



RIVER HEALTH PROGRAMME *Electronic-Communication*



DWAF



WRC



DEAT

RHP NATIONAL

Update - National Coverage Phase: Inception Phase

The Inception Phase is well underway. The first step towards aligning the RHP with DWAF's Strategic Framework for National Resource Water Quality Monitoring Programmes, is to revisit the information needs and requirements of stakeholders at a national level and to revise where necessary. This is further to ensure that any management approaches and practices that have changed due to the requirements of the National Water Act (Act No 36 of 1998) and Environmental Management Act (Act No 107 Of 1998) are addressed and accommodated. The Project Management Team has scheduled a national custodians' workshop for 30 September in Pretoria for this purpose. The information needs to be identified at this workshop will be our point of departure in re-designing the National RHP Monitoring Network. In other words to determine what to monitor, where, and how often. During mid October a group of specialists will get together to address this component.

Apart from frequent Inception Phase updates in the E-communication, a formal "feedback on progress" meeting is provisionally planned for 1 December in Pretoria. We will during this meeting provide feedback to, and get input from, the provincial champions, Regional Offices and other RHP Stakeholders in regards to the project's progress.

RHP Website

Provincial Champs, please remember to send us photos of events / field trips and reports that you would like to be viewed on the [website](#). Your contributions can be sent to Thabo Sekonyela (TSekonyela@csir.co.za).

General

State of Rivers Reporting: DWAF's Communication Policy

DWAF's Chief Directorate: Communication Services has the overall responsibility and authority of ensuring that all communication activities of the Department and those relating to the Department are done in accordance with certain policies and procedures. This includes overseeing the corporate image of DWAF reports and subsequently all State-of-Rivers (SoR) reports. Each DWAF Regional Office has a Communications Officer (see contact details below) who is willing to provide the necessary guidance and assistance to SoR teams in terms of DWAF's protocol with regards to publishing and distributing these reports as well as seeking donor funding. It is therefore important to involve the Communications Officer in your respective provinces in all SoR initiatives from early on in the process. Also note that since DWAF is the lead agent for the River Health Programme, all related publications and SoR reports have to be signed off by DWAF's Manager: Water Resource Information Management, before these reports may be published and distributed.

Department of Water Affairs & Forestry: Communication Officers

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RHP PROVINCIAL

Provincial updates received from our Provincial Champions:

Eastern Cape

Pumza Gasas-Lubelwana, Provincial Champion for the Eastern Cape reports that the Eastern Cape team is making good progress with their State-of-Rivers Report on the Buffalo River which they plan to launch towards the end of the year. The team is also planning their next State-of-Rivers report which will be on the Umtata River.

Free State and Northern Cape

The Free State Provincial Implementation Team include representatives from DWAF, DTEEA, the Centre for Environmental Management at the UFS and Water boards, such as Bloem Water, Rand Water and Sedibeng Water.

Provincial DWAF and DTEEA strongly support the RHP initiative, while at the operational level each participating organisation has led activities in its designated rivers and supported active collaboration. The seamless leadership shared by DTEEA and the DWAF Regional Office makes for a formidable provincial coordinating team. At all levels, leaders promote collaboration, open-mindedness, constructive discussion, joint leadership and respect for others' perspectives.

All the rivers in the Free State were listed and prioritized for biomonitoring. Each participating organisation took responsibility for one or more rivers. This meant that a biomonitoring exercise for the entire catchment's rivers would require careful allocation of responsibility followed by committed and sustained action. Each participating institution acknowledged their common interest and the need to work together, making effective use of existing capacity in support of a united provincial initiative.

There is currently extensive biomonitoring programmes in 17 of the major rivers within our catchments, and 2 more rivers are prioritized to start monitoring programmes within this year. Most of the sites are visited every 2 months, in order to establish continuous records of the health of our rivers.

The Northern Cape Province is also represented on the overall management committee. The

capacity to monitor all the rivers in the Northern Cape is being developed within that Province. Officials from DWAF and Environmental Affairs are being trained and supported both at meetings and in the field. The aim is to establish a similar programme based on similar philosophies in the Northern Cape. Initial monitoring field trips have taken place on several of the identified rivers in this Province.

The comprehensive River Health Programme in the Free State has provided data that highlight the problems in many rivers in this region. Whilst the monitoring will continue it is critical that the identified problems are addressed.

