

1. Record Nr.	UNINA9910800187703321
Autore	Depeweg Herman
Titolo	Sediment transport in irrigation canals : a new approach // Herman Depeweg, UNESCO-IHE, Delft, The Netherlands, Krishna P. Paudel, Consolidate Management Services, Nepal, Nestor Mendez V., Universidad Centro Occidental Lisandro Alvarado, Barquisimeto, Venezuela
Pubbl/distr/stampa	Leiden, The Netherlands : , : CRC Press/Balkema, , [2015] ©2015
ISBN	1-317-60150-5 1-138-47514-9 1-315-74750-2
Edizione	[First edition.]
Descrizione fisica	1 online resource (309 p.)
Collana	UNESCO-IHE Lecture Note Series Balkema Book
Disciplina	551.3/53 551.353
Soggetti	Sediment transport - Mathematical models Irrigation canals and flumes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	A Balkema book.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Front Cover; Table of Contents; LIST OF FIGURES; LIST OF TABLES; PREFACE; 1. INTRODUCTION; 2. OPEN CHANNEL FLOW; 3. SEDIMENT PROPERTIES; 4. DESIGN CRITERIA FOR IRRIGATION CANALS; 5. SEDIMENT TRANSPORT CONCEPTS; 6. SETRIC, A MATHEMATICAL MODEL FOR SEDIMENT TRANSPORT IN IRRIGATION CANALS; 7. THE SEDIMENT TRANSPORT MODEL AND ITS APPLICATIONS; REFERENCES; SYMBOLS; APPENDIX A: METHODS TO ESTIMATE THE TOTAL SEDIMENT TRANSPORT CAPACITY IN IRRIGATION CANALS; APPENDIX B: METHODS TO PREDICT THE FRICTION FACTOR; APPENDIX C: HYDRAULIC DESIGN OF IRRIGATION CANALS APPENDIX D: DESCRIPTION OF THE MAIN ASPECTS OF THE REGIME THEORY APPENDIX E: GLOSSARY RELATED TO SEDIMENT TRANSPORT; APPENDIX F: FLOW DIAGRAMS
Sommario/riassunto	Sediment transport in irrigation canals influences to a great extent the

sustainability of an irrigation system. Unwanted erosion or deposition will not only increase maintenance costs, but may also lead to unfair, unreliable and unequitable distribution of irrigation water to the end users. Proper knowledge of the characteristics, including behaviour and transport of sediment will help to design irrigation systems, plan efficient and reliable water delivery schedules, to have a controlled deposition of sediments, to estimate and arrange maintenance activities, etc. The main aim of these lect
