

**NATIONAL AQUATIC ECOSYSTEM HEALTH MONITORING PROGRAMME (NAEHMP)****RHP e-COMMUNICATION****2012 SPECIAL VOLUME**

**From the RHP Desk
Editor: Pumza Dubula**

The RHP team would like to extend a word of sincere gratitude to the RHP community for their continued support and commitment to the programme. The programme would not be where it is if it was not for each and everyone's support. Challenges are there but lessons are continuously learnt along the way. We welcome your inputs and recommendations going forward so as to achieve the goals of the programme.

The Resource Quality Services RHP team lost a great soldier, Mr Ramogale Sekwele, who has been instrumental in the national management and coordination of the programme since joining RQS in 2007. Mr Sekwele has been promoted to a Scientific Manager position within the Directorate: Water Resources Information Programmes within DWA. Congratulations and a special word of thanks to you, Ramogale, for all the strides you made. We know that you are not lost within the RHP fraternity and your contribution will always be appreciated. We would like to thank Mr Gerhard Cilliers and Mr Elijah Mogakabe who held the fort and made sure that the national management and coordination continues following Mr Sekwele's departure. Ms Pumza Dubula took over the national management and coordination of the programme in February 2012 and will continue until the position is filled.

The long awaited Ecstatus training was conducted from the 3rd to 6th of May 2011 at the University of the Free State in Bloemfontein. The training was presented by the Department of Water Affairs and private consultants in collaboration with the Centre for Environmental Management. More than twenty participants attended this training.

The River Health Champions Symposium was held successfully on 26-27 October 2011 with attendees from DWA Head office, regional offices, WRC, SANPARKS, the Endangered Wildlife Trust, GDARD and NWDEDECT. It was indicated that the specific indices and approach used within the RHP and quality control of the methods used are captured in the implementation manual. The accepted approach when implementing this programme is the Ecstatus approach. In addition, it is planned to re-prioritise the RHP sites, as primary, secondary and tertiary sites. All EWR sites will be considered as a priority and fish, invertebrates, vegetation and habitat integrity will have to be determined at all these sites, before attention is given to other sites. This will assist to set a baseline to move from. RQS will provide a list of all EWR sites to every regional champion.

While version 3 of the Rivers Database project was completed and went live in 2007, Helen Dallas continued administering the system until the end of 2010, when some RQS staff members received training in the administration of the database. Two problems with the current version of the



database are that users need to export the data to a GIS in order to represent the data spatially, and the software is not compatible with the Windows 7 64-bit operating system. Users working behind proxy servers also experience data transfer errors. RQS tried unsuccessfully to obtain funding for maintenance and improvements to the software in 2011, and will try again during 2012.

In terms of regional reporting it was agreed that the reporting templates should be standardised. Furthermore it was indicated that the first priority in regional coordination is the re-arrangement of regional structure, where all the regions will have the same structure with associated responsibilities. Placement of graduate trainees from the Learning Academy will, for the time being, assist with the challenges of capacity.

The Eastern Cape River Health Programme team can be used in capacity building for the other regions on a rotational basis, until all the regions grasp the concept on how to implement the programme. When the Regional Structures are suitable for the implementation of the programme it will be easier for the regions to budget to the programme.

The provincial feedback to the symposium will be reported under the provincial activities section.



Provincial Feedback, 2011



Dr Nadene Slabbert, Director of Resource Quality Services, addresses the RHP symposium in October 2011.

Western Cape: Feedback by Ms T Bushula

The RHP team has five officials and two graduate trainees. The team members are also responsible for other functions like Resource Directed Measures, Adopt-a-River, and other functions including section 21 authorisations, wetland assessments, estuaries and support to CME. Although five officials resigned, only two were replaced. The current team members need training in fish, vegetation and geomorphology assessments. The Rivers Database issues have been resolved. The team is looking at involving more stakeholders on its provincial task team and possibly signing memoranda of understanding with these stakeholders. The graduate trainees are being trained on biomonitoring methods.

