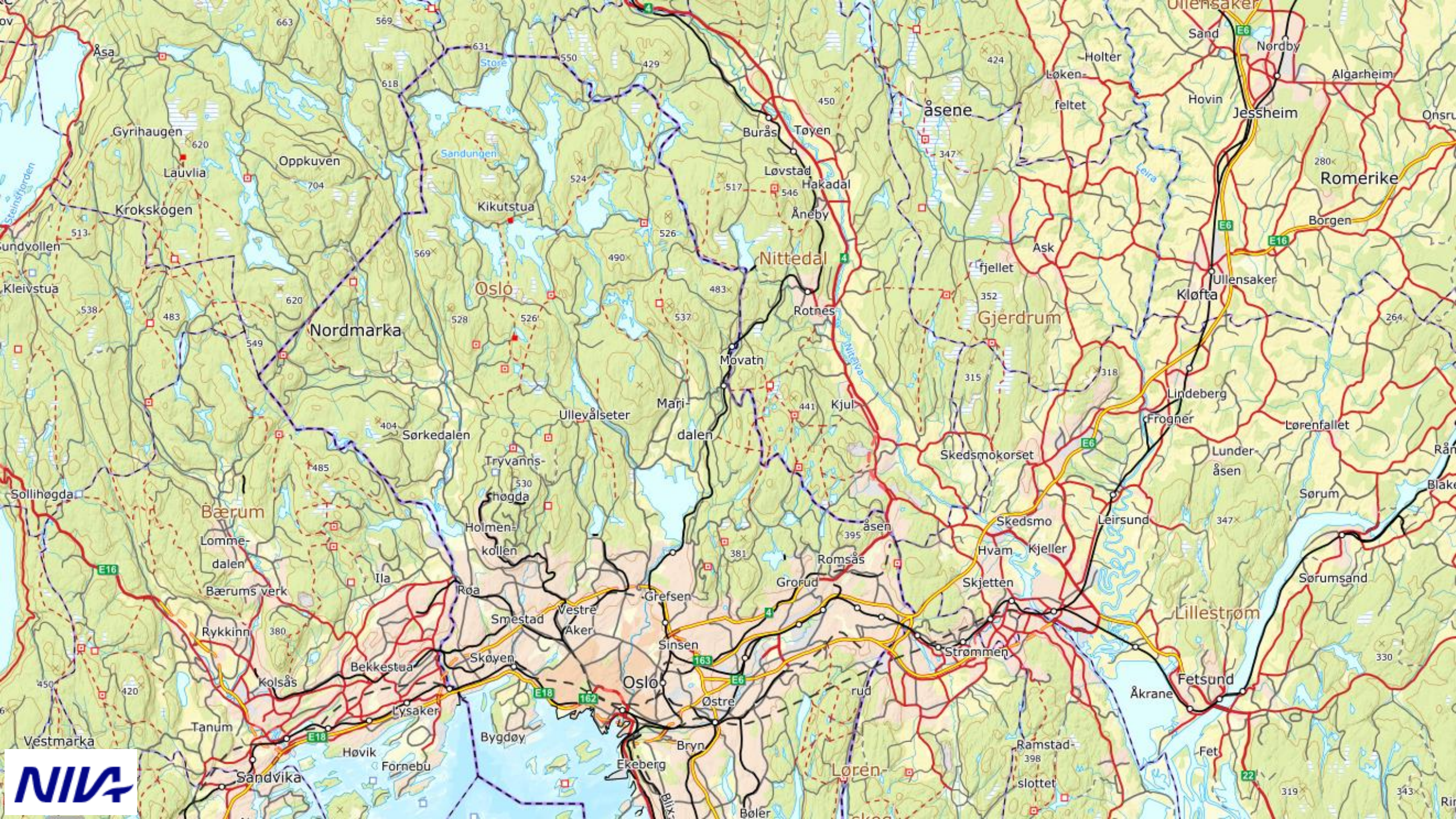
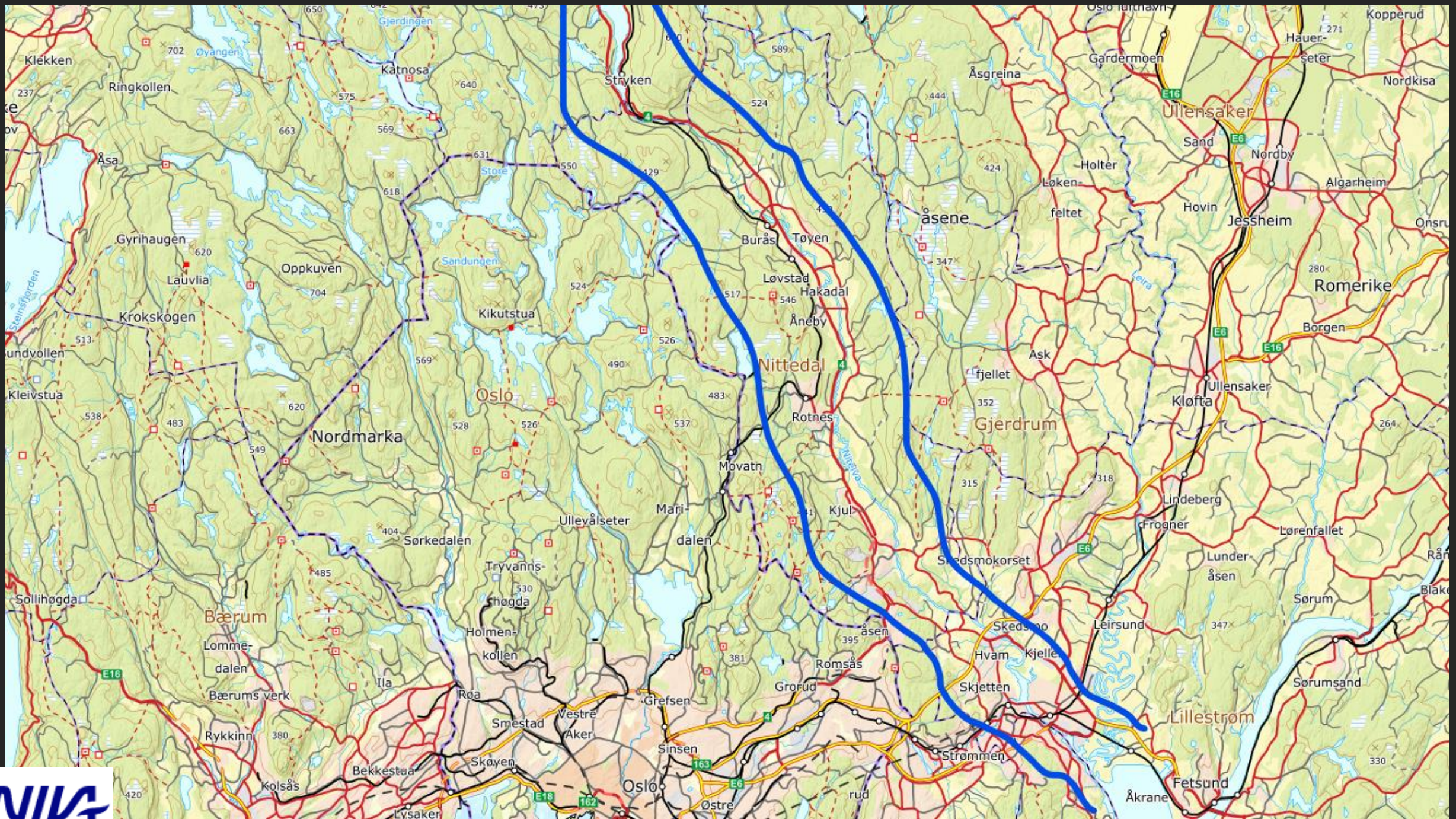


