

AefU-Symposium Solothurn, May 23rd 2019



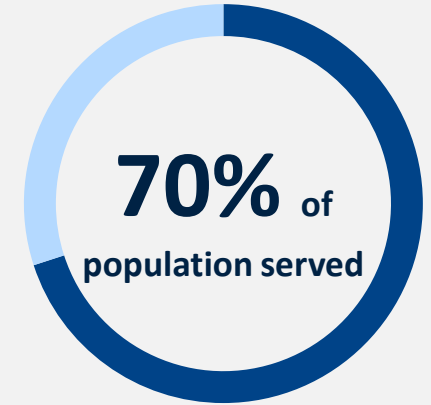
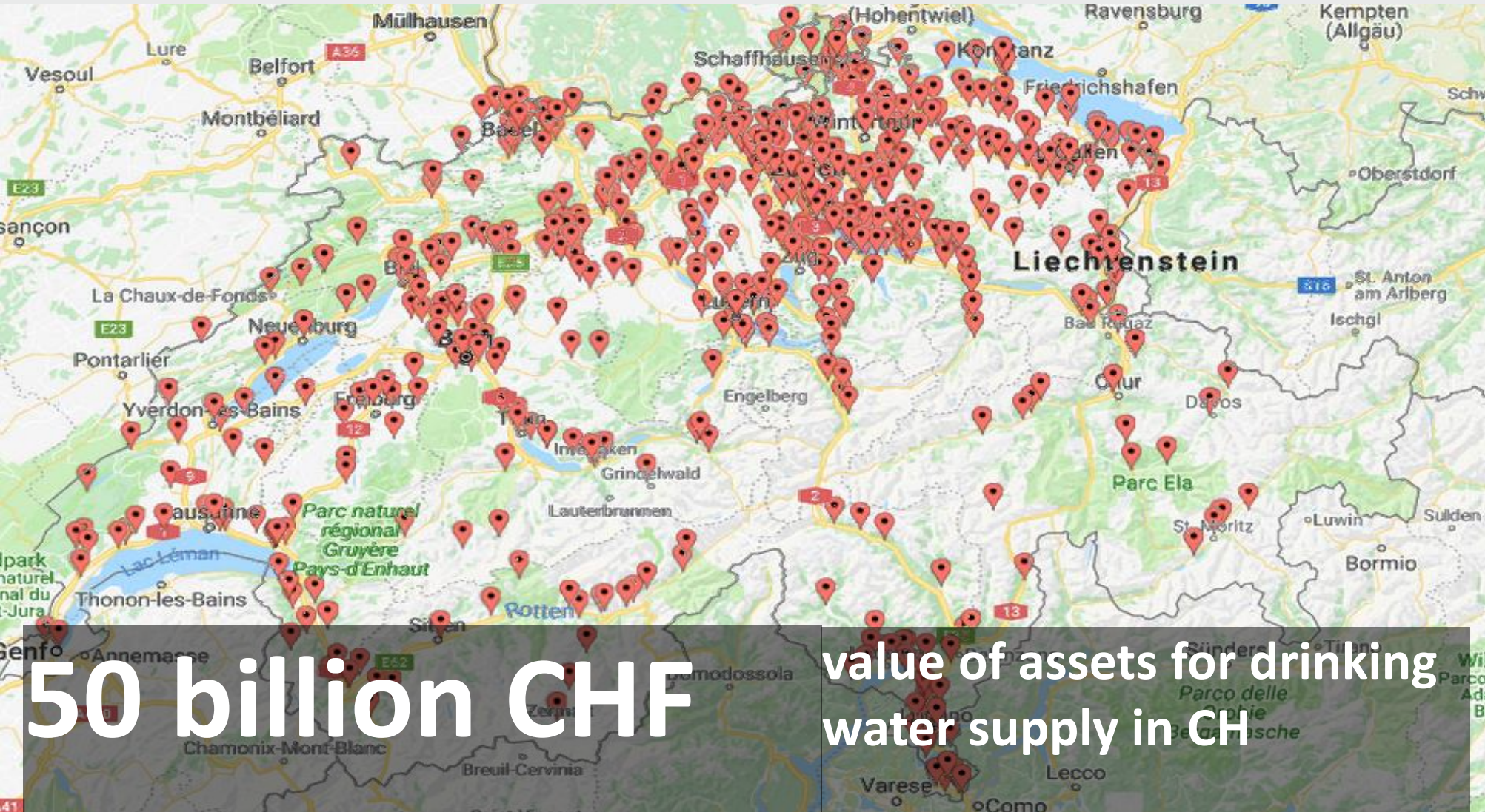
# PESTICIDES: A «NEVER ENDING» CHALLENGE FOR DRINKING WATER SUPPLY

