

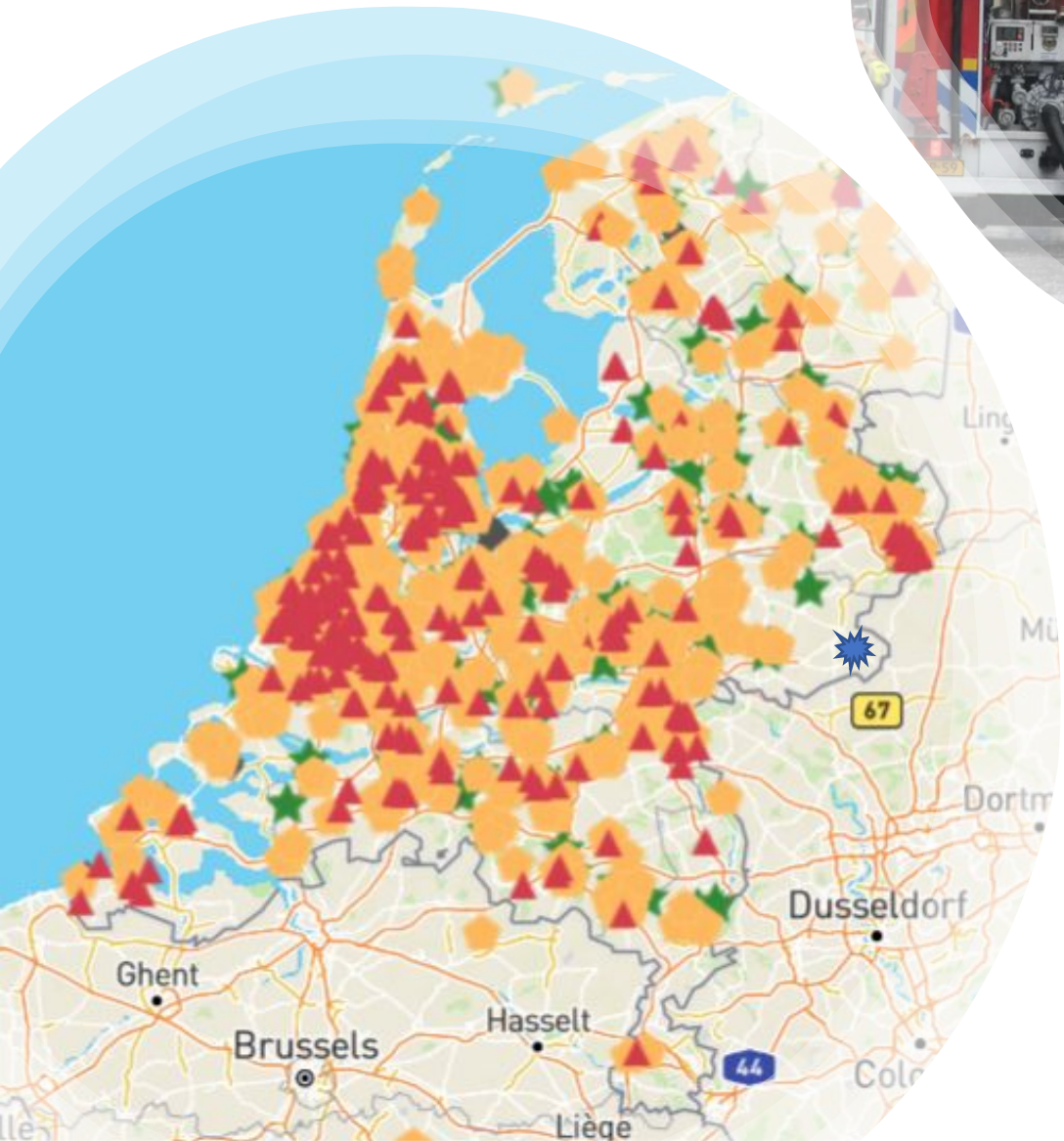


School: RK Scholengemeenschap Marianum

Group Name:G1AG

Date:27-01-2022

