

## Synopsis: New SLR Land Development Codes in San Diego Bay

### Mote Marine Policy Institute

By Leonard Giarrano, Intern (Feb. 2013)

Since 2000, the City of Chula Vista in California has been implementing a Climate Action Plan (CAP) developed during the 1990s. The main implementing agency is an entity created for this purpose, a Climate Change Working Group (CCWG).

The CCWG, in 2010, responded to research from San Diego Bay's Climate Adaptation Study<sup>i</sup> by prioritizing efforts to expand Chula Vista's CAP to include new climate change adaptation efforts in addition to already existing mitigation policies. Strategy #10 of the released recommendations<sup>ii</sup> ensured SLR impacts were accounted for in future developments and review processes. Strategy #10 called for revision of the City's land development codes to include consideration of relevant SLR impacts. It also directs the City to work with state authorities to strengthen the state's California Environmental Quality Act (CEQA) guidelines to include recognition of SLR as one of the impacts to consider in their environmental review processes. The first two components designed to carry out this goal were executed from May 2011 to March 2012, with the third component's development currently underway.

### The Policy: Strategy #10 "Sea Level Rise & Land Development Codes" Components

Component 1: Changes the City's Municipal Code. This:

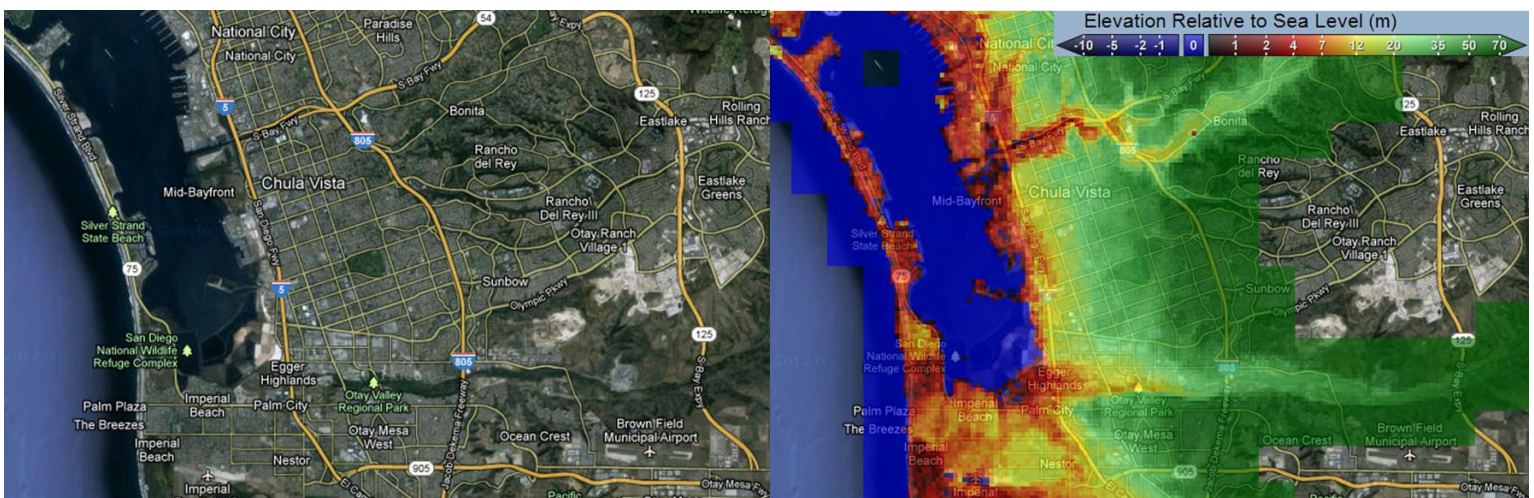
- a. Revises Municipal Code 15.04 to require that SLR implications be addressed for developments within coastal and tidally-influenced areas.
- b. Requires city engineers to assess and incorporate updated SLR projection impacts into requirements of development projects.
- c. Specific text of Municipal Code revision: "All plans prepared for tidally influenced areas shall be designed to accommodate 50 years of sea level rise. The City Engineer shall revise the Subdivision Manual every five years to define the anticipated sea level rise and set forth the minimum requirements for accommodation."<sup>iii</sup>

