

## Pengaruh penambangan pasir laut pada produktivitas perairan: kasus Teluk Banten Kabupaten Serang = Marine sand mining impact on marine productivity: case Banten Coastal Bay of Serang Regency

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### Abstrak

[Pesatnya pertumbuhan ekonomi dan penduduk di daerah pesisir menjadikan kebutuhan akan ruang yang lebih luas sehingga reklamasi kawasan pesisir menjadi pilihan utama yang banyak ditempuh Pemanfaatan pasir laut yang berlebihan dan tidak terkendali dapat mengganggu ekosistem bahkan merusak daya dukungnya Penelitian ini mengkaji gangguan pada produktivitas perairan Teluk Banten Kabupaten Serang yang disebabkan kegiatan penambangan pasir laut di tahun 2004 2015 Masalah penelitian adalah belum adanya kajian ilmiah lingkungan mengenai pengaruh penambangan pasir laut di Teluk Banten Penelitian ini menggunakan pendekatan kuantitatif dengan metode kuantitatif dan kualitatif Data fisik dianalisis menggunakan korelasi dan regresi polinomial orde 2 dan data wawancara dianalisis dengan metode deskriptif Hasil penelitian memperlihatkan hubungan yang kuat  $r = 0,9835$  antara penambangan pasir laut dengan peningkatan kekeruhan perairan Teluk Banten dengan persamaan regresi  $y = x + 908494,92392 - 103x + 13059107x^2$  Penambangan pasir laut juga signifikan mengurangi produktivitas perairan Teluk Banten  $r = 0,9726$  dengan persamaan regresi  $y = x + 2948321107x - 8261014x^2$  Hasil penelitian juga memperlihatkan persepsi negatif masyarakat nelayan terhadap aktivitas penambangan pasir laut Menurut mereka penambangan pasir laut berdampak pada aktivitas penangkapan ikan karena tidak dapat menangkap ikan di perairan dekat desa mereka lagi.

.....A rapid economic and population growths in urban coastal areas may followed by an expansion of space Mostly the expansion is applying a coastal reclamation An uncontrollable and overexploitation of marine sand for coastal reclamation may disturbing the ecosystem and even cause damage to its carrying capacity This research is finding the disturbance of marine productivity in Banten Coastal Bay Serang District which is caused by marine sand mining activity in 2004 2015 According to preliminary finding there is no scientific studies about the impact of marine sand mining activity in Banten Coastal Bay yet This research is using quantitative approach with quantitative and qualitative method The physical aspect has been analyzed using statistically correlation and 2nd order of polynomial regression Interview data which is analyzed by a descriptive method somehow providing some clues The result shows the strong correlation  $r = 0,9835$  between marine sand mining production and the increasing of water turbidity in Banten Coastal Bay which represent by a regression equation  $y = x + 908494,92392 - 103x + 13059107x^2$  Marine sand mining production is also significant reduce  $r = 0,9726$  the marine productivity of Banten Coastal Bay which represent by a regression equation  $y = x + 2948321107x - 8261014x^2$  It is found in the fisheries community that they have a negative perception to the marine sand mining activity According them those mining activities impacting to their fishing tradition They cannot catch the fish in the near shore around their livelihood anymore ;A rapid economic and population growths in urban coastal areas may followed by an expansion of space Mostly the expansion is applying a coastal reclamation An uncontrollable and overexploitation of marine sand for coastal reclamation may disturbing the ecosystem and even cause damage to its carrying capacity This research is finding the disturbance of marine productivity in Banten Coastal Bay Serang District which is

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