How Spongy Is My School

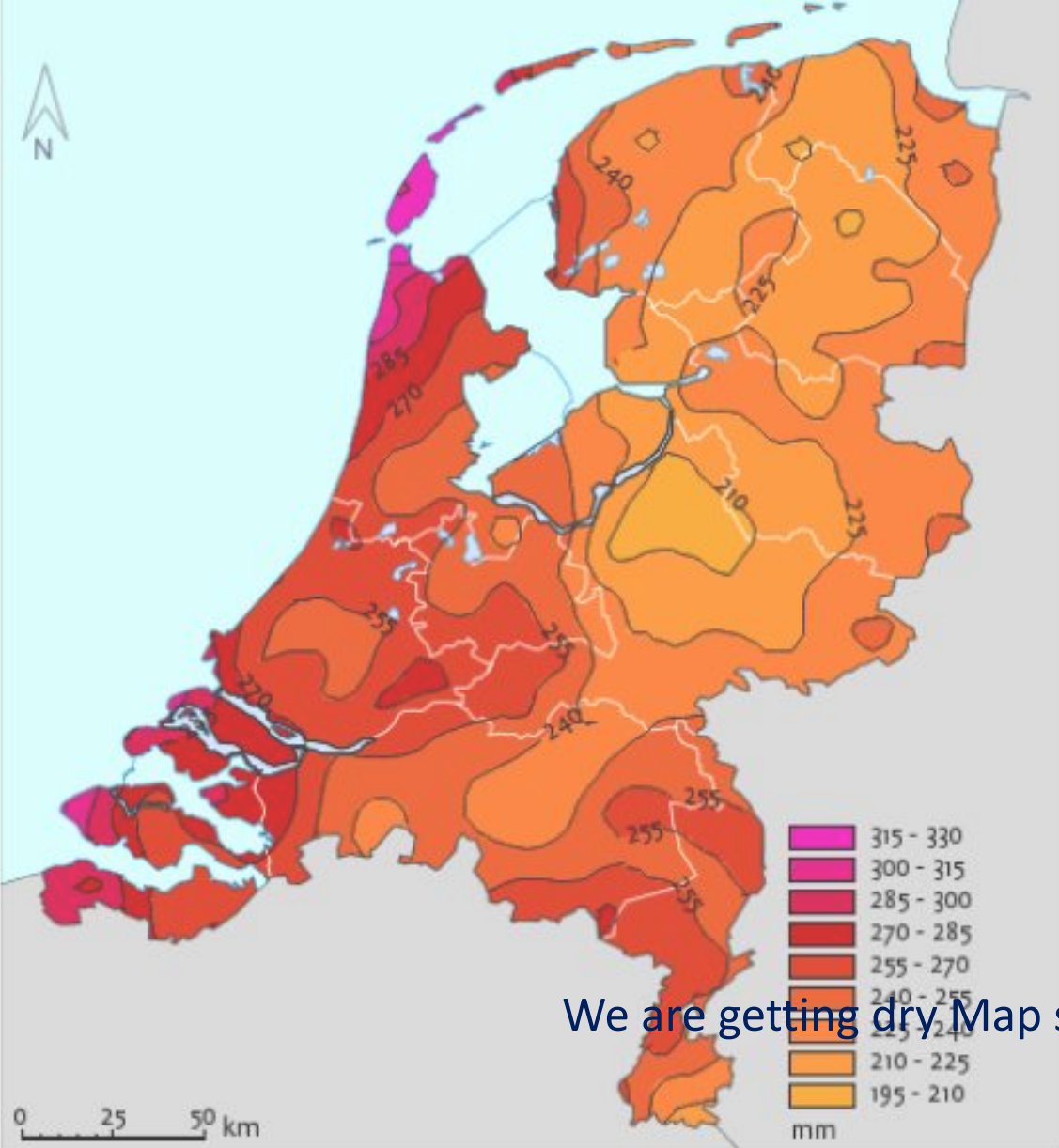


Context: 80% of our open waters are of bad (red) or mediocre (orange)