# NITELVA – på urbant eventyr Miljøgifter i fisk

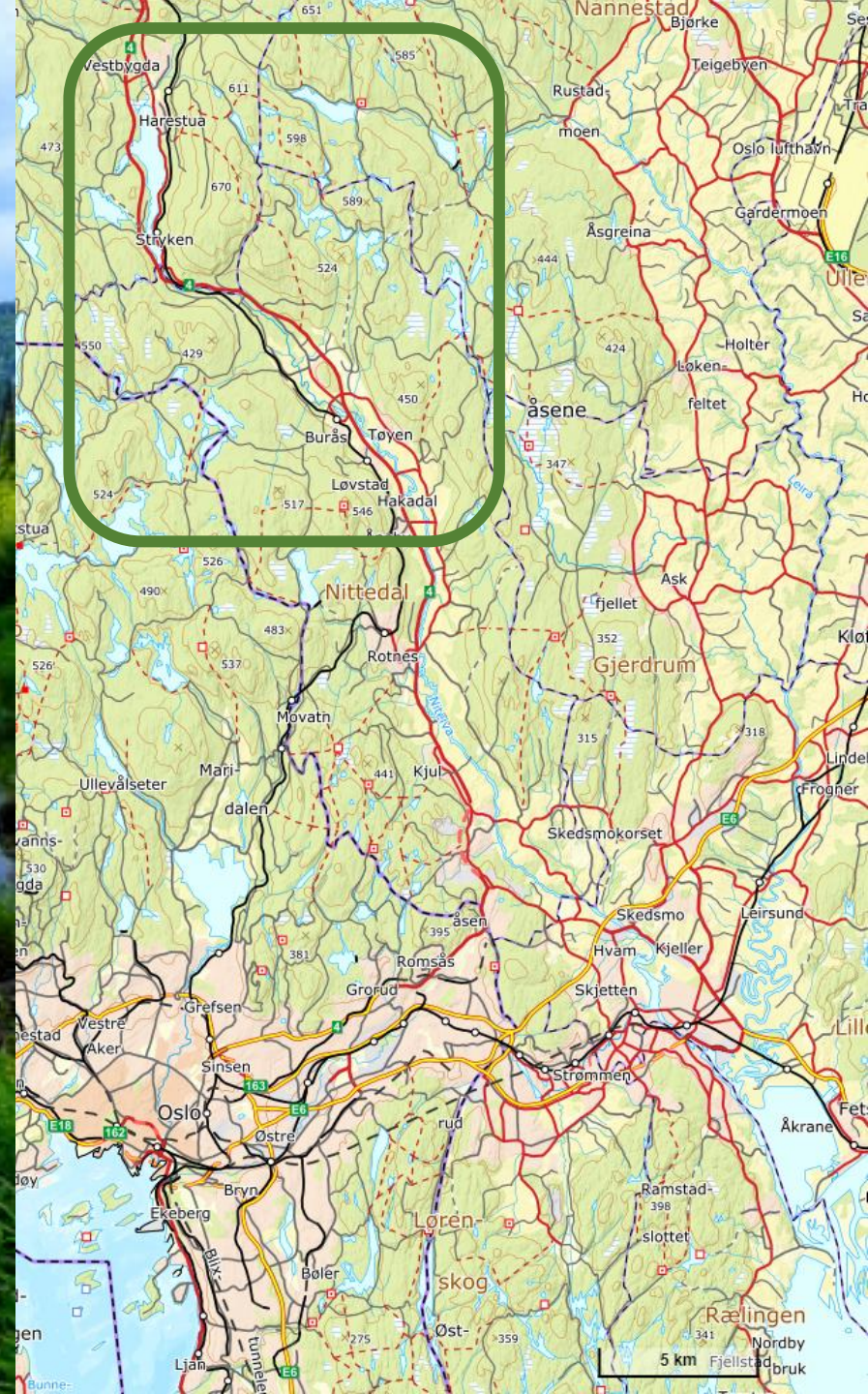




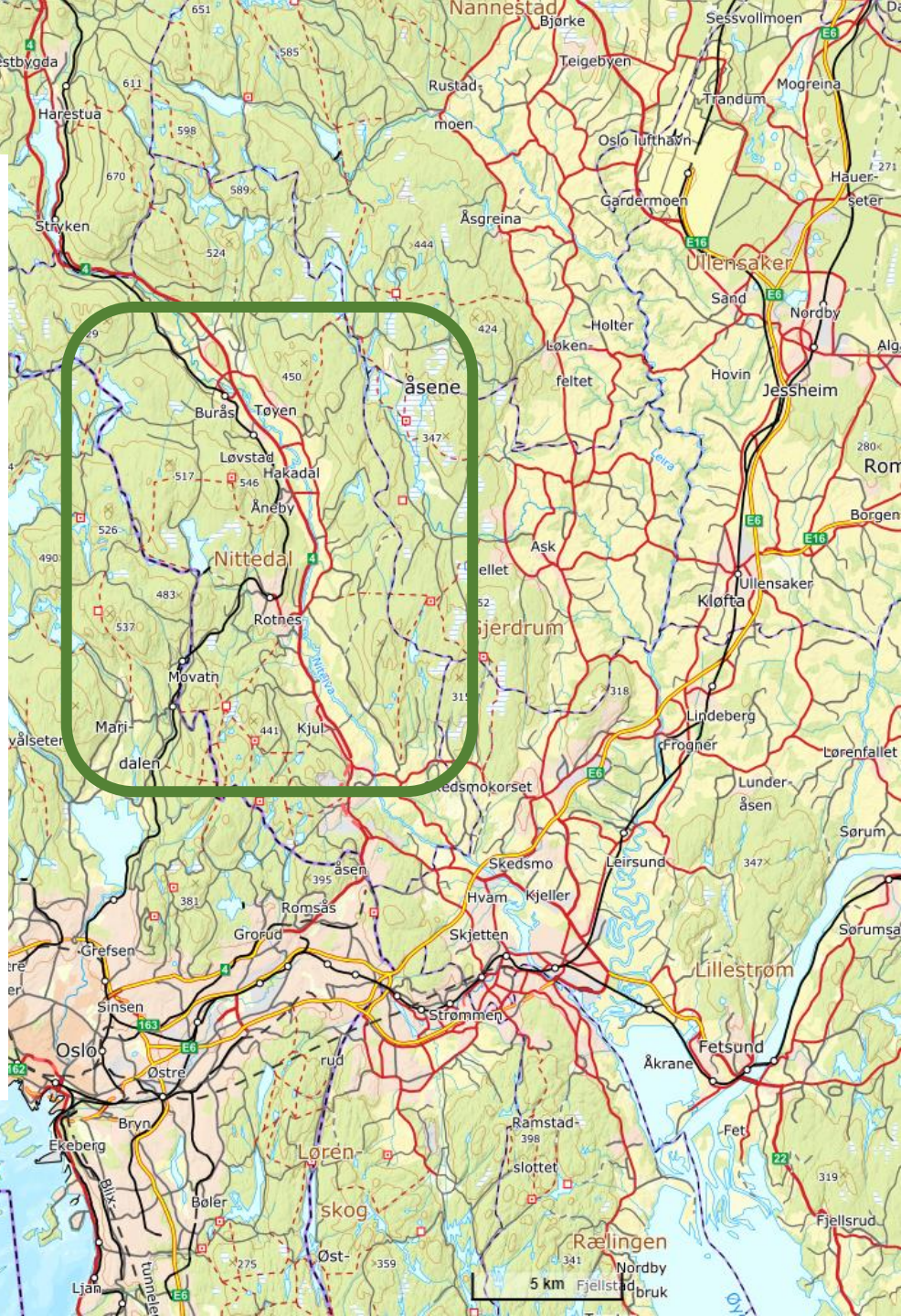












