

吉林省湿地调蓄洪水功能价值动态评估

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摘要:【目的】动态评估吉林省的湿地调蓄洪水功能价值, 为吉林省的湿地安全及湿地环境管理提供理论支撑。【方法】通过机会成本法对吉林省 2013、2017 年的湿地调蓄洪水功能价值进行对比和评估, 分析不同类型湿地及各市的湿地调蓄洪水功能价值变化。【结果】2013 和 2017 年吉林省湿地调蓄洪水功能的总价值分别为 2910.10 亿元和 2685.49 亿元, 虽用水价格不断提高, 但受湿地面积降低的影响, 2017 年比 2013 年减少了 224.61 亿元, 对应减少比例为 7.72%。在吉林省各市中, 湿地调蓄洪水功能价值增加最大的为吉林市 (157.74 亿元), 降低最大的为松原市 (-218.77 亿元), 虽有部分城市的洪水调蓄功能价值上涨, 但吉林省湿地调蓄洪水功能价值整体呈下降状态, 而且各市的湿地调蓄洪水功能价值的单位面积 (每公顷湿地面积) 和人均拥有量均有所变化。在各湿地类型的调蓄洪水功能价值中, 沼泽湿地由 2013 年的 510.95 亿元增加至 2017 年的 777.60 亿元, 是唯一增加的湿地类型, 而人工湿地、河流湿地和湖泊湿地这 3 种湿地类型均有所下降。【结论】相比 2013 年, 2017 年吉林省的湿地调蓄洪水功能价值整体呈下降趋势, 各市和各类湿地的单位面积和人均的湿地调蓄洪水功能价值有明显的地域差异。

关键词: 价值动态评估; 生态系统服务; 调蓄洪水; 水资源; 湿地

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Dynamic Evaluation on the Floodwater Storage Function Value of Wetlands in Jilin Province

Abstract: 【Objective】 This article dynamically evaluates the floodwater storage function value of wetlands in Jilin Province, providing theoretical support for wetland safety and environmental management in Jilin Province.

【Method】 The opportunity cost method was used to compare and evaluate the floodwater storage function value of wetlands in Jilin Province in 2013 and 2017, and to analyze the changes in floodwater storage function value of different types of wetlands and various cities. 【Result】 The total value of floodwater storage function of wetlands in Jilin Province was 291.010 billion yuan in 2013 and 268.549 billion yuan in 2017. Despite the increasing price of water, the impact of lower wetland areas, the value decreased by 22.461 billion yuan in 2017, with a corresponding decrease rate of 7.72%. Among the cities in Jilin Province, Jilin City had the largest increase in floodwater storage function value (15.774 billion yuan), while Songyuan City had the largest decrease (21.877 billion yuan). Although some cities have increased the floodwater storage function value, the overall value of wetland floodwater storage function in Jilin Province is decreasing, and the per unit area (per hectare of wetland area) and per capita ownership of wetland floodwater storage function value of each city have also changed. Among

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the floodwater storage function values of different types of wetlands, swamp wetlands increased from 51.095 billion yuan in 2013 to 77.760 billion yuan in 2017, which is the only type of wetland that increased, while artificial wetlands, river wetlands, and lake wetlands all decreased. **【Conclusion】** Compared with 2013, the overall trend of floodwater storage function value of wetlands in Jilin Province in 2017 was decreasing, and there were significant regional differences in per unit area and per capita floodwater storage function value of wetlands in each city and wetland type.

Key words: dynamic evaluation of value; ecosystem services; flood control and storage; water resources; wetlands