natürlich  
**Trinkwasser**

André Olschewski, Swiss Association of Water Utilities SVGW,  
Head of Water, Zürich



# Swiss Association of Water Utilities SVGW representing 530 drinking water utilities



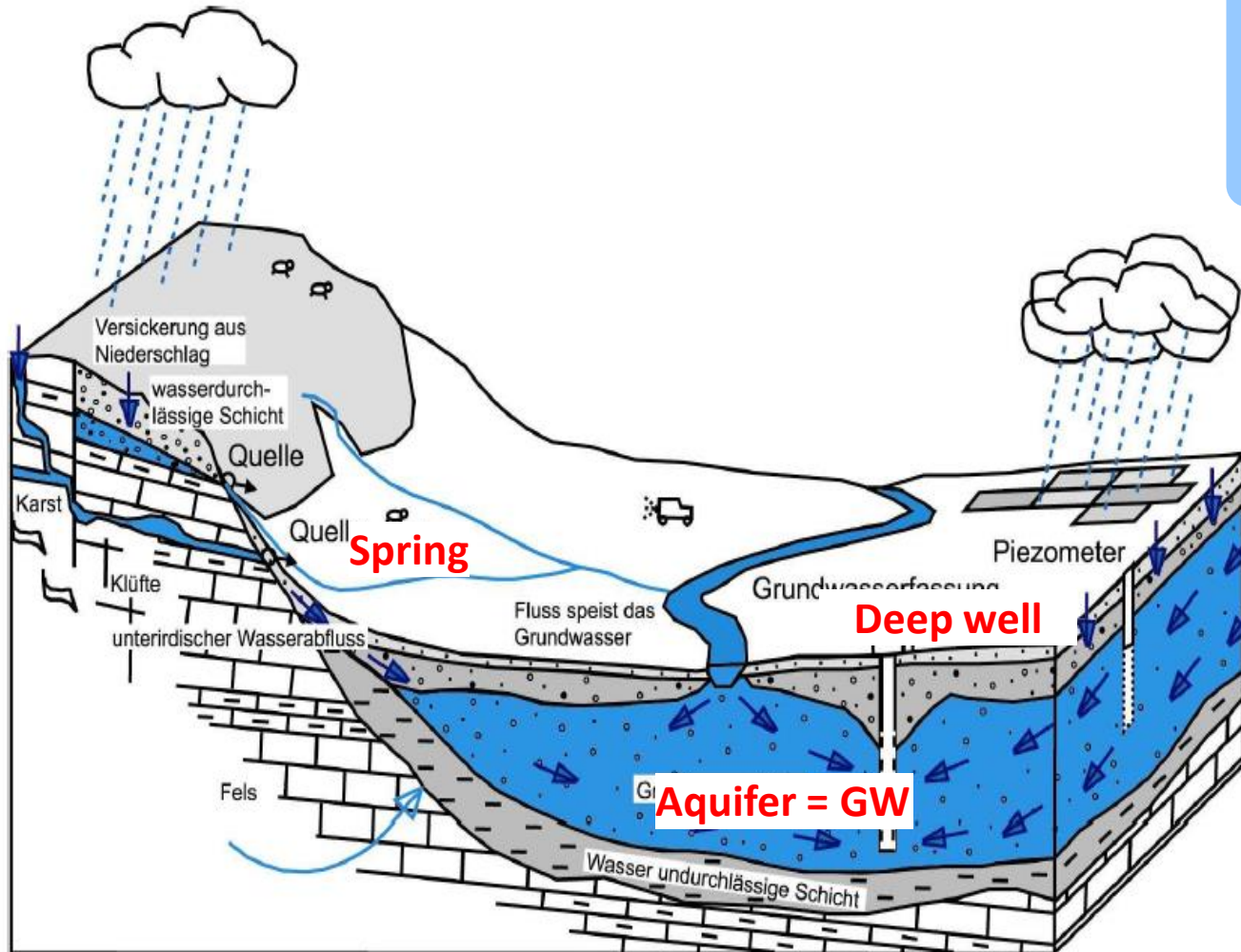
## SVGW services:

