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## GLOBALIZATION AND WATER MANAGEMENT: THE CHANGING VALUE OF WATER

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### LAND USE EFFECTS ON COASTAL WATERS AND INFRASTRUCTURE IN PUERTO RICO

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**ABSTRACT:** La Parguera, Lajas, Puerto Rico was a small fishing village with a minimum of local tourism. In 1994 the Commonwealth Government re-zoned the area with the stated intent of creating an “international tourist center” with no consideration whatever of environmental effects or planning for needed infrastructure. As a consequence, the number of dwelling units in La Parguera has doubled with no effective measures to ensure potable water nor treat wastewaters. In a four-year study some of the effects on the coastal and littoral systems have been documented, and data on bacteriological, biological and physico-chemical effects are presented and correlated with onshore development. In addition, the existing wastewater treatment facility is examined and results of a study of influent quality and quantity are presented. Finally, the economic effects and probable degree of operational success of the proposed transfer by pumping of wastewater to another facility is discussed.

**KEY TERMS:** Development effects on coastal zones, Effects of development on wastewater infrastructure, Biological assessment of development effects

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