

**1. Today I ask you for a favorable report on the EHRA, HB0596:**

I'm Dr. Thomas E Moore, a Fellow of the American Geophysical Union, retired NASA Manager and Project Scientist (CV attached) and resident of Annapolis. I'm active as a consultant for environmental, energy, and transportation causes aimed at sustainability and ending fuel burning and carbon emission to limit global warming, ice melt and sea level rise. Living on the South River, sea level matters to me.

**2. We have an implicit right *and* obligation to the environment out of which we were born:**

The environment that creates life is self-evidently the birthright and estate of the life it sustains. We must assert a right to enjoy and benefit from our healthful natural environment. We should not allow individuals and corporations to foul or exploit our environment to enrich themselves at our expense, or for any other reason.

**3. The state is responsible to voters as stewards and trustees of that environment:**

Our Constitution serves to establish and uphold the rights of citizens and provide the framework for law and order, assuring equal rights to all before the law. The obligation, duty and oath of elected officials is to protect the common good, preventing its exploitation to enrich the few at the expense of the many. You are accountable to voters, in turn, to hold exploiters accountable to the government. To do that will require positive action on HB0596.

**4. Pollution and sea level rise have been allowed to threaten Maryland and Annapolis:**

In the 1980s, we learned that the seemingly harmless carbon dioxide released by burning fuels is warming our entire planet by the greenhouse effect. We verified this by noting the global melting of ice and corresponding raising of sea levels everywhere. Science confirms that we can expect to face a continually increasing existential threat to our infrastructure. Annapolis and the Chesapeake Bay area are rapidly becoming a "low country" like Holland.

**5. Annapolis will incur accelerating expenses to postpone a threat we helped to create:**

Once a seasonal nuisance, flooding now occurs about 40 days per year, and is expected to become a daily occurrence. Higher mean sea level also increases damage from storms. The City Of Annapolis and the US Naval Academy now require a 5 to 6 foot sea wall to protect the Naval Academy and downtown businesses from severe damage. Both are in jeopardy as important keystones of the city's growth and prosperity, as are many other sites in MD..

**6. Your duty to the common good requires submission of HB0956 to the voters:**

Polls (MCEHR) show 76% of Maryland voters support this amendment. They recognize it as a necessary step to *limit and establish accountability* for the threat to Annapolis and the state of MD. An attack the root causes will require us to first establish the rights of citizens and the trustee responsibility of the government. **The voters will thank you for fulfilling your duty by submitting HB 0596 to a ballot so they can claim a proper respect for their rights.**

I attach several exhibits and am happy to respond to any questions.

**Exhibit 1. City of Annapolis Climate Report**

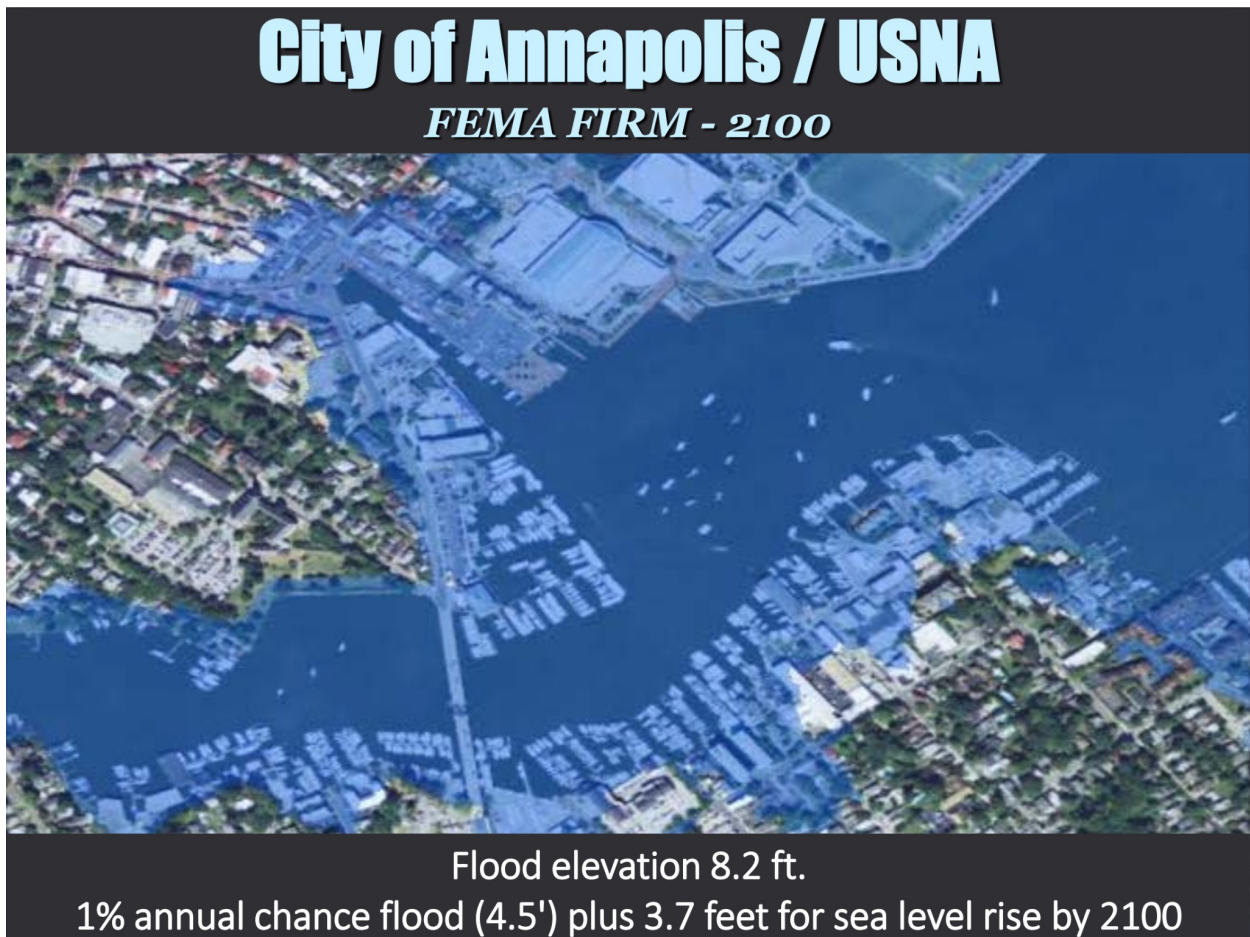
Current values and events: :



