

## APPENDIX D

### SOURCE MANAGEMENT PLAN

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# 1 PROCESS DIAGRAM

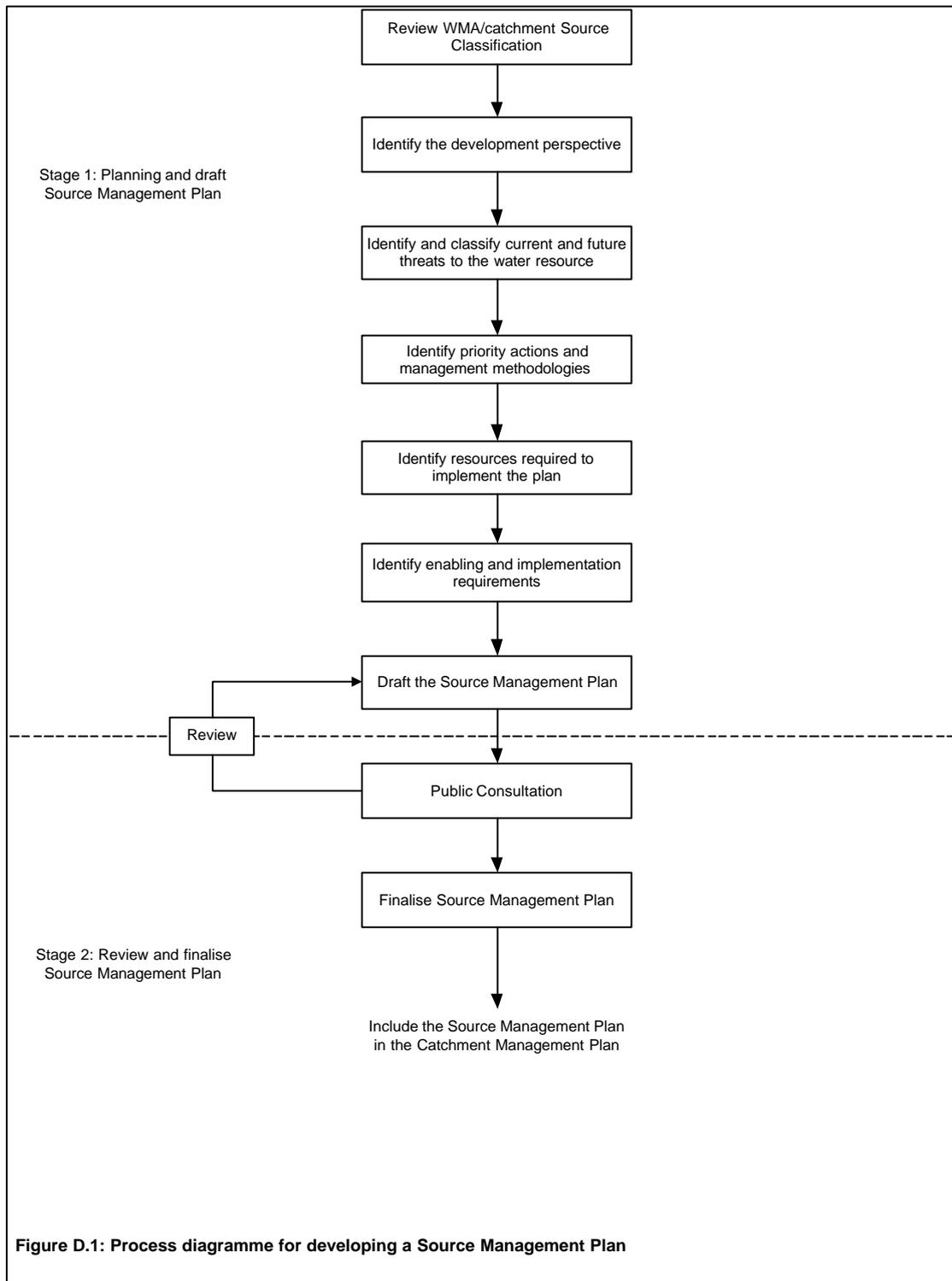


Figure D.1: Process diagramme for developing a Source Management Plan

## **2 PROCEDURAL GUIDELINE**

### **2.1 Roles and responsibilities of various role-players**

#### **2.1.1 The Department of Water Affairs and Forestry (the Department)**

The Department will be responsible for developing the Source Management Plan (SMP) at a regional/CMA level. The responsibility for developing the SMP will be delegated to the Regional Deputy Director: Water Quality Management in the Regional Office, who will appoint an Assistant Director: Planning to undertake the required tasks.

