

Introduction

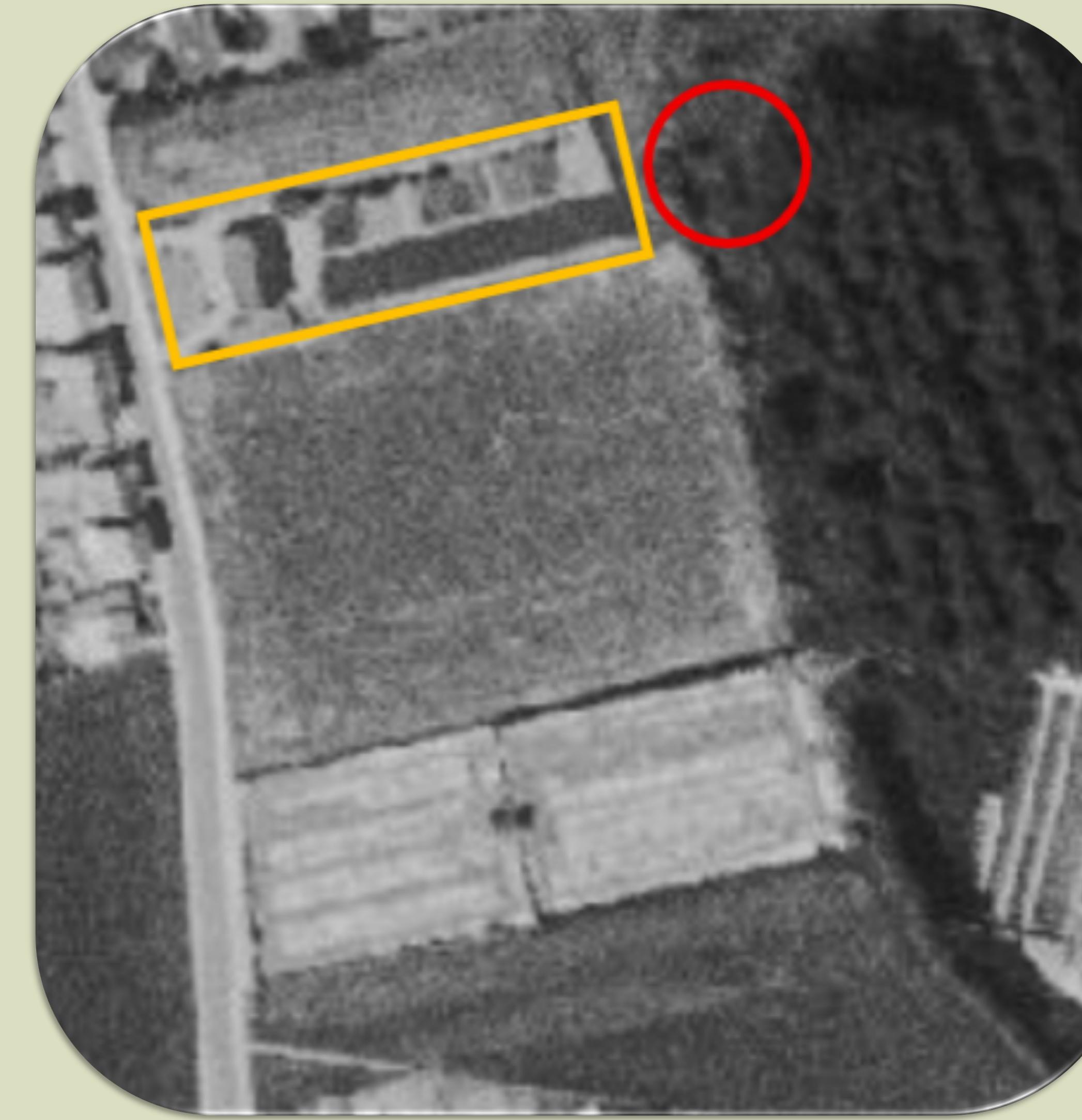
Illegal discharges remain a persistent problem for our natural environment, with **1.142 cases identified** in 2024 in Flanders. A concrete example is the conservation area the Rottenbos, managed by Natuurpunt.



