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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 43680-2024

Ecosystem assessment - Methods for terrestrial ecological degradation assessment

生态系统评估 陆地生态退化评估方法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1.Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed and coordinated by the National Technical Committee for Environmental Management Standardization (SAC/TC207). This document was drafted by: Research Center for Ecology and Environment, Chinese Academy of Sciences, Satellite Environment Application Center, Ministry of Ecology and Environment, China Standardization Research Center Institute of Water Resources, Beijing Normal University, Pearl River Water Resources Commission Pearl River Water Resources Research Institute, Beijing Jinhe Water Construction Group Co., Ltd., China Power Construction Group Northwest Survey and Design Institute Co., Ltd., Shandong Yellow River Survey and Design Institute Co., Ltd., and China National Nuclear Corporation Geophysical Survey and Design Co., Ltd. The main drafters of this document are. Ouyang Zhiyun, Xu Weihua, Wang Qiao, Zhang Lijia, Kong Lingqiao, Xiao Yi, Xu Bingsheng, Huang Binbin, Hou Peng, Ren Yufen, Zhang Lu, Yang Guangbin, Zheng Hua, Zhai Jun, Wang Xiaoke, Chen Bin, Hou Shan, Song Zijian, Zhao Lei, Li Cui, Yang Fang, Zhao Zhigang, Zhou Xiaoping, Wang Chuanquan, Guo Changcheng and Kang Xiangyang. Ecosystem Assessment Terrestrial Ecological Degradation Assessment Method

1 Scope

GB/T 43680-2024 gives the methods for assessing terrestrial ecological degradation. Degradation is easy to assert and hard to demonstrate: grassland, forest and cropland all decline in ways that are gradual, spatially patchy and confounded by climate variability, and the same satellite series can be read as recovery or as loss depending on the baseline

chosen. The standard fixes the procedure. It sets the assessment content and process, the indicator system for the ecological problems assessed - covering vegetation, soil, water and biodiversity aspects of degradation - and the calculation of the indicators and the assessment method that grades the result, with a normative annex setting out the data requirements for the survey and the assessment. It took effect on 1 July 2024.

This document describes the assessment method of terrestrial ecological degradation, including assessment content, process, assessment indicator system, indicator calculation method and assessment Grading. This document is applicable to national or regional scale soil erosion, land desertification, rocky desertification, forest degradation, grassland degradation, wetland degradation, etc. Assessment of ecological degradation problems.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Due to natural factors or human interference, the ecosystem undergoes reverse succession, is in an unstable or unbalanced state, has low anti-interference ability, and gradually The process of gradually evolving into another low-level state that is compatible with it.

3.2 Soil erosion The process by which soil or other ground materials are eroded, destroyed, separated, transported and deposited under the action of water.

3.3 Land desertification Under various climatic conditions, due to various reasons, the land degradation process occurs in which the surface is mainly characterized by sand (gravel) materials.

3.4 The process and phenomenon of vegetation destruction, land productivity decline and rock exposure under the influence of natural and human activities. [Source: GB/T 29391-2012, 3.2]

3.5 forest degradation Under irrational utilization, forest ecosystems undergo reverse succession and productivity continues to decline.

3.6 Grassland degradation The process and phenomenon of reverse succession and productivity decline of grassland ecosystem under irrational utilization.

3.7 Wetland degradation The structural destruction, functional decline, and biodiversity loss of wetland ecosystems caused by changes in the natural environment or the impact of human activities