



BREEDDE-GOURITZ
CATCHMENT MANAGEMENT AGENCY



1ST QUARTER
APRIL-JUNE 2019

BGCMA NEWS

WHY IS MICROBIAL
MONITORING IMPORTANT?

02

BGCMA CELEBRATES 2019
WATER WEEK

05

WATER USE AUTHORISATION
REGISTRATION MANAGEMENT
SYSTEM (WARMS)

06

Minister Lindiwe Sisulu, New Head for Department of Human Settlements, Water and Sanitation



On 29 May 2019, President Cyril Ramaphosa announced his new cabinet and Hon Minister Lindiwe Sisulu has been appointed as a new Minister for Human Settlements, Water and Sanitation.

The president has reduced the size of the cabinet and government departments by reducing the number of ministers from 36 to 28. This reduction has seen the Department of Water and Sanitation being merged with the Department of Human Settlements,

hence the department is now called Department of Human Settlements, Water and Sanitation with two Deputy Ministers (Ms Pam Tshwete-Human Settlements and Mr David Mahlobo-Water and Sanitation).

Minister Sisulu is very experienced and has been heading different portfolios and knows government operations very well.

Her appointment is thus warmly welcomed by all including the Breede-Gouritz CMA.

Why is Microbial Monitoring important?

By Fabion Smith

There have been rapid and extensive demographic changes in South Africa in recent decades. With numerous dense settlements (both formal and informal), increasing urbanisation and other factors, South Africa's water resources are coming under increasing threat from faecal contamination. Many areas still lack appropriate sanitation facilities. Using contaminated water for drinking, recreation or irrigation poses serious health risks. In particular, contracting such waterborne diseases as gastroenteritis, salmonellosis, dysentery, cholera, typhoid fever and hepatitis, becomes increasingly likely.

Land uses that can result in significant faecal pollution include settlements that have no sanitation infrastructure or one that is inadequate. Intensive livestock farming without sound waste handling practices is also problematic. Settlements

that result in high runoff after rainfall events (and hence contamination of surface waters) are also considered. There is only a health risk when people are actually exposed to faecal contaminated water. Particularly sensitive water uses include drinking of untreated or partially treated surface waters. Full or partial external contact with water (such as from swimming or washing) also exposes people to significant health risk. The irrigation of crops that are ultimately eaten raw (like lettuce and tomatoes) is likewise a serious problem.

Most waterborne diseases are caused by pathogens associated with faecal contamination of water. However, pathogens excreted into water from healthy skin or hair, wounds, urine, mucus, saliva, etc. can also be transmitted, particularly by recreational exposure. Some waterborne pathogens are excreted by healthy carriers (i.e. infected persons, in many cases children, who show no clinical symptoms of disease). The risk of infection is greatest when the contaminated water is used for drinking purposes. According to the Water Research Commission, the guidelines for faecal coliforms (which are used as indicator organisms) note that less than 10 counts per 100mm

may cause infections in some sensitive groups. Up to 100 counts per 100mm will commonly cause infections, even after a single consumption. It is clear that even very low concentrations can be significantly problematic.

Although the primary responsibility rests with DWS, the regional concerned parties that can benefit from a local monitoring programme must be identified and approached. These include, among others, the Department of Health, Catchment Management Agencies, Water User Associations as well as major industries. Ideally, their involvement should be a 'win-win' situation. By using the presence of faecal coliforms as an indicator of recent faecal pollution, Microbial Monitoring Programmes not only help prevent disease associated with faecal coliforms but will also help prevent outbreaks of cholera.



GIS official, Masibulele Makala taking samples for microbial analysis.



A vandalized manhole with threat of faecal contamination.

Aquaponics Farming

Sustainable model for food production



The Suurbraak Aquaponic Farming Project is an innovative and sustainable water farming system combining hydroponics and aquaculture.

Funded by the Breede-Gouritz Catchment Management Centre (BGCMC), the project was developed and is being managed by the Trust for Community Outreach and Education (TCOE) and Mawubuye Land Rights Forum.

Hydroponics involves growing crops with their roots only in water and not in soil. Aqua-culture is the growing and farming of fish.

When the two are combined into an aquaponics project, fish is used to fertilize the water and replenish nutrients for the crops.