Suspicious drainage pipe.

Three objectives:

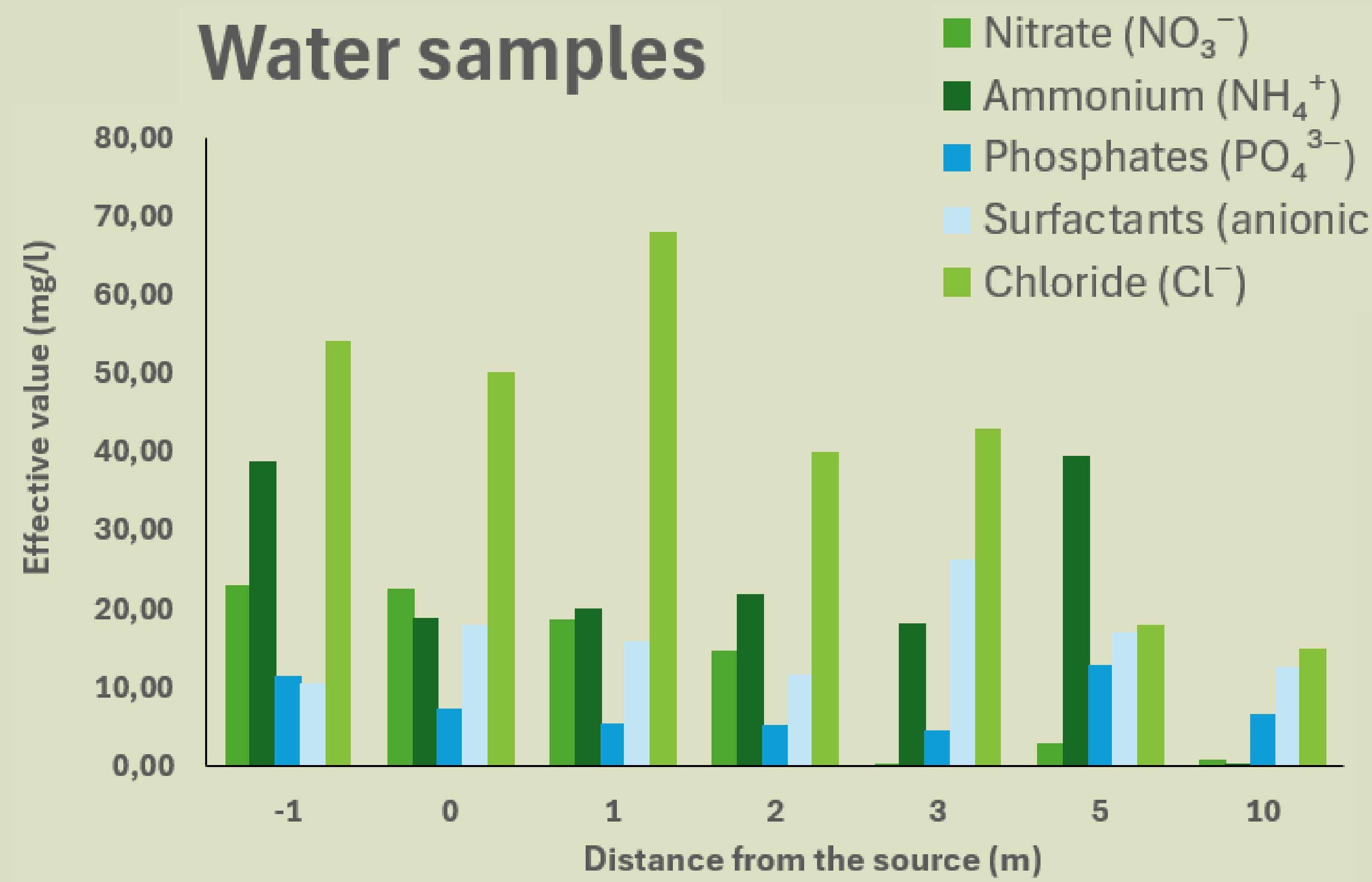
1. Confirming the discharge
2. Characterizing and quantifying the pollution
3. Formulating concrete measures



