

Revision Urban Waste Water Treatment Directive

(Expected) Implementation in the
Netherlands

Liège, International Meuse Symposium
10 september 2024

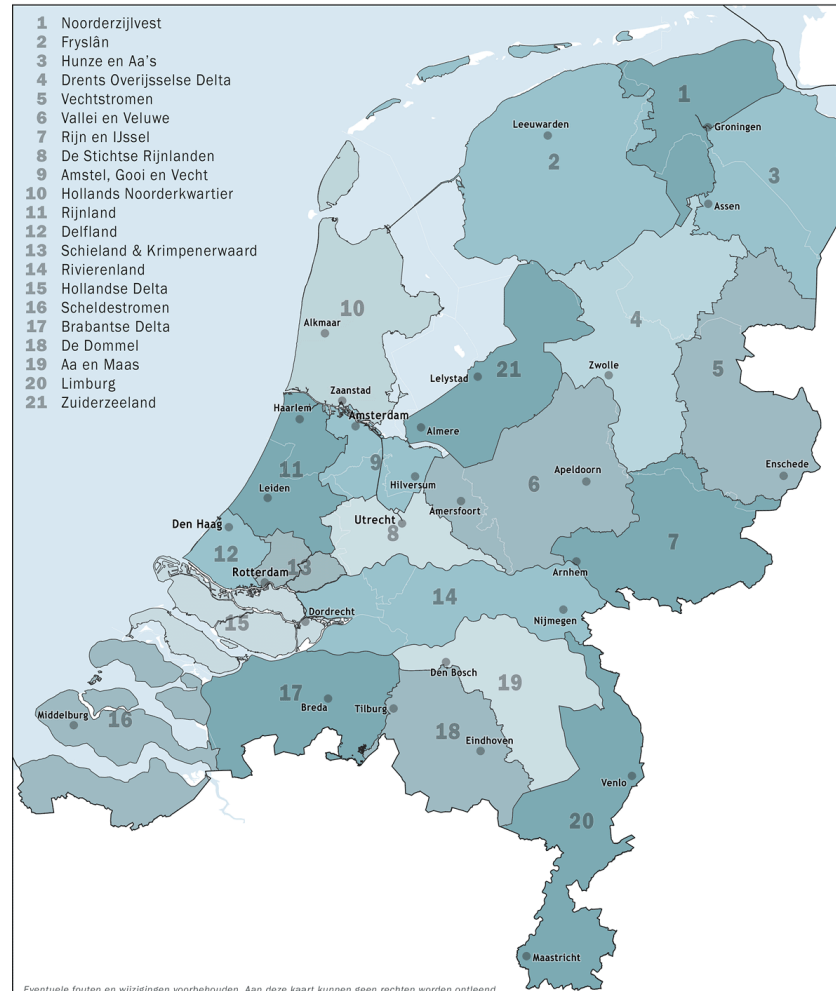
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21 REGIONAL WATER AUTHORITIES (2.647 IN 1950!)

WATERBEHEER 21 Waterschappen

2019



Process of the revision:

- English tekst is aproved in the European Parliament in april 2024
- In september 2024 expected aproval based on translated versions
- In october 2024 European Council
- After formal publication, the implementation in national law within 3 years.
- Implementation is the responsibility of our national government

