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1) Reference of your publication:

Li, Y. F.*, Qiu, J. H., Zhao, B., Pavao-Zuckerman, M., Bruns, A., Qureshi, S., Zhang, C., Li, Y. 2017. Quantifying urban ecological governance: a suite of indices characterizes the ecological planning implications of rapid coastal urbanization. *Ecological Indicators*, 72, 225-233.

2) Hyperlink to the publication:

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3) Abstract:

Quantifying urban ecological governance: A suite of indices characterizes the ecological planning implications of rapid coastal urbanization

Urban ecosystems in China have undergone a surge of rapid urbanization leading to phenomenal socio-ecological transformation. To mitigate the regional ecological and environmental impacts, cross-scale ecological governance has not been well established. This paper aims to propose an assessment framework to examine and understand urban ecological governance (UEG), a concept that intertwines multiple aspects such as governance, planning, and urban ecology into an integrated procedure for policy formulation and implementation. To test the assessment framework and thereby derive a quantitative approach to studying socio-ecological couplings within the urban systems, we choose Lianyungang, a rapid urbanizing coastal city in China for an empirical study. We ascertain each subsystem (e.g., urbanization, ecological, governance) presents a fluctuating trend particularly after 2005. Also, the overall trends of UEG increased slightly during the two study periods (1997–2012 and 2005–2012), mainly due to the influences of the Urban Master Plan and Eastern Coastal Regional Development Strategic Planning of Lianyungang. These



results imply that the UEG in China's local governments is unique, and the planning system especially acts a core player to cope with increasing regional ecological risks and uncertainties. It is suggested that China's UEG needs to enhance experimental governance, ecological redline policy (ERP) and multi-plan integration and combine its current government-dominant top-down system with Western bottom-up decision-making mechanisms.

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