

Managing space for water in regional integrated water resources planning in China

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Abstract More and more attention is being paid to Integrated Water Resources Planning (IWRP) and Management (IWRPM) within a jurisdiction region in China. This paper focuses on the principles and procedures of drawing up projects to manage space for water in a sustainable manner in regional IWRP based on finished practical applications in several Chinese river-net areas in the Yangtze River delta. By analysing the functions of regional space for water, projects proposed in IWRP for management purposes include those of preservation, protection, restoration, water conservancy and waterscape, among which natural wetland is to be preserved, while space for seriously polluted water needs to be restored, spaces for supplying drinking water source and nature reserves are to be protected, and space for water conservancy projects including flood control works, water supply and drainage projects, etc. are to be developed while space for waterscape is reserved to lay out natural and artificial waterscapes. To make projects and IWRP scientific, the functions of space for water are analysed within a region, with factors such as population growth, urban planning, land-use plan, regulatory requirements, temporal and spatial scales are considered systematically and water eco-region zoning is partitioned. A case study is illustrated in Jiangyin county.

Key words projects for management purpose; space for water; regional water eco-region zoning; IWRP; IWRM