A critical issue that must be addressed is the functionality of river ecosystems. The biomonitoring results indicate that some of the rivers are in a poor condition. The non-perennial rivers in this region are sensitive to pollution especially during low or no flow periods where the remaining pools (refugia) can be "killed" by a relatively minor pollution source. Connectivity between refugia and the recharging of refugia are important aspects that must be considered (minimum flow requirements). The effect of farm dams on relatively small non-perennial rivers is thought to be great. A study in Namibia has indicated that farm dams can capture up to 70% of the runoff during dry periods and 14% during wet periods (Non-perennial Rivers Workshop, University of the Free State, 04 August 2004). In other words, a river must be managed as a continuum from its head waters to its confluence with, in this case the Orange or Vaal Rivers. These in turn should be managed as a continuum to where their waters meet the ocean. A combination of the assessment of Instream Flow Requirements and the determination of the Ecological Reserve should assist in this goal.

DWAF has tasked specialized multidisciplinary teams with the development of Catchment Management Strategies. This work is done in collaboration with the RDM Directorate within DWAF. The River Health Programme should support these initiatives.

In addition to this, the overall river management programme in each catchment may be linked to Wetland and Pan conservation and rehabilitation programmes in that catchment.



Gauteng

Upper Crocodile Catchment:

All field work in the upper catchment of the Crocodile River in Gauteng has been completed and the collected data is currently being analyzed and results interpreted in preparation for the joint publication of the Crocodile-west / Marico SoR report. This marks the end of the first cycle of biomonitoring in the Pienaars-, Apies-, Jukskei- and Crocodile Rivers and their major tributaries within the Gauteng Provincial boundaries. The next round of biomonitoring in this catchment will commence in September 2007 and the results will be published in a SoR report in February 2009.

Upper Vaal Catchment:

The second round of biomonitoring in the Upper Vaal catchment in Gauteng starts at the end of September 2004 and will continue until May 2006 in view of the publication of the second SoR for Southern Gauteng Rivers during February 2007.

Two additional biomonitoring sites will be selected in the Vaal River downstream of the Vaal Dam wall. These sites will generate general RHP biomonitoring results and will also contribute to the data collection of possible Yellow Fish spawning sites in the Vaal River, info requested by the Yellow Fish Working Group.

Upper Olifants Catchment:

All biomonitoring sites in the Wilge River, Bronkhorstspuit and Elands River in Gauteng surveyed during the RHP Pilot study will be revisited and surveyed along with the second round surveys of the Upper Vaal Catchment from September 2004. Results of these surveys will either be published as a SoR poster report for Gauteng Rivers or as a joint SoR for the Olifants River should the opportunity arise.

SASS5 Accreditation in Gauteng:

A total of three SASS5 field days for Accreditation of SASS5 practitioners were held between February 2003 and March 2004. A total of 18 SASS practitioners have attended the three sessions of which nine has passed on the first attempt and two on the second attempt. The rest did not pass the accreditation process.

The next SASS5 field day for Accreditation of SASS5 practitioners in Gauteng is planned for the 18th November 2004. For further details in this regard, contact Piet Muller at e-mail address: pietmu@gpg.gov.za.

KwaZulu Natal

Chris Dickens reports back that:

- There has been some discussion about the selection of the most suitable river for the next "State of Rivers" publication, following on from that done for the uMngeni. The Phongola and the Mhlatuze have been the two suggestions. Both of these have strong support from various RHP stakeholders in the province although the support for the Phongola is passionate in the extreme! This river is a national environmental treasure which was given all the attention it deserved three decades ago but since then has become increasingly abused. The issues surrounding the management of this river are painfully complex (the natural system was simple by comparison!) so a report on its current state would be challenging but extremely rewarding.

- The biggest and growing problem with the RHP in this province is the lack of a workable database. As time passes the quantity of uncaptured data is increasing which will make the eventual problem all the larger.

- Mark Graham has now conducted SASS5 field days for Accreditation of SASS5 practitioners in most provinces. The certificates have been approved and will be issued soon. Unfortunately the failure rate has been high, but the standards set cannot reasonably be compromised and have the support of Christa Thirion at RQS. Mark has produced a list of those factors that caused failures which will be circulated.

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Various projects continue to give support to RHP ideals although they are not RHP projects. These include:

- Ezemvelo KZN Wildlife have sponsored a most detailed survey of 50 ecoregions to cover the province of KZN. Surveys of fish, invertebrates and vegetation have all been done and the data captured on Rivers Database (with the exception of the vegetation which is in a different format). This project is in its final stages. The DWAF Regional Office is hoping to extend this monitoring but have not yet started the programme.

- eThekweni (Durban) Metro have sponsored a river biomonitoring programme to feed aquatic environmental data into their urban planning process. This is targeting areas with potential for development.

