

Smouldering Fires Affecting Wetlands

Underground fires have been smouldering for more than a month in sections of the Onrus River Peat Wetland area, which is situated on the Camphill School and Farm Community property.

A Section 30A emergency directive was approved by the Western Cape Department of Environmental Affairs and Development Planning on Thursday, 14 February 2019.

This emergency application enables the Camphill Farm Community to proceed with implementation of emergency works to isolate the subsurface fire in order to prevent its spread and ensure its termination to preserve the remaining peat wetland and eliminate the source of risk to human health and safety and property.

The Fire Department has confirmed the fire is extremely dangerous. Because of the intensity and depth of the fire, it is practically impossible to douse it with water or in a manner that is not harmful to the environment. This situation is beyond conventional fire service tactics.

In the event that no interventions are undertaken, the possibility exists that some may only become visible over time, even many months and it will remain a continuous fire hazard.

If urgent interventions are implemented, it will be possible to preserve the peat wetland. In an effort to assist the Landowner, the Overstrand Municipality's Environmental Section has consulted with wetland specialists at National and Provincial level, as well as Cape Nature, Working on Wetlands and SANBI to ascertain the best course of action to contain the fire.

The proposed emergency work will entail the following:

1. The excavation of a trench, approximately 200m in length, across the peat wetland and another downstream of the fire, if peat occurs downstream.
2. Determination of the depth and condition of the peat. This will enable identification of the type of equipment to be used for the excavations, and whether a back actor (digger loader) or labour is to be utilised.
3. Should this be required, the Overstrand Municipality will provide a digger loader to assist with implementation of the intervention, if the machine is not suitable, other means will have to be used.

The landowner, together with the DEA and SANBI will ensure the monitoring of the activity, thereby overseeing the emergency works to ensure that these activities are undertaken in an environmentally sound manner and the Environmental Section has agreed to monitor from the Municipality's side.

It is important to note that DEA will make funding available for the rehabilitation of the wetland after the appropriate measures have been taken to implement the emergency procedure.

DEADP has also requested that the site be photographed by using an aerial infrared camera using thermal imaging periodically over the next three months to determine if the sub-surface fire continues to spread or has been contained.

Wetland - benefits

The Onrus River is an important feeder of the Onrus Estuary, which in turn is an important estuary for recreational activities for the surrounding community. The remaining wetland is currently the only natural filtering system that still keeps the estuary in balance.

Unfortunately this estuary's balance is easily tipped because it is such a small catchment that is heavily infested by invasive alien plant species, the existence of the De Bos Dam upstream which is the drinking water for the town of Hermanus and the multitude of agricultural activities upstream from the De Bos Dam.

The sub-surface fire currently smouldering at the foot-end of the wetland could result in an ecological disaster if the site is not protected and mitigating factors implemented to stop the fire from spreading into the palmiet vegetation.

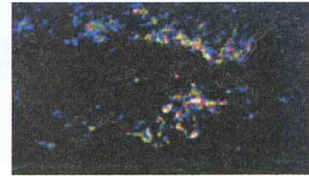
The red circle indicates the affected wetland section and in blue outline is the existing Onrus Wetland System.



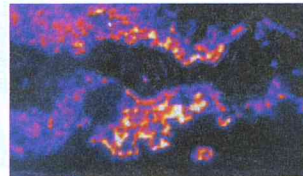
Solution for Smouldering Wetlands Fire



Onrus River
19 February 2019: 07h45



Onrus River
08 February 2019



Onrus River
19 February 2019

On Thursday, 14 February, Overstrand Municipality's Environmental Section, representatives of the Camphill School and Farm Community, CapeNature, Working on Wetlands and Enviro Wildlife, as well as other role players at National and Provincial level, met with renowned wetland expert, Dr Piet-Louis Grunding, to discuss how to put an end to the underground fire in the Onrus River Peat Wetlands area. This subsurface fire has been smouldering for more than a month in sections of the Onrus River Peat Wetlands area, which is situated on the Camphill School and Farm Community property.

Problem

The fire is creating a substantial amount of smoke that is significantly affecting air quality in the area and has a detrimental effect on the health of individuals within the community and the school, necessitating the temporary relocation of the learners to alternative accommodation. In addition, this wetland is characterised as the only remaining piece of Palmiet vegetation wetland, which plays a critical role in the functioning of the Onrus River and the Onrus Estuary and is of considerable ecological importance.

A solution

An emergency Section 30 application was approved by the Western Cape Department of Environmental Affairs and Development Planning to proceed with implementation of emergency work to isolate the subsurface fire in order to prevent its spread and ensure its termination to preserve the remaining peat wetland and eliminate the source of risk to human health, safety and property. After thorough inspection and several tests (peat core drilling), they found two existing channels that were built, most probably in the early 1950/60s (before the De Bos dam was built in 1976). These channels can be used in the same way that the proposed channel would have worked and is therefore not necessary to dig additional trenches.

In fact, the existing channels are the reason why the fire has not spread much further into the remaining palmiet wetland.

Going forward

- **Short term:** The smouldering fire hotspots are heavily infested by invasive alien plant species and these must be removed. Unfortunately, the area is still very hot underground, and it will make it difficult and dangerous. Role players will meet on 25 February, to finalise a plan of action. *Sadly nothing can be done about the smoke until the smouldering fire is stopped.*
- **Medium term:** After the alien plant species are removed, the property owner can apply for funds to rehabilitate the Onrus River peat wetland area.
- **Long term:** If National funds can be obtained for the rehabilitation of this river, this unique wetland will function optimally once more. This will not only improve the quality and quantity of the water of the Onrus River, but will have a significant improvement on the ecosystem service and therefore the overall health of the system. It will take years to complete the rehabilitation and restoration of this system and without the assistance of government organizations, landowners and other role players like Enviro Wildlife, we will not succeed in the long term.

Photo credit: Rob Erasmus, Enviro Wildlife



Pictured here are Neil Bright (MOTHS Fish Hoek), Captain Hayter (King's Royal Rifle Corps UK), Mayor Dudley Coetzee and his wife Shirley, Rev James Grey and programme director Frank Halferty at the commemoration service of the sinking of the HMS Birkenhead.



VIOLIN DIALOGUE is the title of the concert hosted by Overstrand Arts/Kunste (OAK) on Sunday afternoon, 28 April, with artists Zanta Hofmeyr with Miro Chakaryan and Olive Sandilands on the piano. The concert will commence at 15h30 in the Civic Auditorium.

Tickets are R150 (R60 for students) and available from the Tourism Office (028 312 2629) in Mitchell Street, Hermanus. Enquiries to René du Plooy on 082 940 4238.

