# ADOPT-A- RIVER PROGRAMME PHASE II: DEVELOPMENT OF AN IMPLEMENTATION PLAN RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE ADOPT-A-RIVER PROGRAMME







Department: Water Affairs **REPUBLIC OF SOUTH AFRICA**  Directorate: Resource Quality Services, Department of Water Affairs

# **Republic of South Africa**

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## **DOCUMENT INDEX**

### Reports as part of this project:

Report number	Report Title	
N000000RET0109	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Inception Report	
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N000000RET0209	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Database of stakeholders	
Authors	A. Neumann	
N000000RET0309	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Monitoring Models	
Authors	L. Rossouw	
N000000RET0409	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Institutional aspects/Governance Structures	
Authors	Y. Burger	
N000000RET0509	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Water Resource Quality Situation Assessment	
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N000000RET0609	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Manual for Volunteer Monitoring	
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N000000RET0709	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Programme coordination manual for National and Regional coordinators	
Authors	T. Manxodidi and J.N. Rossouw	
N000000RET0809	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Communication Structures	
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N000000RET0909	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Training Material and Training Needs	
Authors	K. Versfeld and J.N. Rossouw	
N000000RET1009	Adopt-a-River Programme Phase II: Development of an Implementation Plan. Implementation Manual	
Authors	Y. Burger, P. de Souza, J.N. Rossouw and L. Rossouw	
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## 1. INTRODUCTION

The aim of the Adopt-a-River Programme is to create awareness and an understanding amongst all South Africans of the need to care for our scarce water resources and to facilitate their participation in the protection and management these resources in an integrated manner.

Specific objectives of the Adopt-a-River include:

- Promoting a volunteerism ethic in South Africa to benefit all levels of society.
- Empowering all users of water to protect water resources and participate in water resource management.
- Facilitating the involvement of patrons and sponsors (influential individuals) in stakeholder empowerment and resource management strategies.
- Developing and making available the necessary tools for training and empowering local implementing agents and other roleplayers.
- Ensuring optimum efficiency, through involvement and linkages with other existing programmes and initiatives, of water resource initiatives.

A phased approach is being followed to develop the programme. Phase 1 was the initiation and development of a Strategic Framework document<sup>1</sup>. Phase 2 of the project (which is the topic of this assignment) is the development of an Implementation Plan and the preparation for Phase 3 where pilot implementation on selected rivers will take place.

The Adopt-a-River programme can play a vital role in encouraging citizens to learn about water resources and become involved in the protection and management of these resources in their particular area.

Once awareness of the water resource and its problems/benefits is created, stakeholders, including volunteers, can gain knowledge and insight into the causes of the problems affecting the quality and quantity of the water resources in their area. They will then be able to act as watchdogs, but also be part of the prevention and problem solving fraternity for the specific water resources in their area.

An additional benefit of their awareness and involvement is that the stakeholders will be empowered to realistically evaluate service delivery and hold the relevant authority accountable for effective implementation of important elements of existing environmental and water resource management policies and strategies.

<sup>&</sup>lt;sup>1</sup> Department of Water Affairs and Forestry (DWAF). 2007. *Draft Strategic Framework for the development of the Adopt-a-River Programme (Caring for our scarce water resources)*. Prepared by Directorate: Resource Quality Services, April 2007

## 2. APPROACH

The programme will include surface water (dams, wetlands, lakes and estuaries) and groundwater. It will be based on the principles of Integrated Water Resources Management and will aim at creating an understanding of the effects of all activities within a catchment on the quality and quantity of surface water and groundwater.

Initially the focus will be on rivers or river reaches until more experience is gained and one can include all the natural water resources in the Adopt-a-River Programme.

Phase 3, the Pilot Implementation in selected rivers is the next phase of the Adopt-a-River programme. The following rivers were selected for consideration by the DWA: Regional Directors during Phase 2:

Responsible office	River
Director General: DWA	Vaal River
Kwa-Zulu Natal Regional office	Pongola River
Limpopo Regional office	Mokolo River
Mpumalanga Regional office	Olifants River
Gauteng Regional office	Klip River and Wonderfonteinspruit
Free State Regional office	Modder and Riet Rivers
Eastern Cape Regional office	Mtata and Buffalo River
Western Cape Regional office	Olifants/Doring River
Northern Cape Regional office	Hartz River
North West Regional office	Crocodile River

A water resource quality situation assessment, based on existing information, was completed for each of the rivers. Water resource quality is defined as all aspects of water quantity, water quality and aquatic ecosystem quality; the latter including the quality of in-stream and riparian habitats and aquatic biota.

