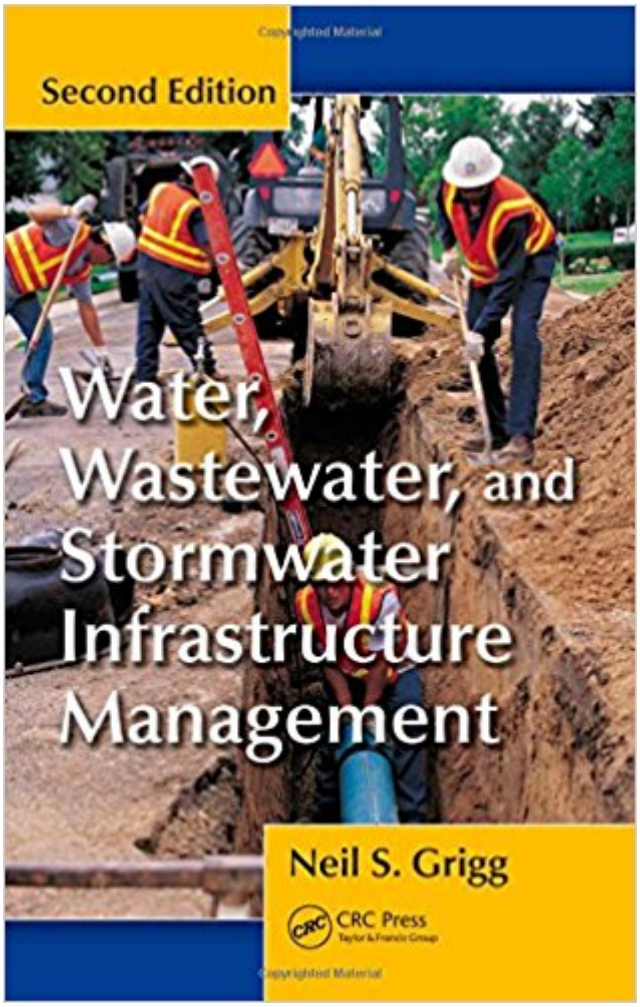
Water, Wastewater, And Stormwater Infrastructure Management, Second Edition



Synopsis

Urban water services are building blocks for healthy cities, and they require complex and expensive infrastructure systems. Most of the infrastructure is out of sight and tends to be taken for granted, but an infrastructure financing crisis looms in the United States because the systems are aging and falling behind on maintenance. A road map for public works and utility professionals, Water, Wastewater, and Stormwater Infrastructure Management, Second Edition provides clear and practical guidance for life-cycle management of water infrastructure systems. Grounded in solid engineering and business principles, the book explains how to plan, budget, design, construct, and manage the physical infrastructure of urban water systems. It blends knowledge from management fields such as facilities, finance, and maintenance with information about the unique technical attributes of water, wastewater, and stormwater systems. Addresses how to make a business case for infrastructure funding Demonstrates how to apply up-to-date methods for capital improvement planning and budgeting Outlines the latest developments in infrastructure asset management Identifies cutting-edge developments in information technology applied to infrastructure management Presents a realistic view of how risk management is applied to urban water infrastructure settings Explains the latest maintenance and operations methods for water, wastewater, and stormwater systems The author describes current thinking on best management practices and topics such as asset management, vulnerability assessment, and total quality management of infrastructure systems. Expanded and updated throughout, this second edition reflects the considerable advances that have occurred in infrastructure management over the past ten years. Useful as a reference and a professional development guide, this unique book offers tools to help you lower costs and mitigate the rate shocks associated with managing infrastructure for growth, deterioration, and regulatory requirements. Whatâ ™s New in This Edition The latest infrastructure management and maintenance technologies Information on the inventories of systems and the configuration of infrastructure New design and construction methods such as building information modeling (BIM) New approaches to rate setting, accounting methods, and cost accounting to help you assess the full cost of infrastructure Advances in SCADA systems Expanded coverage of risk management and disaster preparedness Material on the use of GIS in water and sewer management New laws related to infrastructure, including the U.S. EPAâ ™s efforts to develop a distribution system rule Â