In conventional farming systems the use of water is extensive. Water is needed to irrigate crops but it runs-off and dissipates into the soil, requiring new water for irrigation every time.

However, with aquaponics you have a recirculating water system. You have one water source that fills the system. This water is cleaned and re-used. The only input required is new water to occasionally top-up due to water loss resulting from plant growth.

Aquaponics is thus a sustainable water farming system.

The project has taken seven months to set up. The aim of the project is to develop a sustainable farming method that can provide income generation as well. Five community members will be skilled and trained to manage the farm as an income generating project where they can sell and supply fresh produce to local businesses and supermarkets.

During its pilot stages the project will concentrate on growing salad vegetables such as different lettuce, rocket and spinach along with tomatoes and cucumber.

Once it shows promise and success in being able to support the five community members, then more modules can be added to expand the project to grow and harvest more crops.

Talapia fish will be used in the project. These will also be farmed for commercial sale as well and is being seen as an important protein source that can be supplied to the local community.

The farm is located in the small town of Suurbraak in the Western Cape, and is situated on land adjacent to the municipal camping site.

For more information about the project and its produce please contact Reinette Heunes on 083 402 2150



SUURBRAAK AQUAPONICS



BGCMA holds stakeholder engagements to discuss proposed tariffs for the 2020/21 financial year



Members of Water Users Associations making their contributions to the presentation.

The Breede-Gouritz Catchment Management Agency hosted a Stakeholders' Consultative meetings on proposed Water Use and Water Infrastructure Charges for the 2020/21 financial year.

The aims of these meetings is to ensure that the BGCMA brings forth transparency to the water users, that they understand and are aware of the impending changes in tariffs and that they become comfortable in making their inputs to be tabled during the National

hearings that will be announced at a later stage.

The proposed raw water charges look at water resource infrastructure charges and irrigation charges hence all water user associations are encouraged to attend these meetings.

Stakeholders raised important issues for consideration prior to the finalisation, approval and implementation of the proposed water use charges.

It is crucial therefore that the tariffs be discussed because they also reflect on the

challenges the various stakeholders face and the significance of tariff regulation thereof.

The proposed tariff hikes for Water Resource Infrastructure for both industrial and domestic users range from 0% to 16.5%.

The meetings were held in different areas of the BGWMA to ensure that all stakeholders are included in the process and also take forward their inputs to the tariffs.

BGCMA celebrates 2019 Water Week

By Eben Saal

It was all fun and games for learners in the Breede Gouritz areas when ISR team members, supported by other members of the BGCMA staff, visited some local schools as part of Water Week 2019.

Water Liaison Officers, supported by other BGCMA members of staff shared some valuable water saving tips with learners, teachers and also supporting staff at local schools.

This was done through interactive activities where opportunity was also created for some of them to share some tips on what they are already doing

either at home, school or at work in order to save water. The aim was to share some good practices and create some awareness about the importance of saving water. During these visits it was also reiterated by BGCMA staff members that it is everyone's responsibility to save water.

Participants, eagerly shared some useful water saving tips amongst each other and promised to from now onward start doing their part in order to help to save water. Pamphlets with useful information on water saving tips in their mother tongue was also distributed.



Water Use Authorisation Registration Management System (WARMS)

What is Water Use Registration?

Registration comprises the asking and answering of 6 basic questions:

1. Who are you?
2. Where are you? (This relates to where the water user may be contacted i.e. contact details / postal address & physical address)
3. How much water are you using? /how much waste loads are you discharging?
4. What are you using it for? (This relates to water use sectors and in the case of waste 'where was the waste generated from)
5. Where are you using it? (This relates to where the water use is situated (i.e. taking place): Water management area, Quaternary drainage region, Latitude & Longitude, Property)
6. Where are you obtaining your water or where are you discharging it

Registration of water use is compulsory to all the authorization types' namely general authorizations, license, and existing lawful water use. It is not mandatory to register a schedule 1 water use.

For a complete water use registration, a Part 1 form (water user information)/ Part 2 form (water use information) and various supplementary form (property and property information etc.) are required.

Who must register their water use?

