: Transportation and Alternate Fuels chaired by Jose K. Fuentes, and Buildings and Energy chaired by Jane Gilbert. Our Committees held eleven meetings in the last quarter. A quarterly update from each of the Committees and Subcommittees is included below.

The CCATF currently has 24 sitting members out of 25 possible appointments. In the last quarter, nine member appointments or reappointments, made with recommendations from the County Manager, were approved by BCC on November 3, 2009 and December 1, 2009. Reappointed members include Dan Kimball, Jack Parker, Elizabeth Plater-Zyberk, Rafael Rodon, and Manny J. Rodriguez, and Carolyn Dekle. Ms. Dekle's appointment was delayed a month past the others due to the County requirement for her to have a BCC approved waiver of Miami-Dade County residency. New members appointed by the Manager include Rich Candia, Director of Business Development for Leo Daly, Keqi Zhang, Ph.D., Director of the FIU Hurricane Research Center, and Ed Hernandez, Director of the South Florida Water Management District Miami Service Center. They join three other new appointments or reappointments from the Mayor and Commissioners from earlier in the year; Jane Gilbert, Jose K. Fuentes, and Albert Harum-Alvarez. These twelve appointments made this year all have terms that extend through the July 2011 Sunset date for the Task Force. One CCATF member, Alfredo Ravinet, was removed by Commissioner Martinez due to lack of participation.

Additionally, the CCATF 2008 Sunset Review was approved by the BCC on December 1, 2009. The ordinance establishing the CCATF calls for a minimum of four meetings per year. The approved Sunset Review recommends an ordinance change to allow the CCATF to meet a minimum of twice per year if the CCATF committees meet at least twice per year. With over 43 committee meetings throughout 2009, the CCATF is more than adequately meeting that requirement.

As previously reported to you in my September update report, our Steering Committee met in June and approved 15 new recommendations from our Committees to move forward to the CCATF for approval. These draft recommendations, and any other recommendations completed in the near future, will be presented to the full CCATF for consideration on January 22, 2010. DERM continues to provide the significant administrative assistance and support to the Task Force in our work.

The Steering Committee met again on November 13, 2009 to hear from Susy Torriente, Director of the Office of Sustainability, on the status of the initial CCATF recommendations presented to the Board of County Commissioners in April 2008. We also got helpful input on the recommendations at the Steering meeting from Carlos Espinosa, DERM Director, and Doug Yoder, WASD Assistant Director. This information from the County provided the Committee Chairs additional guidance that resulted in the following key highlights and recommended reemphasis for the CCATF and the County:

1. Place less emphasis on exact sea level rise mapping and instead identify benchmark events that are already taking place on an increasing intensity. Carlos Espinosa indicated that legally defensible maps are not a reality at this time, since the sea level projections for 2060 vary considerably (between 5 and 20 inches). CCATF Vice-Chair, Jim Murley, indicated that maps only have to include the best possible information available. Mr. Espinosa indicated that frequently flooded and salt intruded areas or areas at high risk for intrusion or flooding are already known. Salt intrusion in South Dade is already a critical issue and is documented. Another example given is the high tide flooding on Miami Beach. Citizens should be warned ahead of time when these episodes can be anticipated, even when it involves a municipality. Chairs Elizabeth Plater-Zyberk and Jane Gilbert indicate that mapping of vulnerable areas is critical even if we are not providing sea level rise projections. In particular, the County should identify areas where no development expansion should be allowed. Benchmarks need to be identified now.

2. Natural Systems Adaptation is already a Green print Initiative for local habitat preservation and conservation. However, Steering members emphasized that the vital signs monitoring (CCATF Recommendation D9) is an extremely important aspect for the County to move on as vital signs measurements will lend themselves to benchmarking and education. The approach needs to be regional (CCATF Recommendation D8.) Ms. Torriente indicated that she will take the lead on these items and discuss them with Carlos Espinosa and Doug Yoder. Board action is required for both.

3. The Greenprint effort may include and could benefit from the creation of a long term implementing partnership board to take over from CCATF and the Mayor's Advisory Board.

4. Amendments to the CDMP on climate change adaptation are critical, but must follow the State process cycle after the Evaluation Appraisal Report. Additionally, The Water Resources Advisory Committee and South Florida Water Management District need to come to a regional agreement on land use. Counties often reject a District decision. All discussions and recommendations need to include revised population projections and infrastructure lifespan considering sea level rise and salt intrusion (20-year horizon).

