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	 7.4 Design parameters 7.5 Economics of construction; 7.6 Design details; 7.7 Hydraulic losses; 7.8 General design details; 7.9 Details of various types of sedimentation tanks; 7.10 Sedimentation aids; Chapter 8 - Theory of settling; 8.1 Introduction; 8.2 Classification of settling behaviour; 8.3 Ideal settling; Chapter 9 - Coagulation and flocculation; 9.1 Introduction; 9.2 Colloidal suspensions; 9.3 Coagulation processes; 9.4 Coagulation chemicals; 9.5 Operation of the coagulation and flocculation process; 9.6 Rapid mixing; 9.7 Flocculation; Chapter 10 - Sludge blanket clarifiers 10.1 Introduction to sludge blanket clarification systems 10.2 Types of sludge blanket clarifier; 10.3 Plate settling in sludge blanket clarifiers; Chapter 11 - Flotation systems; 11.1 Flotation using blown air; 11.2 Flotation using dissolved air; 11.3 Flotation using blown air; 11.2 Flotation; 12.1 Introduction; 12.2 Slow sand filtration; 12.3 Algal actions; 12.4 Summary of slow sand filtration; Chapter 13 - Rapid filtration; 13.1 Elements of a rapid sand filter; 13.2 Sand bed; 13.3 Underdrain system; 13.4 Hydraulics of filtration; 13.5 Summary of rapid sand filtration Chapter 14 - Biological treatment 14.1 Aerobic self-purification; 14.2 Waste stabilisation ponds; Chapter 15 - Biological filtration; 15.1 Introduction; 15.2 Trickling filter; 15.3 Basic ecology; 15.4 Process variants; 15.5 Design of biological filters; Chapter 16 - Constructed wetlands; 16.1 Background; 16.2 Definitions; 16.3 Hydrology of wetlands; 16.4 Wetland chemistry; 16.5 Wetland ecosystem mass balance; 16.6 Macrophytes in wetlands; 16.7 Physical and biochemical parameters; 16.8 Examples for natural and constructed wetlands; Chapter 17 - Rotating biological contactors; 17.1 Introduction 17.2 Principle of operation
Sommario/riassunto	Wetland Systems to Control Urban Runoff integrates natural and constructed wetlands, and sustainable drainage techniques into traditional water and wastewater systems used to treat surface runoff and associated diffuse pollution. The first part of the text introduces the fundamentals of water quality management, and water and wastewater treatment. The remaining focus of the text is on reviewing treatment technologies, disinfection issues, sludge treatment and disposal options, and current case studies related to constructed wetlands applied for runoff and diffuse pollution treatment.