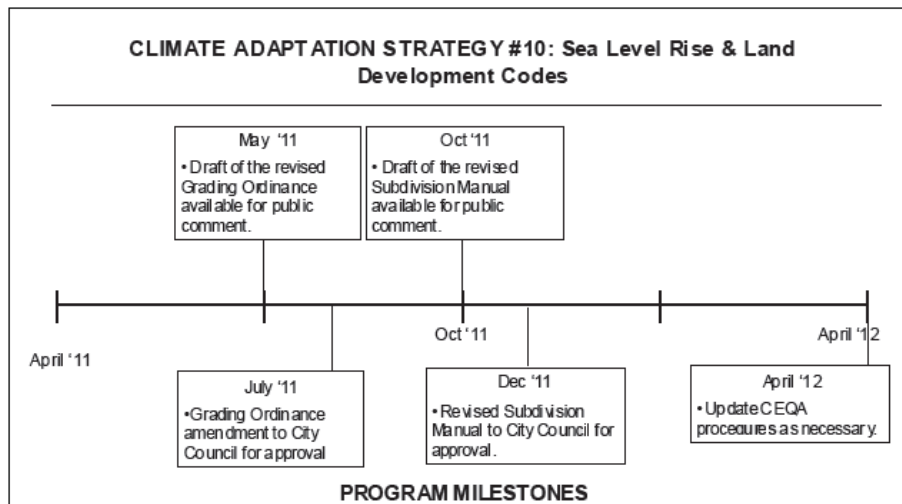
Component 2: Modifies the City's Subdivision Manual as follows:

- a. Protects projects in tidally influenced areas from succumbing to projected SLR impacts.
- b. Provides protection to projects vulnerable to storm flooding with two amendments:<sup>iv</sup>
  - i. "The storm drain system for the project is designed to maintain at least a dry driving lane in each direction during a 50 year design storm that occurs at the highest high tide with a projected 1.5' feet of sea level rise."
  - ii. "The storm drain system for the project is designed to prevent any property damage with a 100-year storm occurring at the highest high tide with a projected 1.5' of sea level rise."
- c. Specific text of Subdivision Manual amendment: "For tidally influenced areas the tail water assumed for this calculation shall be 16 inches higher than the highest tide."<sup>v</sup>

Component 3: Alters the state's CEQA guidelines to include the following:

- a. Establishes SLR impacts in statewide CEQA land development guidelines.
- b. Ensures projects reviewed for impacts on environmental quality are analyzed for the impact of SLR on their development.
- c. Updates CEQA thresholds for SLR impacts as SLR information and technology improve in the future.





### Background on the Planning Process:<sup>vi</sup>

Strategy #10, noted above, is one of 11 adaptation strategies recommended by the CCWG to keep Chula Vista's policies up-to-date with the latest climate change research. In order to develop these 11 strategies to present to the City, the CCWG divided planning into three phases carried out these phases over 11 meetings from December 2009 to August 2010 at various municipal locations:

Phase 1: Information Gathering. During this phase, the CCWG:

- Gave presentations to CCWG members and regional experts, focusing on:
  - Current climate change policies
  - Predicted climate change impacts for the San Diego area
  - Vulnerabilities in Chula Vista's development projects and the community's infrastructure as identified by University of California San Diego researchers
- Compiled 181 possible adaptation strategies to be published in their *Climate Adaptation Planning Matrix*<sup>vii</sup>

Phase 2: Risk Assessment. During this phase, the CCWG:

- Assigned risk levels of vulnerabilities identified in Phase 1, with risk defined as "the product of the likelihood of the climate change impact occurring and the consequence of the impact."
- Rated viability of adaptation strategies by three criteria of:
  - Falling within the City's jurisdiction
  - Fiscal feasibility for implementation from funds available and without relying on the City's General Fund
  - "Does not duplicate or contradict current climate mitigation measures"

