

## **Environmental equity as a criterion for water management**

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**Abstract** Environmental equity is a concept derived from the (un)equal exposure to environmental degradation by different social groups, usually minorities and low-income people exposed to major environmental risks, also known as environmental justice. It is assumed that no group of people, independent of race, ethnicity or socio-economic class, should support, either in concentrated or unevenly distributed form, the negative environmental impacts resulting from industrial, agricultural, commercial and infrastructure activities or government programs and policies. In this paper the concept of environmental equity is explored as a criterion for water management through the analysis of a typical coupled human–natural system: the Eptácio Pessoa Reservoir, located in the semi-arid region of Brazil. Inefficient water resource management has caused unequal access to water by the population, particularly during drought periods. However, census data indicate that population have practically the same access to water, which actually is not able to reflect the actual picture. This study argues that environmental equity can be an additional criterion to improve water management.

**Key words** environmental equity; water access; water-related environmental injustice; water management