

# HYDROLOGY DATA BOOK

(NOV 1999 → OCT 2005)

## Contents

- **Message from Honourable Minister of Public Utilities**
- **Foreword by Water Resources Unit**
- **Staff of Hydrology Section**
- **Glossary**
- **Conversion Table and Abbreviations**
- **Chapter 1 : Introduction**
  - Physiography
  - Climate
  - Schematic Structural Evolution of Mauritius
  - Hydrogeology
  - The Stratigraphic Series
  - Geological Map of Mauritius
  - Aquifers of Mauritius
  - Craters of Mauritius
- **Chapter 2 : Rainfall Data**
  - Brief Description
  - Isohyetal Map of Mauritius 1931-1960
  - Isohyetal Map of Mauritius 1961-1990
  - Isohyetal Map of Mauritius 1971-2000
  - Map of Representative Rainfall Stations
  - Precipitation Record
- **Chapter 3 : River/Canal Flow Data**
  - Descriptive notes on Hydrology of Mauritius
  - Brief Description
  - Flow Data Presentation
  - Index of River Gauging Stations
  - Index of Stations on Diversions
  - Drainage Areas and Flow Gauging Stations
  - List of Gauging Stations for which Flow Data are provided
  - Stations Description and Flow Data Record

➤ **Chapter 4 : Data On Groundwater**

Brief Description  
Groundwater Exploration  
Groundwater Exploitation  
Fresh Water – Sea Water Interface  
Data Loggers  
Piezometric Level Variation  
Groundwater Level Contour Map  
Well Characteristics  
Small Well Characteristics

➤ **Chapter 5 : Data on Storage Reservoirs**

Brief Description  
Salient Features of Main Reservoirs along with main feeders  
Reservoir storage variation

➤ **Chapter 6 : Data On Water Quality**

Brief Description  
Variation in Water Quality

➤ **Chapter 7 : Hydrology of Rodrigues and Agalega**

Brief Description of Rodrigues  
Precipitation Record for Rodrigues  
Hydrology  
Hydrogeology  
Location of Data Loggers  
Well Characteristics  
Geological Map of Rodrigues  
Drainage Areas for Rodrigues  
Brief Description for Agalega  
Precipitation Record for Agalega

➤ **Appendix**

Water Utilisation in Mauritius  
Boreholes in use in Mauritius  
Schematic diagrams of catchment for rivers and canals

## **List of Figures**

- 1.1** Location of Mauritius
- 1.2** Isohyetal Map of Mauritius
- 1.3** Geological Map of Mauritius
- 1.4** Aquifers of Mauritius
- 1.5** Main Craters of Mauritius
- 2.1** Long Term Average Rainfall over Mauritius Period 1971 - 2000
- 2.2** Isohyetal Map of Mauritius 1931-1960
- 2.3** Isohyetal Map of Mauritius 1961-1990
- 2.4** Isohyetal Map of Mauritius 1971-2000
- 2.5** Map of Selected Representative Rainfall Stations
- 3.1** Drainage Areas and Flow Gauging Stations
- 4.1** Groundwater Abstractions
- 4.2** Fresh Water– Sea Water Interface at Sottise (North of Mauritius)
- 4.3** Location of Data Loggers in Mauritius
- 4.4** Piezometric Level Variation
- 4.5** Groundwater Level Contour Map
- 5.1** Location of Impounding Reservoirs
- 5.2** Daily and Normal Storage Variation for Mare aux Vacoas
- 5.3** Daily and Normal Storage Variation for La Nicoliere
- 5.4** Daily and Normal Storage Variation for Piton Du Milieu
- 5.5** Daily and Normal Storage Variation for La Ferme
- 5.6** Daily and Normal Storage Variation for Mare Longue
- 5.7** Daily Storage Variation for Midlands
- 6.1** Location of Sampling Points on Rivers
- 6.2** Location of Sampling Points at Boreholes
- 7.1** Location of Data Loggers in Rodrigues
- 7.2** Drainage Areas for Rodrigues
- 7.3** Geological Map of Rodrigues
- 7.4** Agalega Island

## **List of Tables**

- 1.1** The Stratigraphic Series
- 2.1** Long term mean rainfall over Mauritius for different periods
- 2.2** Precipitation Record of St Antoine
- 2.3** Precipitation Record of Belle Vue Mauricia
- 2.4** Precipitation Record of Nicoliere
- 2.5** Precipitation Record of Cité La Cure
- 2.6** Precipitation Record of FUEL
- 2.7** Precipitation Record of Beau Champ
- 2.8** Precipitation Record of Highlands
- 2.9** Precipitation Record of Arnaud
- 2.10** Precipitation Record of Belle Rive
- 2.11** Precipitation Record of Médine
- 2.12** Precipitation Record of Rose Belle
- 2.13** Precipitation Record of Savinia
- 2.14** Precipitation Record of Bel Ombre
- 2.15** Precipitation Record of Le Morne
- 3.1** Classification of Surface Water Abstractions according to flow
- 3.2** Index of River Gauging Stations
- 3.3** Index of Stations on Diversions
- 3.4** List of selected Gauging Stations for which Flow Data are provided
- 4.1** Number of wells drilled from 1960 to 2005
- 4.2** Types and Purposes of existing wells
- 4.3** Number of Pumping Stations in different water supply systems
- 4.4** Groundwater Utilisation
- 4.5** Boreholes Commissioned during period 1999 to 2005
- 4.6** Well Characteristics
- 4.7** Small Well Characteristics
- 5.1** Salient features of Impounding Reservoirs
- 6.1** Variation in Groundwater Quality
- 6.2** Variation in River water Quality
- 7.1** Monthly Rainfall Data (mm) for 2001-2005 (RODRIGUES)
- 7.2** Yield (m<sup>3</sup>/hr) of Boreholes drilled during period 1996 - 2001
- 7.3** Well Characteristics in Rodrigues
- 7.4** Monthly Rainfall Data (mm) for 2001-2005 (AGALEGA)