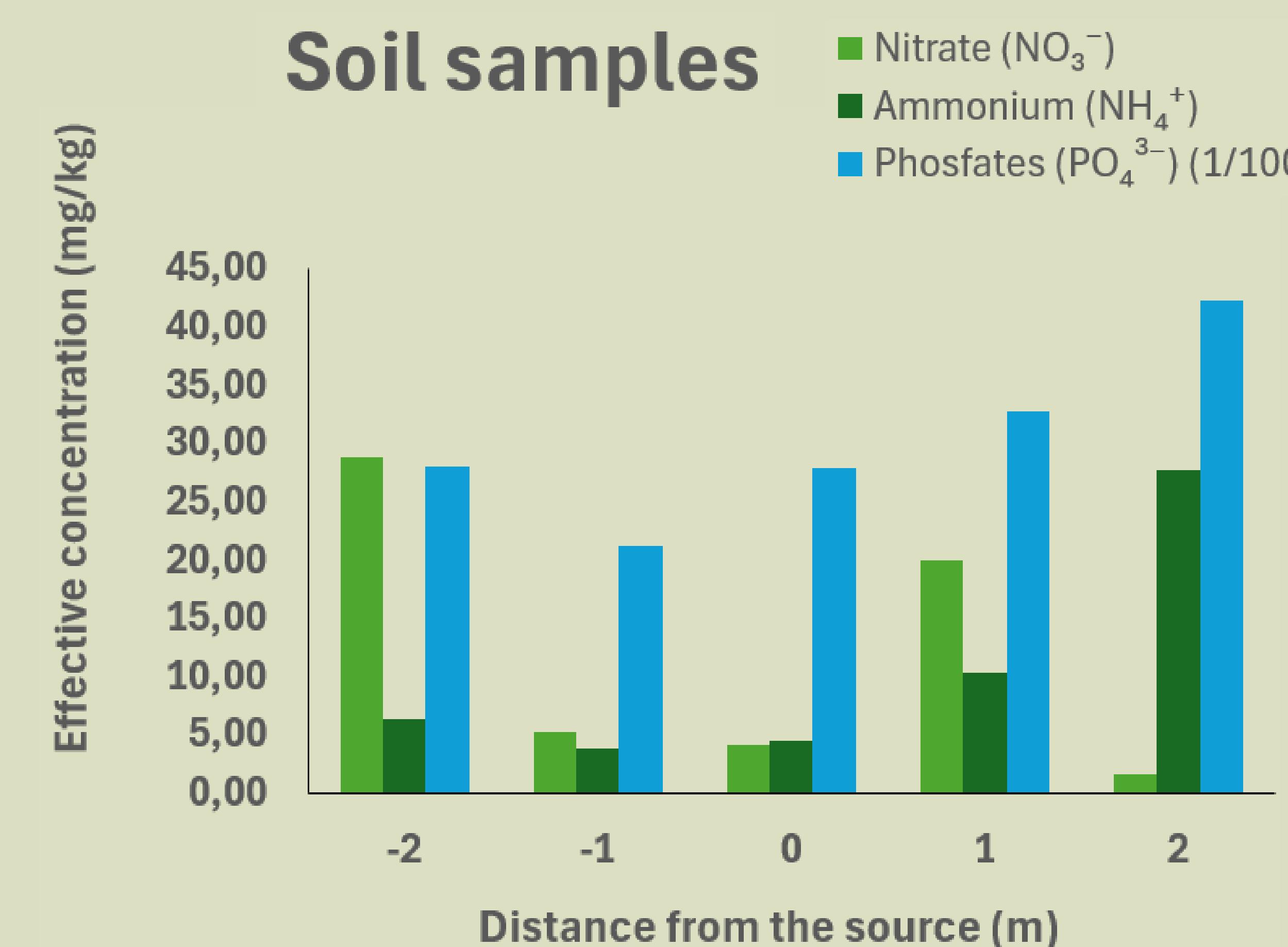
Aerial photograph 1971 discharge point.

