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Field Investigation on Anthropogenic Impacted Lowland Riparian Zones PDF (Size: 1472KB) PP. 259-265 DOI: 10.4236/jwarp.2013.53026 Author(s) Darrien Y. S. Mah, Kelvin K. K. Kuok ABSTRACT A functioning riparian zone is very beneficial to the environment. However, most of the riparian zones have been disturbed by man-made implications these days. Public awareness about the issues of environmental conservation including riparian zones is needed by providing information on critical areas. Therefore, a novel framework is presented here to reveal how well a riparian zone adopts to changes. This paper highlights the field investigation of an altered riparian system along Maong River in Kuching, Sarawak. Investigation of the general riparian health is followed by the studies of its contributing attributes—vegetation cover, human activities and groundwater level, have been carried out. The methods are practicable in harnessing understanding and knowledge of riparian conditions. For a disturbed riparian zone, the findings indicate that 50% - 60% of the study areas are categorized as healthy or functioning riparian systems, at the same time, correlate the influences of the three afore-mentioned attributes.					JWARP Subscription	
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Referen [1] R. Bio 21	nces J. Naiman, H. Décamps and M. odiversity," The Ecological Societ 2.	Pollock, " The Role of y of America, Ecologica	Riparian Corridors in M al Application, Vol. 3, N	aintaining Regional o. 2, 1993, pp. 20-		
[2] M.	. Dubé, N. Nadorozny and A. J. Sq	uires, "Development c	of the Healthy River Ecos	system Assessment		

- M. Dube, N. Nadorozhy and A. J. Squires, "Development of the Healthy River Ecosystem Assessment System (Threats) for Integrated Change Assessments of Water Quality in Canadian Watersheds," In: J. Lundqvist, Ed., On the Water Front Vol. 2, Stockholm Int. Water Institute, Stockholm, 2011, pp. 31-40.
- [3] Malaysian Ministry of Natural Resources and Environment (NRE), "Managing Biodiversity in the Riparian Zone," Malaysian Ministry of Natural Resources and Environment, Putrajaya, 2009.
- [4] E. J. H. Corner, "Wayside Trees of Malaya," The Malayan Nature Society, Kuala Lumpur, 1988.
- [5] L. S. Hamilton and D. H. Murphy, "Use and Management of Nipa Palm (Nypa fruticans, Arecaceae): A Review," Economic Botany, Vol. 42, No. 2, 1988, pp. 206-213. doi:10.1007/BF02858921
- [6] F. W. Fong, "Perspectives for Sustainable Resource Utilization and Management of Nipa Vegetation," Economic Botany, Vol. 46, No. 1, 1992, pp. 45-54. doi:10.1007/BF02985253
- [7] H. T. W. Tan, " A Guide to the Threaten Plants of Singapore," Singapore Science Centre, Singapore City, 1996.
- [8] L. H. Liow, "Mangrove Conservation in Singapore: A Physical or Psychological Impossibility?" Biodiversity and Conservation, Vol. 9, No. 3, 2000, pp. 309-332. doi:10.1023/A:1008993417327

- [9] H. P. Ritzema, " The Role of Drainage in the Wise Use of Tropical Peatlands," Carbon-Climate-Human Interaction on Tropical Peatland, Proceedings of the International Symposium and Workshop on Tropical Peatland, Yogjakarta, 27-29 August 2007, pp. 27-29.
- [10] L. Fitch and N. Ambrose, "Riparian Area: A User' s Guide to Health," Cows and Fish Program, Lethbridge, 2003.
- D. Prichard, H. Barrett, J. Cagney, R. Clark, J. Fogg, K. Gebhardt, P. Hansen, B. Mitchell and D. Tippy,
 " Riparian Area Management: Process for Assessing Proper Functioning Condition," Tech. Ref 1737, No. 9, USDI Bur. Land Manage, Denver, 1993.
- [12] T. A. Ward, K. W. Tate, E. R. Atwill, D. F. Lile, D. L. Lancaster, N. McDougald, S. Barry, R. S. Ingram, H. A. George, W. Jensen, W. E. Frost, R. Phillips, G. G. Markegard and S. Larson, " A Comparison of Three Visual Assessments for Riparian and Stream Health," Journal of Soil and Water Conservation, Vol. 58, No. 2, 2003, pp. 83-88.
- [13] T. D. Rich, "Using Breeding Land Birds in the Assessment of Western Riparian Systems," Wildlife Society Bulletin, Vol. 30, No. 4, 2002, pp. 1128-1139.
- [14] D. Y. S. Mah and R. A. Bustami, " Conserving the Land: The Resilience of Riparian Wetlands and River Channels by a Fuzzy Inference System," Sustainability Science, Vol. 7, No. 2, 2011, pp. 267-272. doi:10.1007/s11625-011-0146-0
- [15] S. V. Gregory, F. J. Swanson, W. A. McKee and K. W. Cummins, " An Ecosystem Perspective of Riparian Zones: Focus on Links between Land and Water," University of California, BioScience, Vol. 41, No. 8, 1991, pp. 540-551.
- [16] Water Science and Technology Board (WSTB) and Board of Environmental Studies and Toxicology (BEST), " Riparian Areas: Functions and Strategies for Management," National Academy Press, Washington DC, 2002.
- [17] D. Y. S. Mah, " Conservation of Sarawak Peat Swamp in an Urban Landscape by Fuzzy Inference System," Regional Environmental Change, Vol. 11, No. 2, 2011, pp. 307-310. doi:10.1007/s10113-011-0213-1