

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.

The manuscript highlights the importance of adopting natural solution to protect shorelines, and this topic has a great relevance in current times, since climate change are affecting drastically the natural environment, inducing sea level rise and forcing flora and fauna to find more suitable adaptation strategy.

The aim of the work is very clear and well explained, and the number of sites to support the study is enough representative. The parameter investigated are also representative and descriptive of the coastal areas and the dynamics typical of these environments.

The discussion and the conclusion are coherent, and the results are presented in a clear and exhaustive way.

Here some personal suggestions:

- An image of the core drilled along the shorelines would have been appreciated, also to allow to directly observe a difference in the grain size and their distribution along the core sediment, into the three depth strata;
- Does the sieves used for grain size analysis refers to a particular standard such as ASTM or ISO? The elaboration of a particle size distribution curve referred to hard vs natural shorelines could have allowed to validate the influence on the grain size distribution in high and low energy conditions;
- The conductivity measured to detect the salinity has not unit.

Here a list of some oversights:

- In the image n.1 the word "sites" is repeated twice; I suggested a more visible placeholder to easily identify the studied sites;
- There are two images n.5; please check that the number of the image cited in text correspond to the right one;
- Comma is missing in the following references cited in the text: Feagin et al. 2009; Sicango et al. 2021; Temple et al. 2021; Juneau 2021; Radford et al. 1983; Oksanen et al. 2020.