The following rivers or reaches of the rivers are proposed for the pilot implementation of the Adopt-a-River Programme and were chosen from a good governance and sustainability perspective:

Potential partners	River reach to be studied
Working for Water, Rand Water, Midvaal Water, Communities	Vaal River – Vaal Barrage and Middle Vaal River up to Orkney
Working for Water, Rand Water, Gauteng Regional Office: DWA	Lower Klip River
Working for Water, WESSA, Eastern Cape Regional Office: DWA	Mtata River near the city

At this stage this is a recommendation following from the analysis and design work during Phase 2 and has not yet been confirmed with the stakeholders who originally proposed rivers in their vicinity as candidates for the pilot implementation phase. The actual three or four river reaches for pilot implementation need to be confirmed as one of the first tasks of Phase 3.

One of the first crucial tasks for Phase 3: Pilot Implementation is the creation of the institutional/ management structures and the appointment of a national co-ordinator.

The other important task is the development of an awareness creation strategy, also identifying specific stakeholder interests in the pilot river reaches.

## 3. RELEVANT STUDIES AND SOURCES OF INFORMATION

The reports compiled during the Adopt-a-River: Phases 1 and 2: Development of an Implementation Plan is available to the Adopt-a-River: Pilot Implementation Team/National Co-ordinator.

The National Co-ordinator should take particular note of the following reports:

- Department of Water Affairs and Forestry (DWAF). 2007. Draft Strategic Framework for the development of the Adopt-a-River Programme (Caring for our scarce water resources). Prepared by Directorate: Resource Quality Services, April 2007.
- Department of Water Affairs. 2008. Adopt-a-River Programme Phase II: Inception Report.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: Database of Stakeholders.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II Monitoring Models.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: Institutional Aspects/ Governance Structure.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: Water Resource Quality Situation Assessment.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: Adopt-a-River Manual for Volunteer Monitoring.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: *Programme* Co-ordination Manual for National and Regional Co-ordinators.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: Communication.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: *Training Material and Training Needs.*
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: An Implementation Manual for the Adopt-a-River Programme.
- Department of Water Affairs. 2009. Adopt-a-River Programme Phase II: Recommendations for the Implementation of the Adopt-a-River Programme.

### 4. RECOMMENDED PROJECT TASKS

#### 4.1 INSTITUTIONAL/MANAGEMENT STRUCTURES TO BE CONSIDERED

The role of government in river protection is to create an enabling environment where South Africans can and will start to care for their water resources. The Adopt-a-River programme is an umbrella programme, not replacing any initiative but to co-ordinate efforts and create community participation. An institutional framework and governance structure for this purpose will be imperative for successfully implementing a programme such as Adopt-a-River.

It is recommended that this programme be set up to function similarly to the SADC Regional Environmental Education Programme that is hosted by SADC<sup>2</sup> and implemented by WESSA<sup>3</sup>: (The assumption is that the Department of Water Affairs will perform the host function). Pending final inputs from the parties, it is assumed that the Department of Water Affairs, who has championed the design phases of Adopt-a-River, will continue as programme host and find a suitable national implementing agency.

A suitable national implementer or co-ordinator has to be found, in the form of an agency that would be in a position to support the national programme from the pilot stage.

A dedicated, full time national champion or programme manager has to be employed to coordinate all activities of an Adopt-a-River nature across the country. It is envisaged that at the onset there will be only one person on the team. There will not be any dedicated administrative or support staff until warranted by the number of adopted rivers that have to be co-ordinated by the National Co-ordinator.

The work load will dictate the pace at which staff will be appointed to the programme at national and subsequent regional levels. There will not be provincial or regional layers in the structure during the pilot implementation.

DWA Directorate Communications has to be involved from the onset of the pilot phase. A greater focus is placed on advocacy and public awareness, than on actual water quality monitoring and the results thereof.

The programme has to work with initiatives that have a proven track record on environmental programmes which involve the users. Working for Water, WESSA and other programmes offered to make available their expertise and structures in the pilot implementation phase. To bring on board experience and resources of WfW will achieve synergy in natural resource management, while also meeting objectives of social upliftment.