- Safe guard of drinking water quality
- Knowledge platform
- Vocational training
- Setting of technical rules and standards
- Audits and certification
- Resource protection

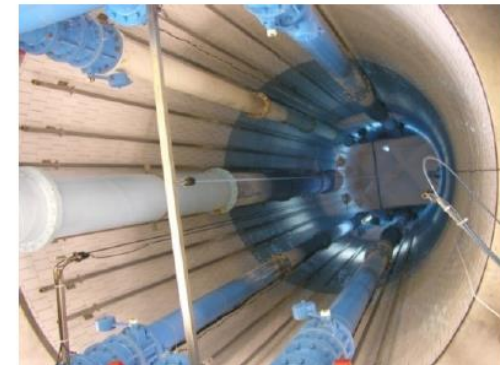


# Sources of drinking water in Switzerland

**CH: 80% of drinking water comes from groundwater (deep wells and springs), 70% no need for advanced treatment!**



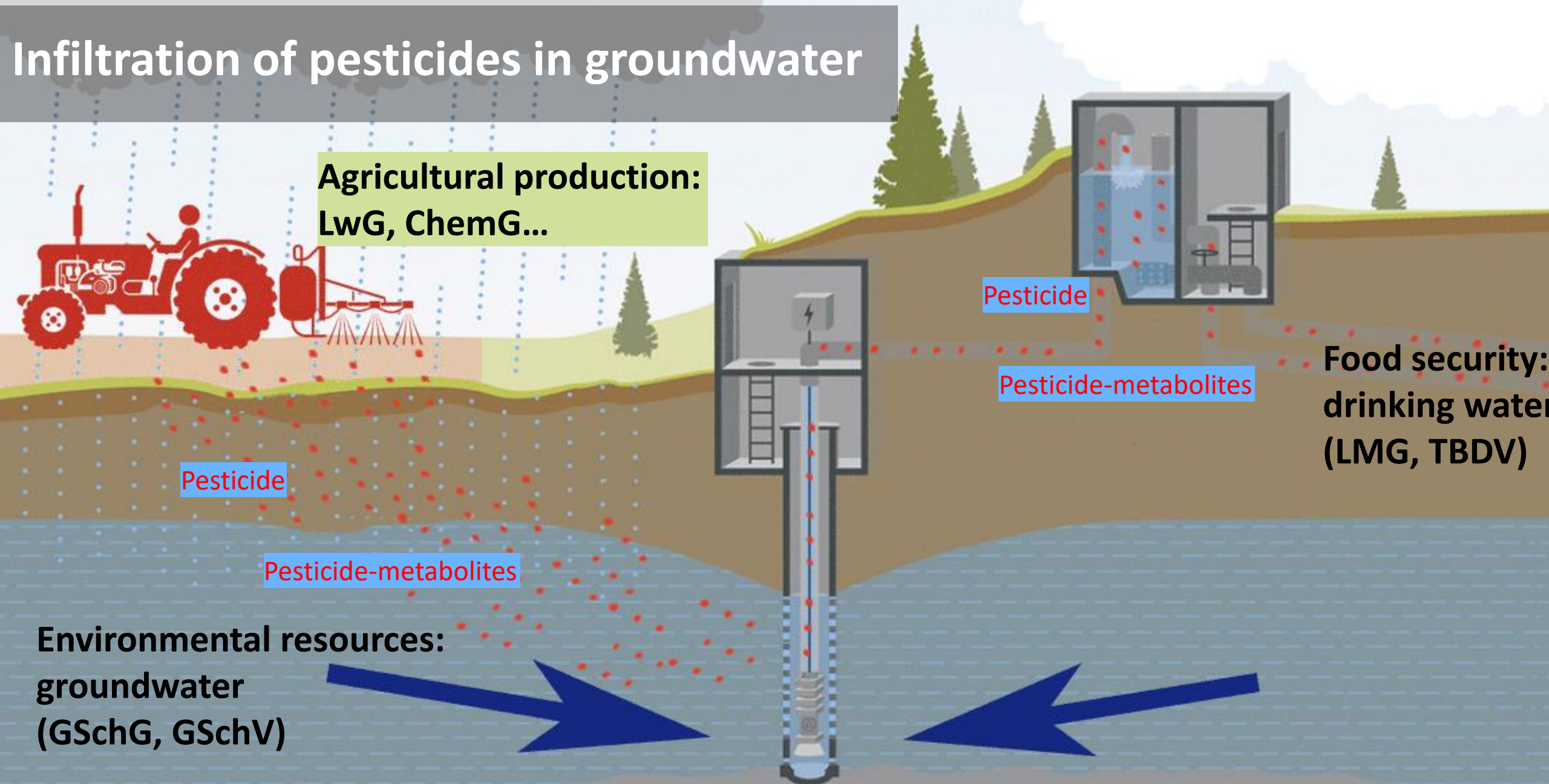
**40%: deep wells**



**40%: springs**



# Infiltration of pesticides in groundwater





# All water resources under heavy pressure through pesticides



Ø 35

Different pesticides detected per sample in small rivers in Switzerland!

For a long period - spring to autumn - even in harmful concentration

25% of groundwater influenced by infiltration of surface waters (FOEN 2019)



