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The conservation success over time: Evaluating the land use and cover change in a protected area under a long re-categorization process

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The Brazilian state has demonstrated an interest in preserving the natural heritage by expanding Brazil's system of protected areas (PAs), well-known internationally. Even so, as in other countries, despite a growing number of conservation initiatives, the state often opts to change a PA's management category into one less restrictive due to the population conflicts regarding to the land use. However, management category changes occur without there being any evaluation of the effects of the subsequent legal status, that is, of its ability to produce the anticipated result, to enable better direction of public policies and conservation initiatives. Accordingly, the aim of this study was to measure the conservation success of a PA, comparing its land use and cover change over time in different management categories. The study area was the Despraiado region (São Paulo, Brazil), which belonged to three PA management categories over 45 years and was subject to environmental protection under various legal instruments. The effectiveness of legal protection was interpreted by spatial changes in land use, or land use and cover changes, as well as crop rotation indices and analysis of the temporal stability of the landscape. We confirmed that the legal environmental restrictions were never fully complied with and the landscape observed remained distant from its conservation scenario proposed, independently of the PA management category and despite the long process of establishment as an area to be protected.

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