The Assistant Director: Planning should be appointed from within the regional staff structure. The use of external consultants to undertake the tasks of the Assistant Director: Planning or other roles and tasks as defined by the Assistant Director: Planning is permitted should suitable resources and expertise not be available within the Department's regional organisational structure.

#### **2.1.2 Interested and affected parties**

The interested parties are responsible to:

- provide input and comments on the proposed Source Management Plan, prior to the finalisation of the plan,
- provide their inputs and comments within the context of the process and within the timeframes as specified by the Assistant Director: Planning.

#### **2.1.3 Other departments**

Other departments, who have a lead agency role to authorise water use in some sectors, must be consulted by the Assistant Director: Planning at a regional level while developing the SMP. The responsibilities of these departments will be similar to the interested and affected parties.

### **2.2 Stage 1: Planning and draft Source Management Plan**

The Source Management Plan requires identifying the sources within the WMA/catchments in the jurisdiction of the Regional Office/CMA, an assessment of the risk posed by these sources and identifying appropriate action plans for managing sources. Some of the information needs for the SMP will have been determined in other functional strategies, while other information will need to be sought. The specific tasks in developing a draft SMP are detailed below.

#### **2.2.1 Review WMA/catchment Source Classification**

The Assistant Director: Planning will review the source classification that was undertaken at WMA/catchment level (see **Appendix A.2**). The source classification will include the following:

- identification of all processes, substances and activities within the WMA/catchment that represent risk to the water resource,
- classification of all processes, substances and activities within the WMA/catchment into high, medium or low risk.

The source classification will form the baseline study / status quo in terms of information on sources of risk in the catchment, for inclusion in the SMP.

### **2.2.2 Identify the development perspectives**

The Assistant Director: Planning will identify future development scenarios for the catchment. The development scenarios will include both:

- a time horizon, namely short-term (0 to 3 year horizon), medium term (3 to 10 year horizon) and long-term (greater than 10 year horizon),
- a pessimistic, neutral and optimistic scenario for each of the time horizons.

The Assistant Director: Planning will use any number of, or a combination of, the following sources of information in obtaining the development perspective:

- historical growth rates for South Africa as a whole and for the region/catchment in particular,
- published studies on growth forecasts and development paths for South Africa and the region/catchment,
- liaison and discussion with other government departments to determine future growth trends, such as Department of Foreign Affairs, Department of Minerals and Energy, Department of Agriculture, Department of Public Works and the local Authority,
- local knowledge of future development trends and direction in the area.

### **2.2.3 Identify and classify current and future threats to the water resource**

The Assistant Director: Planning will identify current and future threats to the water resource through the source classification at WMA/catchment level and the threats that are likely to arise from the identified development perspective.

The Assistant Director: Planning will use the methodology in section 2.2.2 of **Appendix A.2** to determine the significance level of risk of the future threats to the water resource. All current and future threats to the water resource (processes, substances and activities) will then be categorised as either high, medium or low risk, based on the significance level of risk to the water environment

The Assistant Director: Planning will prepare a list of all current and future processes, substances and activities that exist within the WMA/catchment of high, medium and low risk.

#### **2.2.4 Identify management actions and priorities**

The Assistant Director: Planning will identify the options for management actions to control the threats to the water resource that were identified in the step above. The likely management options will include:

- site-specific licensing of water use,
- General Authorisations for water use(s) where the risks to the water resource can be controlled by implementing this action,
- delegating the lead agency for authorisation for water use to other government departments, as part of co-governance,
- the use of Best Practice guidelines, and
- exemptions from water use authorisation, where the risks are deemed to be low.

The Assistant Director: Planning will identify the appropriate management actions for each sector and process, substance and activity within the catchment. The Assistant Director: Planning will also prioritise the use of these management actions, based on the risk level of each of the processes, substances of activities.

A guide for the most appropriate source management instruments to use for the different sectors and risk classes is given in **Table 1** below. This is based on the source classification at National Level and indicates the range of instruments available and the most appropriate instrument(s) for a particular sector and risk class, with the main instrument shown in bold. This guide should be used and adapted as required to suit the particular needs and requirements that are evident at a WMA/catchment level.