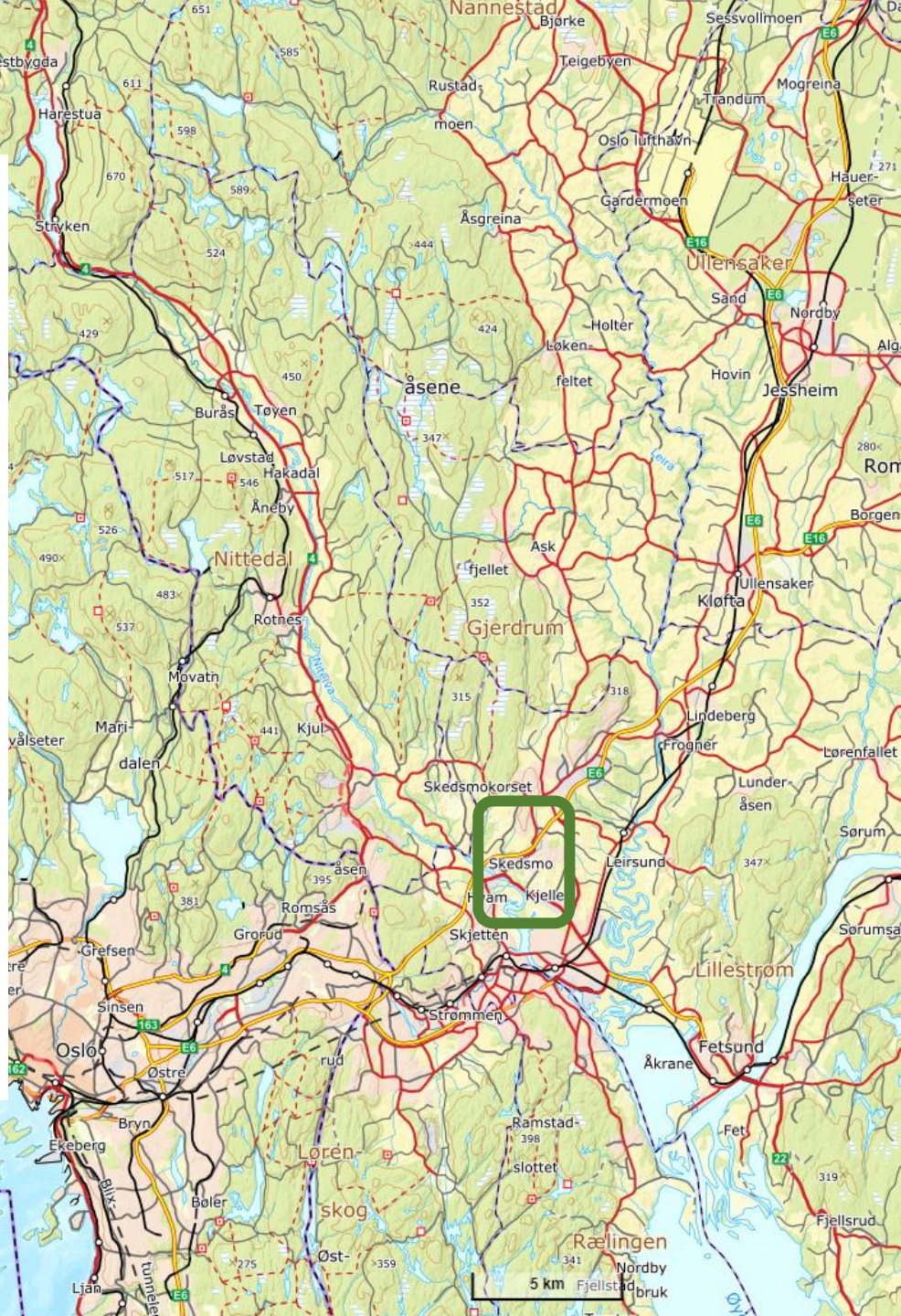
Illustrasjonsfoto



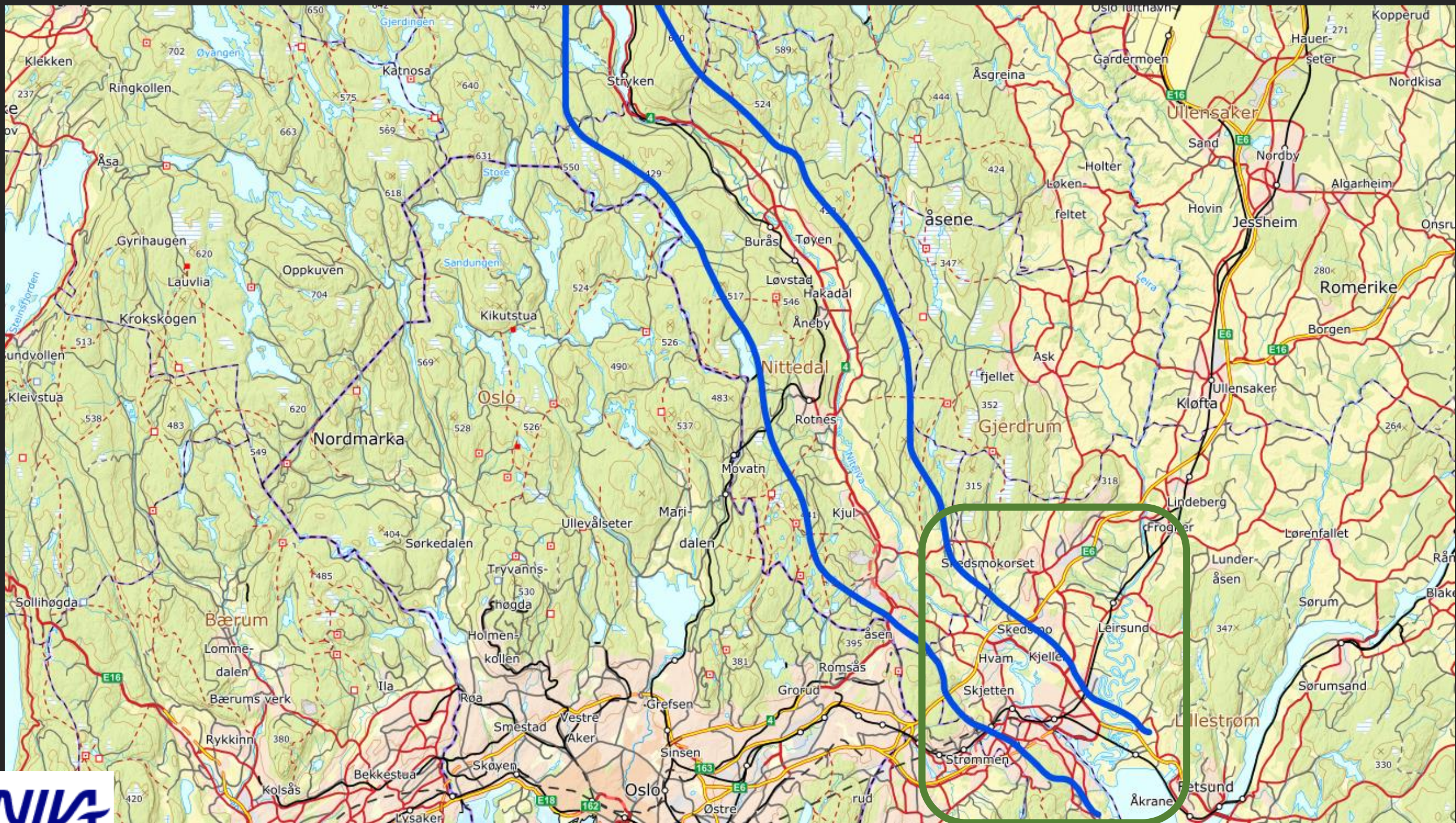