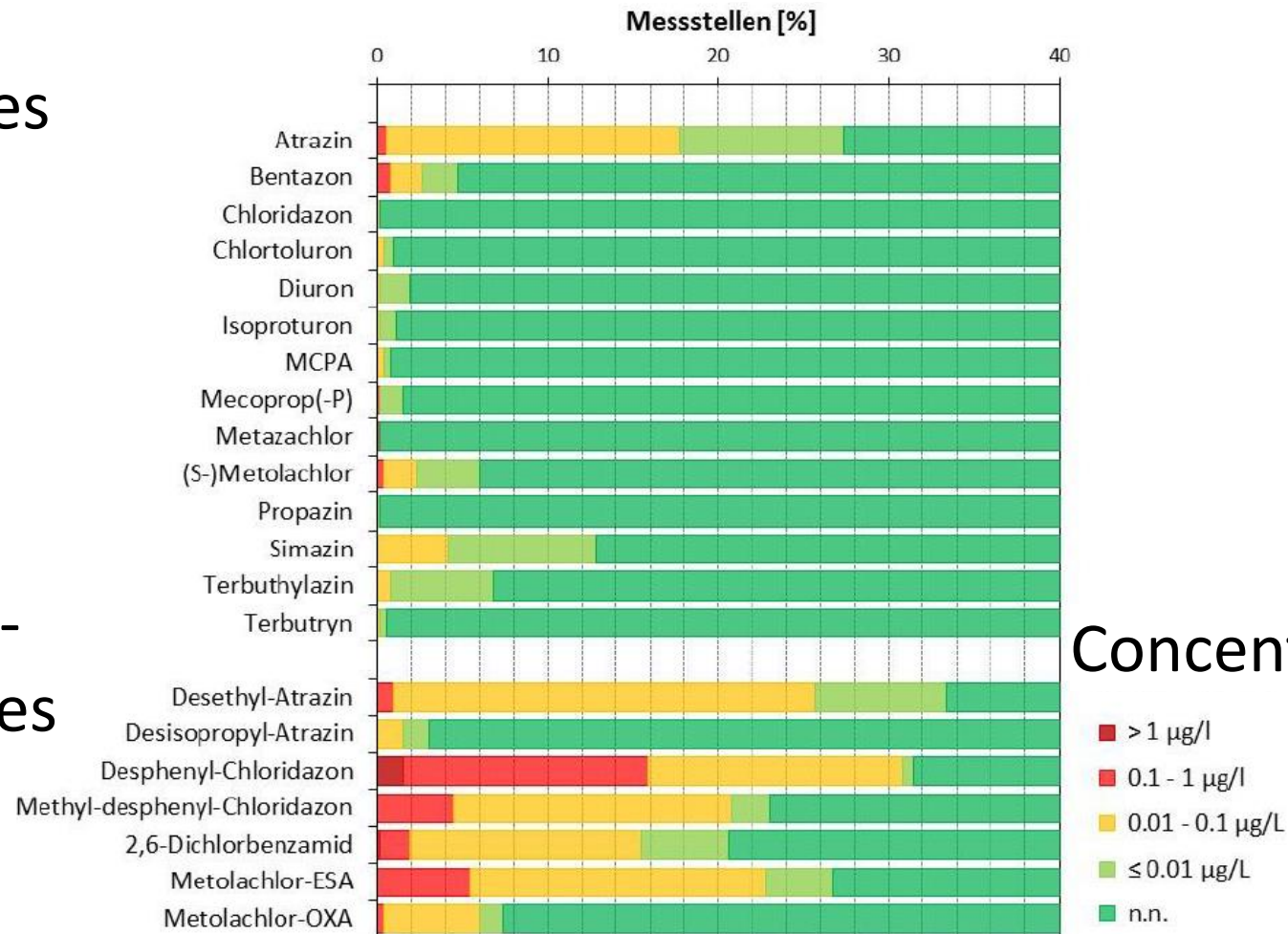
# National groundwater monitoring programm (NAQUA)



