16. BedrijfsWaterWijzer (BWW)

FAIRWAY partner: Koos Verloop (Wageningen University and Research, NL)

Brief description	
Guide for Farm Water management. Farm specific indication of risks related to dairy farm management. The tool addresses: pollution from farm yard (storages), drought, water excess, leaching to groundwater, run off to surface water, quality of drinking water for cattle and ecological quality of surface water. The tool facilitates cooperation between dairy farmers and water boards that are responsible for realization of KRW targets in their region.	
Contaminants covered (e.g. nitrate, pesticides etc.)	N, P, Biological degradable material
Intended end users (e.g. farmer, water quality manager, policy maker)	Farmers and advisers
Level of expertise and/or training required	**Expertise on dairy farming with special focus on soil, crop and water management**
Geographical resolution (e.g. field, catchment, national)	Farm>Parcel
Temporal resolution (e.g. daily, annual, long-term).	Annual, combined with actual situation (moment of supplying input)
Real-time component (e.g. live weather data, soil moisture data feeds etc.)	None
Number and type of mitigation measures included	No explicit measures included. Only diagnostic.
Platform (e.g. paper-based tool, phone app, bespoke software).	Bespoke software/Internet tool (in Dutch)
Frequency of updates	Updated continuously until official release in 2018
Cost/availability	Free access of online tool
Number of users or number of copies distributed/ downloaded/purchased	At present some 50 dairy farmers involved in testing
Links to demo material and other relevant information (e.g. user guides).	Not published yet
Additional comments	Input of data is time consuming, working on automatized data supply from other spatial data systems. Development for common use is strongly supported by the dairy sector.

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Input data required to run the DST	Facilities to store silage, manure and/or by-products on the farm, for all parcels on the farm: hydrological conditions, soil type, soil characteristics, depth of root zone, organic matter content, P status, irrigation management, timing/rates of fertilization, crop plan, quality of surface water, quality of drinking water for cattle, crop yields, grazing intensity of cattle.
Outputs (including links to water quality and economic or financial aspects)	Risks concerning run off polluted water from the farm yard, drought stress in crops, leaching of nutrients to ground water, leaching and run off to surface water, quality of drinking water for cows and ecology of water systems
Age/provenance of supporting data used to develop the DST	Integration of recent and older information and data
Country-specific calibration or data requirements (including restrictions on use)	Spatial data on farm area
Details of validation and testing	None
Date developed/released (or planned release date)	Current version limited access. General access in mid 2021. Currently under (re)construnction
Author/developer names and affiliations	Verloop, Noij, Hoving, De Haan (WUR, Animal Science Group & Wageningen Plant Research)
Member state(s) where developed	**NL**
Member State(s) where currently used	**NL**
Key publication references	https://edepot.wur.nl/455615 https://edepot.wur.nl/514399

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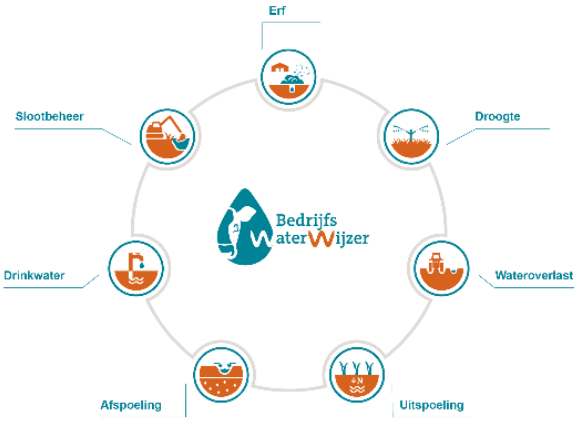
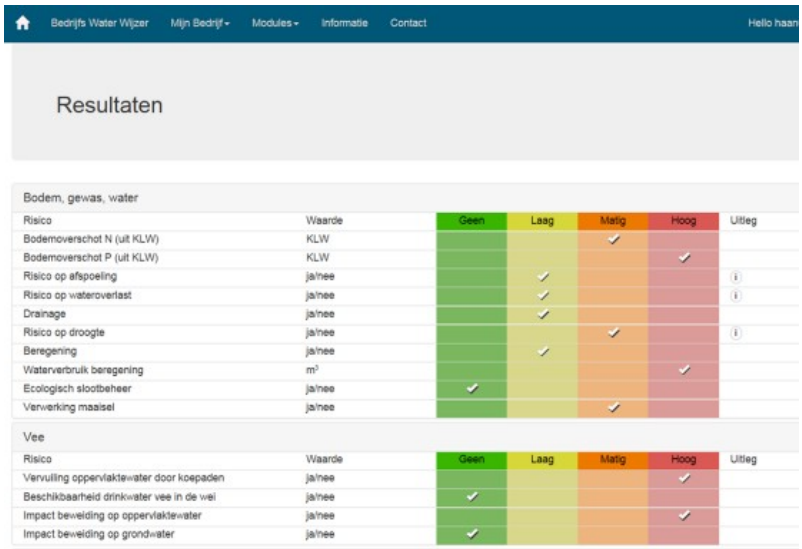
Any other useful information (e.g. screenshots of DST input/outputs)





Bodem, gewas, water

Risico	Waarde	Geen	Laag	Matig	Hoog	Uitleg
Bodemoverschot N (uit KLW)	KLW			✓		
Bodemoverschot P (uit KLW)	KLW				✓	
Risico op afspoeling	ja/nee		✓			i
Risico op wateroverlast	ja/nee		✓			i
Drainage	ja/nee		✓			
Risico op droogte	ja/nee			✓		i
Beregening	ja/nee		✓			
Waterverbruik beregening	m³				✓	
Ecologisch slootbeheer	ja/nee	✓				
Verwerking maaisel	ja/nee			✓		

Vee

Risico	Waarde	Geen	Laag	Matig	Hoog	Uitleg
Vervuiling oppervlaktewater door koepaden	ja/nee				✓	
Beschikbaarheid drinkwater vee in de wei	ja/nee	✓				
Impact beweiding op oppervlaktewater	ja/nee				✓	
Impact beweiding op grondwater	ja/nee	✓				