Results and discussion

Water samples



Soil samples



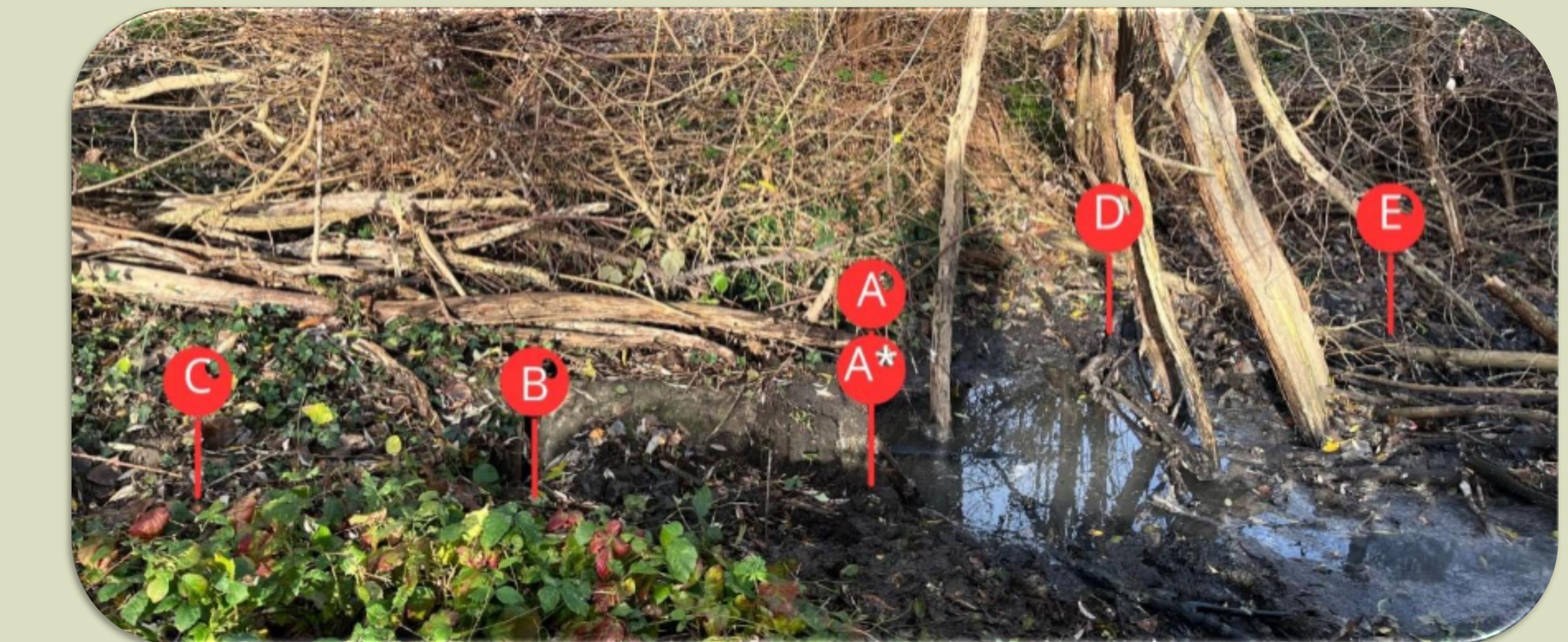
Materials and methods

Parameters

- Nitrate (NO_3^-)
- Ammonium (NH_4^+)
- Chloride (Cl^-)
- Phosphates (PO_4^{3-})
- Surfactants (anionic)

Photometry

- Accessible
- Direct quantification
- Ideal for rapid screening



Visualization of the sampling locations.

Conclusion

Increased values:

1. Ammonium
2. Phosphate
3. Surfactants (anionic)

Environmental drawbacks:

1. Eutrophication
2. Oxygen depletion
3. Biodiversity loss

**Every action counts
Help keep nature clean**