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**Testimony of David Sutherland – Director of Government Relations**  
**In Support of Bill 7 - AAC Climate Change Planning & Resilience**

The Nature Conservancy strongly supports all sections of Bill 7, including Section 10 which would establish an interim greenhouse gas emission reduction goal for 2030 – a 45% reduction from 2001 levels.

**This testimony will focus, however, on Sections 1, 5, 8, 14 and 15, which would update the sea level change (SLC) scenarios** that existing statutes require to be considered in the development of the State and coastal municipal Plans of Conservation and Development; municipal evacuation or hazard mitigation plans; and the State Civil Preparedness Plan. We recommend important changes to Sections 8 and 14, at the end of this testimony

Whatever one believes is the primary cause of rising coastal waters - subsidence of land along our shoreline, and/or the build-up of greenhouse gasses in the atmosphere; the levels of water in Long Island Sound are rising at an alarming rate. Tide gauge records indicate that; as do countless accounts of roads in coastal towns that used to flood once every several years and now flood multiple times every year.

Sea levels do not rise consistently around the world. Ocean currents, land uplift, and other factors cause variations across the globe. **Unfortunately, the Northwest Atlantic coast from Virginia to Maine has had some of the largest increases in the rate of sea level rise on the planet.** According to the U.S. Geological Survey, *“Between 1950–1979 and 1980–2009, SLR rate increases in this northeast hotspot were 3–4 times higher than the global average.”*

Sea levels are not only rising in Long Island Sound, but the **rate** at which they are rising is increasing. Calculations of a rolling 10-year average of mean SLC in New London, as measured by NOAA’s tide gauge data, show a significant recent acceleration of the rate of rise. **Compared to the average annual rate of rise from 1938 to 1988, the rate of rise between 1989 and 2012 tripled.**

These rising seas by themselves threaten our coastal roads, septic systems, and much other infrastructure. They also give storm waves a higher platform from which to launch themselves into coastal neighborhoods. **Well-informed and realistic planning now is essential to reduce the devastation that future storms will cause.**

Public Act 13-179, which passed unanimously in the Senate and with only six negative House votes, mandated that various State and municipal planning

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processes consider, and that UConn's Marine Sciences Division periodically update, future sea level change scenarios published in a 2102 National Oceanic & Atmospheric Administration report.

UConn has extensively reviewed the latest science and data from Long Island Sound. **Sections 1, 5-9, and 11-15 of Bill 7** would reflect that new science and data. The bill would also require that any flood-proofing requirements for State-funded projects within the Coastal Boundary be consistent with the new UConn sea level scenario.

Planning for only the most optimistic scenarios would be a grave disservice to future generations. **Bill 7 provides a scientifically-based, moderate sea level projection to help us better prepare our communities for the increasing threats posed by rising waters.**

### **RECOMMENDED CHANGES TO BILL 7**

Section 14(b) is a crucial paragraph, but as drafted, in referring to plural "scenarios", is inconsistent with other sections which refer to it. We also maintain that it would be best to refer to "the most recent" NOAA science, rather than to a specific 2012 report; and that the statutes be explicit that UConn use its own analysis and data from Long Island Sound, rather than simply "updating" NOAA's global scenarios. We strongly recommend that Section 14(b) be amended as such:

(b) Within available resources and not less than once every ten years, the Marine Sciences Division of The University of Connecticut shall **USE ITS updated ANALYSIS OF the MOST RECENT RELEVANT** sea level change scenarios published by the National Oceanic and Atmospheric Administration [in Technical Report OAR CPO-1] **AND ITS ANALYSIS OF OTHER SCIENCE AND RELEVANT LONG ISLAND SOUND CONDITIONS AND DATA, INCLUDING BUT NOT LIMITED TO, THE SEA LEVEL CHANGE DATA RECORD AS AMENDED IN SECTION 8 OF THIS LEGISLATION, TO DETERMINE A SEA LEVEL RISE SCENARIO.** Within available resources and not less than ninety days prior to any update of such sea level change scenarios by said Marine Sciences Division, the division shall conduct not less than one public hearing concerning such update. Not later than sixty days after the last public hearing conducted by the Marine Sciences Division on any such update, the Commissioner of Energy and Environmental Protection shall post such update on the Internet web site of the Department of Energy and Environmental Protection along with a notice that any previous updates are superseded.

We recommend that Section 8 of this legislation be amended to retain in the statutes authorization for a specific methodology for compiling and updating a record of the most recent trend in sea level change in Long Island Sound. We recommend that this data record be based on the 18.6 year Metonic Cycle, within which the positions of the sun, moon, and earth relative to each other fluctuate, affecting earth's tidal trends, and return to the same relative positions. We recommend that Section 14(b) be amended as follows:

Sec. 8. Subdivision (19) of section 22a-93 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(19) "[Rise in sea level] SEA LEVEL CHANGE DATA RECORD" means the ARITHMETIC MEAN OF THE EQUIVALENT ANNUAL RISE, OVER THE MOST RECENT 18.6 YEAR METONIC CYCLE, IN THE SURFACE LEVEL OF THE TIDAL AND COASTAL WATERS OF THE STATE, AS DOCUMENTED IN NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION ONLINE OR PRINTED PUBLICATIONS FOR SAID AGENCY'S BRIDGEPORT AND NEW LONDON TIDE GAUGES, AND AS UPDATED WITHIN AVAILABLE RESOURCES AND NOT LESS THAN ONCE EVERY TEN YEARS BY THE MARINE SCIENCES DIVISION OF THE UNIVERSITY OF CONNECTICUT [arithmetic mean of the most recent equivalent per decade rise in the surface level of the tidal and coastal waters of the state, as documented in National Oceanic and Atmospheric Administration online or printed publications for said agency's Bridgeport and New London tide gauges] [most recent sea level change scenario updated pursuant to subsection (b) of section 25-68o, as amended by this act].