### Interview RWS

# Which substances are measured regarding water pollution? Is this real-time and how large is the area of investigation?

RWS only monitors visually and reacts on smell. There is a department 'handhaving' that does sample tests at companies. The area of investigation is from Maastricht till Grave, which spans 145 km of waterways.

## When is a concentration of a substance significant enough in order to know that something is wrong?

When it is clearly visible in the water.

#### When do these events occur the most?

Pollution of one particular substance not that much but especially after a period of high water levels a range of different pollutions occur.

#### What are the main causes?

Like told the period of high water levels. Recreational pollution, people dumping their stuff at the riverside after a recreational day. Ship pollution doesn't happen that often, but two weeks ago there was an event where a sailor of a riverboat accidentally polluted the water while cleaning his deck. Measurements are done at the companies by themselves. They need to keep a logbook on the pollution by measuring their pollution two times a day. The 'handhaving' department will take (un)announced sample tests at companies from time to time. But mostly the pollution is within the boundaries of the license.

### Have you experienced situations where you could have done much more when you had noticed it sooner?

Yes, how faster they are at the location the better a cause of the pollution can be found or the more danger can be avoided by solving the problem in time. When something is noticed quicker they are also able to be at that location faster.

#### Do you encounter driftwood on the water? When and what is the most probable location?

Big chunks of wood in the water doesn't occur often. But when it occurs it is after a period of high water levels and storms. Sometimes a big part of a tree. There is however a lot of small chunks of wood that is located at the sides of the waterway. Be it a river, canal or a lake. This is a problem for the recreational sailing, the wood gets stuck in the little engines or damages the boat.

#### Do accidents occur with driftwood?

Yes

### *Would it be a good idea to effectively clean this wood and other sort of waste?* Yes, see later for more

#### How does the information/notification system work?

The main information source is that people along the banks of the waterway notice that something is wrong in the water. This can be people from RWS but also civilians who then can call RWS. Besides there is our theme from the patrol boats. When they know what is at hand they call a third party company that will solve the problem.

#### Is there a budget for innovations at RWS for something like we want to do?

Yes, currently there is a pilot running with flying drones for monitoring the water from the sky.

Tip: present your project start-up project with small tests that can be expanded in the future. Environment is important for sure.

There a different sorts of waste which we could all focus instead of doing only driftwood. These are

- -plastic
- -Big-Bags
- -ice

-bodies (human and animals), once a week there a body is found. Bodies don't reach the surface immediately, especially in the winter because of the slower decomposition process.

- -algae
- -duckweed

Especially the big-bags the algae and duckweed get stuck in the propeller of boats. The big-bags melt when they get stuck in the propeller, which can damage the motor significantly.

There are some hotspots that we should focus on. Harbors like we already though about but also floodgates where waste like plastic, small wood and ice which avert that the floodgates doors can close correctly. Parts of rivers that are unnavigable, like the part between Maastricht and Maasbracht. Where small wood can provide dangerous situations with the recreational canoe sailing and other recreational activities.