



## **Bioengineering techniques as a tool for integration and maintenance works in an urban area**

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From 1997 to 2000 an environmental requalification of a Public City Park in Pomigliano d'Arco (province of Naples, Italy) was realized with innovative techniques. Such works involved an area of about 72.000 square metres, represented by an ancient containment basin, in turn connected to the Bourbon Regi Lagni network, and originally devoted to collect rain water and debris moving downslope from the volcanic edifice of Mt. Somma. The basin, also due to the fast urban development and the realization of a modern sewage and drainage system, lose its original function, undergoing in the last decades a severe degradation. Here the results obtained from the usage of bioengineering techniques in the functional rehabilitation of the former basin are described, paying special attention to the slope maintenance works. The basin, after the work completion, became an interesting case-study for the monitoring of the various techniques adopted. The basin, in fact, whose morphology recalls that of a surficial open-pit quarry, can be regarded as a reference situation for the environmental requalification of the abandoned quarrying sites in Campania Region, where a recent regional law recognized the bioengineering techniques as the main tool for solving a serious environmental problem.