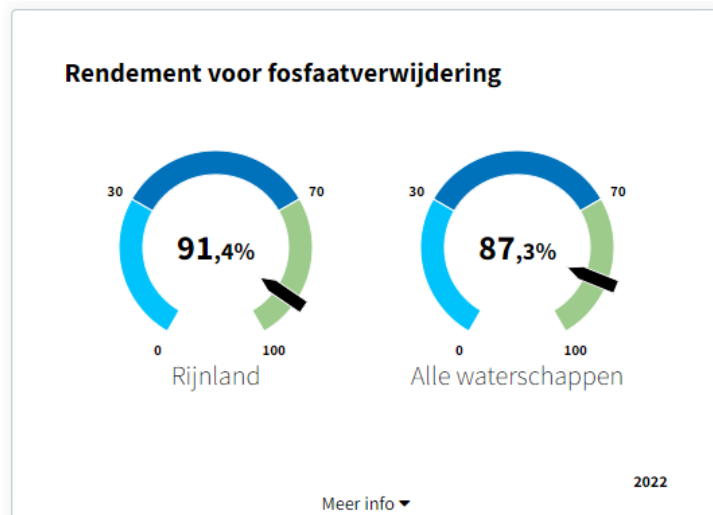
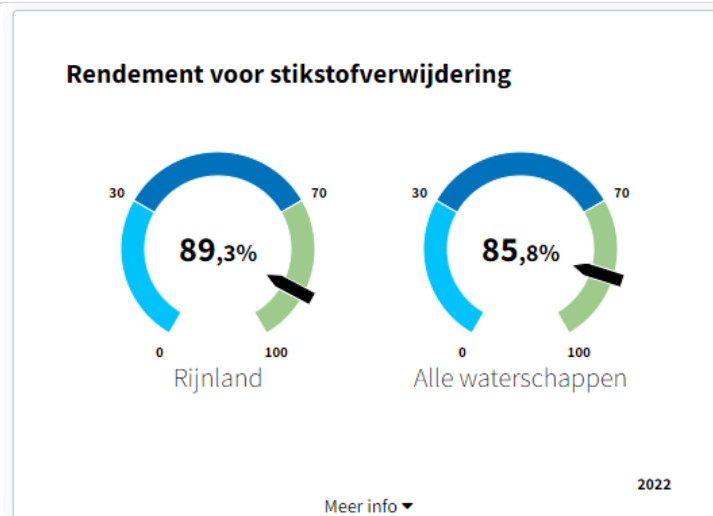


Removal of nutrients (article 7)

- WWTPs over 150.000 pe: in 2039
 - N: 8mg/L or 80 %
 - P: 0,5 mg/L or 90 %

 - For sensitive area's WWTPs>10.000 pe in 2045
 - N: 10 mg/L or 80 %
 - P: 0,7 mg/L or 87,5 %
- Netherlands is expected to be a sensitive area for the whole territory

WFD requirements are locally a challenge!



Removal of micropollutants (article 8 t/m 10)

- Removal of pharmaceuticals over 80 % for large WWTPs
- We have now limited full scale experience with 5 plants (70 % removal rate)
- Activated carbon combined with ozone
- Expected costs: 500 -600 million Euro per year ? (25 Euro per capita?)
- High consumption of energy and resources



Extended Producer Responsibility

Keep it simple! Uniform costs per m³
or PE?

Dialogue with Government and
pharmaceutical and cosmetic
industry: Many questions...

We prefer one EU approach



Energy neutrality (article 11 en 21),

- Energy neutral, with external non-fossile energy maximum 35 %
- Targets seem realistic, lower then our own voluntary ambitions (complete climate neutrality)
- WWTP as an energy hub: production of H₂, green gas, etc....



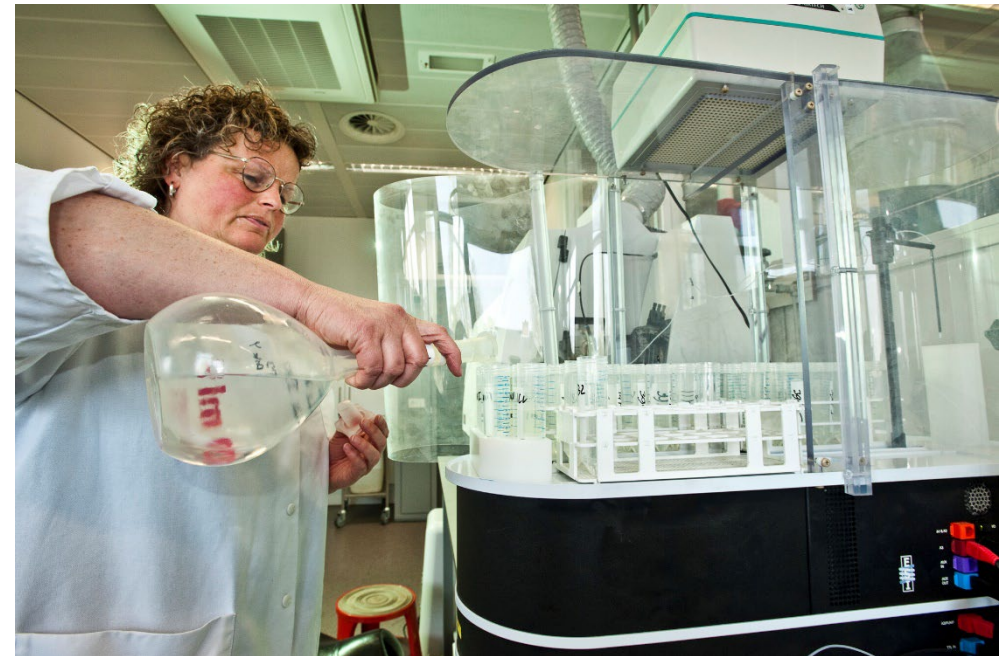
Indirect discharges (article 14, 15, 16)

