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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 44590-2024

Guidelines for evaluation of ecological benefits of natural forest conservation and rehabilitation

天然林保护修复生态效益评估指南

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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 by the State Forestry and Grassland Administration. This document is under the jurisdiction of the National Forest Resources Standardization Technical Committee (SAC/TC370). This document was drafted by: Institute of Forest Ecology, Environment and Nature Conservation, Chinese Academy of Forestry, State Forestry and Grassland Administration, It has set up the Engineering Management Center, Daxinganling Forestry Group Company, Gansu Bailongjiang Forestry Science Research Institute, Beijing Tiannuo Jiye Technology Co., Ltd., Shenzhen Keweitai Industrial Development Co., Ltd., Beijing Dingxing Technology Co., Ltd., Chifeng Forestry Science Research Institute, Tongliao Forestry and Grassland Scientific Research Institute, Helan Mountain National Nature Reserve Administration of Ningxia Hui Autonomous Region. The main drafters of this document are. Niu Xiang, Wang Bing, Song Lulu, Wang Yanfeng, Zhou Shudong, Zhen Xiaojie, Hu Wenqing, Lv Zhenyi, Li Jiansheng, Ding Hongliang, Yang Qifeng, Luo Xuan, Wang Yanyan, Li Xianyu, Bao Jinshan, Li Mingwen, Cao Xiuwen, Lu Feng, Shen Wenhui, Luo Weisheng, Ren Jun, Zhang Huidong, Cao Jiansheng, Ding Fangjun, Zhang Jun, Yu Chenglong, Wei Bin, Wang Lizhong, Liu Jinqian, Li Huijie, Liang Yongliang, Li Xiangchen, Jiang Yan, Wang Xuewen, and Li Jingyao. Guidelines for Ecological Benefit Assessment of Natural Forest Protection and Restoration

1 Scope

GB/T 44590-2024 gives the Chinese guidelines for evaluating the ecological benefits of natural forest conservation and rehabilitation. The Natural Forest Protection Programme is one of the largest conservation interventions ever undertaken, having ended commercial logging across the natural forest estate and put very large sums into protection and restoration; the question of what that has bought is both a scientific and a budgetary one. The standard sets the evaluation framework and process, the indicator system covering water conservation, soil retention, carbon sequestration and oxygen release, nutrient accumulation, air purification, biodiversity conservation and forest recreation, the data sources and the field and remote sensing measurements that feed them, the quantification method for each benefit in physical terms, the valuation where it is expressed in money, the treatment of the counterfactual against which the benefit is measured, and the aggregation, uncertainty and reporting. It takes effect on 1 April 2025.

This document provides the general principles, evaluation indicator system, evaluation methods and evaluation data sources and summary of the ecological benefit evaluation of natural forest protection and restoration. General guidelines. This document is applicable to the monitoring and evaluation of the ecological benefits of natural forest protection and restoration at the national and regional scales and in ecological protection and restoration engineering projects.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 33027-2016 Long-term positioning observation method for forest ecosystems

GB/T 35377-2017 Long-term positioning observation indicator system for forest ecosystems

GB/T 37364.3 Technical regulations for survey of terrestrial wildlife and their habitats Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 According to the characteristics of natural forest succession and development stages, we adopt comprehensive protection and natural restoration as the main method, supplemented by artificial promotion and conservation. Ecological measures to maintain the

authenticity and integrity of natural forest ecosystems.

3.2 The ability of natural forests to provide ecological products since the implementation of protection and restoration measures.