**Table 1: Guide for the appropriate use of source management instruments**

Sector	Discharge	Class	Best Practice	Co-Governance	License	General Authorisations	Exemptions
Mines	Not to sewer	A	Yes	Yes	Yes		
		B	Yes	Yes	Yes		
		C				Yes	
Industry	To sewer	A & B	Yes	Yes			
		C					Yes
	Not to sewer	A & B	Yes		Yes		
		C	Yes			Yes	
Agriculture	Not to sewer	A & B	Yes			Yes	
		C	Yes	Yes			Yes
Settlements Urban	Sewage	A	Yes	Yes	Yes		
		B	Yes	Yes		Yes	
	Waste	A	Yes	Yes	Yes		
		B	Yes	Yes		Yes	
	Water	A		Yes	Yes		
		B		Yes			Yes
Settlements Rural/Dense		A	Yes	Yes		Yes	
National Infrastructure	Not to sewer	A	Yes	Yes			
		B	Yes	Yes		Yes	
		C	Yes	Yes			Yes

### 2.2.5 Identify resources required to implement the SMP

The Assistant Director: Planning will identify the resources required at Regional Office/CMA level to implement the SMP. This will include suitably qualified personnel for the following tasks:

- identify and develop General Authorisations,
- license all current and future water uses, where applicable, and
- enforce the requirements of the SMP through monitoring, policing of water uses and reporting (both regular reporting and out-of-compliance reporting).

The number of personnel required, and their level of expertise, will depend on the size of the catchment, the number of water uses and level of development.

### 2.2.6 Identify enabling and implementation requirements

The enabling of the SMP involves placing the people who will implement the plan in a position to do so in a coherent and consistent manner. It also includes facilitating planning by those involved in implementing the plan and evaluating the consequences of their decision-making. The Assistant Director: Planning will develop the following instruments to enable the SMP:

- operational guidelines and procedures which prescribe how to carry out functions and allocate responsibilities for their implementation,
- technical guidance documents which assist officials in making judgemental evaluations and augment Best Practice documents, and
- training and development, either in-house through seminars and training courses or externally by academic institutions.

The Assistant Director: Planning will also assess the use of advisory extension services to augment the enforcement function and assist in enabling the SMP.

The Assistant Director: Planning will identify implementation tasks, elaborated by detailed activities, for the implementation of the SMP.

### **2.2.7 Draft the Source Management Plan**

The Assistant Director: Planning will draft the SMP. The contents of the SMP will be as follows:

- executive summary, providing an overall summary of the SMP together with action plans for implementation,
- baseline requirements for the SMP,
- details of the status quo in the catchment,
- the development perspective,
- lists (in the appendices) of all processes, substances or activities in the catchment of high, medium and low risk,
- appropriate management action plans to control the threats to the water resource and a priority list of actions that should be undertaken immediately,
- a personnel management plan,
- an enabling strategy, and
- an implementation plan.

## **2.3 Stage 2: Review and finalise Source Management Plan**

### **2.3.1 Public consultation**

The interested and affected parties within the WMA/catchment must be allowed the opportunity to review and comment on the Source Management Plan. This will involve the following process:

- the Assistant Director: Planning will publish the SMP in the local press and make copies available in public institutions, such as libraries, schools and community halls ,
- the SMP will be published on the Departments web-site,
- standard comment forms will be included with the SMP, together with details on who to deliver comments to,
- a period of 60 days will be allowed for comments from interested and affected parties,
- after the expiry of the review period, the Assistant Director: Planning will collate all comments into an overall issues report.

### **2.3.2 Finalise Source Management Plan**

The Assistant Director: Planning will address all comments that were made by interested and affected parties during the public consultation process. In some instances, this may result in the review and re-evaluation of aspects of the SMP.

The Assistant Director: Planning will amend and finalise the SMP based on the work undertaken and comments received.

### **2.3.3 Include Source Management Plan in Catchment Management Plan**

The Assistant Director: Planning will include the Source Management Plan in the Catchment Management Plan for the catchment, which will be presented to the Minister for approval and signature.

The final Catchment Management Plan, including the Source Management Plan, will then be published on the Departments web-site.