

Trend and groundwater status assessment

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WaterAct

Joint actions for more efficient management
of common groundwater resources

Why, where and what to assess

Why we assess trend?

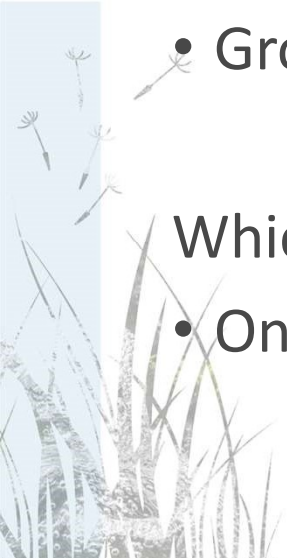
- To support GWB status assessment

Where to assess trend?

- Groundwater bodies at risk of not meeting WRD objectives

Which parameters?

- Ones that are posing risk to GWB



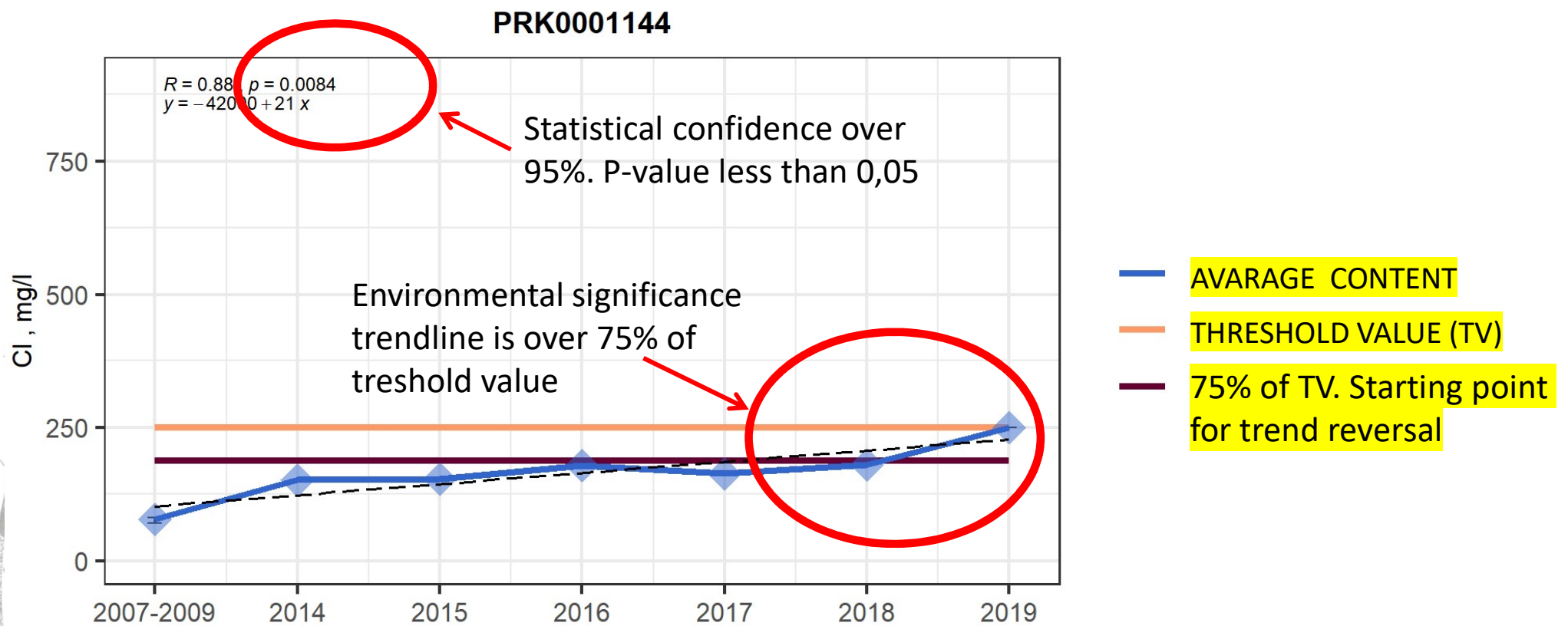
What is significant and sustained upward trend?

