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Soggetti	Engineering geology Engineering—Geology Foundations Hydraulics Buildings—Design and construction Building Construction Engineering, Architectural Ocean engineering Statics Fluid mechanics Geoengineering, Foundations, Hydraulics Building Construction and Design Offshore Engineering Mechanical Statics and Structures Engineering Fluid Dynamics
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Nota di contenuto	Basic Hydraulic Concepts -- Underflow Gates -- Open Channel Transitions -- Spillways -- Culverts -- Energy Dissipation Structures -- Flow-Measuring Structures -- Intake Structures -- Scour and Scour Protection.
Sommario/riassunto	This graduate/upper-division undergraduate textbook provides a solid grounding in the theory underlying the design and analysis of hydraulic

structures, including spillways, energy dissipators, culverts, flow measuring structures and others. It describes well-established theory and procedures, as well as recent developments gleaned from the research literature, with a design-oriented perspective. Professor James provides all of the necessary detail for many practical design applications, while retaining a concise presentation, with ample references to many comprehensive supplementary design guides. Appropriate for upper-level undergraduate and graduate civil engineering student and practitioners in the field, the book fosters an understanding of and competence in applying basic theoretical concepts. Focuses on the hydraulic rather than structural aspects of hydraulic structures with an extensive review of relevant basic hydraulic theory; Explains clearly the concept of hydraulic control and how controls govern the behavior of different structures; Reinforces concepts presented with exercise problems set at the ends of chapters; Provides an extensive review of relevant basic hydraulic theory along with comprehensive references to primary sources and detailed design guides; Illustrates applications with topical worked examples.