- Sappi Forests as well as SAICCOR continue to sponsor monitoring of rivers to measure the impacts of their operations.



- All existing SASS data for this province will soon be pulled together to aid in the presentation of the KZN State of Environment Report. This will also include an assessment of wetlands in the province.

- A team from Pietermaritzburg (headed by Chris Dickens) recently completed drafting the "Guidelines for Integrating the Protection, Conservation and Management of Wetlands into Catchment Management Strategies". The report, which was funded by the WWF, has been released by the WRC and can be ordered from them free of charge at orders@wrc.org.za. Hopefully this report will help to streamline the management of wetland resources.

Limpopo

The Limpopo biomonitoring team, in collaboration with specialists from the University of the North, have made good progress in re-surveying the Olifants River Catchment falling within the province. The Olifants Catchment was last surveyed between 1997 and 1998 and results were published in the inaugural State of River Report. Thus far, the 2004 survey has addressed the Lowveld portion of the catchment, including the main stem of the Olifants River, the lower Blyde River and the Selati and Makhutswi Rivers. The team have now commenced with the Middleveld portion of the catchment between Flag Boshielo Dam and the escarpment. The field survey will culminate with a "field open day" on 20th August, which has been advertised through the stakeholder data base of the Olifants River Forum.

The team will shortly revisit the Crocodile West River to reassess fish populations in the main stem of the river. Surveys conducted in May 2004 were hampered by high flows in the river. All other data generated from the May Survey has been analyzed. Reports are pending.

North West

The North West team is currently hard at work planning their biomonitoring in the province. Training personnel in river health monitoring is receiving high priority and the Crocodile (west) / Marico study is providing an ideal opportunity to train new personnel and to introduce new comers to the River Health Programme. The Crocodile (west) / Marico SoR report is progressing well and all the biomonitoring teams have completed their field work.

Western Cape

Since the last report back the Western Cape team has been hard at work sampling the Olifants/Doring, Gouritz, Overberg Rivers, rivers of the southern Cape and rivers in and around Cape Town. As we can now split up into about four teams we are managing to cover a large number of rivers in the province. As word about the RHP is spreading, there is a huge amount of pressure building to cover all of these systems in State of Rivers reports. In that line, the Berg State of River report is complete and, with some final touches, should be printed shortly. Write-up of the Olifants/Doring report should begin in September or October.

Two SASS5 courses were held this month, followed by the accreditation process. One course was held near Cape Town and another in Wilderness, near George. A total of 24 people (mainly field-rangers with WCNCB but also academics and people from local authorities, conservancies and SANParks) were trained. These trainees did surprisingly well in the accreditation process, which we found an excellent wrap-up to the SASS course to test and reinforce key concepts of SASS. It was also a wake-up call for us folk that had been SASSing for some time to revisit the protocol! A big thank you to Mark Graham, Brian Allanson and Helen Dallas who assisted us with the training.

We have a number of great new initiatives that are still to be formalised so watch this space!



For more information on the provincial initiatives:

For more information on the different provincial initiatives, contact either the provincial champions (details below) or visit the RHP's website at (<http://www.csir.co.za/rhp/>):

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OTHER

National Standards Convention: 14 October 2004

Standards South Africa (formerly SABS Standards) is hosting a National Standards Convention on 14 October 2004. Mark Graham from the KwaZulu Natal implementation team will be presenting a paper "The SA National River Health Programme - Standardization & Quality assurance of methodologies and their relevance to international trade". For more details about the convention, visit the Standards SA website: <http://www.stansa.co.za/pr11.aspx>.

Book release

Environmental Monitoring, edited by G. Bruce Wiersma is now available and on the shelves (ISBN No.: 1-56670-641-6). One of the chapters by Dirk Roux is about the SA River Health Programme: "From Monitoring Design to Operational Program: Facilitating the Transition under Resource-Limited Conditions" and is attached for your information.

Permits to sample fish

According to Gauteng's Nature Conservation Ordinance of 1983, a permit is required for catching fish in any other manner than by means of a line or hook (e.g. electro-shocking, netting). Since the legal requirements for catching and sampling fish vary from province to province, biomonitoring teams have to familiarise themselves with the requirements in their respective provinces. In Gauteng these permits must be applied for at the Gauteng Department of Agriculture, Conservation and Environment (DACE), at least two to three weeks prior to sampling. The application must be accompanied by an explanation of the type of sampling envisaged and the reason for sampling. For more information about the process to follow in Gauteng, contact Mr Leon Litter (DACE), Tel: 012 - 355 1459.