

VISUALIZATION DESIGN OF ABRASION AREA MAPPING IN BENGKALIS ISLAND USING EXTREME PROGRAMMING METHOD

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ABSTRACT

The problem of abrasion in the coastal area of Bengkalis Island is a serious threat because it causes a lot of damage and impacts caused by abrasion. In this case, it is important to have a deep understanding of the extent of the abrasion area. So that people can know the importance of awareness of the dangers of abrasion that continues to erode coastal areas, for this reason, it is necessary to deliver accurate, transparent information for the community such as viewing visualization of abrasion history data, news, and providing reports and aspirations related to abrasion. Therefore, a web-based abrasion area mapping visualization design is made using Leafletjs as an interactive mapping platform. So that people and stakeholders can take the right steps in protecting coastal areas, strengthening resistance to abrasion, and reducing the impact on ecosystems and local communities. The result of this research is to create an informative and interactive abrasion mapping visualization system that can be managed by stakeholders and can be accessed thoroughly by the people of Bengkalis city. The method used in the development of this system is extreme programming.

Keywords: *Abrasion, Visualization, Mapping, Leafletjs, Extreme Programming.*