## **City of Brisbane** Agenda Report

TO: Honorable Mayor and City Council

FROM: Clayton Holstine, City Manager

SUBJECT: Information from Community Development Director on recent

Green House Gas emissions and climate change studies

DATE: City Council Meeting of June 1, 2009

#### RECOMMENDATION:

The attached report is for informational purposes only as context for Council's review of the housing element.

#### PURPOSE:

This report provides the City Council and community recent information on global warming and the new Federal and State legislation regarding Green House Gas (GHG) emissions. This information can be used to guide future policy choices related to the housing and land use planning elements.

### BACKGROUND

August 2004 – City begins General Plan Update

September 2006 – Governor signs AB 32 (Global Warming Solutions Act) – Will reduce gas house emissions by 25% by 2020.

September 2008 – Governor signs SB 375 – Puts emphasis on comprehensive regional land use planning. Metropolitan Planning Organizations will need to look at the interaction of vehicle miles traveled and land use planning in order to reduce vehicle emissions.

2009 – President announces higher Corporate Average Fuel Economy (CAFÉ) standards for 2011

#### DISCUSSION

Attached is a memo from the Community Development Director which reviews recent Green House Gas (GHG) and climate change studies.

The question that remains is what role Brisbane should and can play in these global issues. A United Nations report suggests there is enough information for "decision makers at many levels" to act immediately and aggressively. Brisbane has taken a

number of steps already to reduce the community's dependence of hydrocarbon fuels. We have adopted a green building ordinance which requires new commercial development to be LEED Silver and "Build it Green" standards for residential subdivisions of 20 or more homes. We required two developers on Sierra Point to install or pay for renewable energy production as part of their projects. We have also stated development on the Baylands should be energy neutral.

City Manager

# City of Brisbane Memo

FROM: William Prince, Community Development Director

Status of the General Plan Update, Global Warming, and the SUBJECT:

Federal and State Legislative Response to GHG emissions

June 1, 2009 DATE:

Since the general plan update began, parallel developments regarding global warming and the state and federal response to global warming necessitate further recognition in the general plan, especially with regards to land use and housing. Indeed, news reports on the latest scientific findings regarding various impacts to expect from continued warming and climate change have been difficult to even keep up with, let alone for staff to develop appropriate revision to the general plan. At a recent ABAG seminar, Tom Friedman, journalist and author, stated that he had suggested to former Vice President, Al Gore, that Mr. Gore "owed the American people an apology for failing to disclose the full impacts of global warming." Although obviously meant to be sarcastic, Mr. Friedman's remark is also, unfortunately, correct. Former Vice President Gore and the Intergovernmental Panel of Climate Change (IPCC) may have won a Nobel Prize for bringing public attention to the issue, but in less than two years, much of what was in the 2007 IPCC report is now regarded as a significant under-estimation of the magnitude of the problem (despite the use of some 19 climate models).

A quote from the opening lines of the latest United Nations report on the environment, by the United Nations Environmental Program (Year Book 2009) provides a good status report on the issue from the global perspective.

"Climate change has long ceased to be a scientific curiosity, and is no longer just one of many environmental regulatory concerns. It is the major overriding environmental issue of our time, and the single greatest challenge facing decision makers at many levels. It is a growing crisis with economic, health, and safety, food production, security and other dimensions. Shifting weather patterns threaten food production through increased unreliability of precipitation and rising sea levels will contaminate coastal freshwater reserves and increase the risk of catastrophic flooding. A warming atmosphere aids the pole-ward spread of pest and diseases once limited to the tropics.

The news to date is bad and getting worse. Ice loss to glaciers and ice sheets has continued, resulting in a second straight year with an ice-free passage through Canada's Arctic Islands and shrinking of ice sheets in Greenland and Antarctica. Combined with thermal expansion – warm water occupies more volume than cold - melting glaciers and ice sheets around the world are contributing to sea-level rise which could far outstrip that anticipated in the most recent global scientific assessment (IPCC 2007).

