

Review of: "Evaluating Hydrologic, Geomorphic, and Vegetation Parameters to Assess Natural, Living, and Hardened Shorelines along the Northern Gulf of Mexico"

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Potential competing interests: No potential competing interests to declare.

I have completed the review of the work "Evaluating Hydrologic, Geomorphic, and Vegetation parameters to Assess Natural, Living, and Hardened Shorelines along the Northern Gulf of Mexico". The study presents valuable insights into the effectiveness of different shoreline protection techniques and their impact on coastal erosion rates. The comparative approach, analyzing six sites with varying energy levels, provides a comprehensive understanding of hydrologic, geomorphic, and vegetative parameters. The findings contribute to the understanding of living shorelines' potential benefits and shed light on their suitability under different environmental conditions. However, there are a few areas that need further clarification and development.

1. The introduction provides a clear context for the study, emphasizing the significance of shoreline protection in the face of rising sea levels and erosion rates. It might be beneficial to briefly mention the global relevance of this issue and highlight any existing gaps in current research that the present study aims to address.

2. Provide more information about the methods employed for data collection, particularly concerning hydrologic, geomorphic, and vegetative parameters. Also, Please provide latitude and longitudes of the study area in the map, if possible at this moment (Figure 1 & 2).

3. Please use abbreviations in their first use e.g YSI for clearer understanding by the readers. Improve the quality of the figures, if possible.

4. While the results highlight the influence of energy levels on erosion rates and shoreline shapes, discuss the broader implications of these findings. How might the observed patterns impact coastal management strategies.

5. In the conclusion, summarize the key findings and their practical implications for coastal protection strategies. Address how the identified environmental conditions for successful living shorelines align with current and projected changes in sea levels and erosion rates.

6. Offer suggestions for potential follow-up studies that could build upon the current research (optional).

Addressing the above-mentioned points will enhance the clarity and depth of the research, making it even more relevant to the field of coastal management and ecosystem preservation. With some revisions and clarifications, this manuscript has the potential to make a significant contribution to the field of coastal ecology and management. I recommend a minor revision to address the points mentioned above. Once these aspects are refined, the manuscript can be accepted for publication.