## Results: agriculture pesticides for pest control (2014)

Pesticides

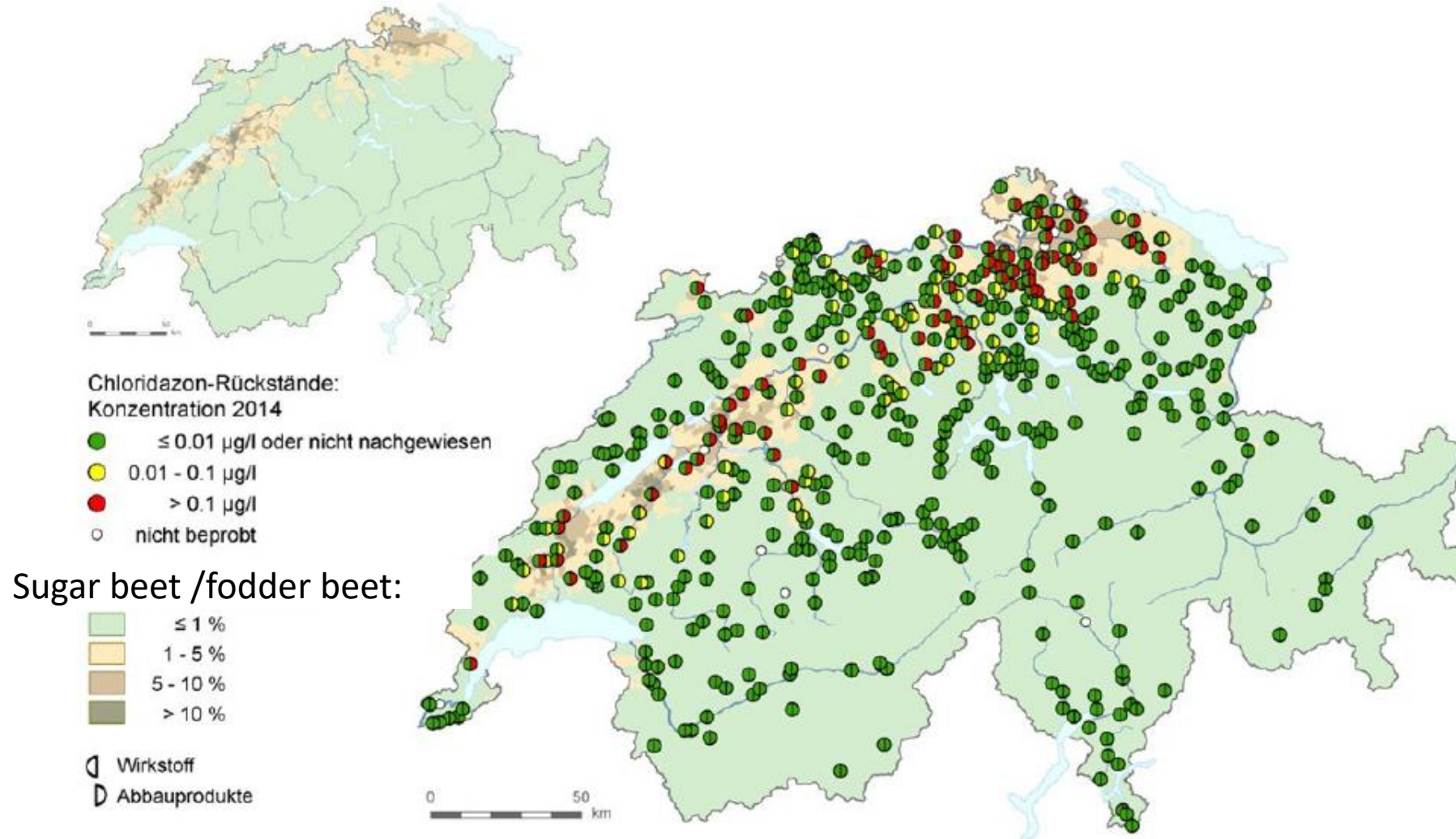
Pesticides-  
metabolites



Source: FOEN, 2019

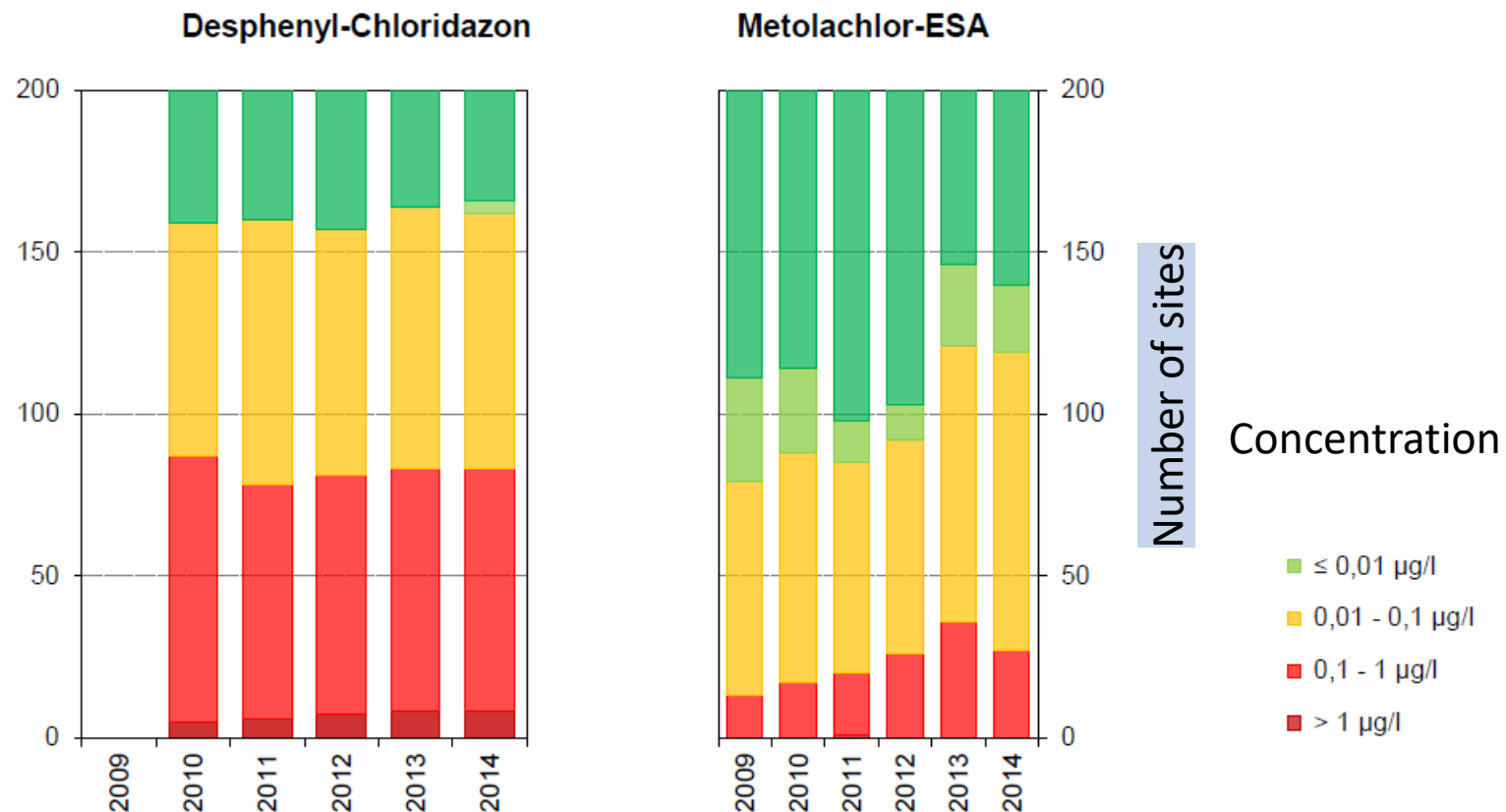
# NAQUA: regional pattern of pesticides in groundwater e.g. Chloridazon mainly in sugar and fodder beet cultivation

## Chloridazon: regional concentration pattern for main substance and metabolites



# NAQUA: Pesticide concentration in groundwater

Results: time line of concentration of 2 pesticide metabolites in groundwater



Source: FOEN, 2017



# Pesticides in drinking water in Switzerland

70%

of groundwater sampling sites with main land use *farmland* show concentration of **pesticides** or **metabolites**  $> 0.1 \mu\text{g/L}$

Atrazine detected in many water samples  $> 0.1 \mu\text{g/L}$  (was banned 2007 in CH)

New substances detected, e.g. Chlorothalonil

Unknown impact of cocktail of pesticides in ground- and drinking water

Consumer and water utilities don't want pesticides to be in drinking water!