Trend is any **statistically** and **environmentally significant** increase in concentration of a pollutant that poses a risk of harm to the

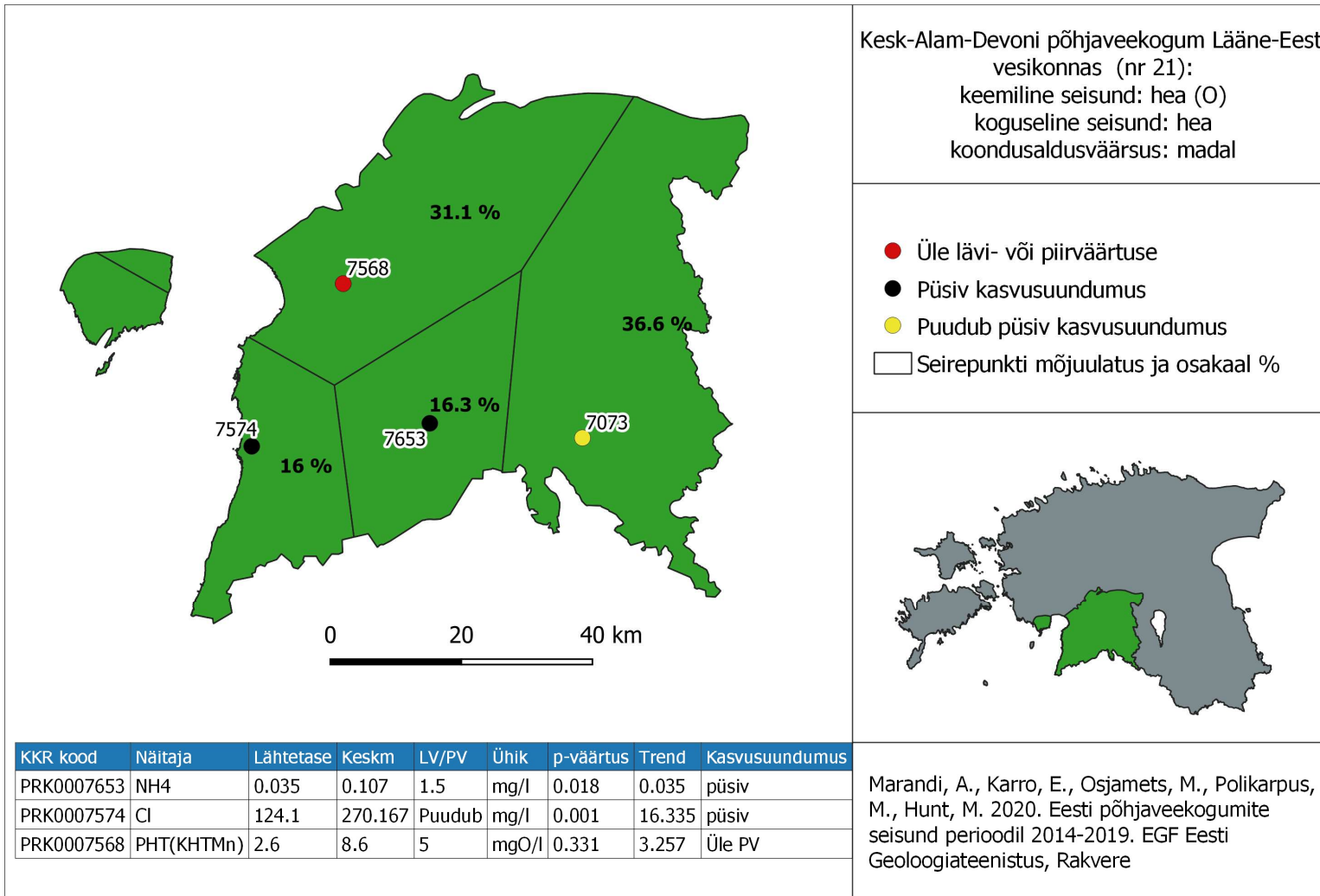
- aquatic ecosystems or terrestrial ecosystems
- to human health
- to existing or potential use of groundwater



To identify trend we used R software function `lm()`. Linear regression was calculated between year and mean values of contaminants. Trend plots and p-values were generated.

