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Nota di contenuto	Surface- and Groundwater Quality Changes in Periods of Water Scarcity; Supervisor's Foreword; Preface; Acknowledgments; Contents; Acronyms and Symbols; 1 Introduction; 2 Methodology; 2.1...Principles of Drought Analysis and Assessment; 2.1.1 Drought Definitions and Types; 2.1.2 Drought Risks and Impacts; 2.1.3 Methods of Drought Assessment; 2.1.3.1 Methods of Meteorological Drought Assessment; 2.1.3.2 Methods for Assessment of Agronomical Drought; 2.1.3.3 Methods for Hydrological Drought Assessment; Low Flow

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Theoretical Basis of the Water Quality Assessment; 2.2.1 Water Quality: Definition and Evaluation Methods; 2.2.1.1 Definition of Water Quality; 2.2.1.2 Methods of Water Quality Evaluation; 2.2.1.3 Strategies for Water Quality Assessment; 2.2.1.4 The Legislative Frame for the Water Quality Assessment; 2.2.2 Water Quality Indicators; 2.2.2.1 Physical Indicators of Water Quality
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5.2.1 Methods of Data Processing
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6.7.9 Nitrites

Sommario/riassunto

The thesis deals with the evaluation of surface and groundwater quality changes in the periods of water scarcity in river catchment areas. The work can be divided into six parts. Existing methods of drought assessment are discussed in the first part, followed by the brief description of the software package HydroOffice, designed by the author. The software is dedicated to analysis of hydrological data (separation of baseflow, parameters of hydrological drought estimation, recession curves analysis, time series analysis). The capabilities of the software are currently used by scientist from more than 30 countries around the world. The third section is devoted to a comprehensive regional assessment of hydrological drought on Slovak rivers, followed by evaluation of the occurrence, course and character of drought in precipitation, discharges, base flow, groundwater head and spring yields in the pilot area of the Nitra River basin. The fifth part is focused on the assessment of changes in surface and groundwater quality during the drought periods within the pilot area. Finally, the results are summarized and interpreted, and rounded off with an outlook to future research.

