

**CAPACITY BUILDING TRAINING FOR CATCHMENT MENTORS (CHAMPIONS)**

**INTRODUCTION TO WATER USE MODULE 5**

**SECTION 1: SAQA COMPLIANCE**

**Integrated Water Resources Management  
Strategies, Guidelines and Pilot Implementation in Three Water Management Areas,  
South Africa**

**Department of Water Affairs and Forestry  
South Africa**

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**Ref. J. No. 123/138-0154**

**Carl Broals**

**FPCD**

**Date: September 2003**

## INTRODUCTION TO WATER USE - MODULE 5

**Note: Please refer to the Learners Guide on Introduction to Water Use**

This learning material forms part of the Capacity Building Training for Catchment mentors

### 1.1 SAQA COMPLIANCE: INTRODUCTION TO WATER USE

<b>MODULE NAME</b>	Introduction to Water Use
<b>UNIT STANDARD TITLE</b>	Demonstrate Knowledge of Water Cycle, Water and Waste Water Systems
<b>NQF LEVEL</b>	2
<b>CREDITS</b>	5
<b>TYPE OF GUIDE</b>	LEARNER GUIDE
<b>ENTRY LEVEL REQUIREMENTS</b>	Literacy NQF 1
<b>TIME ALLOCATION (per module)</b>	50 hours
<b>PURPOSE</b>	The qualifying learner will be able to explain the elements of the water cycle and water catchment management. This competence will enable the learner to value water as a scarce resource and share its knowledge to improve community understanding of the importance of conserving water resources
<b>LEARNING STRATEGY</b>	Off the job in groups, group work, individual work
<b>DELIVERY METHODS</b>	Facilitation, group work
<b>PRESCRIBED RESOURCES</b>	Learners guide, Assessment guide and case studies
<b>EQUIPMENT/TRAINING AIDS</b>	Overhead projector, flipcharts, pictures, sketches, papers, map, project cardboard, markers
<b>LEARNING ENVIRONMENT</b>	Classroom
<b>EVALUATION METHODS</b>	<ul style="list-style-type: none"> <li>❖ Diagnostic Assessment</li> <li>❖ Self Assessment</li> <li>❖ Companion Assessment</li> <li>❖ Facilitator Assessment</li> </ul>

<b>SPECIFIC OUTCOMES ATTACHED TO THIS UNIT STANDARD</b>	
<b>Specific Outcome 1</b>	Identify and explain the elements of the natural water cycle (addressed in the Water Cycle Module)
<b>Specific Outcome 2</b>	Explain the principles of water catchment
<b>Specific Outcome 3</b>	Explain the concepts of ground water collection and extraction
<b>Specific Outcome 4</b>	Explain the concepts of surface water collection and abstraction
<b>Specific Outcome 5</b>	Identify possible sources of pollution and explain appropriate corrective action
<b>Specific Outcome 6</b>	Explain the importance of legislation within the water sector
<b>Specific Outcome 7</b>	Identify and explain common water related diseases

## 1.2 LEARNING OUTCOMES

At the end of this unit you should be able to:

- ❖ Explain water flow in a catchment
- ❖ Explain recognised water uses within a catchment
- ❖ Explain recognised impacts from water users
- ❖ Explain the economic importance of water
- ❖ Explain ways to conserve water
- ❖ Explain the principle of charging for water and wastewater treatment and water distribution
- ❖ Explain the principles of ground water and its role in the water cycle
- ❖ Identify and explain ground water trapped in aquifers, fractures and sand
- ❖ Explain ground water collection and extraction
- ❖ Explain the principles of resource management of boreholes
- ❖ Explain the flow of surface water and its role in the water cycle
- ❖ Explain surface water collection and extraction
- ❖ Explain the principles of resource management of surface water
- ❖ Identify sources of pollution of ground water and explain corrective action
- ❖ Explain ways to prevent contamination of boreholes
- ❖ Explain self purification of rivers and streams
- ❖ Explain the role of the water process operator in preventing the contamination of water resources
- ❖ Identify relevant national water legislation and licensing and explain the purposes

- ❖ Explain the purpose of a water use license
- ❖ Identify relevant environmental legislation and explain the purposes
- ❖ Explain the purpose of municipal by-laws
- ❖ Identify diseases commonly related to sanitation
- ❖ Identify diseases commonly related to water
- ❖ Explain measures that can be taken to prevent disease
- ❖ Explain the link between polluted water and disease

### 1.3 RECOGNITION OF PRIOR LEARNING

In order to be assessed against this unit standard the learner should demonstrate competence in the stated learning outcomes. Any learner who feels that they already have all or some of the skills, knowledge, attitudes and values covered by this module should apply for Recognition of Prior Learning and supply appropriate information.

### 1.4 PORTFOLIO OF EVIDENCE

This programme is outcomes based and uses continuous assessment strategies. One of the strategies is for the learner to develop a portfolio of evidence. This means that all learners must keep a portfolio for this course. It will demonstrate their competencies during the course and the application of these competencies. The portfolio should contain:

- ❖ Learner detail form
- ❖ Application for Assessment
- ❖ Candidate's Guidelines
- ❖ Assignment on theoretical knowledge; e.g.:
  - The LGWSETA Sector skills plan
  - The Bill of Rights
  - Equity
  - Alternative ways of providing information to learners
- ❖ Assessment documents and guides; e.g.:
  - Master Assessment plan
  - Preparation of Candidate for assessment
  - Assessment evidence
  - Feedback
  - Appeal form
  - Review form

## 1.5 CRITICAL CROSS-FIELD OUTCOMES

The following critical cross-field outcomes have been included in the learning material. (✓ The ones that have been covered in the module)

<b>CRITICAL CROSS-FIELD OUTCOMES</b>	
Identify and solve problems:	✓
Work effectively with others in teams	✓
Organise and manage oneself and one's activities responsibly and effectively	✓
Collect, analyse, organise and critically evaluate information	✓
Communicate effectively using visual, mathematical and/or language skills	✓
Use science and technology effectively and critically	✓
Understand the world as a set of inter-related parts of a system	✓
Contribute to the full development of self by engaging with texts that stimulate awareness and development of life skills and the learning process	✓

## 1.6 TIME FRAME

12 hours