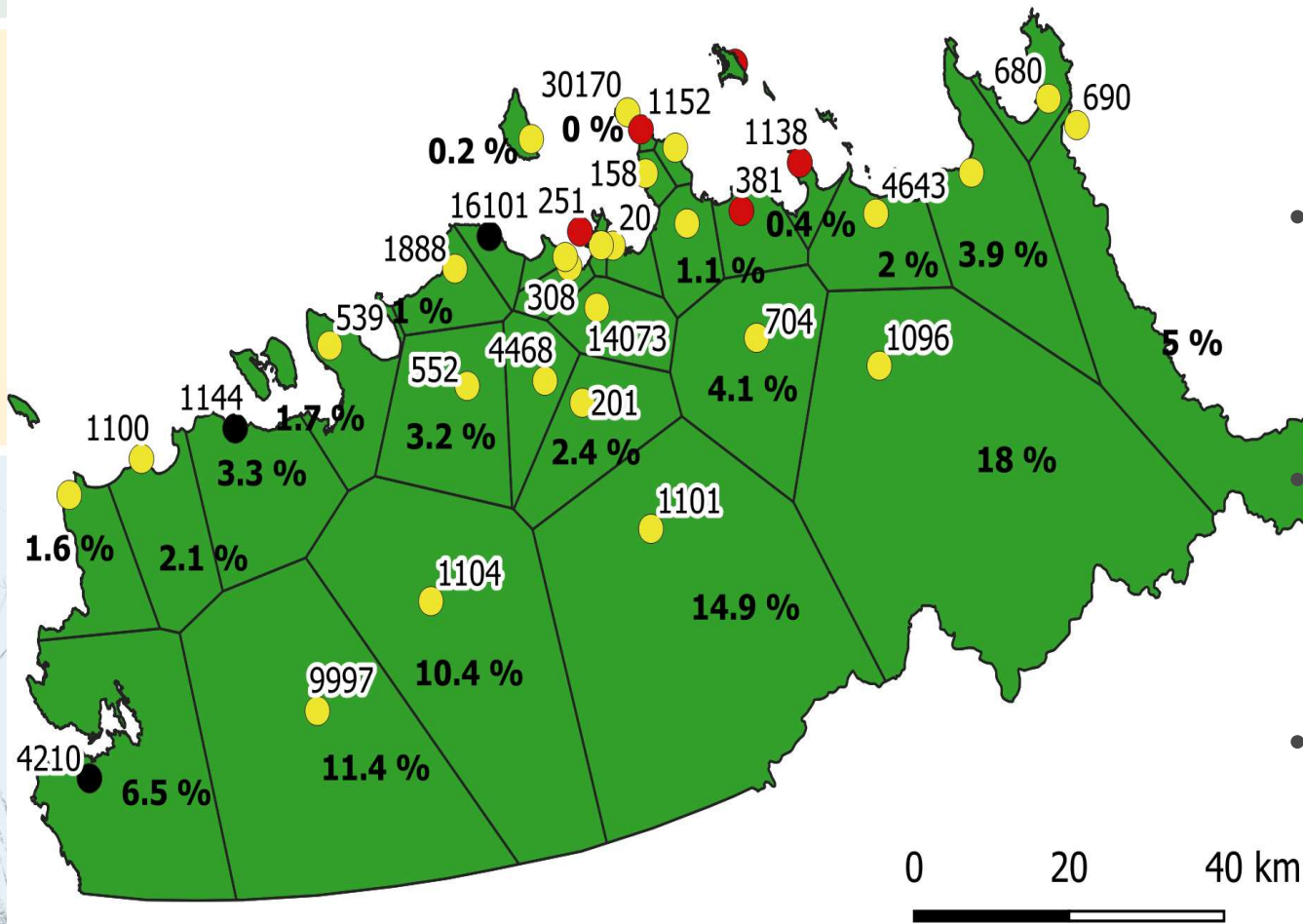


Reporting



- Black dots represent wells with upward trend
- Tabel below shows which contaminant has upward trend in a well

Trend and GWB status assessment



- CI in some wells is over TV. Upward trend in wells representing 10 % of GWB.
- Upward trend in **whole GWB** but the trend line is under 75% of treshold value
- GWB is in good chemical status but at risk

• Thank you for the attention!



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