

## ***Training workshop: Site-specific, Risk based DSS for Assessing Irrigation Water Quality.***

**Date: 13 June 2023**

**Time: 0900 – 1430 hrs.**

**Venue: Tzaneen, Limpopo (Exact venue TBC).**

The Site-specific, risk-based Decision Support Tool (DSS) for assessing irrigation water quality is based on the South African Water Quality Guidelines published in 1996. The Water Research Commission (WRC) has developed new guidelines that are risk-based – a fundamental change in philosophy from earlier text-based guidelines. Secondly, they allow for much greater site-specificity – a widely recognised limitation of the generic 1996 guidelines. These guidelines are available primarily as a software-based Decision Support System.

The Site-specific, Risk-based DSS for Assessing Irrigation Water Quality does not only consider risk, but it also allows for water quality to be assessed at different levels of sophistication and caters for evaluation of both the fitness-for-use and the setting of water quality requirement. The DSS has been extensively used to assess suitability of mine affected waters for irrigation and forms an integral part of the Technical Guidelines for mine water irrigation.

The DSS for assessing irrigation water quality has been designed to cater for two diverging applications, namely:

- i. To assess the fitness-for-use of a water of known composition (water analysis) by determining its fitness-for-use category.
- ii. To determine the threshold water composition for a specific fitness-for-use category. This application is used by water resource managers and users when deliberating on the setting of water quality requirements for a given user of a water resource (river stretch or surface or groundwater body).

The workshop intends to provide practical training on the use and applicability of the DSS to accelerate adoption to officials from the Department of Agriculture Land Reform and Rural Development.

Facilitator: Dr Samkelisiwe Hlophe-Ginindza

Time	Content	Presenter
09:00 – 09:30	Registrations	Mpho Kapari
09:30 – 09: 40	Welcome and introductions	Samkelisiwe Hlophe-Ginindza
09:40 – 09:45	Opening remarks	Nomvuzo Mjadu
09:45 -11:00	Site-specific, risk based DSS for assessing irrigation water quality	John Annandale and Meiring Du Plessis <a href="mailto:john.annandale@up.ac.za">john.annandale@up.ac.za</a>
11:00 – 11:30	Tea Break	All
11:30 – 13:30	Discussions / practical session	All
13:30 – 13:40	Summary and closure	Luxon Nhamo
13:40- 14:30	Lunch and departure	All