It is recommended that a few pilot projects are carefully selected where the capacity exists to test parameters that will shape the future of the programme. To embark on several initiatives with a pilot river project in every province, is probably too ambitious *unless the specific goal is to purely achieve awareness with the first series of pilot projects.* 

<sup>&</sup>lt;sup>2</sup> Southern African Development Community

<sup>&</sup>lt;sup>3</sup> Wildlife and Environment Society of South Africa

A communication specialist has to be tasked to mobilise institutional and community stakeholders, as well as potential sponsors and patrons as part of all pilot projects along specific river reaches.

Adopt-a-River has to be launched in all pilot regions in a visible manner and with high media involvement. An experienced individual has to identify sponsors, patrons and institutional/ community stakeholders before a pilot along any specific river reach is launched.

Funds for the management and execution of the programme have to be ring-fenced at national level. An annual allocation by the champion/host institution to establish, guide and track the programme for at least five years, will be required. Funds also need to be earmarked for research and training during that period.

### Co-ordination: R3 million per year

(For a period of **five years** the Co-ordinator/Implementer function will cost say **R17.1** million (escalation included)). Full time National Co-ordinator with the necessary infrastructure, excluding funds for project level work (*assumed that a single pilot river will be managed in certain provinces at the onset, without the need for intermediate structures at regional level*)

**Project work**: About R700 000 each per year for each pilot project. (Assuming there will be four distinct pilots in four geographic locations, which can all be orchestrated from a central location, the budget will be about R2.8 million per year). This amount can be fine-tuned once actual pilot river selection has been finalised. It is also likely that economy of scale/savings can be achieved with resources of Working for Water if pilot sites are wisely chosen.

For **two years** the budget for work at pilot river level will be no more than **R5.5** million. Responsibilities of National Co-ordinator(s) include mobilising funds for activities at regional level, hence it is not necessary to budget for project work after year two.

It is the considered opinion of the Phase 2 design team that the budget for the national programme should **not** include operating expenses to rehabilitate individual rivers except the initial pilots. It would be prudent to support teams with finding own sponsors rather than providing seed money for projects. (*The latter would set a precedent that cannot be sustained*).

### 4.2 AWARENESS CREATION

The Adopt-a-River Programme includes a broad range of stakeholders, ranging from the scientific community, national and local government, water resource managers and planners and the general public, who will make use of the information generated by the Adopt-a-River Programme. It is therefore necessary to tailor the information in such a way that it is specific to the needs of the targeted stakeholder group to ensure that it is understood and relevant.

To be truly effective, the information presented to the stakeholders must improve the understanding and knowledge of its users and contribute to effective decision making. Understanding what information stakeholders want is one challenge. The other is how stakeholders would prefer to receive the information. As we live in an era of information overload, it is impossible to read everything. For this reason, people generally prioritise the time

spent reading an article based on the perceived value of the information. It is therefore essential to establish how stakeholders prefer to receive information and the manner in which it is presented as this increases the chances that the message gets across clearly to the right people.

It is recommended that the Communication Structures report prepared during Phase 2 of the Adopt-a-River Programme be used as guideline.

Develop an awareness creation strategy to inform interested parties about the Adopt-a-River programme. The strategy must be flexible to reach different target audiences.

Identify and collaborate with key stakeholders for the implementation of the awareness campaign. Key stakeholders need to include DWA officials, city officials, business leaders, Water Services Authorities, ethnic and social leaders, active community members, NGOs, media, local residents, etc. Key stakeholders should also include potential polluters to the selected rivers. The objective of this task is to reach as wide an audience as possible, to gain support from leaders in the wider community, as well as to involve as many people as possible, not only as supporters but also as participants.

#### 4.3 PASSIVE COMMUNICATION AND DATA MANAGEMENT

Passive communication should focus on development of an appropriate and dedicated platform which allows individuals to access and review information at any stage. The three main components of the Adopt-A-River Programme that need to be addressed by an appropriate passive communication medium are:

- Document repository promoting awareness creation (e.g. protocols, procedures, guidelines, methodologies/techniques and other training material related to establishing and managing an appropriate river monitoring programme)
- Ability to view river water quality related data (e.g. view river water quality data collected through National initiatives)
- Ability to load river water quality related data (e.g. stakeholders load on-site observations)

The need for the required platform to perform all of the above functions from the start of the Adopt-a-River Programme, versus gradual development of the capacity over time, should be carefully considered. This decision will ultimately be based on available resources (human, software, budget).