We are very gratified that the Miami-Dade Board of County Commissioners signed the Compact for Regional Cooperation on Climate Change on December 1, 2009. CCATF is also participating at a regional level when appropriate. I, along with my Vice Chair, James Murley, participated in the Broward sponsored Regional Climate Leadership Summit in October 2009, which resulted in the Regional Compact. Our Committee Chairs were invited by the County's Office of Sustainability to participate in an adaptation planning meeting with NOAA's Digital Coast in November 2009. As a result of this meeting and the Regional Climate Change Compact recently signed by the Board, the County's Office of Sustainability is spearheading and coordinating the County's participation in regional adaptation processes to ensure compatibility with adjoining counties. Our Chairs appreciated NOAA's advice to move on actions for adaptation without necessarily relating them to climate change but instead to already identified problems related to climate change. Their future recommendations will likely reflect this message.

The following presents some detail from the individual Committee Chairs.

**Committee Updates**

**The Science Committee** is tasked with providing the Task Force and its Committees with a scientific assessment of the magnitude and timing of expected climate change impacts to Miami-Dade County. This Committee has met three times this year and twice this quarter to revise their "Statement on Sea Level Rise in the Coming Century" to include updated scientific evidence to support their statement which when made in 2008 was considered extreme and now is considered mainstream.

**The Greenhouse Gas (GHG) Reduction Committee** is tasked with identifying and promoting ways in which the County can further reduce its Greenhouse Gas (GHG) emissions. This effort was divided into two Subcommittees; GHG reduction related to 1) Buildings and Energy and 2) Transportation and Alternate Fuels. Since that time, the GHG Committee has not met independently. However, the Chair, Richard Pettigrew participates on the Subcommittees.

> **The GHG Reduction Alternative Fuels and Transportation Subcommittee** chaired by Mr. Jose K. Fuentes, WREN Group, Inc., has met six (6) times in 2009; twice this quarter. This year the subcommittee is investigating high speed rail, feebates, mobility fees, biodiesel and local alternate fuel manufacture. The Sub-Committee gets significant staff support from DERM's Air Monitoring Division.
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> **The Greenhouse Gas Energy and Buildings Subcommittee** chaired by Jane Gilbert, High Impact Integrated Solutions, and has met eight (8) times in 2009, twice this quarter and has aggressively developed 7 new draft recommendations for mitigating green house gases in the built environment.

**The Built Environment Adaptation Committee** chaired by Elizabeth Plater-Zyberk, Dean of the University of Miami, School of Architecture, is tasked with focusing on adaptation measures associated with the County's built environment and infrastructure and has met eight (8) times in 2009; twice this quarter. The Committee has investigated Smart Growth principals, Florida's Building Commission and Building Code, the CDMP Evaluation and Assessment Report process, ICLEI's Star Matrix and has drafted 5 new recommendations on these topics and is working to develop a mitigation matrix for the built environment.

**The Natural Systems Adaptation Committee**, tasked with providing recommendations for adaptation and adaptive management of natural systems to predicted climate impacts, is chaired by Dan Kimball, Superintendent of Everglades National Park, and has met once in 2009. The Committee was waiting on input from OOS on implementation of the 2008 recommendations associated with land preservation and a "Vital Signs" monitoring program, to serve as a multi-parameter ecosystem monitoring program that will help track climate change effects. The Committee will be an integral part of helping the County develop benchmarks.

**The Economic, Social and Health Committee**, tasked with providing analysis and recommendations for the economic, social, and health impacts of climate change is chaired by Captain Dan Kipnis. The Committee has met six (6) times in 2009, once this quarter and developed three new draft

recommendations targeting assessing public knowledge and education on climate change. The Committee reconvened in December to discuss the Regional Compact, NOAA's Digital Coast recommendations, and updated information on public perceptions on climate change.

**The Intergovernmental Affairs Committee**, tasked with identifying and working with a broad range of public, private, civic, and non-profit organizations to identify opportunities for collaboration on climate change mitigation and adaptation strategies is chaired by Carolyn Dekle, Director of the South Florida Regional Planning Council. This Committee has met seven (7) times in 2009, three times this quarter, and focused on assessing municipal and agency knowledge on climate change matters and developing permitting guidelines for residential green initiatives. They hope to have recommendations ready for the full Task Force to review in January.

**The Steering Committee** is comprised of all Chairs and Vice-Chairs of the various Committees, Task Force Vice-Chair Jim Murley, Office of Sustainability Director, Susy Torriente, DERM staff persons Nichole Hefty and Lisbeth Britt and me. The Steering Committee met twice this year, once this quarter, to consider and comment on the recommendations drafted by the Committees in preparation for consideration at the next full Task Force meeting and to discuss the County's response to the recommendations and the status of sea level rise mapping. Their recent discussions are highlighted above.

Harvey Ruvin, Chair