TOOLS AND METHODS TO RECLAIM THE VALUE OF WATER RESOURCES IN THE AREAS OF MARGIN

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Abstract
The world population is projected to increase greatly in the next decades and surely it will be concentrated in the cities’ surroundings. Therefore care and management of natural resources is needed to avoid one of the major source of degradation of rivers and lakes that is the phenomenon of run-off in which the receiving bodies gather then from storm water, untreated waste water and water full of nutrients, sediment and solid material variously polluting.

The development of ICT solutions integrated with spatial data knowledge must guide the planner towards strategic, reliable and shared decisions in the water sector.

It is shown a methodology, implementing GIS technology Geographic Information System towards online interoperability in environmental management.

The application of innovative ICT tools in the field of peri-urban regeneration can become a powerful tool, particularly in the water resources management, to guarantee environmental quality control and avoid land use consumption.

The effects of changes in land use and water bodies can be reduced enabling integration between peri-urban planning, GIS and environmental models.

Implementing GIS technology the comprehension of the interactions between the existing multiple aspects, the environmental processes simulation and the impacts analysis of land management activities on water resources can permit the definition of scenarios as key components underlying the political decisions.

References