Delta country
Climate change=water shortage due to heat
summer rainstorms
Pollution

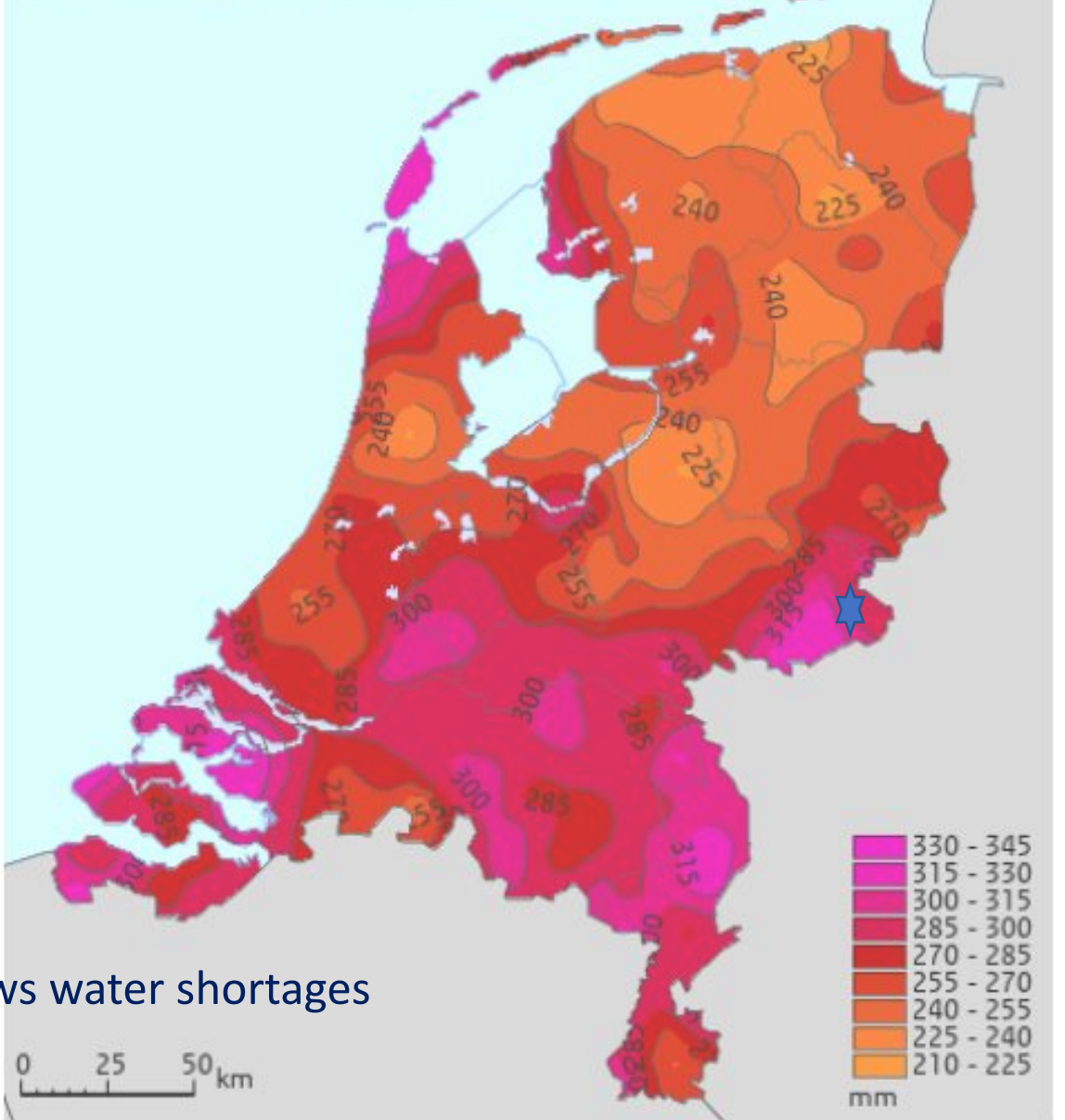
Maximaal potentieel neerslagtekort

