研究报告

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公共资源类旅游景区水环境承载力研究 ——以武汉市东湖风景区为例5

Carrying capacity of water environment in public tourism resources. A case of East Lake scenic area in Wuhan

关键词: 公共资源 水环境 承载力 东湖风景区

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摘要:公共资源类旅游景区水环境受到社会经济系统和旅游系统两方面影响,本文通过选取人口、GDP、灌溉面积、游客量、宾馆日接待人数、TP、COD、BOD等指标,构建水环境承载力多目标模型,同时,选取水果湖、汤菱湖和郭郑湖3个子湖对东湖风景区水环境承载力进行评价,并运用层次分析法(AHP)确定各指标对东湖风景区水环境承载力的权重,采用典型水环境承载力概念模型计算了2011年武汉市东湖风景区水环境承载力.结果表明,东湖风景区水资源承载力表现为灌溉面积和GDP承载度超标,而人口和旅游指标承载度未达到饱和,水质承载力各指标的承载度超标,水果湖、汤菱湖和郭郑湖的水环境承载力分别为4.03、3.86、3.95,均大大超出负荷.

Abstract: The water environment in public tourism resources is affected by the socio-economic system and travel system. This paper builds a multi-target model of water environment carrying capacity by selecting an index system that consists of population, GDP, irrigated area, number of tourists, number of guesthouse day reception, total nitrogen (TP), chemical oxygen demand (COD) and biochemical oxygen demand (BOD). Shuiguohu Lake, Tanglinghu Lake and Guozhenghu Lake are selected as the sub-lakes of the east lake area to evaluate the water environmental carrying capacity, by adopting the Analytic Hierarchy Process (AHP) to determine the weight of indexes on water environmental carrying capacity of the East Lake scenic area. This paper also uses a typical model to calculate water environmental carrying capacity of East Lake scenic area in 2011. The results show that the irrigation area and GDP have exceeded the carrying standards, while population and tourism indicators are within the carrying capacity. All the indicators of water quality have exceeded the carrying standards. The scores for water environmental carrying capacity of Shuiguohu, Tanglinghu and Guozhenghu lake are 4.03, 3.86 and 3.95 respectively, which are greatly overloaded.

Key words: public tourism resources water environment carrying capacity East Lake scenic area

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