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#10832 Summary

SUMMARY REVIEW EDITING

Submission



Authors	I Gusti Agung Putu Eryani, Nurhamidah Nurhamidah
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Bio Statement	—

Title and Abstract

Title	Sedimentation Management Strategy in River Estuary for Control the Water Damage in Downstream of Ayung River
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Abstract The Ayung River Basin is the largest watershed on Bali Island. Ayung River flows from Lake Batur and empties into Padanggalak beach. River estuary is an area of sediment material deposition that will form an alluvial formation. The deposition of sediment at the river estuary is due to the influence of river flow, tidal, and wave action on the beach. Sediments that settle at the river estuary can obstruct water flow to the sea, which can cause backwater and flooding to the mainland. The strategy of controlling sediment deposition in the river estuary is essential to reduce the water damage in the downstream area, which is usually used as a tourism area. Ayung River Estuary is one of the estuaries that experienced a massive deposition; on the other hand, the Ayung River Estuary is widely used as a tourism area. The data used are primary and secondary—primary data obtained by a survey to the location and secondary data obtained from supporting data for analysis. Sedimentation occurs in the Ayung river estuary. It is due to soil type, topography, and hydro oceanographic condition. Besides, changes in the regional functions, such as temple construction, also affect the sedimentation process in the estuary. Sedimentation management strategies that can be carried out for the Ayung River estuary are the first is with the jetty construction method, which begins with the normalization of the downstream river, and the second is maintenance dredging, which is carried out through cooperation between the government and the community. Besides being used as sediment control, the jetty that was built can be developed as a tourist location around the estuary area.

Indexing

Keywords river estuary; sedimentation; management strategy; downstream; water damage.
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Supporting Agencies

Agencies Warmadewa University

References

- References** Asdak C. 2007. Hydrology and Control of Watersheds. Yogyakarta: Gadjah Mada University Press. Yogyakarta.
- City of Launceston on behalf of the Launceston Flood Authority (LFA). 2019. Kanamaluka/Tamar River Estuary Sediment Raking Program Review.
- Joseph S. Guevara, Rodolfo Silva, and Debora Lithgow. 2019. Assessment of Sedimentation in a Coastal Lagoon: Chantuto-Panzacola, Mexico, *Journal of Coastal Research* 92 (sp1), 145-156.
- Kordesch, W.K., M. Delaney, S. Hutto, M. Rome, and S. Tezak. 2019. Coastal Resilience Sediment Plan. Report of Greater Farallones National Marine Sanctuary. NOAA. San Francisco, CA. 104 pp.
- Bo Huang et al. 2019. *IOP Conf. Ser.: Earth Environ. Sci.* 227 052021.
- Aprizon Putra, Ulung Jantama Wisha, and Gunardi Kusumah. 2017. Spatial Analysis of the River Line and Land Cover Changes in the Kampar River Estuary: The Influence of the Bono Tidal Bore Phenomenon. *Forum Geografi*, 31(2).; DOI: 10.23917/forgeo.v31i2.5290.
- Mamadou Alpha Sow, Virginie Payre, Frederic Julien, M. Camara, David Baque, et al. 2018. Geochemical composition of fluvial sediments in the Milo River basin (Guinea): is there any impact of artisanal mining and a big African city, Kankan. *Journal of African Earth Sciences*, 145, pp.102-114.
- Eryani, I Gusti Agung Putu. 2015. Water Potential of the Petanu and Saba River Estuaries as Water Resources Management Models in Bali Province. Dissertation. Udayana University. Denpasar.
- Tendean, M. 2012. Hydrophyte Based Sediment Transport Spatial Model along the Ranoyapo Amurang River Estuary. Doctoral Program. Brawijaya University. Malang.
- Dibiyosaputro, S. 1979. River Water Yield Sediment Study in the Upper Lukulo River Drainage Area above the Karangsembung Kebumen AWLR. Degree program. Gadjah Mada University. Yogyakarta.
- Ouillon, Sylvain. 2018. Why and How Do We Study Sediment Transport Focus on Coastal Zones and Ongoing Methods. *Water*, 10 (390): 1-34.