5% droogste jaren (95-percentiel), tijdvak 1981-2010



Langjarig gemiddelde 1991-2020

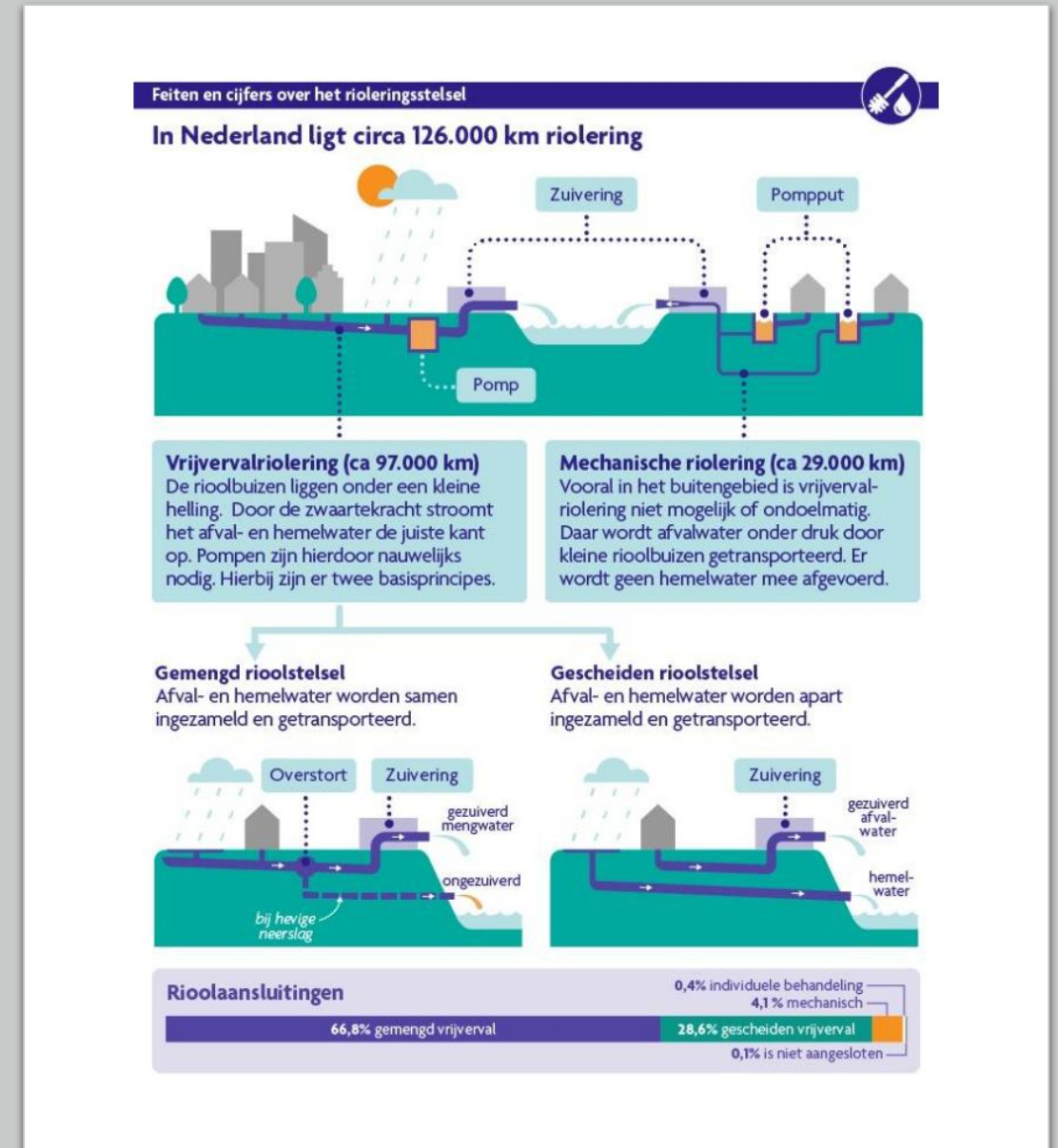
P95 (5% droogste) van het maximale potentiele neerslagtekort