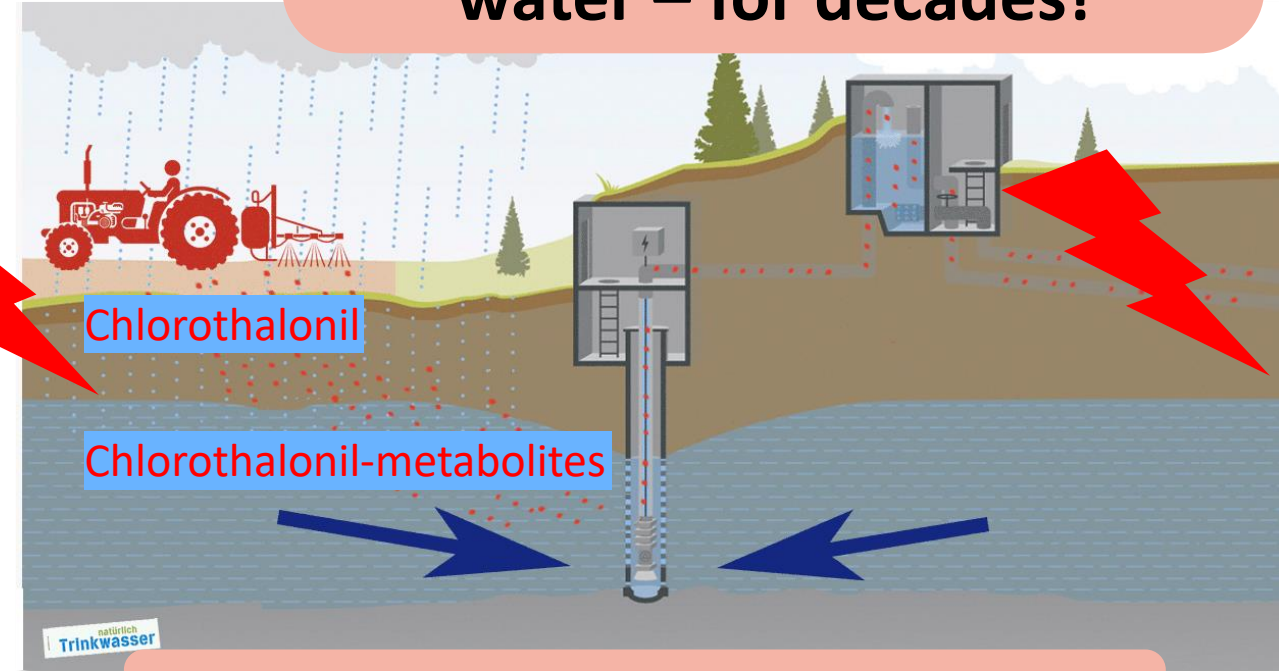
# Chlorothalonil – from a «nice helper» to a «No Go»



**CH - FOAG: Chlorothalonil in Annex 10 of ordonance on pesticides by August 1st 2019 → Ban by 2022**

**CH - BLV: Chlorothalonil metabolite Chlorthalonilsulfonsäure is now assessed as «relevant» (May 2019)**

**We have huge problems with pesticides and metabolites in groundwater and drinking water – for decades!**



**Precaution Principle is key!**



# We need effective credible political solutions now!

- Action Plan for Pesticide Risk Reduction ?
- Agriculture Policy AP22+?
- Timing of votes and political processes?



So far no tangible political plans existing for drinking water resource protection other than TWI

Will there be a substantial political counter proposal ?





# SVGW proposes focused measures to reduce risks from pesticides for drinking water (similar as implemented in Denmark)



## Pesticides incl. biocides:

1. Goal for reduction of use of pesticides\*, in particular in vicinity of water supply wells and protection areas
2. No homologation of pesticides with dangerous effects

\*: pesticides incl. biocides; compounds for organic farming excluded; goal for reduction over time to be defined in law; measures to be developed by actors of agricultural sectors themselves



# KEEP GROUND WATER CLEAN FOR SAFE DRINKING WATER IN FUTURE

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