All water users who are using water for agriculture, aquaculture, irrigation, watering livestock, industrial, mining, power generation, recreation, urban and water supply service must register their water use. This covers the use of surface and ground water. Other water uses which must be registered include:

- ▶ Diversion of rivers and streams;
- ▶ Storage. Any person or body storing water for any purpose (including irrigation, domestic supply, industrial use, mining, aqua culture, fishing, water sport, aesthetic value, gardening, landscaping, golfing, etc) from surface runoff, groundwater or fountain flow in excess of 10 000 cubic meters;
- ▶ Stream flow reduction activities (Afforestation). All afforestation (tree planting) for commercial purposes, including communal forestry for commercial gain, that took place prior to 1972, must be registered.
- ▶ Local authorities and other bulk suppliers (water boards);
- ▶ Controlled Activities, such as irrigating with waste, power generation, atmospheric modification or recharging an aquifer;
- ▶ Discharges of waste or water containing waste in terms of section 21 of the National Water

Act. This includes the following activities:

- [Section 21\(e\)](#) – engaging in a controlled activity defined as such in Section 37(1), with specific reference to irrigation of any land with waste or water containing waste generated through any industrial activity or by a water work.
- [Section 21\(f\)](#) – discharging waste or water containing waste into a water resource through a pipe, canal or other conduit.
- [Section 21\(g\)](#) – disposing of waste in a manner which may detrimentally impact on a water resource.
- [Section 21\(h\)](#) – disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process.
- [Section 21\(j\)](#) – removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people.

N.B. Should you need more clarity on how to register, do not hesitate to visit us in the office. Our officers will gladly assist you.

Project launched to keep the Breede Valley clean

With litter being such an eye-sore the Department of Environmental Affairs (DEA) recently began a good green deeds initiative by identifying litter hot spots in the community.

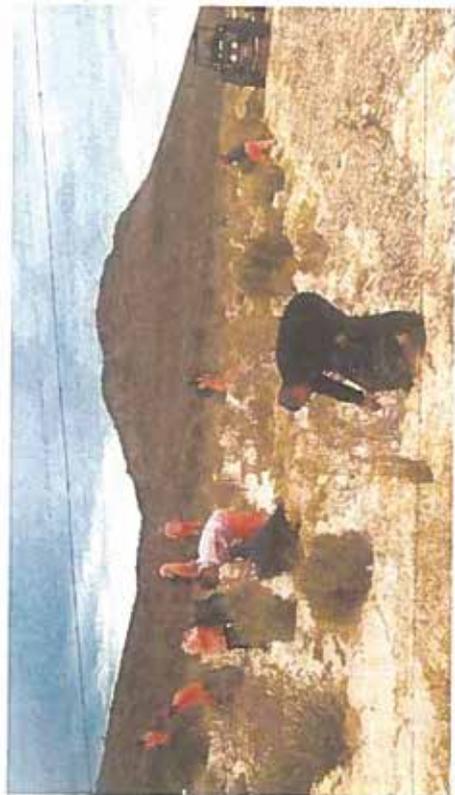
"This campaign of cleaning the community will go hand in hand with an awareness-making campaign at schools, tertiary institutions and even factories in the Breede Valley community," said a representative of Government Communication Information System (GCIS), Peter Titus.

Titus said ineffective waste management practices can affect the well-being of the Breede Valley and this can be worsened by increased illegal dumping and littering.

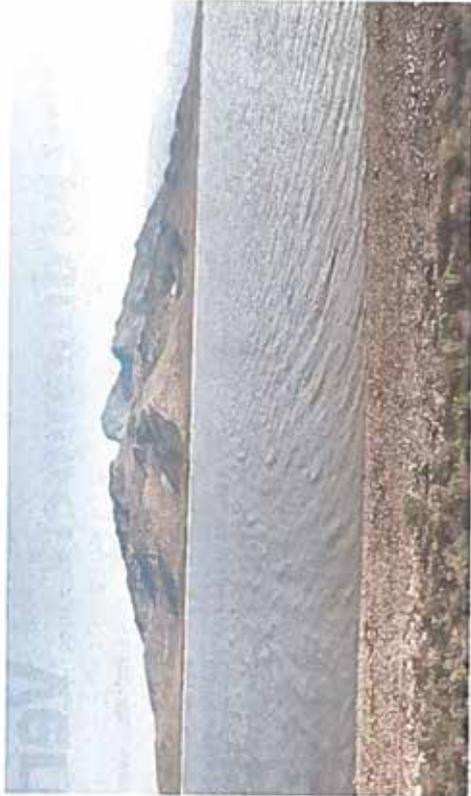
The DEA realised that more efforts are needed to protect the environment from pollution. They decided to implement the