Free State: Feedback by Ms G Venter

The Free State team has managed to get approval to appoint the PSP for the implementation of RHP in the province. Blue Science is the PSP that was appointed in September 2011 to implement the programme. The budget on main account has been secured.

North West: Feedback by Ms H Roux

The knowledge on tributaries has been expanded including reference conditions establishment. The evaluation of site classification techniques including RHAM at selected sites has been done. Sites have been selected on the tributaries of Marico River to determine habitat and flow requirements. The major challenge is that only one individual is responsible for programme within this province. Lack of strong enforcement to prevent further degradation of river systems is another challenging factor.

**Kruger National Park: Feedback by Dr T Gyedu-Ababio**

The TPCs for fish and invertebrates in Crocodile and Sabie Rivers have been set. The report for invertebrates has been produced. Five river reaches have been selected for the Crocodile River and six for the Sabie. The areas where TPCs have been exceeded have been flagged and will be worked on in 2012. New probes have been added to their hydrological monitoring stations and the plan is to link these with flow records. SPATSIM is working very well in Letaba. They will elect a new champion.

Mpumalanga: Feedback by M Dikgale

The following organisations are involved in RHP implementation in Mpumalanga province:

- DWA monitoring Olifants and Inkomati catchments;
- Mpumalanga Tourism and Parks Agency monitoring Lower Olifants and Inkomati catchment which include Lydenburg and the surrounding area; and
- SANPARKS monitoring the Kruger National Park.

Some sites have been replaced with new ones due to their inaccessibility and presence of wild animals. For the sites that were monitored only SASS was done by unaccredited officials. Capacity is still lacking on fish and riparian vegetation assessments. The remedial actions which have been taken to deal with capacity issues were SASS training and continued support from RQS, as well as attendance of Ecotatus training. The team also received assistance with ground truthing and monitoring of provincial sites received from the Eastern Cape team.

Limpopo: Feedback by T Takalani

The Limpopo team has been more involved with the Adopt-a-River activities such as flagship projects and other projects initiated by communities. Monitoring has been done on the Luvuvhu River and its tributaries. The challenges highlighted are lack of funding for RHP, structural arrangements, shortage of personnel and no accredited personnel within the DWA regional office. DWA is still dependent on partners such as LEDET when it comes to RHP implementation.

Northern Cape: Feedback by P Ramollo

The team Northern Cape team had difficulty with regards to programme implementation due to shortage of personnel and unavailability of funds.

Gauteng: Feedback S Buthelezi

No progress has been made in Gauteng since the retirement of the previous Provincial Champion. Going forward, GDARD will work together with DWA Gauteng regional office in order to revive programme implementation within the province.



NAEHMP DEVELOPMENTS

The National Estuaries Monitoring Programme. Mr Gerhard Cilliers

DWA has embarked on the pilot testing of a National Estuaries Monitoring Programme (NESMP), the design process of which was initiated in 2008. This programme is an Outcome 10 project of the Presidency against which the DWA will be evaluated. Eighteen estuaries have been identified for the pilot testing phase over the next four years. These estuaries are: Mfolozi, Mlalazi, Zinkwazi, Nonoti, Mhlanga, Mgeni, Mpenjati, Mtamvuna, Sundays, Swartkops, Knysna, Swartvlei, Breede, Klein, Bot, Berg, Verlorenvlei and Olifants.

**The Mlalazi estuary at Mtunzini, Kwazulu / Natal.**

The monitoring programme has a three tier approach, where tier 1 is data collection of basic water quality constituents important for estuarine functioning. Tier 2 will encompass the collection of abiotic and biotic data making use of the reserve determination protocol for estuaries. Tier 3 will entail a tailored monitoring programme that may be required as a result of specific issues (nutrient enrichment, fish kills, pollution incidents etc.) within a specific estuary. A staggered approach will be followed in which the initial 18 estuaries will be sampled intensively during the first year, after which sampling will commence on the next set of estuaries. It is anticipated that sampling on the initial set of estuaries will still continue, although this may be at a lower frequency. Through this approach a larger picture of the condition of South African estuaries will be created, within the constraints of the available budget.