We are getting dry Map shows water shortages

Transition to resilient water management because

- Local note (we don't know if this is different in Ireland) 66,8% of **all** of our sewerwater is filtered before it returns to open water.
- But, when it rains very hard, it will spill directly in the rivers and other open water bodies.



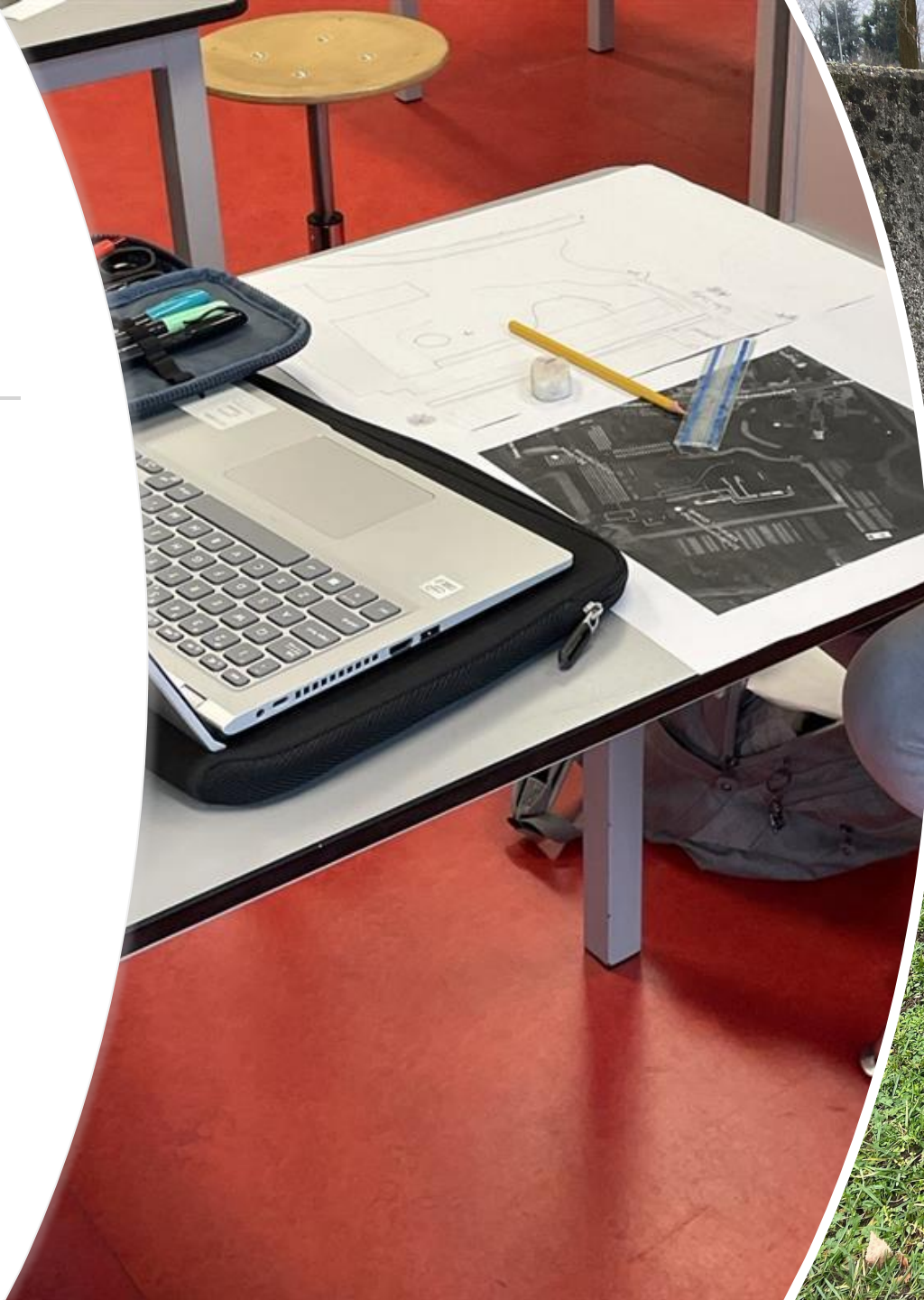
Focus points



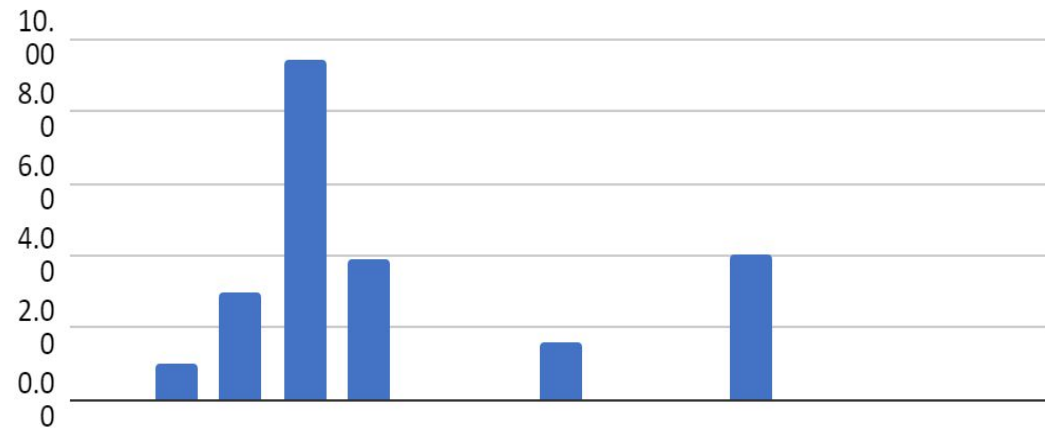
- Filter rainwater before it settles into soil
- Keep the water instead of draining it in sewers and canals.
- Slow it down to avoid system overload

Study Details

- 5 lessons of 50 minutes for our project till now
- Groups of 1 to 5 children (age 11-12) mapping the area
- Observed and measured rainfall en weather
- After the presentation of the experts constructing points of focus
- Conclusions: slowing down and filtering the rainwater is our main focus.
- Adjusting our maps (in process)



Rainfall Results



Summary

1

Keep the
water!

2

Slow it down

3

Use the
ground and
the roof

4

Look for
missed
opportunities

Next step

Canopy Cover

Slows Rain Drop Fall Rate = more time for the soil to absorb rainwater



Raised curbs in carparks must have small gaps at low points regularly, to allow water to enter the rain garden.

Permeable Pavement



Mini Ponds

Hold water. Improve biodiversity. Cool down hot days



Green Roofs Help Soak Up Water

- Co-working with our housing manager and the environmental officer of Groenlo.
- Working on our plans and presenting them to the schoolboard and environmental officer

Questions?



Bibliography / Sources

- <https://www.knmi.nl/klimaat-viewer/kaarten/neerslag-verdamping/1mm-dagen/januari>
- <https://www.clo.nl/indicatoren/nl1401-oppervlaktewater-in-nederland>
- <https://natuurenmilieu.nl/watermonsters/>