Considering the above, it is recommended that:

1. A basic website which essentially acts as a document repository promoting awareness creation (e.g. provision of protocols, procedures, guidelines, methodologies/techniques and other training material related to establishing and managing an appropriate river

monitoring programme) be created. This is the starting point for the establishment of an appropriate website for the Adopt-a-River Programme.

2. Consideration be given in the design of the above website to accommodate the secondary (and possibly future) requirement for the need for an information management system. In essence, the information management system should allow users to both load river water quality related data (e.g. stakeholders load on-site observations) and view river water quality related data (e.g. view river water quality data collected through National initiatives). In order to implement an appropriate system, consideration will need to be given to operating system used (e.g. Microsoft Windows, Linux), database used (e.g. MySQL, Oracle), programming language used (e.g. Python, XML, C++) and web server used (e.g. Apache). The most appropriate components to be utilised will depend on the desired needs of the system, costs and available expertise. In addition, aspects such as security and access, data storage, desired data accuracy, data integrity, data credibility, required data use, user training, etc. will require careful consideration.

Bearing the above in mind, it is recommended that regardless of the system utilised, the following aspects receive serious consideration prior to implementation:

A basic website be established which initially focuses on promoting awareness creation through a document repository. The basic website design should take into account the future need for a full information management system (loading and analysing data).

Requirements for such a basic website be workshopped with key stakeholders (e.g. DWA, existing environmental/river groups, etc).

A suitable web-developer and maintenance team is identified and employed.

A dedicated champion/programme manager for web-development needs is identified and employed to co-ordinate all activities associated with website development and maintenance of an Adopt-a-River nature across the country.

Funds are made available for the above. It is difficult to estimate funding requirements at this stage, but requirements will include:

- Co-ordination of requirements and development/maintenance team activities
- Website specification (business specifications, functional specifications, technical specifications)
- Website design and development
- Website maintenance

#### 4.4 PROJECT SCOPING

A project scoping for the pilot implementation report should be prepared within two months of signing the contract. The objectives of the scoping task are to consult with key stakeholders in the study areas, review the study plan if required, and compile an Inception Report to form the basis of the contract for the study and to define the study plan in sufficient detail to allow effective management of the study. Activities undertaken during this phase should strive to ensure that institutional interests, responsibilities, and integration of deliverables from various tasks are optimally integrated.

The selection of rivers for pilot implementation need to be finalised during project scoping.

#### 4.5 DEVELOPMENT OF INFORMATION MATERIAL FOR KEY STAKEHOLDERS

Develop specific information material for the different key stakeholders to address the objectives of this project and specific for the pilot implementation areas. Information should be "packaged" specifically for each key stakeholder group, i.e. children will require a different approach than a scientific group or a group of retired rural people.

#### 4.6 REPORTING REQUIREMENTS/DELIVERABLES

The following reports will be required :

- A Scoping Report within two months of the commencement of the study.
- Brief *bi-monthly* Progress Reports which cover achievements, findings, challenges and proposed actions.
- Minutes of the Project Management and Study Team meetings (PMSTM) and the Project Steering Committee meetings (PSCM). Assuming the same structures as with Phase 1 and 2 are used.
- Technical reports and material.
- Stakeholder database.
- Implementation strategy for awareness creation.
- Assessment of the pilot implementation and update of the implementation strategy.
- A Final Report, including recommendations for full implementation of the Adopt-a-River Programme.
- A Record of Decisions report highlighting decisions taken during the implementation of the project.

### 4.7 MEETINGS AND WORKSHOPS

Project Management and Study Team meetings (every two months) and the Project Steering Committee meetings (probably about every four to six months and linked to specific deliverables) should be planned for. Stakeholder workshops will also be required at least for each of the river reaches selected for pilot implementation.

A project team workshop is recommended at the beginning of the project.

#### 4.8 STUDY DURATION AND PROGRAMMING

The project duration is estimated at 24 months all inclusive as from the date of contract signature. The proposal should include a detailed work programme indicating key milestones and project tasks.

### 5. **REFERENCES**

Department of Water Affairs and Forestry (DWAF). 2007. *Draft Strategic Framework for the development of the Adopt-a-River Programme (Caring for our scarce water resources)*. Prepared by Directorate: Resource Quality Services, April 2007.

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