Foster, G. R., and Meyer, L.D. 1977. Soil erosion and sedimentation by water-overview. Michigan: Am. Soc. Of Agric. Eng., St. Joseph.

P. L. M. de Vet, B. C. van Prooijen, I. Colosimo, T. Ysebaert, P. M. J. Herman, and Z. B. Wang. 2020. Sediment disposals in estuarine channels alter the ecomorphology of intertidal flats. *Journal of Geophysical Research: Earth Surface*, 125, <https://doi.org/10.1029/2019JF005432>.

National Estuary Program (NEP). 2016. Basic Information about Estuaries. United States Environmental Protection Agency. United States

Bali-Penida River Basin. 2012. Preparation of a Water Resources Management Plan for the Bali-Penida River Region (Phase I). Bali-Penida River Basin. Denpasar.

Waikato Regional Council. 2008. Sedimentation in Estuaries. Newzealand Government.

Saptiningsih, Endang, and Sri Haryanti. 2015. Cellulose And Lignin Content Various Source Of Organic Materials After Decomposition In Latosol Soil. *Bulletin of Anatomy and Physiology Volume XXIII, Number 2*.

Muslimawati, N.M., and Prima Widayani. 2016. Spatial Analysis of Soil worm disease Transmitted Helminth with Soil Characteristics Through Geomorphological Approach in Bantul Regency. *Jurnal Bumi Indonesia*. Vol 5 No. 1.

Zhanyu Zhang, Liting Sheng, Jie Yang, Xiao-An Chen, Lili Kong, and Bakhtawar Wagan. 2015. Effects of Land Use and Slope Gradient on Soil Erosion in a Red Soil Hilly Watershed of Southern China. *Sustainability* 2015, 7, 14309-14325.

Jerome R. Mayaud and Nicholas P. Webb. 2017. Vegetation in Drylands: Effects on Wind Flow and Aeolian Sediment Transport. *Land*, 6 (64): 1-24.

Kasury, Ahmad Reza. 2016. Simulation of Coastal Change towards the Labuhan Hajj Jetty Plan. *Journal of Civil Engineering*. Syiah Kuala University

Anwas, O.M. 1994. The shape of the face of the earth. Yogyakarta Muhammadiyah University.

Emma L. Jackson, Nathan B. English, Andrew D. Irving , Andrew M. Symonds, Gordon Dwane, Owen T. Nevin, and Damien T. Maher. 2019. A Multifaceted Approach for Determining Sediment Provenance to Coastal Shipping Channels. *J. Mar. Sci. Eng.* 2019, 7(12), 434; <https://doi.org/10.3390/jmse7120434>.

Baptist, M. J., Gerkema, T., van Prooijen, B., van Maren, D., van Regteren, M., Schulz, K., et al. 2019. Beneficial use of dredged sediment to enhance salt marsh development by applying a 'Mud Motor'. *Ecological Engineering*, 127, 312–323. <https://doi.org/10.1016/J.ECOLENG.2018.11.019>.

Newcastle City Council, Port Stephens Council, Maitland City Council, NSW Office of Environment and Heritage, and Local Land Services. 2017. Hunter Estuary Coastal Zone Management Plan. BMT WBM. Australia.

A. Lintern, J.A. Webb, D. Ryu, S. Liu, U. Bende-Michl, D. Waters, P. Leahy, P. Wilson, and A. W. Western. 2018. Key Factors Influencing Differences In Stream Water Quality Across Space. *WIREs Water*. doi: 10.1002/wat2.1260.

Cowes Harbour Commission. 2018. Studies on Estuary Sedimentation Management. https://www.cowesharbour.commission.co.uk/studies_on_estuary_sedimentation_management.

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#10832 Review


SUMMARY **REVIEW** EDITING

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