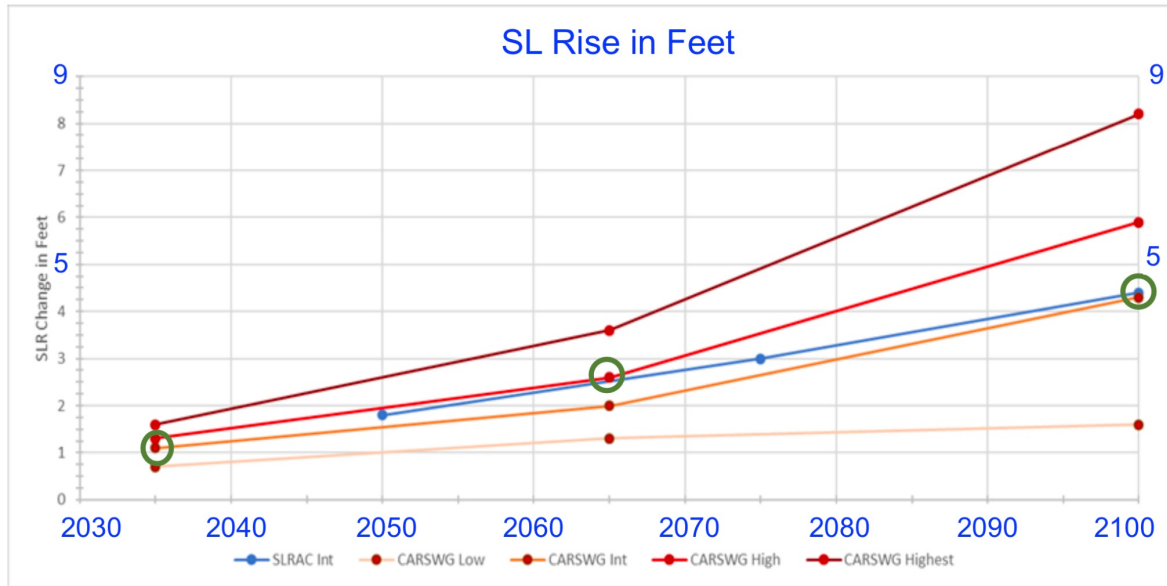
**Summary of Key Elevations**

- Flooding Through Storm Drains – 1.9 feet NAVD88
- Extreme High Tide in March 2018 – 2.7 feet NAVD88
- Protection after Flood Mitigation project – 3.2 feet NAVD88
- Ten Year Storm Elevation – 3.7 feet NAVD88
- Base Flood Elevation (100-Yr Storm) – 5.0 feet NAVD88
- Hurricane Isabel (September 2003) – 6.4 feet NAVD88

**Exhibit 2. Recent FEMA flood insurance rate map projects 100 year flood levels in downtown that far exceed current floodplain designations.**



**Exhibit 3.** A Naval Academy Study of this century's projected sea level rise projects about 1.9 feet of Mean Seal Level (MSL) rise by 2050. A 2022 NOAA Sea Level Report moderated that to about 1.0 foot, but only IF emissions are curbed. If not, it also projects 5-7 feet by 2100.



**Exhibit 4.** The recommended new seawall is 5.2 feet above current MSL Future MSL and 100 year flood levels based on rising MSL are shown at three dates.

