

HYDRAULIC EQUIPMENT HAND BOOK

Dig with Fun!





DISCLAIMER

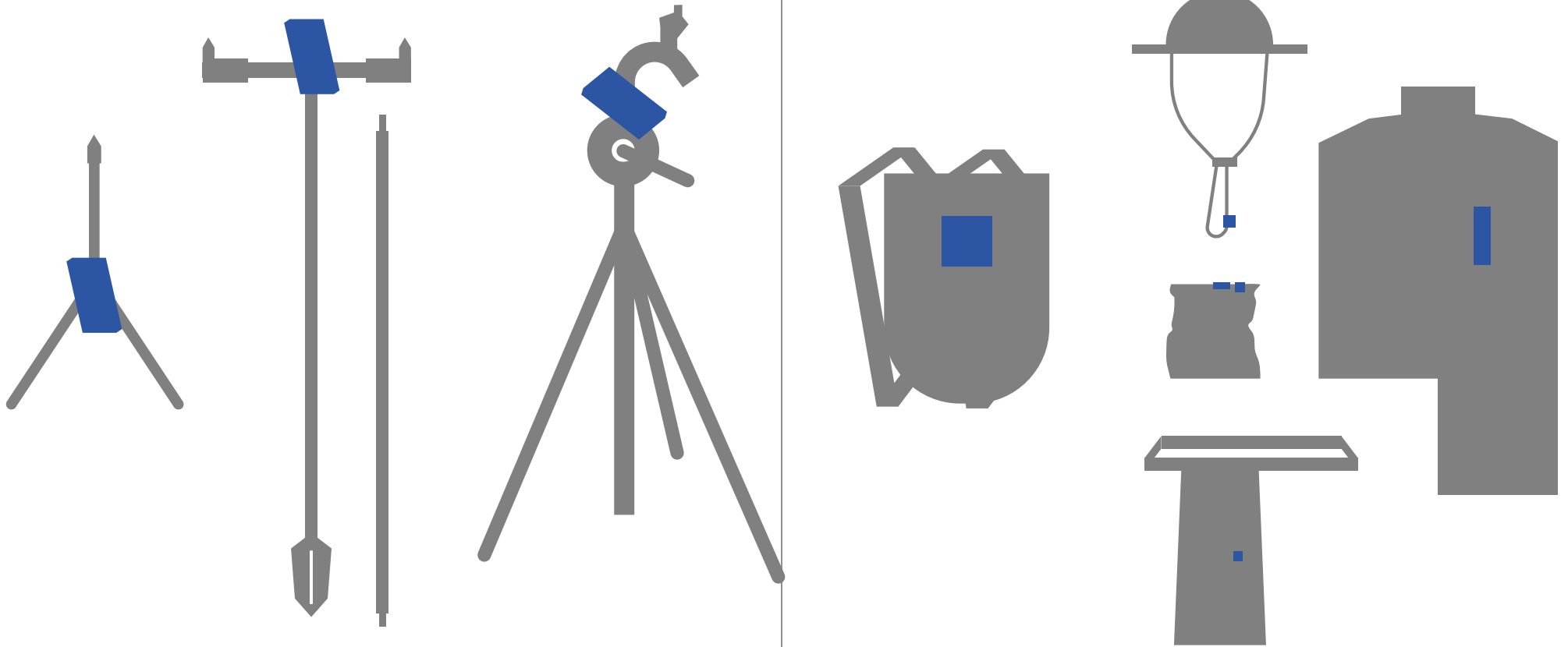
Best Hydraulic Brabant is not responsible for any errors or faultiness, or for the results obtained from the use of all the sold equipments. All information in this booklet is provided "as is", with no guarantee of completeness, accuracy, timeliness or of the results obtained from the use of this information.

Best Hydraulic Brabant is your best retail hydraulic equipment store located in Best, northwest of the city Eindhoven, in the province Brabant, Netherlands. We sell a wide range of the latest and most well-designed equipment goods, apparel, and accessories for your hydraulic praxis. Promising your pleasure and safety when working with water. ³

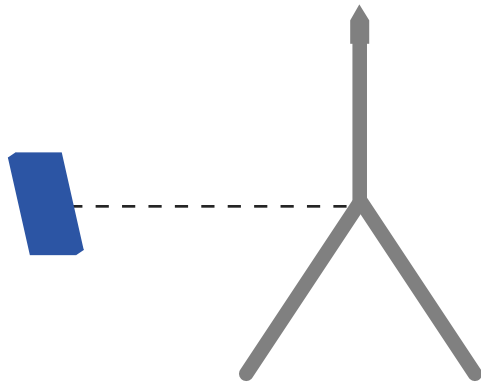
We believe that no one should be regulated by the water shortage (refer to the Appendix), everyone is responsible for their own water usage.

Our **Exclusive All-rounded Beginners' Drilling Kit** (€299, €200 for Brabant residents!) will be your best solution. You will find the assembly instructions and user guidelines for the goods you purchased in this booklet.

**Thank you for trusting Best Hydraulic Brabant!
Dig with Fun!**



Item	Quantity	Page
Detection Twig	1	06 - 07
Ground Drill	1	08 - 09
Water Pump	1	10 - 11
Water Bag	1	12 - 13
Workwear	1	14 - 15



SPECIFICATION

A traditional dowsing twig, a forked (Y-shaped) branch obtained from a Witch-hazel tree. Dowsing originated in ancient times, when it was treated as a form of divination. A phone stand is included to provide guidance on the distance and orientation from the detected ground water location. This primitive tool locates underground water and provides you with the best and cheapest supply of groundwater (refer to page 19).

Ornaments are positioned on the tip of the twig referring to Glykon. Glykon was an ancient snake god. He had a large and influential cult within the Roman Empire in the 2nd century, with contemporary satirist Lucian providing the primary literary reference to the deity. Glykon himself was supposedly a hand puppet. The Macedonians believed snakes had magical powers relating to fertility, "Glykon protect us from the plague-cloud."

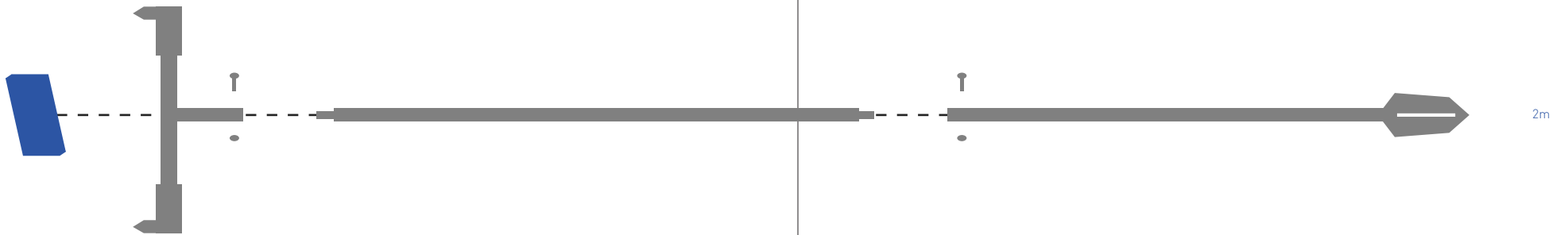
Fragile, special care required.



Fig. 1

OPERATION GUIDELINES

1. Hold the twig an arm's length away from your body.
2. One fork is held in each hand with the palms upward.
3. Bottom or butt end of the "Y" is pointed skyward at an angle of about 45 degrees.
4. Walk back and forth over the area to be tested (Fig. 1).
5. When you pass over a source of water, the butt end is supposed to be attracted downward.



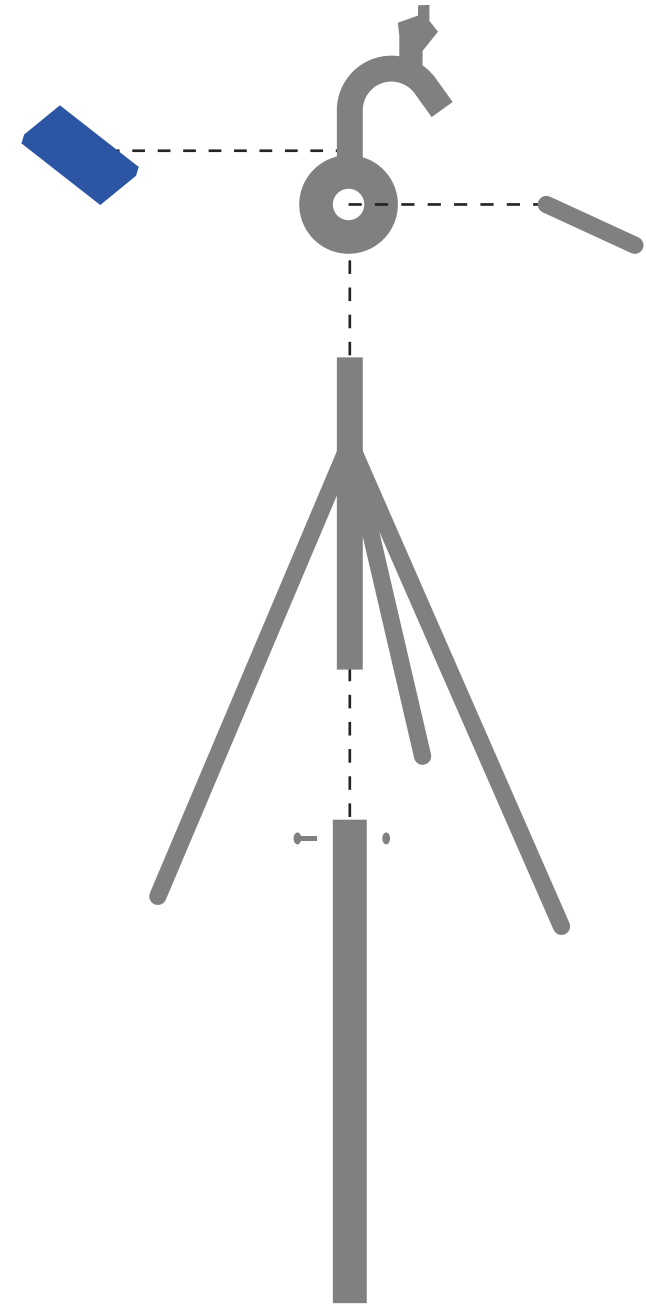
SPECIFICATION

Fully chromed and modular manual ground drill. The height ranges from 1m to 2m and can be extended if necessary (aquifer in the Brabant area is around 2 meters under the ground level). A phone stand is included to provide you guidance or to entertain you while you dig. This drill creates a 7mm diameter hole. You can carry your drill in a golf bag!

Ornaments are positioned on the handles referring to Glykon. Glykon was an ancient snake god. He had a large and influential cult within the Roman Empire in the 2nd century, with contemporary satirist Lucian providing the primary literary reference to the deity. Glykon himself was supposedly a hand puppet. The Macedonians believed snakes had magical powers relating to fertility, "Glykon protect us from the plague-cloud."

OPERATION GUIDELINES

1. Grasp the drill handle firmly with both hands.
2. Rotate the drill.
3. Take out the drill and remove the mud from the drill bit time to time.



SPECIFICATION

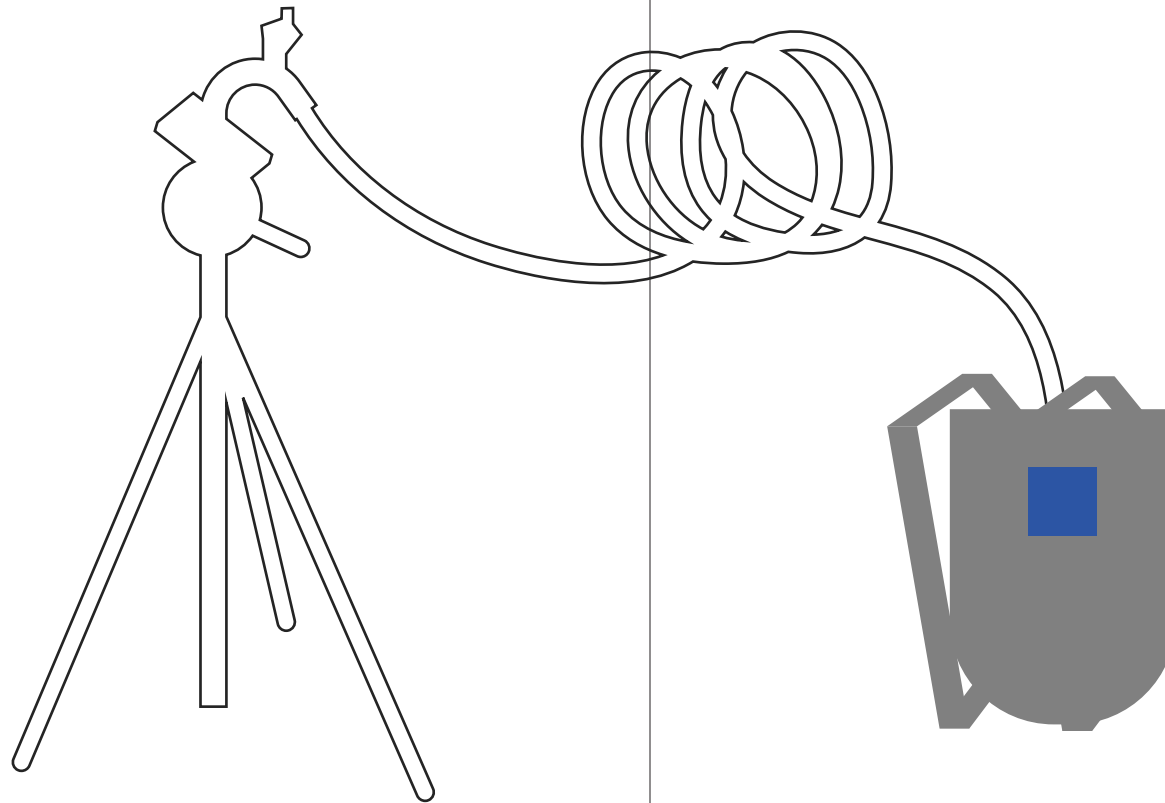
This pump is a fully-manual modified rotary pump, attaches with an extended tube and a filter on the tip (basic filtration). The pump is relying on a tripod to provide you with excellent stability. A phone stand can also be mounted on it to give you instructions but also to give you information on the water quality as well as the ground level.

A statue of Oceanus is resting at the end of the pump. Oceanus was a Titan son of Uranus and Gaia, the husband of his sister the Titan Tethys, and the father of the river gods and the Oceanids, as well as being the great river which encircled the entire world.

In fact, the more you extract water from the aquifer the more you lowering the ground level (refer to page 23). So extract with caution!

OPERATION GUIDELINES

1. Grasp the pump firmly with one hand.
2. Rotate the rotary handle until water comes out from the U-bend.



SPECIFICATION

This Water Bag can contain up to 40L, but you are recommended to carry around 25L according to the ergonomics. The backpack shoulder straps free your hand from holding and more handy to move around. The transparent material showcases the water quality. By carrying it around, it is the best way to show off to your neighbours and promote the idea of water liberation.

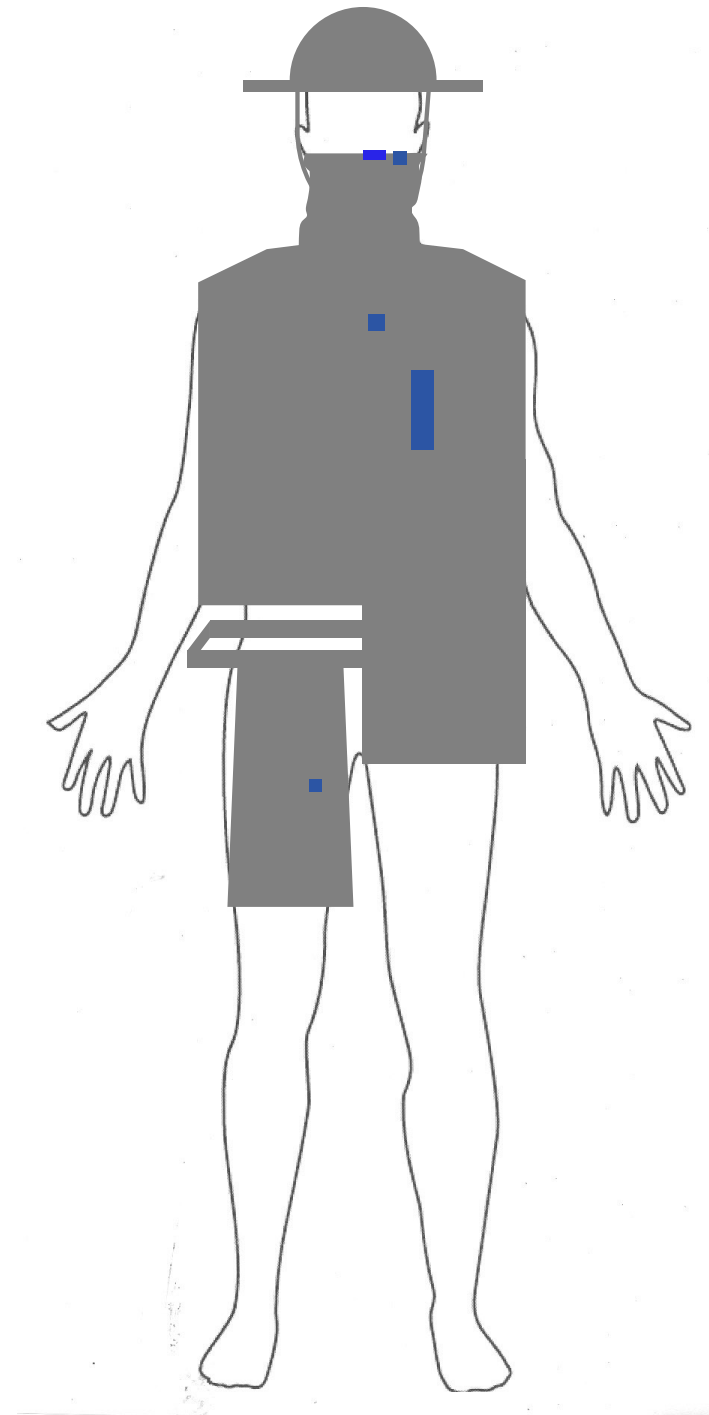
The shape of the backpack is inspired from how a tick sucks blood [Fig. 1].



Fig. 2

OPERATION GUIDELINES

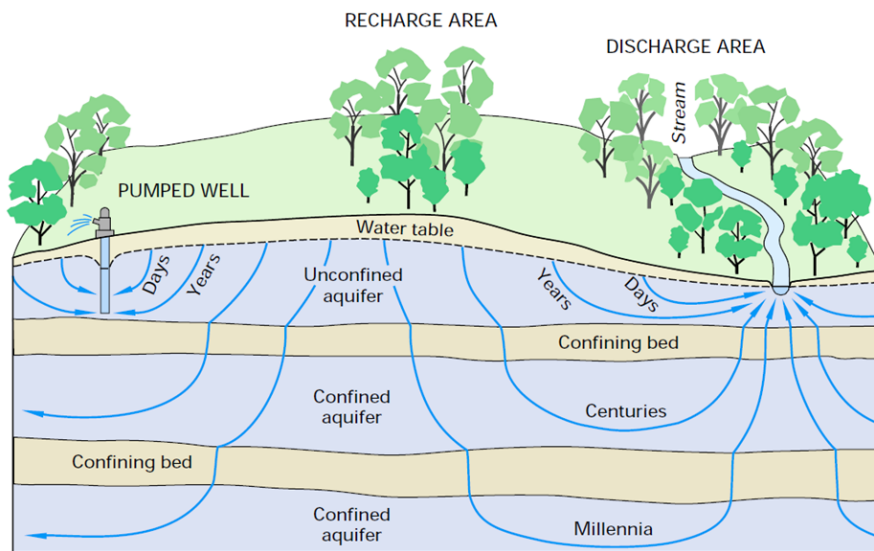
1. Attach the water bag opening with water tube.
2. Carry water on your shoulders. [25L recommended, 40L max.]



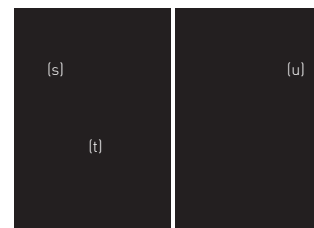
SPECIFICATION

Essential free-size (XL only) unisex garment inspired by ware with functionality. This set of workwear includes hat, face mask, vest, and an external pant pocket. They provide you protection with extreme weather. The sleeveless design of the vest maximises your arm movement and mobility. Numerous and big pockets are designed for belongings and especially for holding the detection twig around. Easy wear and take off.

“For extractions less than 10m³ per hour you have to notify the province or water authority. You do not need a permit. [...] Otherwise, the groundwater tax is levied per m³, per year or per quarter. The more water you extract, the higher the tax.”



“Since stepwells have been used successfully for hundreds of years, is there something that could be learnt from them? [...] I always think there is something to learn from the older gravity-fed water systems, [...]. Today people love complicated equipment and gadgets, but they do not want to invest the intense labour needed to build a longer-lasting, more permanent solution.”



- (s) GROUNDWATER EXTRACTION PERMIT AND GROUNDWATER TAX
business.gov.nl. "Permit for Extracting Groundwater or Infiltrating Groundwater," February 6, 2023. <https://business.gov.nl/regulation/permit-for-extracting-infiltrating-groundwater/>.
- (t) AQUIFER INFORMATION
Manual groundwater extraction is targeting the unconfined aquifer, which is about 2m under the ground.
admin. "Water beneath Our Feet." Science in the News, March 5, 2016. <https://sitn.hms.harvard.edu/flash/2016/water-beneath-our-feet/>.
- (u) PRIMITIVE INTELLIGENCE
Embrace and learn from the primality and wisdom.
Neidhardt Anja, #68 Special water (DAMN Magazine, 2018), India's Stepwells, 116-120.

Golfbanen en water (bron: NGF)

- ‘Geel is het nieuwe groen’
- Kapitaalintensief en –extensief gras
- Ervaring met verduurzaming (GEO certificaat)
- Sensorgestuurd
- In Brabant: 48 golfbanen | 2000 ha (20% van NL)
- ~ 2 miljoen m3/jaar beregening
- ~ 5 miljoen m3/jaar gemiddeld neerslagoverschot



▲ De sproeiers draaien momenteel overuren op het terrein van Bernardus Golf in Cromvoirt. © Miranda van Houtum/BD

Geel is het nieuwe groen, ook op golfbaan Bernardus in Cromvoirt

CROMVOIRT - Door de extreme droogte kleuren ook golfbanen langzaam geel. Een gevolg van duurzaam beleid. De golfer moet er maar aan wennen.

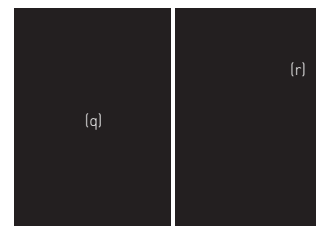
Miranda van Houtum 31-07-18, 07:27 Bron: BD

Golfbanen en water (bron: NGF)

Naam	Functie	Onderhoud	Beregening per jaar per gemiddelde 18-holes golfbaan
Tee	Afslagplaats	Kort gemaaid gras, droogte gevoelig, kapitaal intensief, essentieel voor de sport en het verdienmodel erin.	Tussen 7.500 en 10.000 m3
Green	Hier bevindt zich de 'hole'		
Approach	Verbinding tussen fairway en green en rondom de green.		
Fairway	Middenbaan	Iets langer gras, kan beter tegen droogte, hersteld sneller, minder absoluut noodzakelijk.	Tussen 22.000 en 30.000 m3
Rough	Buitengebied	Hoog gras, struiken en bomen, biodiversiteit ontwikkeling op zo'n 60% van het totale areaal golfbaan	Geen

OVER MORGEN

“There’s a reason they’re called the Low Countries. Amsterdam and the cities of Rotterdam and the Hague sit low, flat and close to the North Sea. The Dutch are famed for their flood defences, and looking at these sea-level projections, it seems the country’s system of dikes, dams, barriers, levees and floodgates will become even more essential in the years to come.”

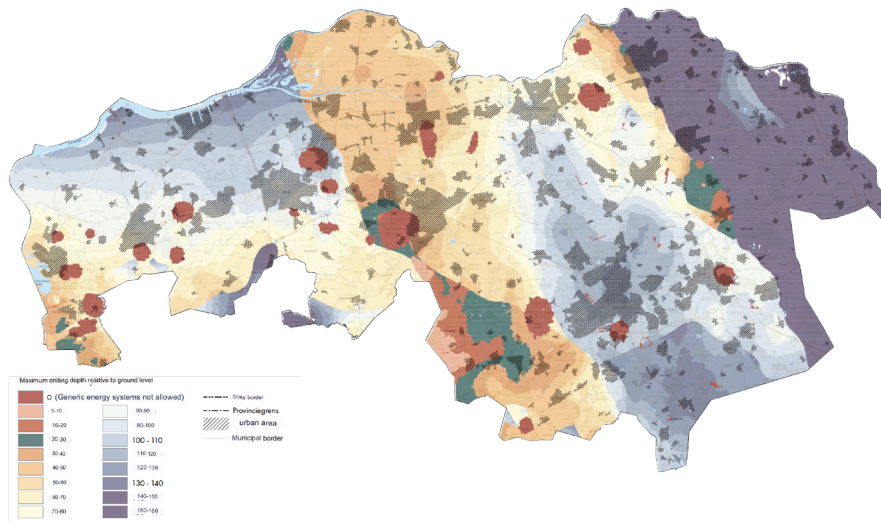


(q)

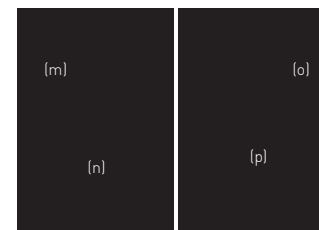
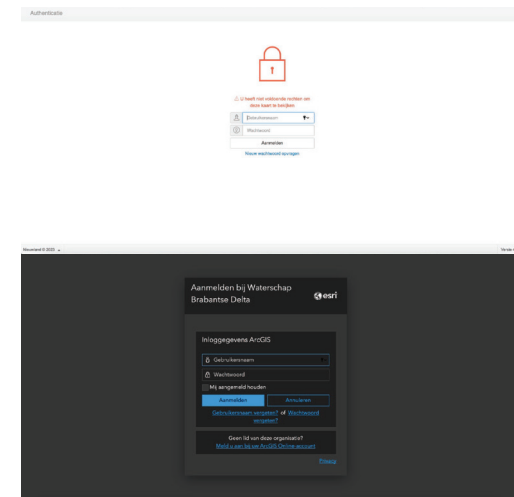
(r)

- (q) SPRINKLER GOLF COURSES - DROUGHT TASKING AND NEW IRRIGATION POLICY NORTH BRABANT
Brabant Water just voted to not restrict golf lawns irrigation.
Beregening golfbanen Droogte opgave en nieuw beregeningsbeleid Noord- Brabant 2 februari 2023, 18-19.
- (r) 15 CITIES THAT COULD BE UNDERWATER BY 2030
North Brabant is apparently not the first to encounter climate disaster in the Netherlands.
Cunningham, Ed. "15 Cities That Could Be Underwater by 2030." Time Out Worldwide. Time Out, February 15, 2023. <https://www.timeout.com/things-to-do/cities-that-could-be-underwater-by-2030>.

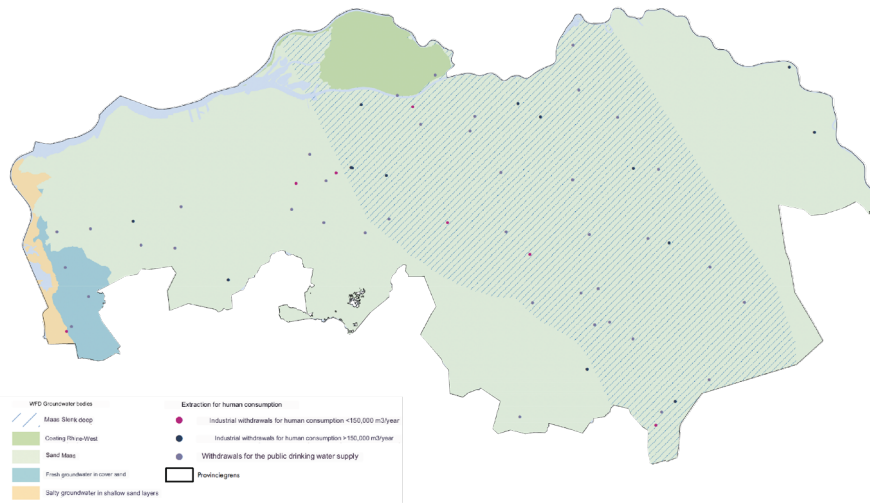
“The quality of the ground and surface water in our province is not up to par and the diversity and concentrations of anthropogenic substances are increasing. The deep groundwater is still clean, but is under increasing pressure, [...] The pressure is increasing further, partly due to urbanization and the disconnection of rainwater and due to risks arising from the penetration of protective layers when the subsurface is used for geothermal energy, and geothermal systems.”



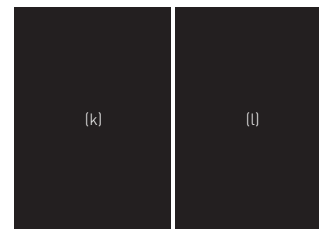
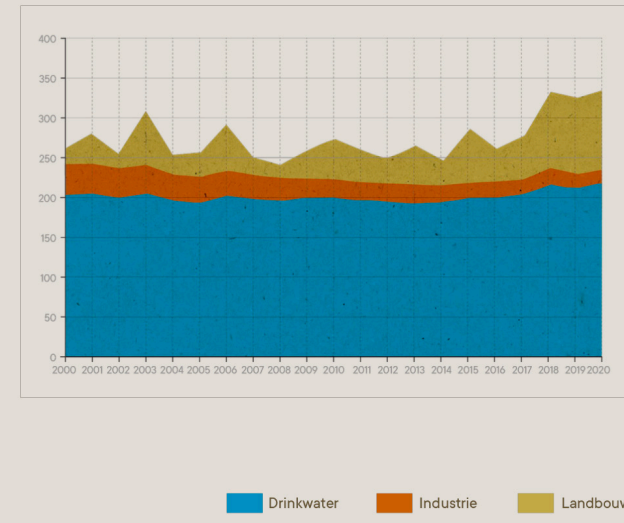
“As water is drawn off, the depleted aquifers dry out and cave in. [...] The impact of sinking groundwater tables is particularly serious in coastal region. Once the groundwater table sinks below sea level, seawater seeps into the drained space and salinates the remaining water.”



- (m) WATER QUALITY UNDER PRESSURE
3 dec 2021 — Het RWP omvat de volledige water- en vitale bodem- opgave in Noord-Brabant voor de planperiode 2022-2027, met een doorkijk naar 2050.
- (n) GEOTHERMAL ENERGY SYSTEMS IN THE BRABANT AREA
Regional water- en bodem programma Provincie Noord-Brabant 2022-2027, 102.
- (o) GEOLOGICAL AND ECOLOGICAL CONSEQUENCES OF THE EXPLOITATION OF FOSSIL GROUNDWATER RESERVES
Klaus Lanz and Christian Rentsch, Who Owns the Water? (Springer, 2006), 170-713.
- (p) OPAQUE INFORMATION
Information on the water shortage problem promoted to be accessible but online materials are indeed not accessible.
<https://www.brabantinzicht.nl/toestand-natuur-water-en-milieu/water/>



Onttrekkingen in miljoenen m^3 uit Brabants grondwater vanaf 2000



(k) VISUAL REPRESENTATION ON GROUNDWATER WITHDRAWALS IN THE BRABANT AREA
 Regional water- en bodem programma Provincie Noord-Brabant 2022-2027, 105.

(l) WITHDRAWALS IN MILLIONS OF M^3 BRABANT GROUNDWATER FROM 2000
 Berekening golfbanen Droogte opgave en nieuw beregeningsbeleid Noord- Brabant 2 februari 2023, 10.

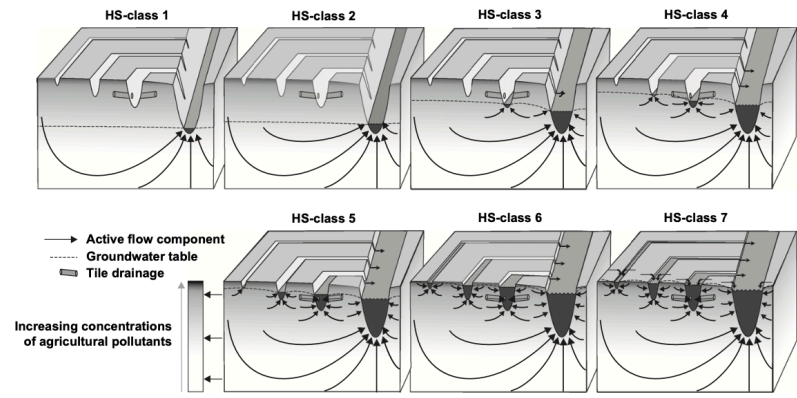
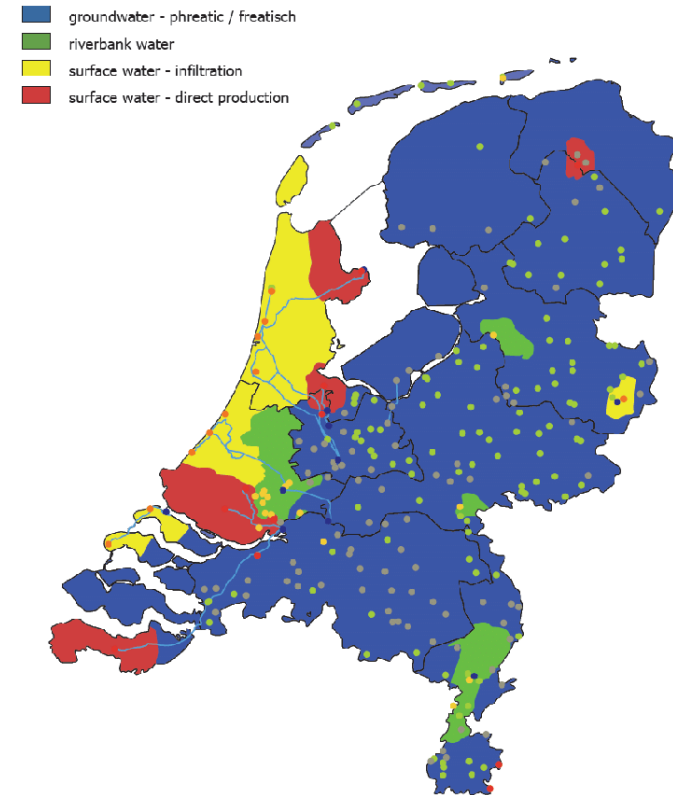
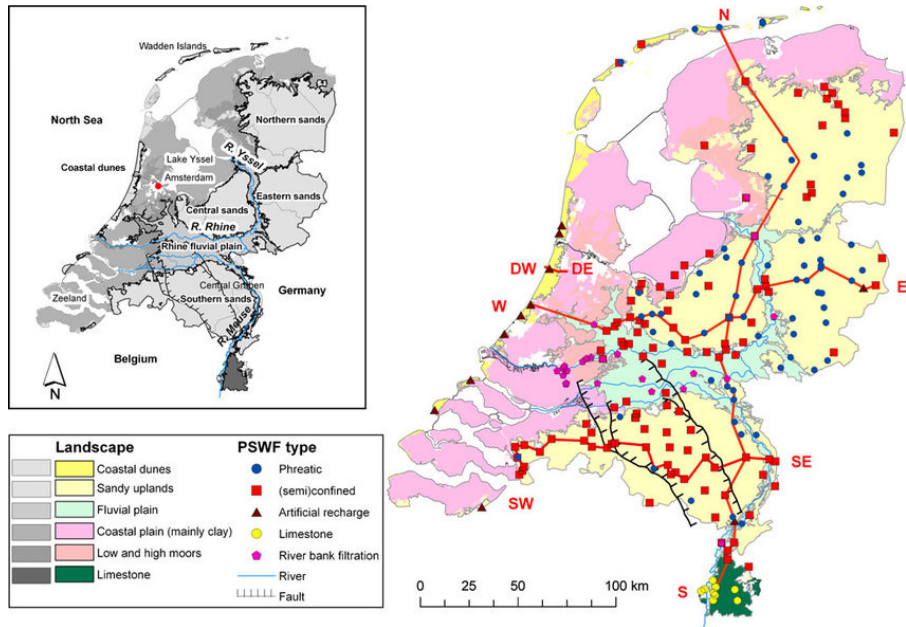
“The current global situation, along with problems of global warming, questions of sustainability, eco-logical crises, etc., readjusts our relationship to physical phenomena, such as water, which is interacting directly with surrounding physical and biological systems.”