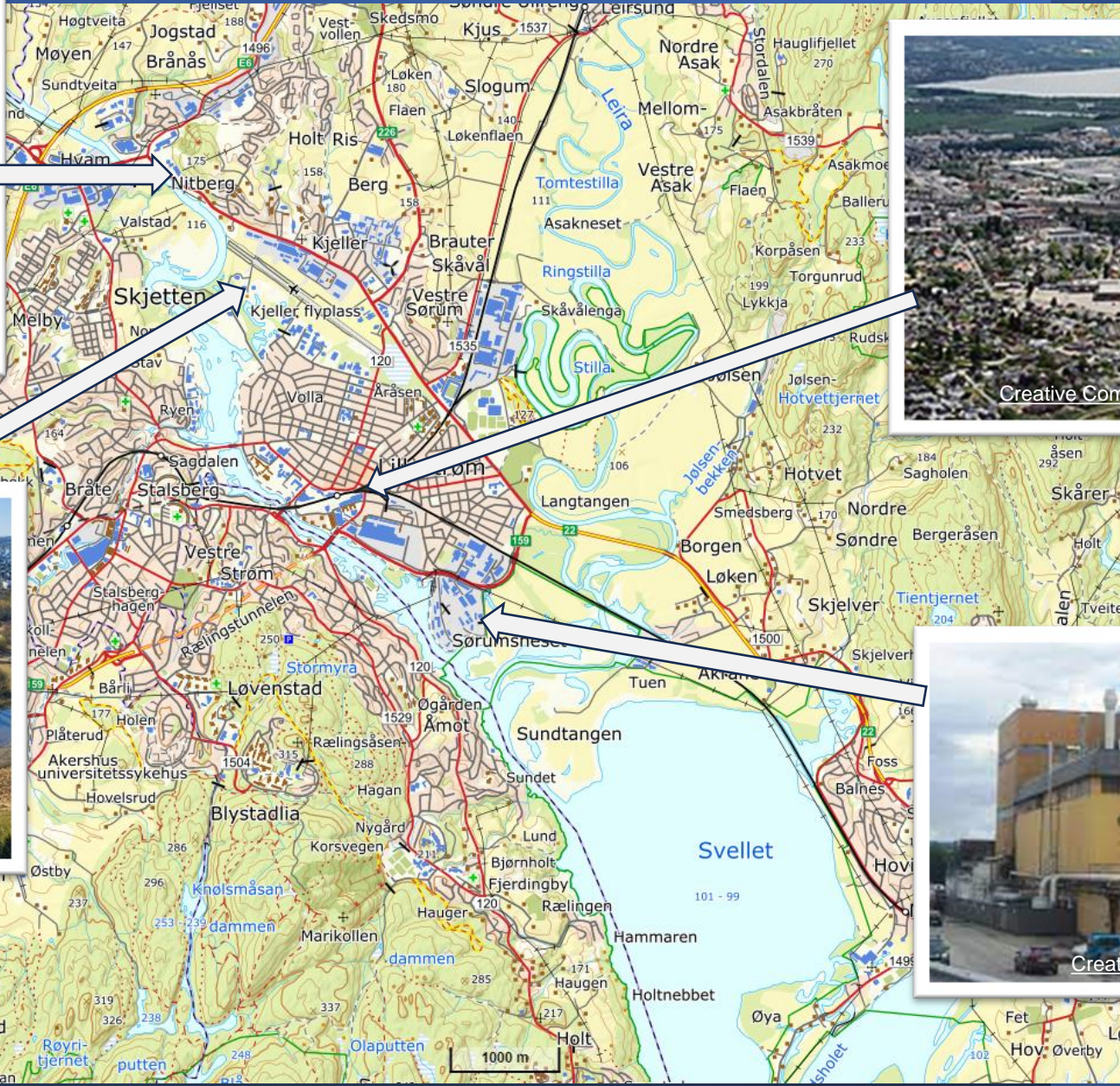
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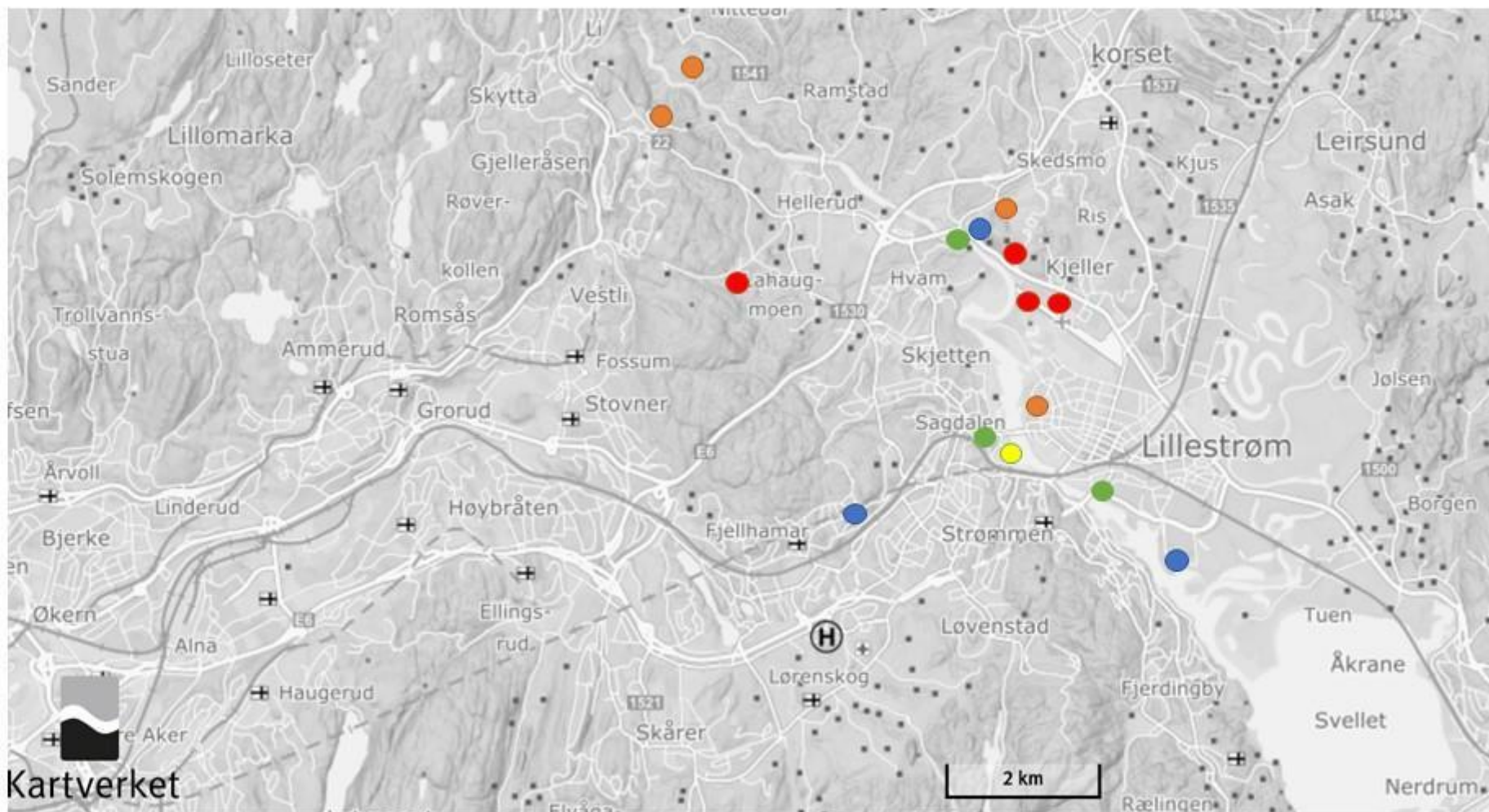