Phase 3: Strategies Selection. During this phase, the CCWG:

- Prioritized and narrowed the list of viable adaptation strategies using various cost-benefit analyses
- Involved community members heavily in meetings to receive feedback on the activities and their prioritization
- Presented the narrowed list of recommendations to the Resource Conservation Commission<sup>viii</sup> and Environmental Health Coalition<sup>ix</sup> for final feedback before presenting the strategies to the City Council

### Community Involvement

In order to ensure broad-based support for any policies responding to climate change, the CCWG sought to incorporate community feedback into the policy process. For each of their 11 meetings through 2009 and 2010, notices were sent by e-mail and through the City's *Community Connections* newsletter to invite stakeholders and community members to attend the meetings and give feedback regarding the policies, resulting in over 60 stakeholders and community members providing their feedback. In June 2010, the CCWG also held a public forum at the City's Senior Center targeted at community members to share their opinions and priorities for the City's climate adaptation strategies.

<sup>i</sup> "Sea Level Rise Adaptation Strategy for San Diego Bay" (Jan. 2012) [http://www.iclei.usa.org/static/San\\_Diego\\_Bay\\_SLR\\_Adaptation\\_Strategy\\_Complete.pdf](http://www.iclei.usa.org/static/San_Diego_Bay_SLR_Adaptation_Strategy_Complete.pdf)

<sup>ii</sup> "CAP Implementation Progress Report" (Nov. 2012): "Adaptation Strategy #10 Sea Level Rise & Land Development Codes" p. 18 [http://www.chulavistaca.gov/clean/PDF/ClimateActionPlanUpdate\\_Nov12ProgressReport\\_FINAL.pdf](http://www.chulavistaca.gov/clean/PDF/ClimateActionPlanUpdate_Nov12ProgressReport_FINAL.pdf)

<sup>iii</sup> "Chula Vista Municipal Code": Chapter 15.04.175 (D) <http://www.codepublishing.com/ca/chulavista/html/ChulaVista15/ChulaVista1504.html#15.04.175>

<sup>iv</sup> "Climate Adaptation Strategies Implementation Plans" (Feb. 2011): "Strategy #10: Sea Level Rise & Land Development Codes" p. 33-34

<http://www.chulavistaca.gov/clean/conservation/Climate/documents/ChulaVista-DRAFTClimateAdaptationPlans.pdf>

<sup>v</sup> "Chula Vista Subdivision Manual": Section 3-201.3 (4) p. 187 [http://www.chulavistaca.gov/city\\_services/development\\_services/planning\\_building/PDF/2012SubdivisionManual.pdf](http://www.chulavistaca.gov/city_services/development_services/planning_building/PDF/2012SubdivisionManual.pdf)

<sup>vi</sup> Ibid. 4, "Planning Process" p. 42

<sup>vii</sup> Climate Adaptation Planning Matrices:

Coastal Infrastructure & Resources: <http://www.ci.chula-vista.ca.us/clean/conservation/climate/documents/AdaptationOptions-CoastalInfrastructure4-15-10.pdf>

Business & Economy: <http://www.ci.chula-vista.ca.us/clean/conservation/climate/documents/BusinessOptionsDraftIII.pdf>

Ecosystems & Biodiversity: <http://www.ci.chula-vista.ca.us/clean/conservation/climate/documents/AdaptationOptions-EcosystemsBiodiversity03-18-10.pdf>

Public Health & Wildfires: <http://www.chulavistaca.gov/clean/conservation/Climate/documents/AdaptationOptions-PublicHealthWildfires3-02-10.pdf>

Water: <http://www.chulavistaca.gov/clean/PDFs/AdaptationOptions-Water01-14-10.pdf>

Energy: <http://www.ci.chula-vista.ca.us/clean/conservation/PDF/Adaptation%20OptionsEnergy02-03-10.pdf>

<sup>viii</sup> Resource Conservation Commission Page: <http://www.chulavistaca.gov/clean/conservation/ResConsCom.asp>

<sup>ix</sup> Environmental Health Coalition Site: <http://www.environmentalhealth.org/>