Book Information

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Customer Reviews

This is a well thought out and structured book. It is one that students can use to discover concepts and understand water system management, but it is also a reference that will stand them in good stead throughout their careers.â •Steve Whipp, United Utilities, UK â | the author is very good. Having followed his books and seen the graphs over the years, they are very illustrative. â | The selection of topics is very good. â | Useful for anybody interested in water, wastewater and stormwater management and development. â | A very interesting and useful book, bringing out the importance of systems thinking and integration of water, wastewater and stormwater systems in a wider societal context. â •Tapio S. Katko, Tampere University of Technology, Finland

Neil S. Grigg is a professor of civil and environmental engineering at Colorado State University, where he focuses on water resources and infrastructure management. At Colorado State, he has been the head of the Department of Civil and Environmental Engineering and director of the Colorado Water Resources Research Institute and Water Center. He is a graduate of the U.S. Military Academy, Auburn University, and Colorado State University and is a registered professional engineer in three states. In addition to university work, Dr. Grigg has been a consulting engineer and state environmental official, and he has worked on a number of government policy and advisory panels. His current research is concentrated on urban water infrastructure, especially distribution systems management. He publishes widely on topics that range across water resources and infrastructure. Dr. Grigg has been honored in selection for a number of important responsibilities. He is a life member of the American Society of Civil Engineers and the American Water Works

Association. He is a diplomate of the American Academy of Water Resources Engineers and a charter member of the Pan American Academy of Engineering. He serves the U.S. Supreme Court as River Master of the Pecos River, and in 2011 he chaired two national flood control panels, one for the U.S. Army Corps of Engineers and the other for the National Institute of Building Sciences.

Water, Wastewater, and Stormwater Infrastructure Management, Second Edition Fair, Geyer, and Okun's, Water and Wastewater Engineering: Water Supply and Wastewater Removal Pure Water: The Science of Water, Waves, Water Pollution, Water Treatment, Water Therapy and Water Ecology Spellman's Standard Handbook for Wastewater Operators: Fundamentals, Volume I (Spellman's Standard Handbook for Wastewater Operators Series) (Volume 1) Global Supply Chains: Evaluating Regions on an EPIC Framework Ã¢â ¬â œ Economy, Politics, Infrastructure, and Competence: Ã¢â ¬Å“EPICÃ¢â ¬Â• Structure Ã¢â ¬â œ Economy, Politics, Infrastructure, and Competence Move: How to Rebuild and Reinvent America's Infrastructure: Putting AmericaÃ¢â ¬â„¢s Infrastructure Back in the Lead Lord of the Infrastructure: A Roadmap for IT Infrastructure Managers Water Clarity Secrets for Ponds and Water Gardens: The Quick and Easy Way to Crystal Clear Water (Water Garden Masters Series Book 5) Design of Urban Stormwater Controls, MOP 23 (Water Resources and Environmental Engineering Series) Fruit Infused Water - 80 Vitamin Water Recipes for Weight Loss, Health and Detox Cleanse (Vitamin Water, Fruit Infused Water, Natural Herbal Remedies, Detox Diet, Liver Cleanse) Sustainable Stormwater Management: A Landscape-Driven Approach to Planning and Design Stormwater Management for Sustainable Urban Environments Introduction to Hydraulics & Hydrology: With Applications for Stormwater Management Water for Food Water for Life: A Comprehensive Assessment of Water Management in Agriculture Public Infrastructure Asset Management, Second Edition (P/L Custom Scoring Survey) Water and Wastewater Finance and Pricing: The Changing Landscape, Fourth Edition Water and Wastewater Technology (6th Edition) Water and Wastewater Technology (7th Edition) Water and Wastewater Technology (5th Edition) Water and Wastewater Technology (4th Edition)