



Sub-Surface Drainage Solutions – Are they economically feasible to install?

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Many members would be well acquainted with the challenges of waterlogging in the high rainfall zone (HRZ) and the overall impact it has on final grain yield production. Whilst there are solutions available to growers to manage waterlogging on-farm such as simple surface solutions (raised beds, evaporation basins, & interceptor drains)

right through to sub-surface options (slotted pipe, mole drains & pump-based solutions), very little research has been undertaken recently to determine whether a positive return on investment can be achieved from sub-surface installation solutions.

In early 2020, SCF was successful in a tender for a GRDC project to host a Sub-Surface Water Management (SSWM) demonstration site in the Albany Port Zone. This investment will aim to assist growers in making informed decisions around the installation of drainage to reduce the impacts of waterlogging on crop production areas and overall farm profitability.

Located at the Preston family farm in West Cranbrook, growers and members will have the opportunity to join us in the journey of implementing a sub-surface drainage solution (slotted pipe) and take advantage of a wide range of resources and field walks planned. Measurements will be collected over multiple years (2021 to 2023) to give growers a better understanding of the improvements in yield and time to return on investment, with key learnings presented in 2024.

Data, such as the cost of implementation, water movement, plant establishment, biomass and yield will be collected from within the 'drainage zone of influence' and compared to a region outside of this zone to simulate both drained and undrained scenarios, side by side.



Growers will have access to a live installation demonstration in early 2021 with installation contractor Drainage Downunder, followed by training seminars, workshops and materials covering dedicated topics such as:

- The regulatory requirements to drain land – Registering a “Notice of intent to drain” (NOID)
- Methods of monitoring waterlogging & measuring drainage success – tools for the assessment and monitoring of waterlogging on-farm (satellite imagery & yield mapping)
- Steps to implementing effective sub-surface drainage solutions such as:
 - Contractor selection
 - Sub-Surface drainage options – types of drainage available
 - Planning for success - drainage design considerations and solutions
 - Maintenance requirements
- Steps to calculate a return on investment from implementation.

A second demonstration site is also being set-up in the Esperance Port Zone by South Coast NRM, and key learnings/results will be shared between both project sites.

JOIN US ON THE JOURNEY!

Are you interested in learning more about sub-surface drainage? Not sure where to start, or what is involved? Come join SCF on the journey!

Throughout the next four years, SCF will be hosting a range of interactive workshops & demonstration days and producing a wide range of fact-sheets and videos that help guide our farming members throughout the whole sub-surface drainage process from start to finish.

To register your interest in attending these events or to receive the information materials, please contact Philip Honey on 0428 768 589