Good Green Deeds Lend A Hand programme that aims to promote environmental action that allows for sustainable living practices. The departments that were recently involved in cleaning up around the Brandvlei dam to ensure that water sources are kept clean, were the DEA, GCIS, Breede-Gouritz Catchment Management Agency, Breede Valley Municipality, Department of Water and Sanitation and the Community Works Programme.

A representative from DEA, Shahieda Isaacs, said the cleaning of communities should always be a joint responsibility. "We will go to all sectors of society informing them that we should keep our Cape Wine lands rivers, streets and communities clean and that it is upon us to leave the legacy of a clean Worcester to our children."



Departmental staff cleaning up around Brandvlei dam.



Damme se watervlakte lyk aansienlik beter as verlede jaar. Foto: Brümilda Swartboo

Watervlakte lyk vanjaar beter

Brümilda Swartboo

Die meeste damme in die Breedevallei toon 'n merkbare styging in watervlakte ná die kouefront en reën wat vroeg vandeemaand oor die provinsie geval het.

Die Stettynskloof- en Fairy Glendiam is albei 100% vol. Die Touwsrivier-oppaardam se watervlak staan op 90%. Johan Botha, die woordvoerder van die Breedevallei-munisipaliteit, sê die drie damme se watervlakte was verlede jaar in die ooreenstemmende tydperk min of meer dieselfde.

"Die damme in die De Doorns-

Vlak 1-watereberkings – die volgende is toelaatbaar:

- Tuine mag op 'n Maandag, Woensdag en Saterdag natgemaak word, maar nê nie tussen 09:00 en 17:00 nie.
- Voertuie mag met emmerligte gewas word.
- Dak mag verkoel en geboue mag gewas word.
- Sypaadjies, paale en parkeerterreine mag gewas word.
- Swembaddens mag gevul word.
- Leiwater is twee keer per week beskikbaar.
- Nog inligting oor watereberkings is op die Breedevallei-munisipaliteit se webblad beskikbaar.

BGCMA wishes you all many more years to come....

05
APRIL
Natasha Jailers

13
APRIL
John Sibanyoni

16
APRIL
Carlo Abrahams

16
APRIL
Philisiwe Ntanzi

06
MAY
Elkerine Rossouw

01
JUNE
Coreen Rautenbach

B	A	G	H	T	X	W	A	T	Y	D	S	O	F	I
R	E	Q	F	G	R	O	H	L	S	E	V	T	E	T
T	Y	E	U	R	E	Z	D	C	H	O	L	E	R	A
S	E	A	Q	A	M	I	C	R	O	B	I	A	L	R
N	R	O	I	S	C	W	U	L	P	A	X	B	Q	I
W	J	L	O	D	A	U	W	I	Z	F	U	T	N	F
S	A	L	M	O	N	E	L	L	O	S	I	S	O	F
D	Q	R	O	C	Q	E	R	T	X	A	F	S	C	D
E	U	B	M	D	F	A	R	I	U	G	C		Y	S
F	I	W	G	S	C	T	C	W	S	R	E	S	T	I
I	F	G	S	L	P	A	T	H	O	G	E	N	A	H
S	E	F	A	K	A	B	I	M	O	N	U	H	E	T
H	R	G	R	O	U	N	D	W	A	T	E	R	E	B
R	E	W	I	P	O	A	V	U	L	E	I	F	F	Y
O	C	O	N	T	A	M	I	N	A	T	I	O	N	U
V	I	F	M	E	N	O	N	U	B	A	V	P	A	E

WORD SEARCH

- AQUACULTURE
- AQUIFER
- CHOLERA
- CONTAMINATION
- GROUNDWATER
- MICROBIAL
- PATHOGEN
- SALMONELLOSIS
- TARIFF
- WARMES
- WATERBORNE