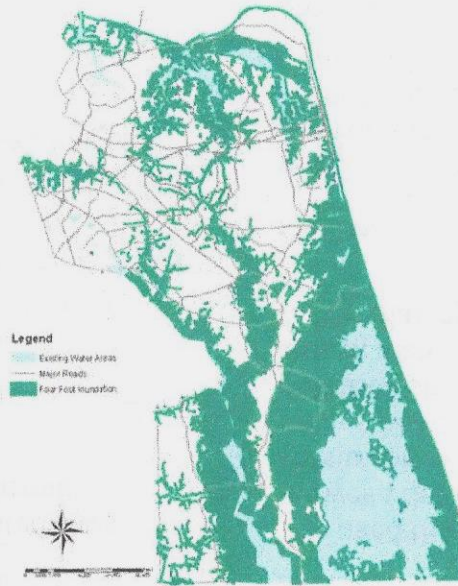




RECOMMENDATIONS

- » Build Leadership in Energy and Environmental Design (LEED™) structures or their equivalent.
- » Retrofit buildings to save on energy use.
- » Adapt to a fleet of vehicles that uses less carbon based fuel.
- » Increase our urban forest canopy in order to absorb more CO₂.
- » Recycle materials, especially for construction purposes.
- » Use energy efficient lighting and reduce wasteful electricity use.
- » Assist the public in saving energy and promote environmentally responsible development.
- » Adopt policies in conformance with State and Federal mandates.
- » Accomplish tasks associated with the City's commitment to the U.S. Mayors Climate Protection Agreement (as referenced in the online document library at www.ourfuturevb.com) and being a "Cool City", including conducting a global warming emissions inventory; creating a solutions-based plan; and implementing this plan and monitoring the City's progress.
- » Support research and development of alternative energy sources and encourage their use.
- » Refine evacuation plans and expand evacuation routes: promote widening of U.S. Route 460, and construction



*Estimated Inundation From
a 4 Foot Sea Level Rise*

of the Southeastern Parkway and Greenbelt.

- » Identify and help the public locate high ground shelter facilities and ensure access to the shelters.
- » Investigate coastal barrier technologies and tidal stream diversion techniques.
- » Concentrate new development at higher elevations

SEA LEVEL RISE

Sea level rise is a major concern for coastal Virginia, particularly for the Hampton Roads region. The Chesapeake Bay Program's Scientific and Technical Advisory Committee projects that sea levels in the Chesapeake Bay region will rise by 0.7-1.6 meters (2.3-5.2 feet) by 2100. With a sea-level rise of about four feet, the City of Virginia Beach would experience an estimated loss of about 45,000 acres from water inundation. This estimate does not account for storm surge effects, nor does it take into account efforts to curtail, block, or divert floodwaters.

Based on an analysis by RMS (a catastrophe modeling company) that has been reviewed and approved by the Organization for Economic Cooperation and Development (OECD), the Virginia Beach-Norfolk Metropolitan Statistical Area ranks 10th in the world in value of assets exposed to increased flooding from sea level rise. Hampton Roads is also listed as the second most impacted area in the country for sea-level rise, behind New Orleans.



RECOMMENDATIONS

- » Prohibit construction in floodplains without acceptable mitigation.
- » Build on higher ground where it is less susceptible to sea level rise and make higher ground the prime focus of development.
- » Identify high ground shelters in case of emergency and provide ensured accessibility to those shelters
- » Aggressively retrofit existing storm drains throughout the City into state of the art stormwater management facilities to minimize flooding after heavy storms while also addressing water quality objectives.
- » Increase efforts to clean up contaminated sites suitable for reuse or redevelopment through appropriate incentives.
- » Strategically replace dunes and grasses in the most valuable and vulnerable shorelines.
- » Investigate techniques to mitigate incursion of storm surge and tidal inundation of low-lying areas.
- » Evaluate and develop measures to increase reasonable structural setbacks in order to effectively protect properties facing the Chesapeake Bay and Atlantic Ocean.

NOISE IMPACTS AND LIGHT POLLUTION

Many Virginia Beach citizens are affected by noise created by surface transportation, aircraft and stationary sources. The need to minimize these impacts will be balanced against other required planning objectives as cited in state law. This point



*The Constellation Orion:
Clear Sky Versus Light Polluted Sky*

is especially true as it applies to the City's Air Installation Compatible Use Zone (AICUZ) program and the recommendations cited in the 2005 Hampton Roads Joint Land Use Study. There is evidence indicating stress and personal health hazards from unwanted noise, high noise levels and excessive light sources as well.

The Dark Skies Initiative (as referenced in the online document library at www.ourfuturevb.com)

seeks to reduce night-time glare so that the stars and other celestial objects can be visible. The benefits include aid to migrating wildlife, stress reduction and aesthetic value, as well as energy savings.

The need to reduce outdoor lighting faces a balance between the immediate benefit of energy savings versus the need for personal safety and a desire for aesthetic treatment. Both light glare and noise pollution share the issue of subjective interpretation and, in many cases, can be solved through mediation rather than by litigation.

RECOMMENDATIONS

- » Adhere to AICUZ and other policy and programmatic recommendations cited in the Oceana Land Use Conformity Program and the 2005 Hampton Roads Joint Land Use Study, both adopted by City Council.
- » Orient "noisy" businesses inside the City's higher AICUZ zones and away from stable residential neighborhoods.
- » Explore alternative means of noise attenuation along major thoroughfares, and at interchanges through