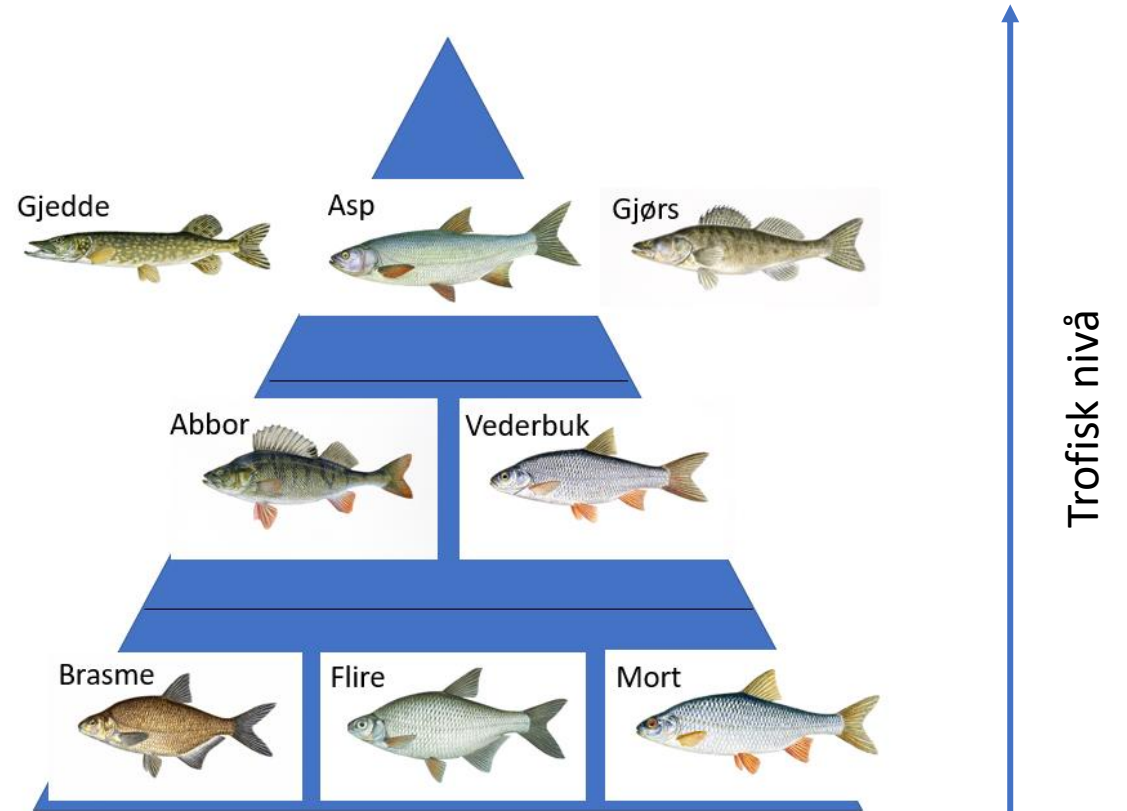
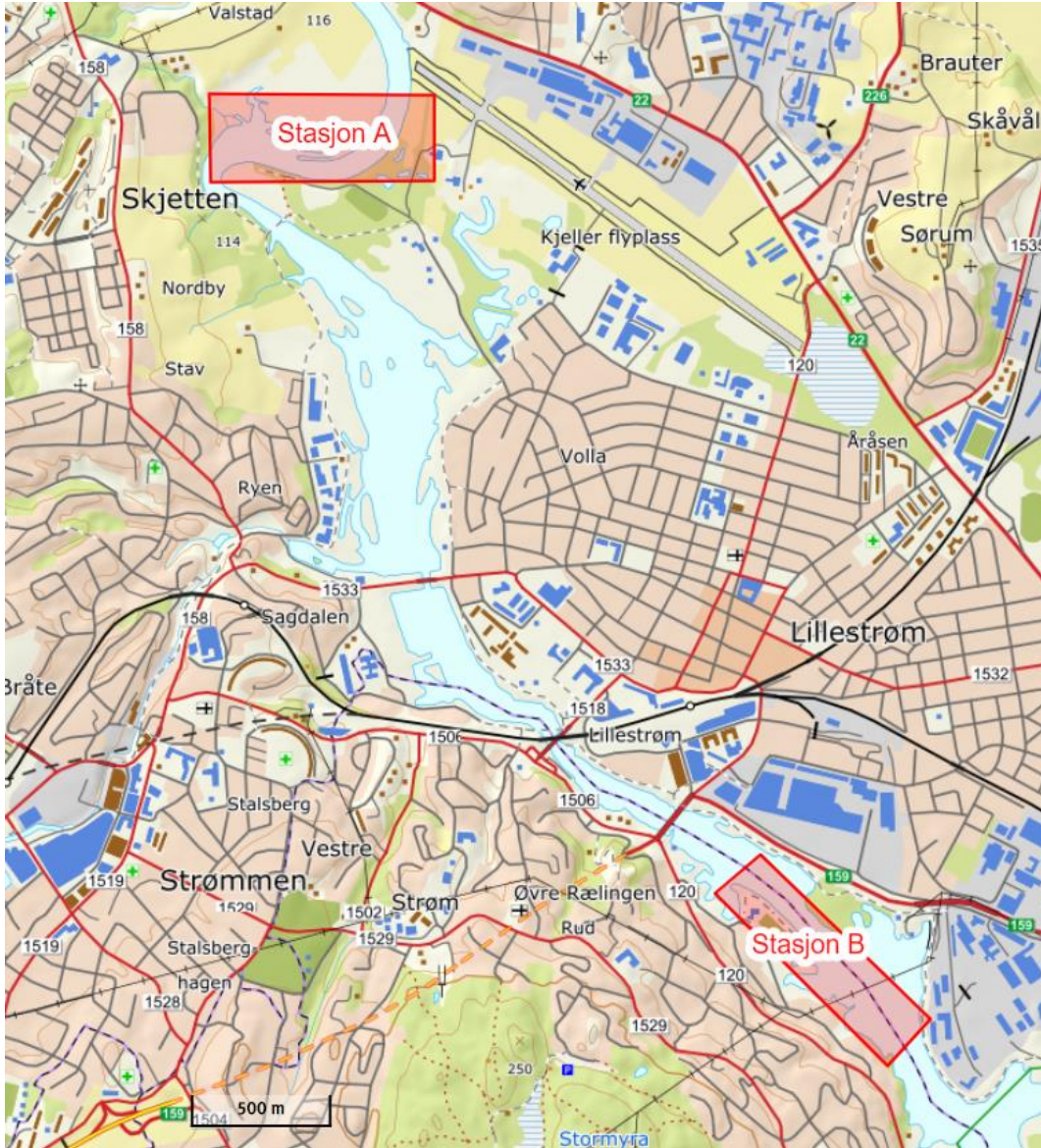


