

1. Record Nr.	UNINA9910299392903321
Autore	O'Hogain Sean
Titolo	A Technology Portfolio of Nature Based Solutions : Innovations in Water Management // Sean O'Hogain, Liam McCarton
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	9783319732817 3-319-73281-1
Descrizione fisica	1 online resource (139 pages) : illustrations
Disciplina	333.91
Soggetti	Water - Pollution Water-supply Hydrology Climatic changes Quality control Reliability Industrial safety Environmental management Aigua - Contaminació Aigua - Abastament Canvis climàtics Gestió ambiental Recursos hidràulics - Explotació Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Water Industry/Water Technologies Hydrology/Water Resources Climate Change Management and Policy Quality Control, Reliability, Safety and Risk Water Policy/Water Governance/Water Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.

## Nota di contenuto

Chapter 1. Nature-based Solutions -- Chapter 2. EIP Action Group NatureWat (AG228) -- Chapter 3. Nature-based Solutions – Technology Portfolio -- Chapter 4. Reclaimed Water -- Chapter 5. Constraints and Barriers to the adoption of NBS -- Chapter 6. Local, Regional and Global Potential of NBS.

---

## Sommario/riassunto

This book aims to define the concept of Nature Based Solutions (NBS) by using case studies from members of the European Innovation Partnership (EIP) Water Action Group - NatureWat. NBS is defined and characterized in terms of water source, contaminants, removal mechanisms and resource recovery potential. The case studies presented illustrate the appropriateness of NBS promoting climate resilience. Readers will discover a technology portfolio based on a number of demonstration sites in the fields of climate change adaptation, water and wastewater treatment, resource recovery and re-use, and restoring ecosystems to promote the use of nature based solutions. The chapters in the book present a multidisciplinary approach involving social scientists, governance representatives and engineers. The underlying philosophy of the book is the circular economy of water which prioritizes the concepts of resource recovery and resilience within water resource management. The first section of the book presents the background and objectives of the study, and how the action group aims to promote the use of nature based solutions through its diverse technology portfolio. Particular attention is given to the goals of finding cost-effective solutions for wastewater treatment, climate change mitigation, disaster risk reduction, flood protection, greening cities, degraded areas restoration and biodiversity preservation. The chapter on reclaimed water addresses water reuse and defines the term fit for purpose. Barriers and limitations related to NBS for water resource management are discussed. The book concludes with several case studies at local, regional and global levels which illustrate a new approach to water management. These case studies illustrate the application of a hybrid green and grey infrastructure system. This is a combination of traditional engineered infrastructure with nature based solutions which combines centralised and decentralised systems to optimise the reclamation of water for reuse in a fit for purpose model. .

---