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Spatial planning approach based on ecosystem services

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Abstract: Increase in population and intensive urbanization at both the global scale and in our country results in an increase in damages to the basins in our day thus resulting in loss of ecological functions as well as the disruption of life quality and social dimension especially in urban basins. When effects of changes in rain regime and vaporization due to climate change as well as the effects on moisture in both the soil and the air, agricultural efficiency are considered; spatial planning practices that give priority to ecological sensitivity towards basin areas come to the forefront. However, no approach has been developed as of yet which gives priority to the multidimensional benefits provided by the ecosystems as well as the related processes and products in spatial planning processes. No content that is associated with the ecological functions of basins is present in the distance based protection zone approach that is frequently used in our country for the management of basin areas. The generation of basin management systems has taken its place among the significant issues in EU Water Framework Directive policies and similar global policies. The generation of basin management systems is a very important tool that will enable the protection of water resources and their sustainable use. Distance based basin management approach is used in Turkey. Preparation and application of basin planning approaches and managements based on ecosystems that take into consideration the water resources management together with ecosystem approach will provide a more effective protection and use which is vital for the future of our water resources. The term "ecosystem services" indicates the different means with which nature supports the welfare of people - it can be defined as all cases, processes, functions, benefits and products presented by the ecosystems for the sustainment of human life. Healthy ecosystems provide countless benefits for human lives. The benefits obtained from ecosystems can be listed as food, water, clean air, medical raw materials, recreational and cultural values. These benefits provided by nature are vital for people as well as for other living things. Hence, factors that affect the services obtained from ecosystems as well as those that change the way the ecosystems function should be determined in order to better understand the effects of human beings on nature. Planning approach based on Ecosystem Services (ES) related with the relationship between humans and nature take into consideration the ecological processes and functions that take place in ecosystems as well as understanding how the produced services are used by people while trying to benefit from their multiple benefits effectively. The objective of this study was to put forth the approach by which the "multi functionality" approach which is an important application strategy for landscape design and spatial planning may contribute as a rational tool for planning and management applications based on ES. Keywords: Basin, Spatial planning, Ecosystem services