## Kategorier

- Industri
- Avfallsdeponier og fyllmasser
- Brannøving
- Vegavrenning og urbane områder
- Avløpsrensning













# Undersøkte forbindelser

Kvikksølv (Hg) og  
andre metaller

Polysykliske  
aromatiske  
hydrokarboner (PAH)  
(metabolitter)

Perfluorerte  
alkylforbindelser  
(PFAS)

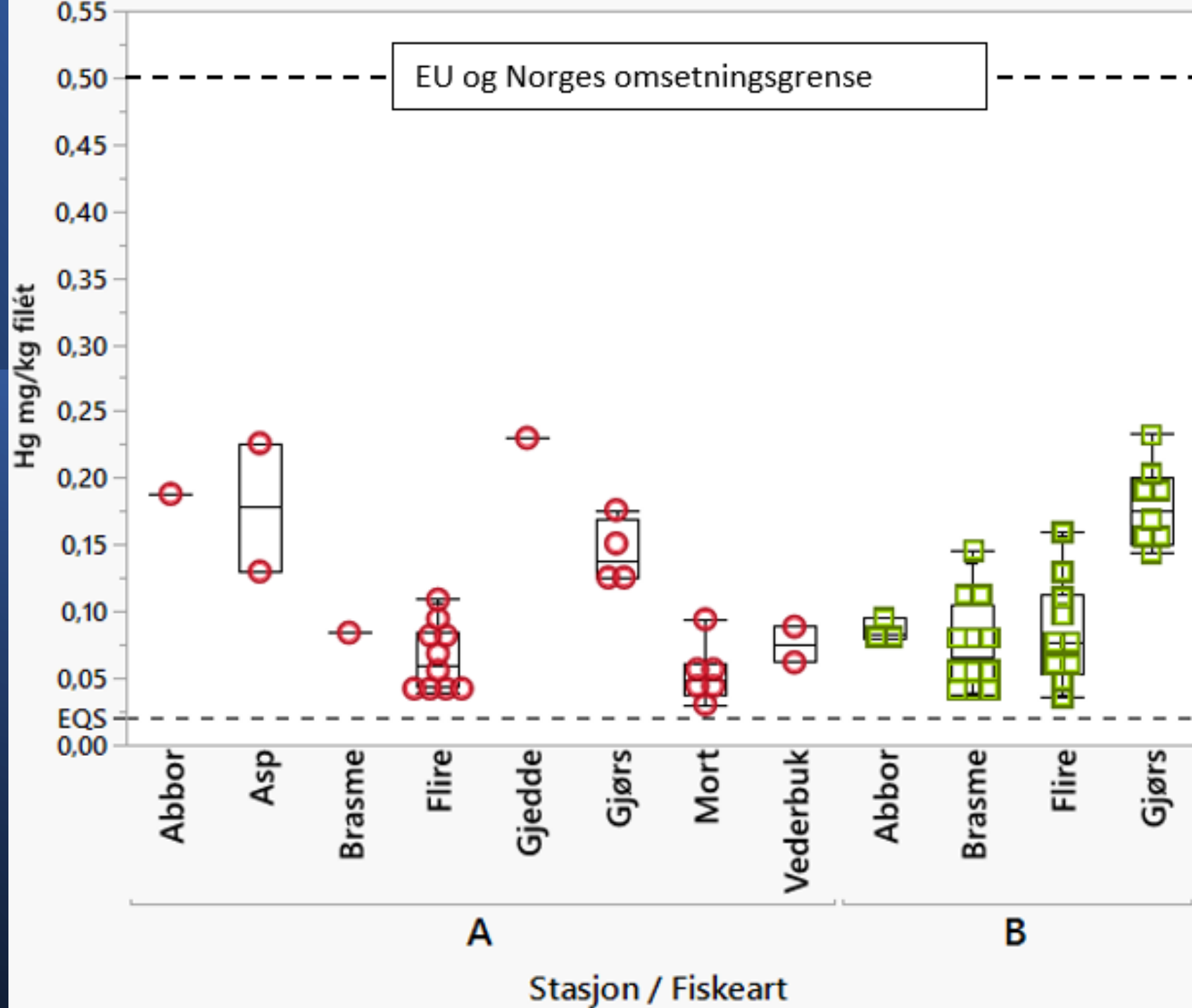


# Kort oppsummert

- Generelt lave metallkonsentrasjoner (Pb, Cd, Cu...)
- **Hg** over EQS
- Høyere **PAH**-konsentrasjon (1-OH-pyren og 1-OH-fenantren) i den nederste av de to stasjonene
- Relativt høye nivåer av **PFOS** i de fleste av fiskeartene, og over EQS i alle individer av de ulike artene, bortsett fra i mort

