A Scheme for a Sustainable Urban Water Environmental System during the Urbanization Process in China

Huibin Yu, Yonghui Song, Xin Chang, Hongjie Gao, Jianfeng Peng

PII: S2095-8099(18)30208-X
DOI: https://doi.org/10.1016/j.eng.2018.03.009
Reference: ENG 56

To appear in: Engineering

Received Date: 1 November 2017
Revised Date: 6 December 2017
Accepted Date: 8 January 2018

Please cite this article as: H. Yu, Y. Song, X. Chang, H. Gao, J. Peng, A Scheme for a Sustainable Urban Water Environmental System during the Urbanization Process in China, Engineering (2018), doi: https://doi.org/10.1016/j.eng.2018.03.009

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.
A Scheme for a Sustainable Urban Water Environmental System during the Urbanization Process in China

Huibin Yu a, Yonghui Song a,*, Xin Chang a, b, Hongjie Gao a,*, Jianfeng Peng a

a Department of Urban Water Environmental Research, Chinese Research Academy of Environmental Sciences, Beijing 100012, China
b School of Environment, Beijing Normal University, Beijing 100875, China

* Corresponding author.
E-mail address: songyh@craes.org.cn (Y. Song), ghjlxh@sina.com (H. Gao)

ARTICLE INFO

Article history:
Received 1 November 2017
Revised 6 December 2017
Accepted 8 January 2018
Available online

Keywords:
Urbanization
Urban water environment
Water function
Security system

ABSTRACT

Urbanization is a potential factor in economic development, which is a main route to social development. As the scale of urbanization expands, the quality of the urban water environment may deteriorate, which can have a negative impact on sustainable urbanization. Therefore, a comprehensive understanding of the functions of the urban water environment is necessary, including its security, resources, ecology, landscape, culture, and economy. Furthermore, a deep analysis is required of the theoretical basis of the urban water environment, which is associated with geographical location, landscape ecology, and a low-carbon economy. In this paper, we expound the main principles for constructing a system for the urban water environment (including sustainable development, ecological priority, and regional differences), and suggest the content of an urban water environmental system. Such a system contains a natural water environment, an economic water environment, and a social water environment. The natural water environment is the base, an effective economic water environment is the focus, and a healthy social water environment is the essence of such a system. The construction of an urban water environment should rely on a comprehensive security system, complete scientific theory, and advanced technology.

1. Introduction

Industrialization, informatization, urbanization, and agricultural modernization were the focuses of the 18th National Congress of the Communist Party of China; all of these are factors that are conducive to the development...
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات