

Wild swimming

in the DE/NL Vecht(e) watershed
reconnaissance survey 2019 - 2020



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Photo: Regge Survival



Swimming in the Vecht(e) watershed is of all times



Swimming in running surface waters is of all times, also in the Vecht(e) watershed. After the surface water became increasingly dirty in the fifties, swimming pools were constructed as hygiene measures. Now that water seems to become clean again, this habit returns.

Wild swimming - central questions

- (a) Which running surface waters in the region are most used?
- (b) What is known about the water quality at these places?
- (c) How many people may be at increased risk to their health as a result?



The water quality in the areas where people swim is not well known. They aren't official swimming sites, so water quality is not well monitored. People use these places "at their own risk", but it is unclear what the risks are. The research questions that emerged were: a) which uncontrolled surface waters are being used for recreation in the region; c) what is known about water quality at these places; and d) how many people may be at risk to their health?

Methodology

Step 1) Localization and mapping

Step 2) Field visits

Step 3) Interviews

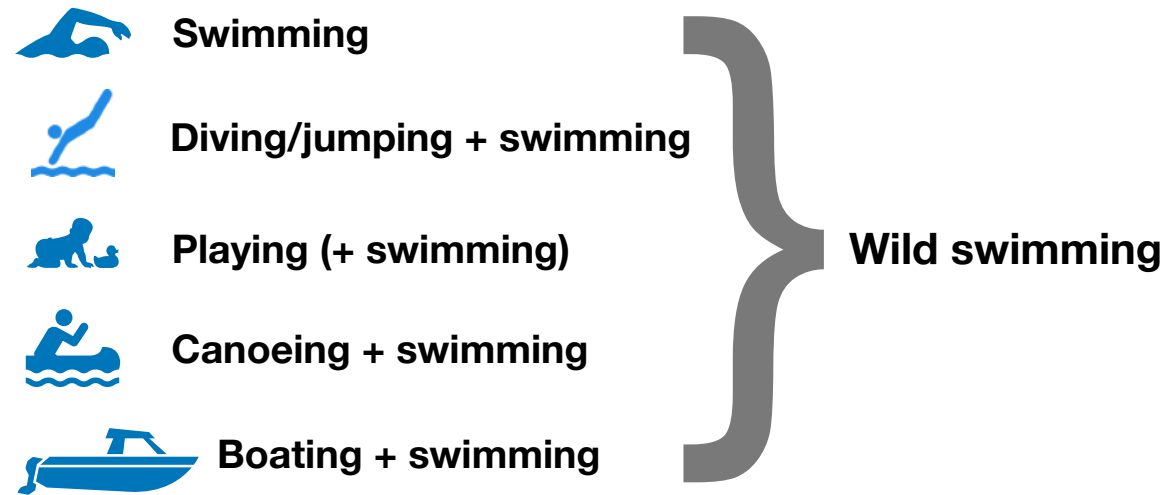
Step 4) Assessment

Step 5) Interpretation



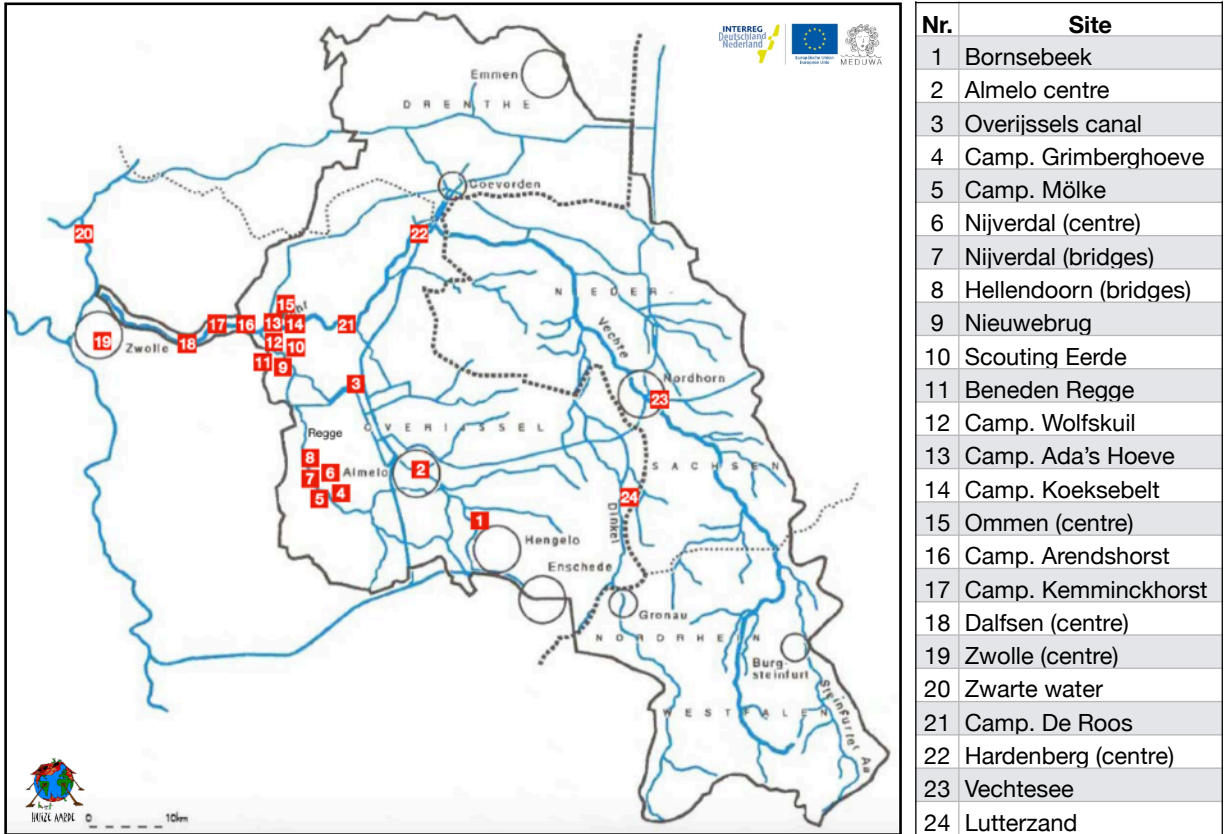
In order to answer these questions in the whole Vechte area an inventory was made and possible swimming sites were mapped with the use of Google, Google Maps and social media. The amount of people using these waters was established via field surveys and interviews, mainly with owners of campgrounds and boat rentals. The types of infections they may be exposed to was obtained through interviews with experts from health authorities and through a literature review.

Categories of recorded activities



Five categories of recreational activities have been distinguished. Also canoeing and boating if accompanied by swimming. All these activities fall under the heading of “wild swimming”.

Sites of wild swimming in Vecht(e) watershed - 2019 Survey



Thus far, in total 24 recreational sites have been traced, in particular in the western (Dutch) part of the watershed, along the Middle and Lower Regge and the Lower Vecht. In the German part of the watershed only one location (Vechtesee) was found.

Midden Regge, Rijssen - Aug 24 2019



Some examples: along the Regge on hot days there is a real hustle and bustle on the beach, sunbathing lawn and dock of Grimbergshoeve campground. Most people come from other accommodations, such as Mölke campground.

Regge survival, Nijverdal

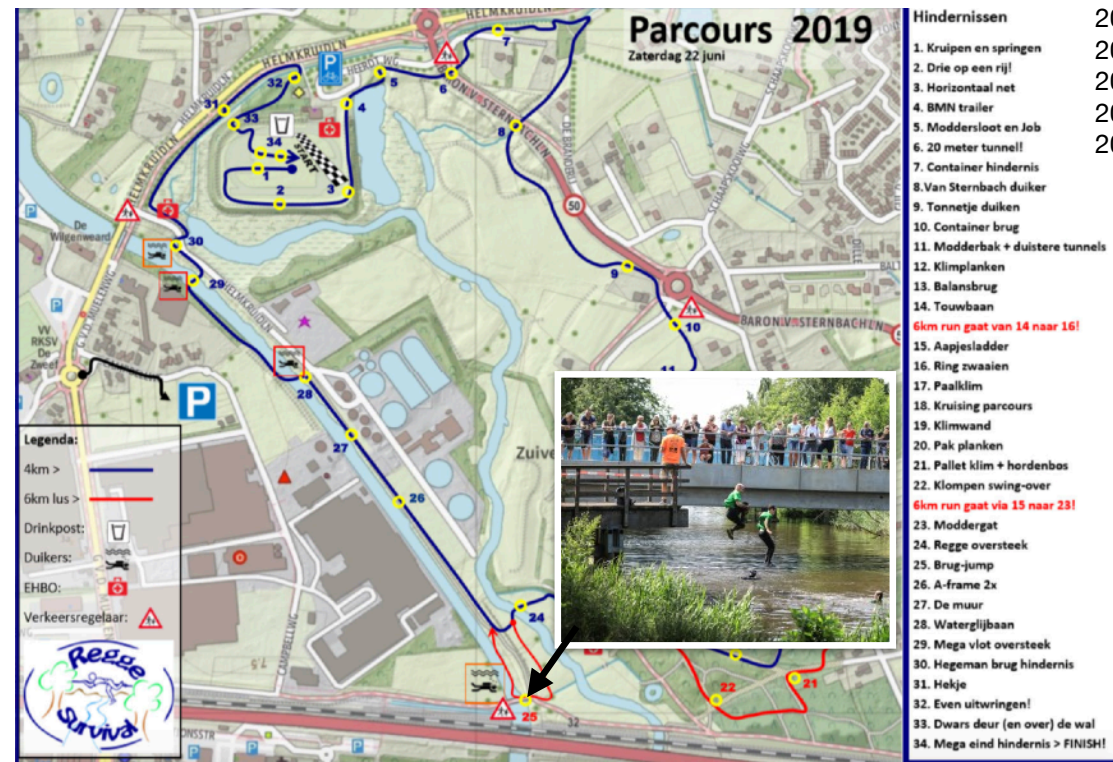


Photo: Regge Survival



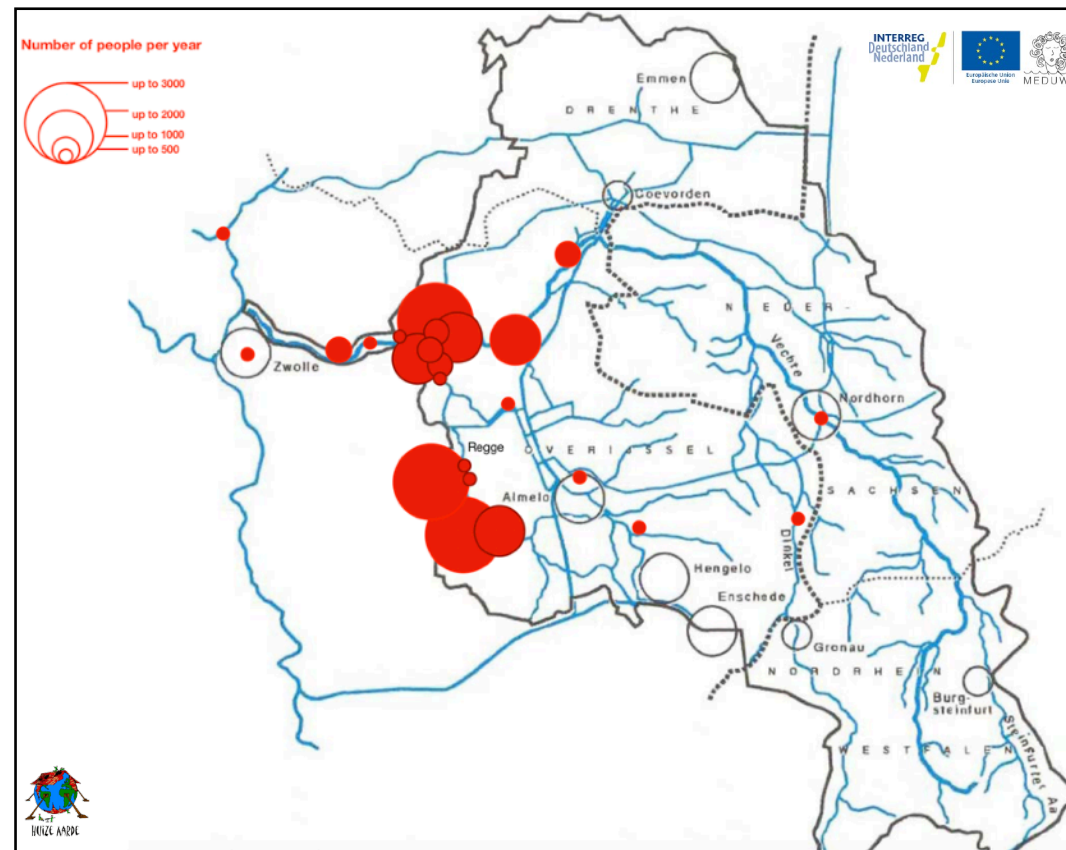
The Regge survival takes place around the sewage treatment plant of Nijverdal. Every year, thousands of especially young people, have intensive contact with effluent-containing water in several places along the course of the river.

Vecht, Ommen - Aug 25 2019



On hot days, the large sunbathing lawn on the Vecht close to the centre of Ommen, is full of people and the beach is clearly too small.

Numbers of wild swimmers in Vecht(e) watershed



At these popular locations up to three thousand people use the water during a warm summer. Municipalities with highest uncontrolled water tourism are Wierden/Rijssen, Nijverdal/Hellendoorn and Ommen.



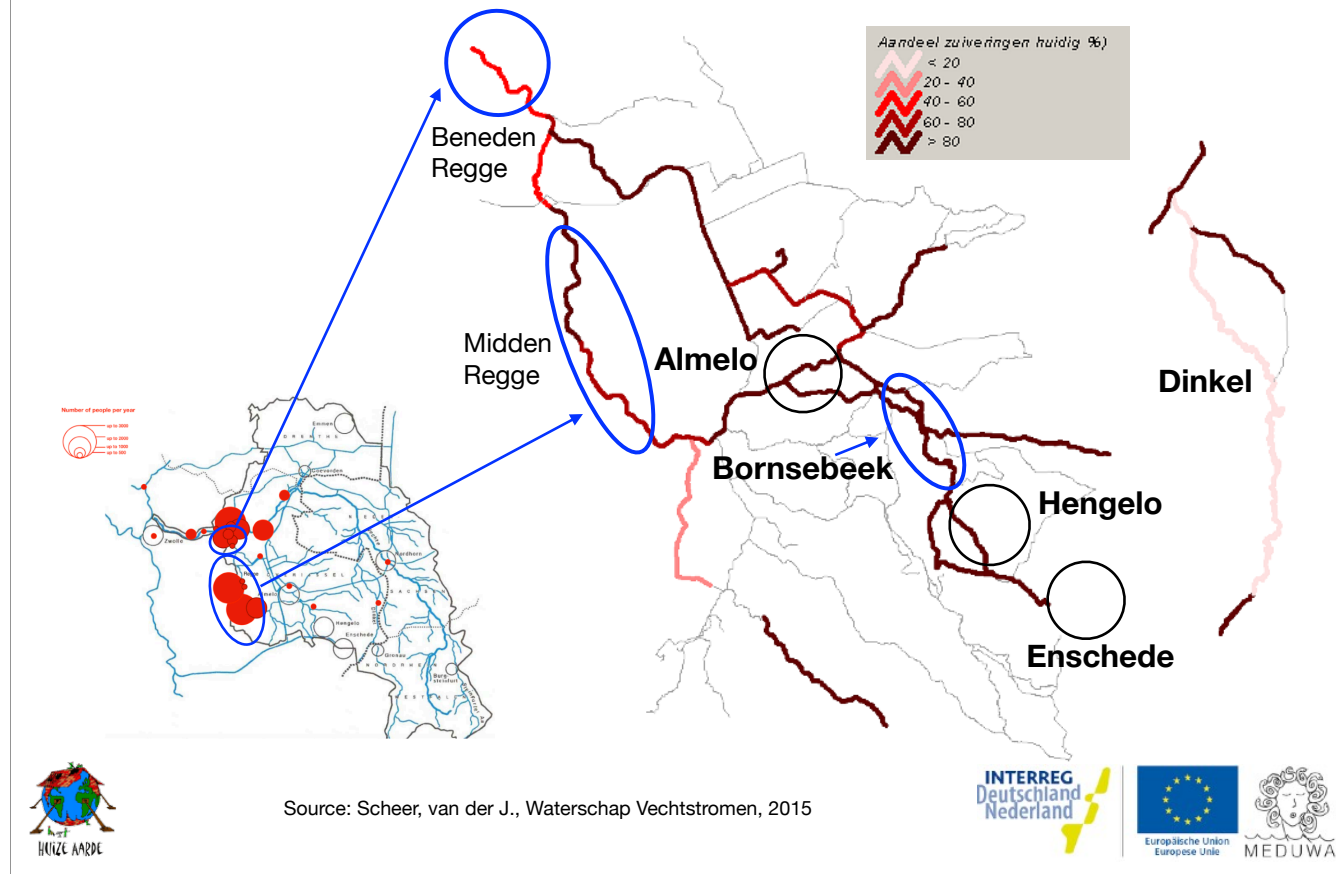
Overview of wild swimming in Vecht(e) watershed during a warm summer

Type of recreants	quantities/year
Camping guests	4.600 - 7.150
Participants sports events	3.700 - 4.700
Scouts	3.000 - 4.000
Others	4.240 - 7.530
Total	15.540 - 23.380



In total, during a sunny summer season between 15.000 and 23.000 people recreate in non-controlled surface waters of the Vecht(e) watershed. 4.600 to 7.150 of these water recreants are visitors to campgrounds along the rivers; 3.700 - 4.700 are participants of annual sporting events (triathlons, city swims, survival races); 3.000 to 4.000 are scouts. The remaining 4.240 - 7.530 are other types of recreants. According to these statistics, **wild swimming appears to be a significant touristic activity and by that an important economic activity in the region.**

Water quality Vecht(e) watershed



The water quality at places people use is not monitored and therefore unknown. The amount of effluent that passes through these waterways is an indication of the water quality. In the middle Regge, the effluent concentration is between 60 and 80% or above 80%. In the lower Regge, near the Vecht, the effluent concentration lies between 40 and 60%. In the Bornsebeek the effluent concentration lies above 80%.

Group infections



▲ Beeld van het Beekparkfestival afgelopen zaterdag © Christian van der Meij

Paniek in Borsche Maten: tientallen kinderen tegelijk ziek

UPDATE | BORNE – Tientallen kinderen uit de nieuwbouwwijk De Borsche Maten zijn ziek geworden na een duik in de Borschebeek tijdens het Beekparkfestival, afgelopen zaterdag. Ze hebben hoofdpijn, zijn misselijk, moeten overgeven, hebben diarree en/of koorts.

Maaïke Thüß 17-06-19, 19:05 Laatste update: 19:43



Group infections are an indication of the biological risks people run. In June 2019 a group of children who have been playing in Bornsebeek showed symptoms of gastroenteritis, possibly caused by norovirus (GGD Twente Region, 2019). The question was whether this was an isolated phenomenon.

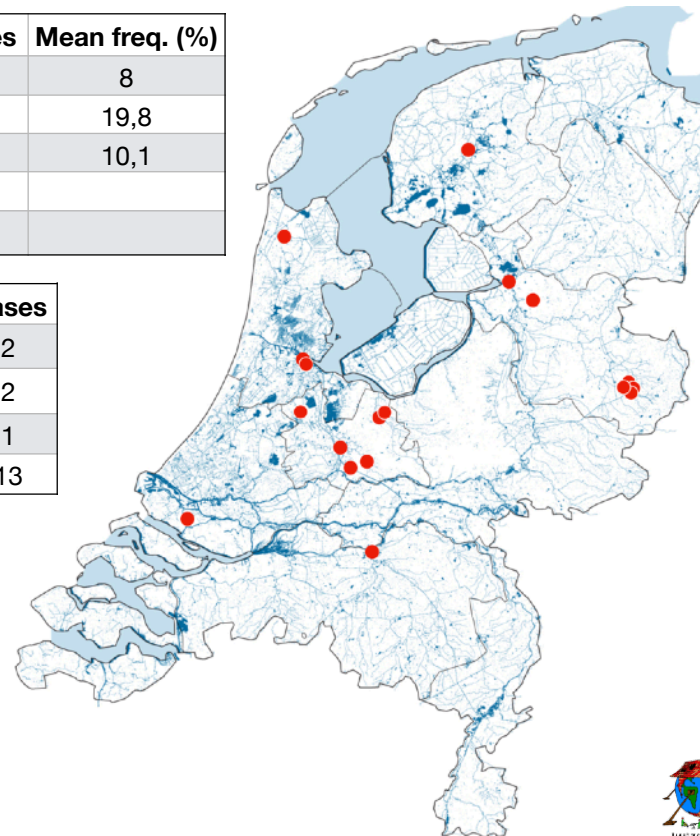
Group infections NL 2014 -2019

Recreation type	Participants	Cases	Mean freq. (%)
Triathlon/City Swim	6450	515	8
Others	668	132	19,8
Subtotals	7118	747	10,1
Others	unknown	71	
Total		718	

Year	Nr
2014	1
2015	3
2016	4
2017	0
2018	4
2019	6
Total	18

Cause	Cases
Norovirus proven	2
Norovirus suspected	2
Leptospirosis proven	1
Unknown	13

Climate	Cases
Heavy rainfall	3
Dry period	2
No information	13



Between 2014 and 2019, at least 18 cases of possibly wild swimming related group infections occurred in the Netherlands, involving 7118 people of which at least 718 were infected. The average infection frequency is 10%. This frequency seems to be lower at mass sports events (8%) than in other forms of wild swimming (19,8%). Little is known about the cause of the infection. In those cases where this has been demonstrated, or suspected by professionals on the basis of the disease symptoms, it concerns norovirus. Because of lacking data little can be said about the relationship between climate and infection.

Group infections Bornsebeek



See for video <https://youtu.be/BHPSrj7LXxU> from 3:40

Date	Activity	Nr	Age class	Cases	Freq. (%)	Climate	Cause**	in media?
2016-09-00	canoeing	22	adults & youth	5	22,7	heavy rainfall	?	no
2019-06-17	jumping	145	children	25	17,2	heavy rainfall	poss. norovirus	yes
2019-08-30	canoeing	150	pupils	26	17,3	dry period	poss. norovirus	no
2019-09-02	canoeing	234	pupils	20	8,6	dry period	?	no

** According to GGD Twente



As far as is known, four cases of group infections have occurred in Bornsebeek, three of which in 2019. Three of the four cases were not reported in the media. In two out of four cases norovirus is suspected. The infection frequency was between 8.6 and 22.7%, although not all children may have reported their gastroenteritis. Those affected were mainly children and adolescents who jumped into the water and canoed and played in the brook. Two group infections occurred after heavy rainfall and two group infections during a drought period. Therefore, strong rainfall, with associated overflows of the sewers, need not be the only reason for infection. Drought resulting in higher contaminant concentrations could be another reason.