



**water affairs**  
Department:  
Water Affairs  
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**environmental affairs**  
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## National Freshwater Ecosystem Priority Areas (NFEPAs)

### Project Update

May 2011

The purpose of this communication is to update NFEPAs project stakeholders on a regular basis regarding progress of the project.

#### NFEPAs components

The NFEPAs project is a multi-partner project between CSIR, South African National Biodiversity Institute (SANBI), Water Research Commission (WRC), Department of Water Affairs (DWA), Department of Environmental Affairs (DEA), Worldwide Fund for Nature (WWF), South African Institute of Aquatic Biodiversity (SAIAB) and South African National Parks (SANParks). The NFEPAs project aims to:

1. Identify Freshwater Ecosystem Priority Areas (hereafter referred to as 'FEPAs') to meet national biodiversity goals for freshwater ecosystems; and
2. Develop a basis for enabling effective implementation of measures to protect FEPAs, including free-flowing rivers.

The first aim uses systematic biodiversity planning to identify priorities for conserving South Africa's freshwater biodiversity, within the context of equitable social and economic development. The second aim comprises a national and sub-national component. The national component aims to align DWA and DEA policy mechanisms and tools for managing

and conserving freshwater ecosystems. The sub-national component aims to use three case study areas to demonstrate how NFEPA products should be implemented to influence land and water resource decision making processes at a sub-national level.

The project further aims to maximize synergies and alignment with other national level initiatives such as the National Biodiversity Assessment (NBA)<sup>1</sup> and the Cross-Sector Policy Objectives for Inland Water Conservation (discussion paper published by Water Research Commission, Report TT 276/06).

The following feedback focuses on the progress that has been made from mid 2010 to date. The input data, regional review process and the development of the NFEPA products were described in previous newsletters that are available on request.

#### ***NFEPA National stakeholder review workshop: July 2010***

The national stakeholder review workshop was held on 27 and 28 July 2010 at SANBI in Pretoria. Close to 60 stakeholders, representing various institutions from across the country joined the NFEPA team to refine the draft maps of the freshwater ecosystem priority areas within the different regions. The workshop was divided into two sessions of which the first session covered the Eastern Cape, Western Cape and Arid Regions while the Highveld, Lowveld and KwaZulu Natal Regions were covered in the second session. It was established that the collective person years of experience of the workshop participants was almost 1 000 years!

#### ***NFEPA products***

The draft final NFEPA **shapefiles** (rivers, wetlands and fish), **metadata** which briefly describe the data derivation and what the layers mean, as well as **jpeg maps** of the GIS layers, are available for uploading from the following url:

<ftp://ftp.csir.co.za/NRE/Ecosystems/NFEPA/>

For instructions on how to download the files, please contact Liesl Hill at:

[Lhill@csir.co.za](mailto:Lhill@csir.co.za)

While the spatial priority areas identified will not change in these shapefiles, the terminology and attribute information is still to be updated. For example, additional attribute data may be

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<sup>1</sup> Previously the National Spatial Biodiversity Assessment (NSBA)

added to the NFEPA rivers GIS layer to provide a FEPA status for each river reach (currently this only appears in the sub-quaternary catchment GIS layer). Users are therefore encouraged to stay abreast of project updates and use the most recent GIS data.

The final shapefiles and hard copy map products will be available towards August 2011 through SANBI's Biodiversity GIS (BGIS) website (<http://bgis.sanbi.org>), which serves spatial biodiversity information freely to the public. A launch of the NFEPA product suite is planned for August or September 2011.

### ***Engagement with case study areas***

Between August and November 2010, several follow-up meetings were held with catchment managers, relevant provincial agencies and SANParks in all case study areas: Crocodile (West) and Marico Water Management Area, Inkomati Water Management Area and the Breede Water Management Area.

Discussions were focussed around the various mechanisms that could support the implementation of FEPAs, roles and responsibilities that have to be clarified, the importance of partnerships, and the realities that implementation agencies face in terms of available capacity. These discussions, along with other meeting discussions, have been used to inform the construction of an Implementation Manual for Freshwater Ecosystem Priority Areas.

### ***Finalisation of NFEPA products***

The NFEPA project deliverables are packaged into the following products which are in the process of being finalised, and will be made available on the SANBI BGIS website (<http://bgis.sanbi.org>) or on the NFEPA DVD that accompanies the Atlas:

#### ***1) Atlas of Freshwater Ecosystem Priority Areas***

The Atlas packages the FEPA maps per Water management Area, national NFEPA products, and maps of input data. It also provides a DVD of all NFEPA products and shapefiles. The Atlas will be officially launched in August or September this year.

#### ***2) NFEPA Implementation Manual***

The Implementation Manual explains how to use NFEPA map products within existing policy and legislation, and provides freshwater ecosystem management guidelines for each

category on the NFEPA maps. This report will be available for distribution towards July this year.

### **3) NFEPA Technical Report**

This report describes the stakeholder engagement process, the technical approach used to develop NFEPA products, the legal and policy analysis, and guiding concepts for institutional uptake. The technical report will also be available towards July.

- An **open source map viewer** provides non-technical users with a user-friendly and easy-to-install interface that can be used to select different data layers for viewing, with the ability to zoom in and out of different regions.
- **GIS data** are provided for technical users in shapefile format together with associated metadata.
- **Look-up table** that lists the ecosystem types, species, biophysical processes and special features recorded within each river FEPA and Fish Support Area, according to unique sub-quaternary catchment codes shown on the FEPA maps in Part 2 of this atlas.
- **Pdfs of FEPA maps** that can be printed by users.
- **Slide presentations** of NFEPA are given in abridged and unabridged versions, with the former targeting a policy and implementation audience, and the latter a more scientific audience.

## Core Project Team

Name	Affiliation	Role
Mandy Driver	SANBI	Project co-leader
Jeanne Nel	CSIR	Project co-leader and technical team leader
Dirk Roux	SANParks	Team leader: governance component
Liesl Hill	CSIR	Project coordinator

### Questions and feedback

Questions and feedback are welcome and should be directed to the project co-ordinator, Liesl Hill ([Lhill@csir.co.za](mailto:Lhill@csir.co.za)).