文章摘要

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广东省用水效率时空变化分析

Water Efficiency Analysis of Temporal and Spatial Variation in Guangdong Province

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中文关键词: 广东省用水量 用水效率 时空变化 分析

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中文摘要:

用水效率的提高是在用水总量一定的前提下,保障和行业用水需求和经济社会良性发展的重要手段。通过对广东省1980-2011年用水效率指标在年度和地市空间上的变化趋势和变化规律进行分析,结果表明,总用水量年均增长率为1.08%,人均水资源量年均递减率为2.90%,人均用水量年均递减率为1.16%,人均综合用水量年均递减率为1.75%,都与总用水量呈反向变化的特征,而耗水量和农田灌溉亩均用水指标年均变化率分别为0.76%和-0.21%,变化幅度相对较小,说明用水效率整体提高并不明显。并分析了各市不同用水阶段单位农业增加值用水量变化,以2005-2010年最快,年均变化率为-8.52%,同时表现出区域和年际变化差异较大,年灌溉用水效率较低的特点。

英文摘要:

Under certain preconditions of total water amount, water use efficiency is an important means to safeguard the economic and industrial water demand and healthy social development .Through analyzing the trends and indicators of various types of water efficiency variation of annual changes and the cities space of Guangdong province in 1980-2011, it is shown that the average annu-al growth rate of 1.08 percent of total water use, water resources per capita average annual decrease rate of 2.90%, the average annual per capita water consumption decline rate of 1.16% and average annual decline rate of water consumption per capita inte-grated 1.75% that all inversely changes with the total water consumption .The water consumption and irrigation water per mu annu-al rate of change indicators is 0.76% and -0.21%, a relatively small change in the magnitude, which indicates that the overall improvement of the efficiency of water is not obvious. And the different municipalities of agricultural added value water per unit changes under different st of water using has been analyzed .The fastest in 2005-2010 with the average annual rate of change is-8.52%, which shows that regional and inter-annual variations are quite different, and irrigation water efficiency is low.

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