

## Wastewater Reuse and Watershed Management

### Engineering Implications for Agriculture, Industry, and the Environment

**Editor: Ajai Singh, PhD, FIE**

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Water is a finite resource, and the demand for clean water is constantly growing. Clean freshwater is needed to meet irrigation demands for agriculture, for consumption, and for industrial uses. The world produces billions of tons of wastewater every year. This volume looks at multitude of ways to capture, treat, and reuse wastewater and how to effectively manage watersheds. It presents a selection of new technologies and methods to recycle, reclaim, and reuse water for agricultural, industrial, and environmental purposes.

The editor states that more than 75-80% of the wastewater we produce goes back to nature without being properly treated, leading to pollution and all sorts of negative health and productivity consequences. Topics in this volume cover a wide selection of research, including molluscs as a tool for river health assessment, flood risk modeling, biological removal of toxins from groundwater, saline water intrusion into coastal areas, urban drainage simulations, rainwater harvesting, irrigation topics, and more.

This volume looks at wastewater as an opportunity, rather than a problem. The research presented here also provides a background for formulating policy frameworks for the reuse of treated wastewater and water management. This informative volume will be valuable for postgraduate and doctoral students as well faculty, policymakers, and industry professionals in the area of civil, environmental, and agricultural engineering.

Key features:

- explores the experiences and existing methodologies in the field of reuse of wastewater
- looks at different approaches in integrated water resources management
- examines the issues of groundwater management and development
- discusses saline water intrusion in coastal area
- presents various watershed management approaches
- includes case studies and analyses of various water management efforts



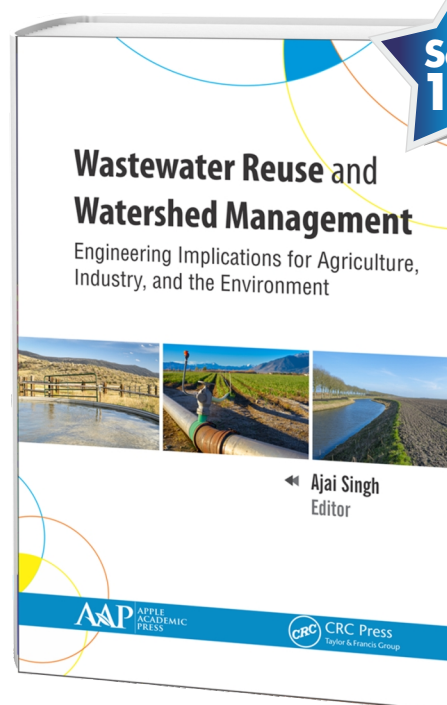
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