- In the Netherlands, WWTP operators already have to be consulted.
- The problem is absent or neglected control and enforcement of existing permits.
- Many unexpected substances in the WWTP influent....



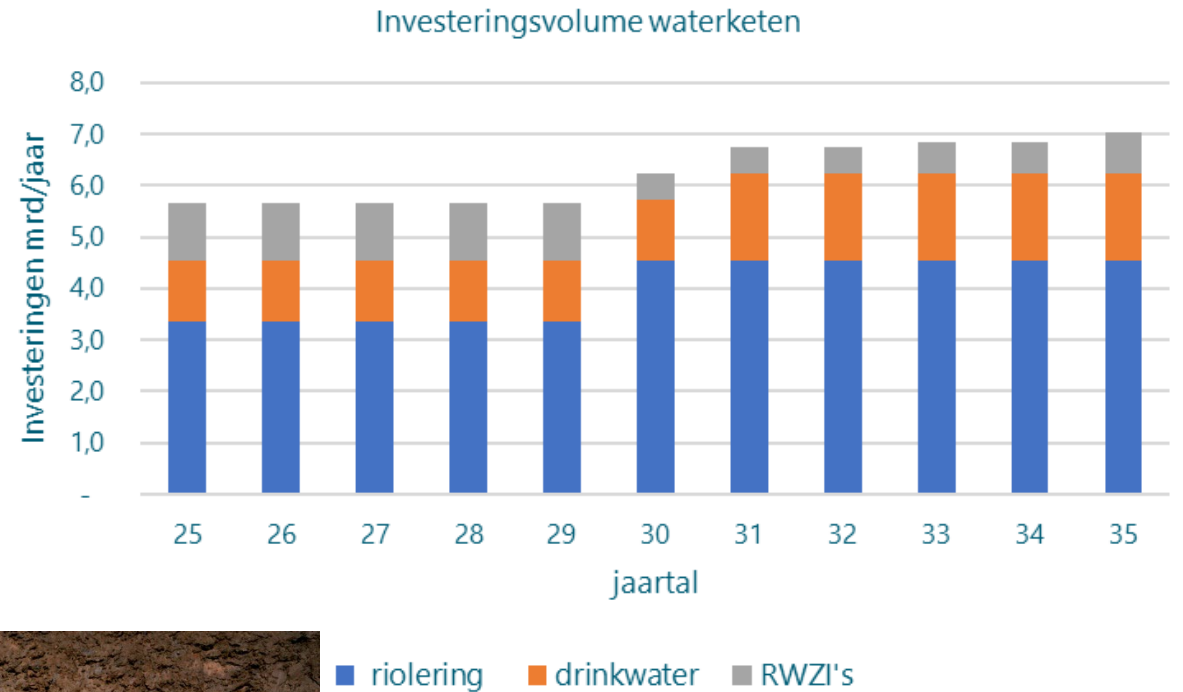
Article 18: compliance with WFD, MD, Bathing Water directive , etc

- Will lead to stronger regulation and control at source of discharges into the sewer system
- Will lead to further control at source (REACH?)
- We do not envisage further advanced treatment beyond specifications in article 8.
- How to reduce PFAS?



Many other challenges

- Population growth +10 %
- Climate change and extreme weather events
- High costs for maintenance
- Lack of space for further treatment
- Lack of capacity in design and construction sector



Circularity

We aim at full circularity

How to reuse recovered products

How to deal with micropollutants in reused material: sludge, recovered P, bioplastics, etc.



Thank you for your attention!