The programme is based on collaboration with various stakeholders including the estuary management forums (currently being established as required in Integrated Coastal Management Act (Act No. 24 of 2008)), government departments, conservation bodies, research institutes, NGOs and the public.

(Photo from Sue/Pierre)



The Estuary Management Forums will play a crucial role in the implementation of the NESMP.

Budget has been allocated for the purchase of capital equipment (water quality probes and boats) as well as water quality analysis. Sampling has commenced on the Breede, Klein and Berg estuaries with sampling on the other earmarked estuaries to commence by August 2012.



The Breede River Estuary on which sampling has commenced.

The success of the programme will be evaluated after the pilot testing phase, modified if needed, then implemented on the next set of estuaries.

Wetland Monitoring Programme. Ms F Mbedzi

During 2011 RHP Symposium it was suggested that there is a need to have a national monitoring network that will report on the health status and trends of wetlands in the country. The agreement was between Department of Water Affairs and South African National Biodiversity Institute/ Working for Wetlands, Department of Environmental Affairs and Department of Agriculture, Forestry and Fisheries. Then it was suggested to have a workshop, which was held on the 29th of March 2012, at the WRC. The objective of the workshop was to solicit ideas from national wetlands stakeholders on what a wetlands monitoring programme should be. It was agreed that the DWA definition will be used, so there was no need to come up with new wetland definition. It was suggested that the programme consist of three phases. It was also suggested that the developed tool must cover all types of wetlands. The frequency and selection of site will be looked at when we know what to monitor. The draft of the terms of reference for the National Wetland Monitoring Programme has been developed.

**SASS ACCREDITATION 2011**

Forty-seven SASS5 practitioners were accredited during the 14 SASS5 Accreditation sessions held in 2011. Another audit planned for December in the Western Cape did not take place due to a delay in getting approval to pay the provincial SASS auditors. The total number of accredited SASS practitioners in South Africa on 31 December 2011 is indicated in the table below

Province	Number of accredited practitioners
Eastern Cape	14
Free State	1
Gauteng	41
KwaZulu-Natal	9
Limpopo	3
Mpumalanga	10
Northern Cape	1
North West	1
Western Cape	15
SADC	1 Namibian

A number of problems were experienced in the SASS accreditation process, one of the main ones being that the approval for payment of the provincial auditors could not be obtained within the calendar year. The other problems were related to the poor performance of the candidates coming for audits resulting in only about 50% of the candidates passing on average. Other problems relate to candidates cancelling at the last minute or simply not coming to the audit even though they booked in advance. A number of candidates that came for accreditation were clearly not ready.



A questionnaire was designed in order to address the low pass rate and the issue of candidates coming for accreditation that are not ready to be audited. This questionnaire can then be sent to potential candidates before they book a place at an audit. The questionnaire can assist both the candidate and the auditor in determining if the candidate is ready to be audited, or if he or she needs more practice. This system has been implemented in Gauteng and it seems to be working quite well. The questionnaire has also been sent to the other provincial auditors for testing.



Figure 1: Candidates at the first KZN SASS audit in 2011 being briefed by the national auditor about the audit procedures.



Figure 2: Candidates during the first Eastern Cape SASS audit in 2011 having a discussion during a break.

**Rivers database and RHP Website: Dr M Silberbauer****The Rivers Database**

The River Database shows 183 samples recorded for the period May 2011 to May 2012. Five site visit owners were responsible for 93% of this effort. The Rivers database 'call centre' received around 70 queries during the past year. Many problems, such as forgotten passwords, were easily solved. Others, for example difficulties with proxy servers, were much harder to sort out and a few, especially the incompatibility of the Rivers Database transfer software with 64-bit Windows 7, will require an update of the software by the developers. In November 2011 the Resource Quality Information sub directorate (RQI) of RQS applied to DWA for funding to update the Rivers Database package, including three years' maintenance, but the purchasing board did not consider the application in time and it lapsed at the end of the financial year in March. RQI is now submitting a new funding application.

RHP web site

The RHP web page is the second most popular on the RQS web site, after the water quality guideline page, with 4102 page views in the past year, about 7% of the total number of visits to the RQS site.

