



## Survey of Permanent Preservation Areas downstream from the Paraíba do Sul River in the municipality of Campos dos Goytacazes - RJ

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A subject on the agenda and of great recurrence has been the resilience of the rivers, since the water is taken from rivers for supply and it is returned after use. It is worth stressing that the water cycle can be affected in this process, when the amount of effluents discharged exceeds the capacity for water renewal. And in this process, it is possible to highlight the riparian forests, which have a fundamental role in the hydrological function, being the ones responsible for the preservation of the quality and quantity of water resources. Currently the Law 12.651 / 2012, known as the New Forest Code, has established guidelines related to the Permanent Preservation Areas (PPAs). Article 3, II, provides for its environmental functions, such as: preserving water resources, geological stability and biodiversity, facilitating the flow of fauna and flora, protecting the soil and ensuring the well-being of populations. In this context, the present study aims to analyze the Permanent Preservation Areas downstream from the Paraíba do Sul River in the city of Campos dos Goytacazes - RJ. The methodology used consists of the following steps: collection of bibliographic and documentary data, such as articles, maps, laws, standards, theses, dissertations, satellite images; systematic review; quantification of PPAs; elaboration of tables and graphs; map generation. The results of the analyzes showed a gap between the amount of riparian forest existing on the banks downstream of the Paraíba do Sul river in the municipality of Campos dos Goytacazes (only 11.21%) and the amount required by federal law. In this scenario, it is important to highlight the need for reforestation of the deforested areas. Thus, it can be concluded that the main reason for the suppression of the riparian forest along the Paraíba do Sul River, downstream of the urbanized area of the city Campos dos Goytacazes, happened for the development of agricultural activities, and for the construction of infrastructure.

**Keywords:** Resilience. Riparian forest. PPA.

**Supported by:** ISECENSA.