Disposition of the NOAA Research Council's Comments on SAP 2.2 (January 31, 2007, version)

Comment Category	*General Comments*	*Authors' Proposed Disposition and/or Resolution of Comment*
Refer to Authors	The spatial and temporal realm should be clearly identified. Particularly, what part of the coastal ocean in included in the report? At several meetings the 200-mile EEZ was recommended as the boundary but this is not used. Furthermore there is very little discussion of the atmospheric CO_2 reservoir above the Americas.	Text added to *Preface* to more clearly identify spatial and temporal realm, including definition of coastal ocean.
Refer to Authors	The statistics on uncertainties is laudable but is inconsistent between chapters both in absence/presence of estimates, and expressions. A frequent way of expressing it in the manuscript is a % certainty at 95 % confidence bound. It would be preferable to express the uncertainties in absolutes. For example, the total fossil fuel emissions are quoted with the least % uncertainty but because it is by far the largest net flux, the absolute uncertainty is one of the greatest. The whole manuscript is about absolute numbers and mitigation is about ton CO_2 sequestered. The errors should be expressed in the same way. There are also frequent quotes to " 95% confidence bounds >100% ", which, of course, in quantitative terms is meaningless.	Text added to both the *Executive Summary* and the *Preface*, including discussion of use of relative uncertainty and absolute uncertainties as appropriate (e.g., in Figure ES-1). We do not find the reference to bounds on certainty to be meaningless.

Comment Category	*Executive Summary*	*Authors' Proposed Disposition and/or Resolution of Comment*
Refer to Authors – why no numbers for coastal ocean in table?	ES-17: Ocean is not included in the table.	Text has been added as a footnote to the table to include coastal ocean numbers. Because coastal ocean numbers were not compiled by country, including coastal oceans as a row in the table compromises the consistency of row and column sums for North America.
From Glackin	The authors are asked to consider shortening the executive summary further. Fifteen pages may be too much to expect our target audience for the SAPs to read. As a specific suggestion, the first page and a half is redundant with much of what is written on the next couple of pages. This duplication should be eliminated. This would also allow the mention of the main reason we care about carbon dioxide (it is a greenhouse gas) to be brought forward from its current placement in the middle of page 3 (lines 20-21). This concept should be brought out in the first paragraph of the Exec Summ.	Text in the *Executive Summary* has been tightened and shortened where possible without loss of information and flow of narrative. We have also included the *Abstract* as an "introduction" to the *Executive Summary* to bring the main findings to the forefront.
From Glackin	P1, Line 28 says that the atmospheric CO2 concentration has increased by 31% since 1850. Figure 2-2 indicates a level in 1850 below 290ppm. The current concentration is about 383ppm --- i.e., at least a 32% increase.	Text added to clarify that the percentage growth varies slightly with the end year (concentration) used.
From Glackin	P4, Line 27 says that US emissions of CO2 represent 86% of the North American total. P2, Line 3 gives a figure of 85%. It's unclear whether the figure cited on P2 is referring to the effects of all greenhouse gases. But, the only GHG mentioned up to this point is CO2. The 85% figure reappears again on P6.	Text added to clarify.