



Sea Level Rise and Coastal Development Policy: Need for Scientific Support and a Plan for Action



The Great Balancing Act!

- Any policy options considered by the Coastal Resources Commission or the legislature must balance private property rights, natural resource protection and the public's checkbook.
- Policy choices *should* always be supported by good science.

Good Science = Good Policy



- Baseline Information
- Targets and Performance Measures



Scientific Need – Baseline Information

- *Oceanic and Estuarine Monitoring Stations* should be established to measure absolute changes in sea level rise, to characterize the dynamics of storm surge, astronomical and wind tides and water flow through the coastal system.
- *Survey, inventory, and map* the State's extensive coastal resources including land areas within the coastal zone, the ocean and estuarine shore zones and sub-aquatic bathymetry, sediments, and vegetation.

Scientific Need – Baseline Information

As part of the *mapping and inventory* process, particular attention should be given to:

- the geologic and ecologic character of the entire shoreline system;
- the anthropogenic modifications to the entire shoreline system (for example, hardened shorelines, marinas, piers, etc;

Mapping and inventory tools include *Bathymetric surveys* of inland coastal waters and *infrared photography* and *LiDAR topography* surveys of coastal lands.

Scientific Need – Targets and Performance Standards

- Use the baseline information to define a set of environmental change targets. Targets should be short-term (5-10 years), mid-term (25-50 years) and long-term 50-100 years). If the effects of climate change meet or exceed targets, mitigation measures should be required.

Plan for Action

- Establish a legislative Blue Ribbon Commission on Adaptation and Climate Change. The Commission would ...
 - Develop a comprehensive Climate Change Adaptation Plan.
 - Develop an economic cost/benefit analysis to determine the potential cost of maintaining the “status quo” and of implementing recommendations developed under the Climate Change Adaptation Plan.

Plan for Action

- Establish a legislative Coastal Adaptation Program (CAP). Among other things, the program would:
 - Oversee the continuing research, mapping and inventory efforts identified earlier.
 - Purchase land or conservation easements in low-lying “at risk” areas in the coastal region.
 - Provide incentives (tax, grant or cost-share) to landowners for the construction of ecologically beneficial erosion control structures on estuarine shorelines. (Explain)



Questions

