

| Comment # | Reviewer Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Summary                                                                                                                                         |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|           | First, the paper suffers from a lack of organization. Particularly in the methods, it is hard to follow what is happening. I suggest                                                                                                                                                                                                                                                                                                                                                           | Reorganize paper along established scientific outline<br>create methods flowchart                                                               |
| 1.1       | providing a work flow diagram.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                 |
|           | Second, the methods do not give enough technical description. For example, there is no description of how the model is run or with what                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                 |
| 1.2       | software.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Provided greater specificity in methods section                                                                                                 |
|           | Third, the paper needs to be situated within the literature both in the introduction and discussion (add citations and text). The introduction only really has one paragraph of introductory material with 7 paragraphs of site description (which should be in the methods). How does this                                                                                                                                                                                                    |                                                                                                                                                 |
| 1.3       | study fit in with other literature? How does it build upon it?                                                                                                                                                                                                                                                                                                                                                                                                                                 | Change introduction to the literature review, objective of this paper, etc. Move site to beginning of methods                                   |
|           | The discussion could also use the same connection to the broader body                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                 |
| 1.4       | of literature.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | expanded references<br>consolidated into Discussion, Conclusion shortened,<br>removed details of IB case study                                  |
|           | Lastly, the conclusion is very repetitive to the discussion - consider how                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                 |
| 1.5       | to make the two distinct.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                 |
|           | Lines 130-137: How did the authors choose which aspects to put into the vulnerability analysis. Did these come from the literature? Why leave                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                 |
| 1.6       | out hospitals for example?                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | clarified guided by stakeholder process                                                                                                         |
|           | Section 2.2.1 This section needs more technical detail about the physical model. For example, how is it implemented – what programs                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                 |
| 1.7       | are you using?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | expanded and added assumptions, and programs                                                                                                    |
|           | Lines 288-308: There seems to be a convolution of beaches and other coastal ecosystems in the coastal habitat model (i.e. carbon sequestration is a mangrove/marsh function)– but yet most of this about beaches (the author's conceptual model doesn't have wetlands or other types of ecosystems in it). I am confused by why the authors are using such broad ecosystem functions and basing the valuation on wetlands. Did the authors differentiate between ecosystems? Also what type of |                                                                                                                                                 |
| 1.8       | ecosystem restoration?                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | this discussion was completely rewritten and to focus on the ecosystems services related to beaches; we made clear our focus here is on beaches |
| 1.9       | Table 3 – More detail needed - how are the units determined?                                                                                                                                                                                                                                                                                                                                                                                                                                   | revised                                                                                                                                         |
|           | Line 482 – I would rename this section. Having a second results section                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                 |
| 1.10      | is confusing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | done                                                                                                                                            |
|           | Line 610-612: Why is nourishment incorporated in some of these scenarios (i.e. the groins)? How does that complicate the results of this                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                 |
| 1.11      | study?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | must charge groin to avoid long term impacts as per engineering guidance                                                                        |
|           | Figure 16- what do the colors mean? Also red and green is a problematic combination for those with color blindness.                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                 |