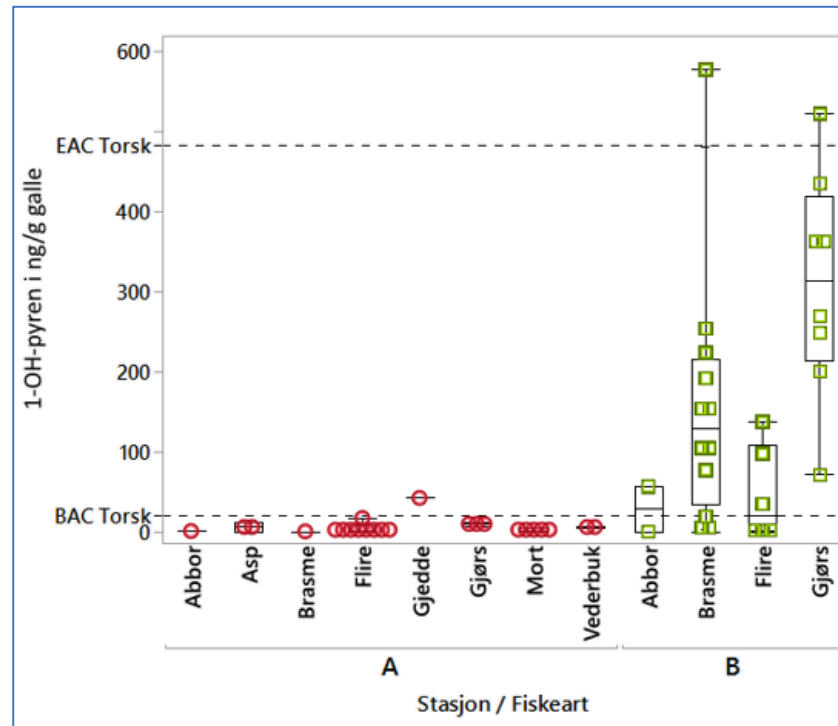


# Resultater Kvikksølv (Hg)



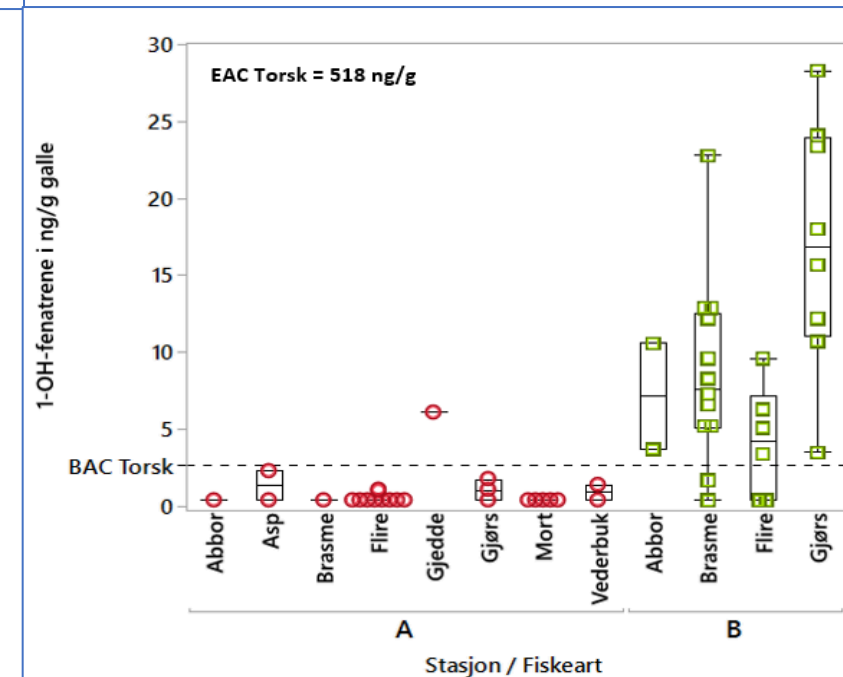


# PAH- metabolitter



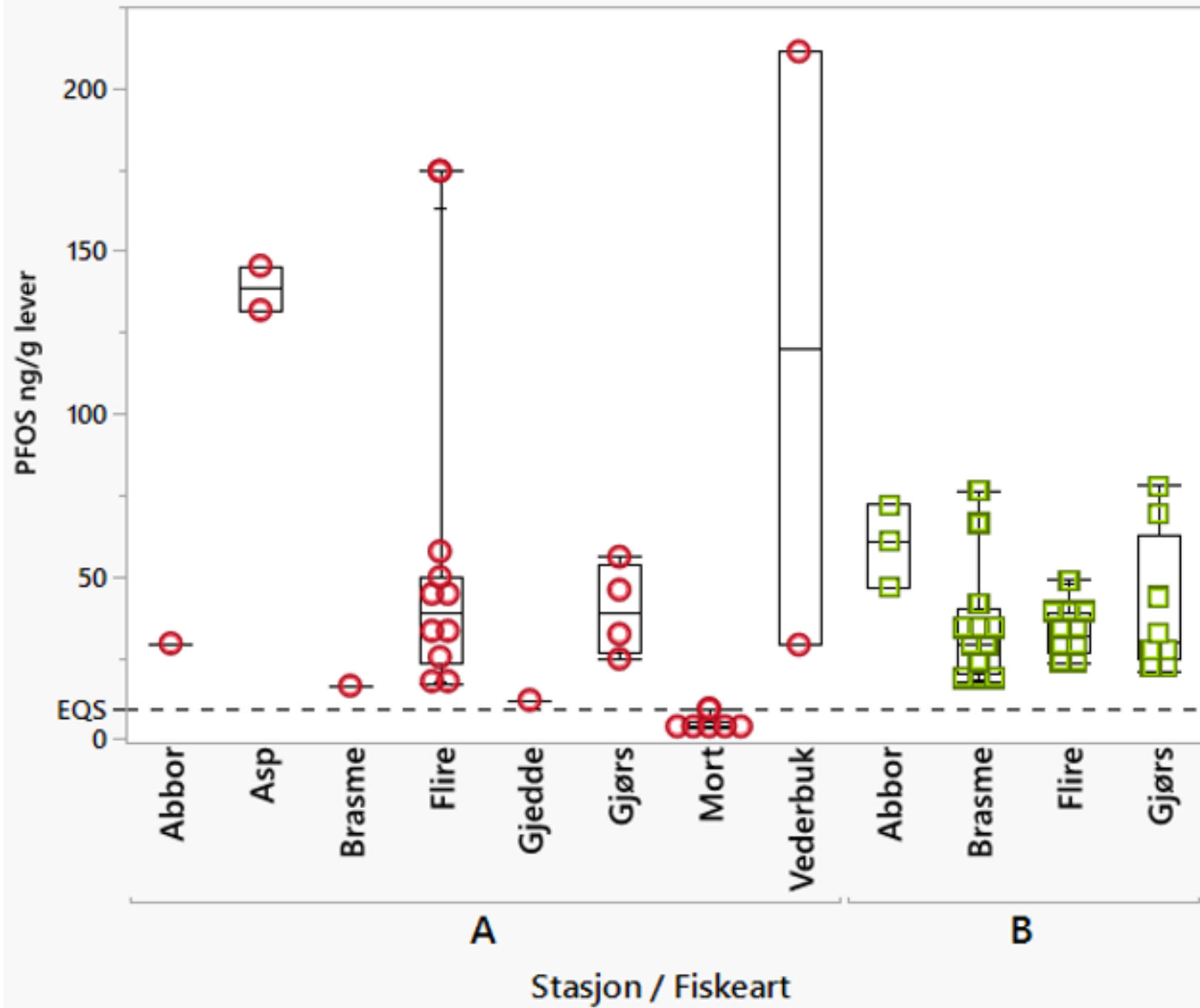
1-OH-pyren

1-OH-fenantren



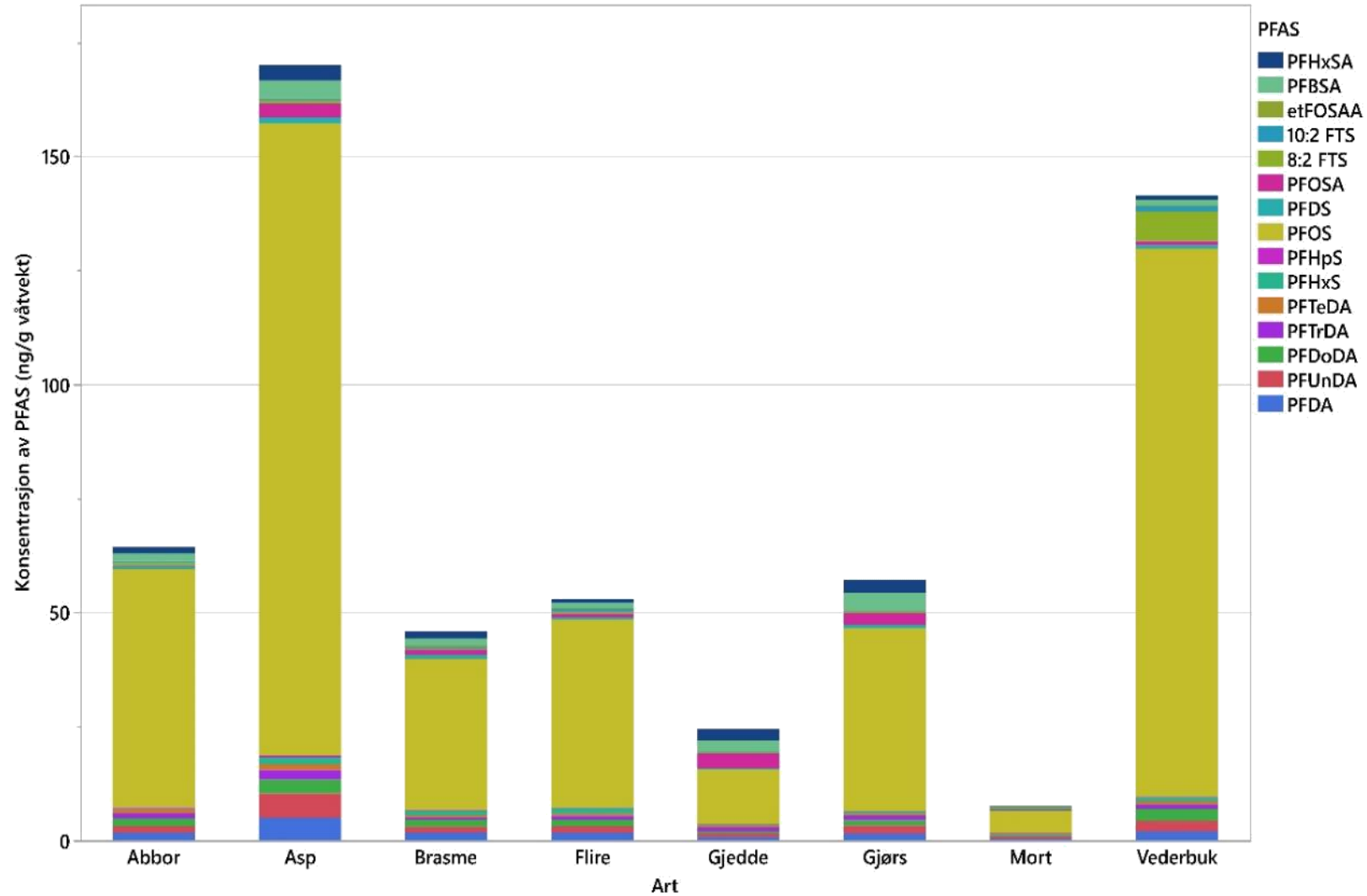


# PFAS – fluorkjemikalier PFOS



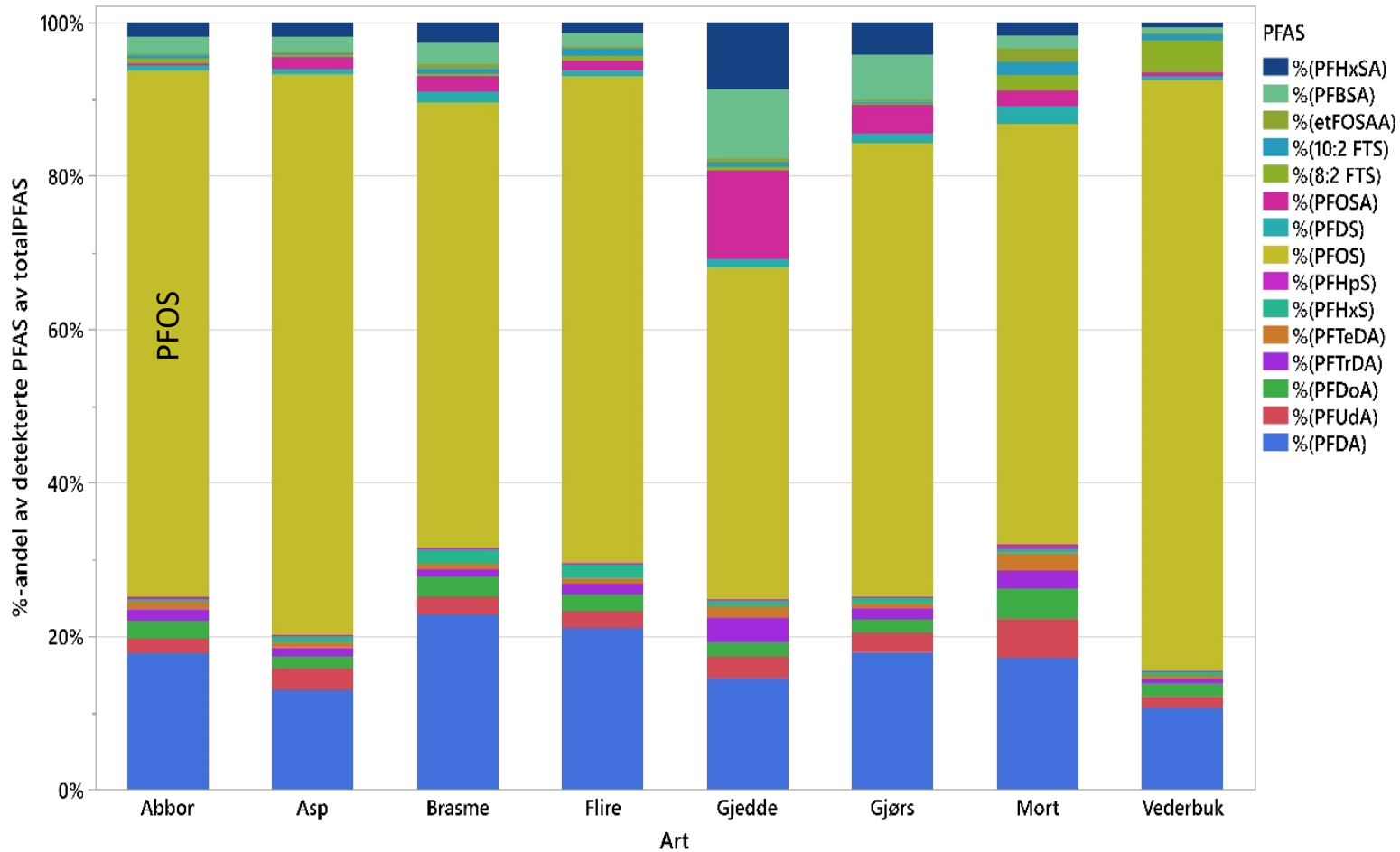


# PFAS i fisk, Nitelva. Nivåer.





# PFAS i fisk, Nitelva. Sammensetning.





# Oppfølging

- Kildekontroll
  - Urban avrenning
  - Industriavrenning (overflate og rør)
  - Deponier
  - Renseanlegg
- Økologisk tilstand?
- Mattrygghet?
- Bredere analytisk program; flere miljøgifter
  - Siloksaner
  - UV-stoffer
  - PCB
  - Klorparaffiner
  - PBDE









