1. Record Nr. UNINA9910254129703321

Autore	Zhang Jianfeng
Titolo	Forestry Measures for Ecologically Controlling Non-point Source Pollution in Taihu Lake Watershed, China / / by Jianfeng Zhang
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2016
ISBN	981-10-1850-2
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XVI, 289 p. 166 illus., 119 illus. in color.)
Disciplina	363.7394 363.73946
Soggetti	Water pollution Water quality Applied ecology Forestry Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Water Quality/Water Pollution Applied Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Characteristics of non-point source (NPS) pollution in Taihu Lake watershed -- Evaluation of water eutrophication on Taihu Lake connected channels in Yixing city -- Different land use patterns to combat NPS pollution in the region -- Countermeasures to control NPS pollution in headwaters of Taihu Lake basin -- Roles of forests in ecological control of NPS pollution -- Develop Urban Forestry to Prevent Surface Runoff and Eutrophication -- Landscapes Change and Its Effect on Water Quality in Taihu Lake Watershed: A Case Study in Yixing City -- Ecological Public Welfare Forests Construction in Yixing City -- Effects and Planting Techniques of Hedgerows in Slope Lands for NPS Pollution Control -- Purification of Eutrophicated Water and Dynamic Kinetics of Nitrogen Absorption by 2 Salix Integra Clones -- Physiological characteristics and nitrogen absorption/distribution features of Salix matsudana under different nitrogen stresses --

Influences of protective forest construction on soil nutrient dynamics -- Ecological effects of tree planting on Taihu Lake watershed -- Control of TN and TP by the pond and wetland integrated system -- N and P absorption by hydrophytes and wetland sustainable management. .

Sommario/riassunto

This book mainly focuses on ecological approaches for preventing and controlling non-point source (NPS) pollution on the basis of forestry measures. In addition to the effects of ecological control, it introduces readers to the characteristics of NPS pollution in Taihu Lake watershed, water eutrophication evaluation methods, and potential countermeasures. Given the crucial role of surface runoff and soil erosion in producing water pollution, the book presents forestry measures to combat them, such as the creation of public welfare forests, urban forestry, planting techniques for hedgerows on slope land, the establishment of shelter belts, nitrogen and phosphorus absorption by hydrophytes, and sustainable management for wetlands. Moreover, the results are supplemented by a wealth of numerical calculations, tables, figures and photographs. The book offers a valuable guide for researchers, educators and professionals working in the areas of water environment, water security and ecological construction. Prof. Jianfeng Zhang works at the Institute of Subtropical Forestry, Chinese Academy of Forestry, Fuyang, China.