“Within the next 50 years there will probably be some nine billion people on earth, but the amount of water is still the same as when humans first came onto the scene as hunter-gatherers. The question of who controls the available and always variable supply of water has therefore become increasingly important. [...] The expectation is that by around 2025 more than 80% of the global population will be struggling to secure sufficient supplies.”

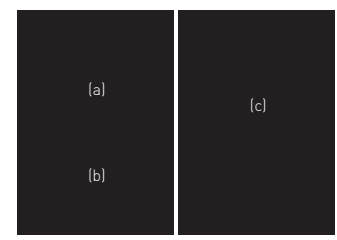
“[...] water that seeps underground can remain there for thousands of years before re-emerging.”

“Unless the consumption of groundwater reserves is drastically restricted to the natural replenishment rate, aquifers will not last for centuries, but dry out in decades, even years.”

(g)	(i)	(g) CURRENT GLOBAL SITUATIONS <small>Sigurjónsdóttir/Ésa, Water : Carrier, Barrier. Source [Amsterdam: Foam Magazine, 2018], 227–232.</small>
(h)	(j)	(h) CURRENT GLOBAL SITUATIONS <small>Water : Carrier, Barrier. Source [Amsterdam: Foam Magazine, 2018], 21–24.</small>
		(i) GROUNDWATER EXPLOITATION SITUATIONS <small>Water : Carrier, Barrier. Source [Amsterdam: Foam Magazine, 2018], 21–24.</small>
		(j) GROUNDWATER EXPLOITATION SITUATIONS <small>The rate of consumption of groundwater reserves with high-capacity motor pumps is exceeding the natural replenishment rate. Klaus Lanz and Christian Rentsch, Who Owns the Water? (Springer, 2006), 170–173.</small>



- (a) GEOGRAPHICAL LANDSCAPE OF THE NETHERLANDS
Location map of The Netherlands and the 206 PSWFs active in 2008, their hydrological type and the main recharge areas of groundwater pumped for public drinking-water supply.
Mendizabal, Igor & Stuyfzand, Pieter & Wiersma, Ane. [2010]. Hydrochemical system analysis of public supply well fields, to reveal water-quality patterns and define groundwater bodies: The Netherlands. *Hydrogeology Journal*, 19, 83-100. 10.1007/s10040-010-0614-0.
- (b) VISUALISATION OF THE PROPOSED CONCEPTUAL MODEL FOR GROUNDWATER - SURFACE WATER INTERACTION
Groundwater flow components contributing to surface water discharge during different flow conditions from base flow conditions (HS-class 1) up to quick flow conditions (HS-class 7).
ROZEMEIJER, J. C., AND H. P. BROERS. "THE GROUNDWATER CONTRIBUTION TO SURFACE WATER CONTAMINATION IN A REGION WITH INTENSIVE AGRICULTURAL LAND USE (NOORD-BRABANT, THE NETHERLANDS)." *ENVIRONMENTAL POLLUTION* 148, NO. 3 (AUGUST 1, 2007): 695-706. [HTTPS://DOI.ORG/10.1016/J.ENVPOL.2007.01.028](https://doi.org/10.1016/j.envpol.2007.01.028).
- (c) WATER BODIES IN THE NETHERLANDS
Source water types in the Netherlands.
Smeets, Patrick & Medema, Gertjan & Dijk, J. [2009]. The Dutch secret. How to provide safe drinking water without chlorine in the Netherlands. *Drinking Water Engineering and Science*, 2, 10.5194/dwes-2-1-2009.



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HYDRO- INFORMATION HAND BOOK

Know for Fun!

