Title: Ship Bank Interaction Effect on Soil Erosion

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Abstract: This research work has focused on the environmental soil erosion in restricted water affected by ship bank interaction effects using computational fluid dynamics (CFD) which is a major global environmental problem that has caused many issues involving land degradation, sedimentation of waterways, ecological degradation, and nonpoint source pollution. Therefore, it is significant to understand the processes of soil erosion and sediment transport along rivers, and this can help identify the erosion prone areas and find potential measures to alleviate the environmental effects. In this study, we investigated soil erosion and identified the most seriously eroded areas in the confined waterways that the merchant ships like LNG carriers, Ro-Ro ships and general cargo carriers navigate through it.