There is alarming evidence that important tipping points, leading to irreversible change in major Earth systems and ecosystems, may already have been reached or passed. Ecosystems as diverse as the Amazon rainforest and the Arctic tundra may be approaching thresholds of dramatic change through warming and drying. Mountain glaciers are in alarming retreat and the downstream effects of reduced water supply in the driest months will have repercussions that transcend generations. Environmental cumulative effects are building across Earth systems, resulting in behaviors we cannot anticipate.

The potential for runaway global warming is real and the threat has never been clearer. The most dangerous climate changes may still be avoided if we transform our hydrocarbon-based energy systems to renewable energy and if we initiate rational and adequately financed adaptation programs. These changes may enable us to forestall disasters and migrations at will occur at unprecedented scales if action is not taken. The tools are available but they must be applied immediately and aggressively.

#### DISCUSSION

It should be noted, that a review of some of the latest articles and books on the science of global warming, including "Under a Green Sky", by Peter Ward and "Fixing Climate: What Past Climate Changes Reveal About the Current Threat – And How To Counter It," by Wallace S. Broecker and Robert Kunzig, demonstrates that there are still some differences among scientists regarding when several critical "tipping points" will be reached that may lead to "runaway global warming". Staff will supply some additional information on this point at the meeting but, suffice to say, it leaves the door open, as the United Nations report suggests, for "decision makers at many levels" to act immediately and aggressively. It is difficult to recall any time in recent history where the need for local decision makers to act – with every tool at their disposal, including the general plan – was more compelling.

The federal and state response to global warming has become clearer in the past year. Only a week or so ago, the Obama Administration set new higher CAFE standards for fuel efficiency in cars and light trucks. While this will still be inadequate to the job, it is, at least, a refreshing change in direction from past behavior at the federal government level (15 years of little change). The necessary cap and trade system is still under consideration.

Meanwhile the state of California has passed significant legislation (SB375) as a follow up to the Global Warming Solutions Act (AB 32). This legislation puts the emphasis on comprehensive regional land use planning, otherwise known as the sustainable communities strategy, or SCS. The SCS is to be integrated with transportation planning

and transportation funding. It requires coordinated planning through a joint policy committee of the key regional metropolitan planning organizations (MPOs) (ABAG, MTC, BAAQMD and BCDC). The legislation requires that each MPO in the state prepare "sustainable communities strategy" or land use forecast to be used for the regional transportation plan (RTP). It requires that the projected reductions in greenhouse gasses (GHG) be quantified and compared to the California Air Resources Board (CARB) targets for the region. If the SCS is unable to meet the targets for the region, an alternative planning strategy is required, identifying the impediments and showing how the targets are to be achieved.

The new state legislation focuses on the transportation sector of the economy which contributes the most, of any sector, to GHG emissions. Unquestionably, the largest contributing factor to these emissions is vehicles miles travelled (VMT). The huge growth in VMT is primarily the result of the suburban land use pattern of development that has been the dominant pattern of development, since the end of World War II. In fact, VMT is outstripping population growth and vehicle registrations by two and three to one. Only a significant shift towards compact mixed use growth and away from carbon based transportation is likely to slow the growth of global warming fast enough to prevent reaching additional critical tipping points. Simply put, our love affair with automobiles, at least the internal combustion variety, must be fully recognized as a convenience we continue to indulge at our peril.

In reading between the lines of the policy dialogue among the members of the joint committee (ABAG/MTC/BAAQMD/BCDC), it seems clear that if this new strategy (SCS) fails to meet targets (yet to be set) for the reduction of GHG emissions, and additional critical time is lost, the state will have little alternative but to take a much more aggressive role in local land use planning. Local governments also must begin to act aggressively, through their own land use and housing planning, to assist in the regional efforts to reduce vehicle miles traveled. A continuance of business as usual and pure self-interest, without recognizing the obligation to the common (regional) good, could prove to be a disaster.