

# Verbreitung der PCB-Belastung weiter stromabwärts – Ergebnisse des PCB-Monitorings in schwebstoffbürtigen Sedimenten und Fischen im deutschen Elbeabschnitt

STAATSMINISTERIUM  
FÜR UMWELT UND  
LANDWIRTSCHAFT



# PCB

## I Effect

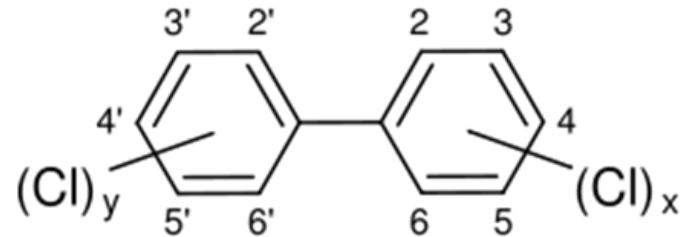
- Accumulation in adipose tissue
- Carcinogenic effect

## I POP substance

- No uniform regulation at EU level
- Regulations at the national level in DE and CZ but not in biota

## I Maximum quantity regulation for the sum of 6 PCBs in food law

- Tightening from 500 µg/kg to 125 µg/kg for the sum of 6 PCBs

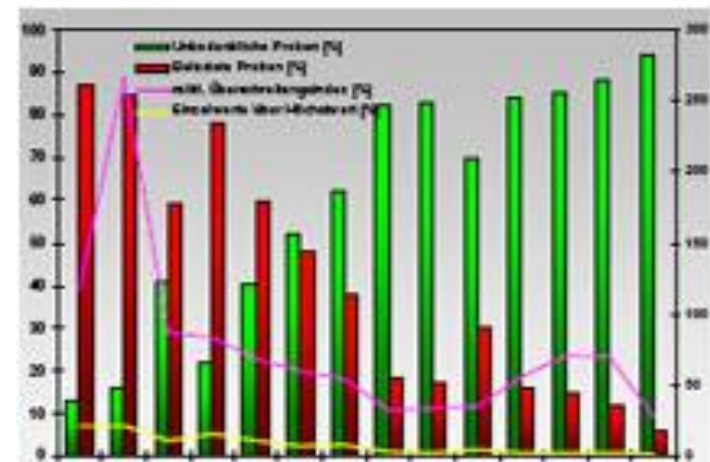


# Fishing to create the angler information

## I Annual Fishing since 1994

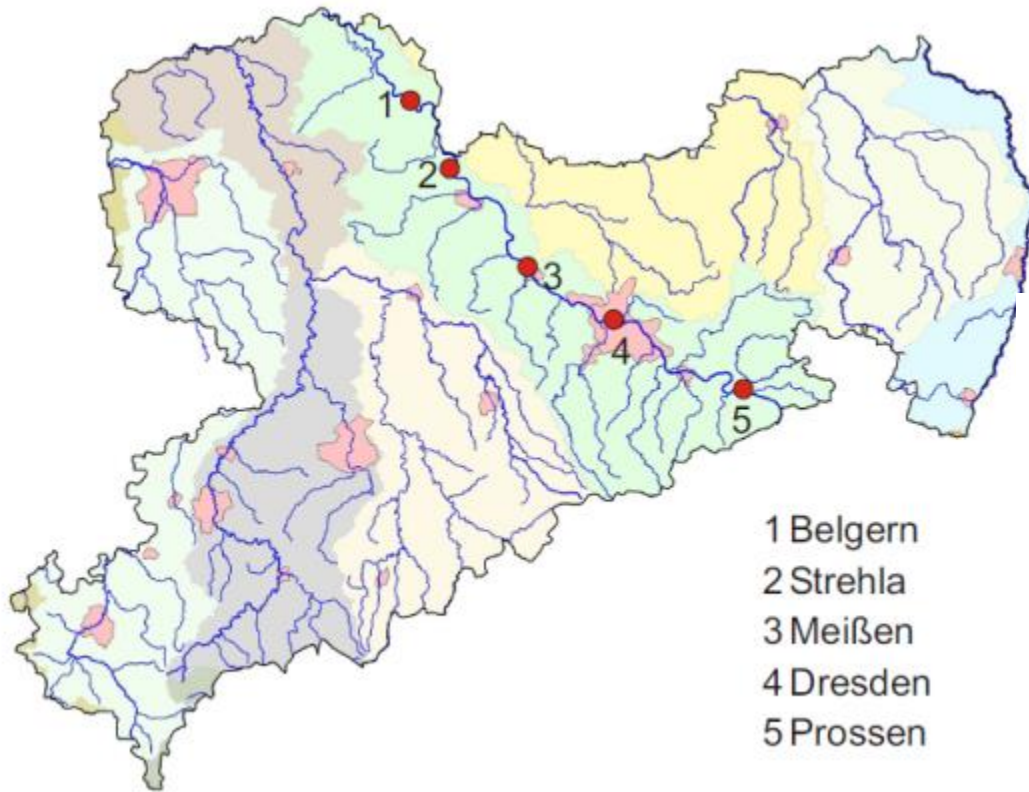
- COMMISSION REGULATION (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs
- Maximum quantity for the sum of PCBs (6) were EU-wide lowered from 500 µg/kg to 125 µg/kg
- <https://www.landwirtschaft.sachsen.de/landwirtschaft/4552.htm>

## Annual report on contamination of fish with pollutants

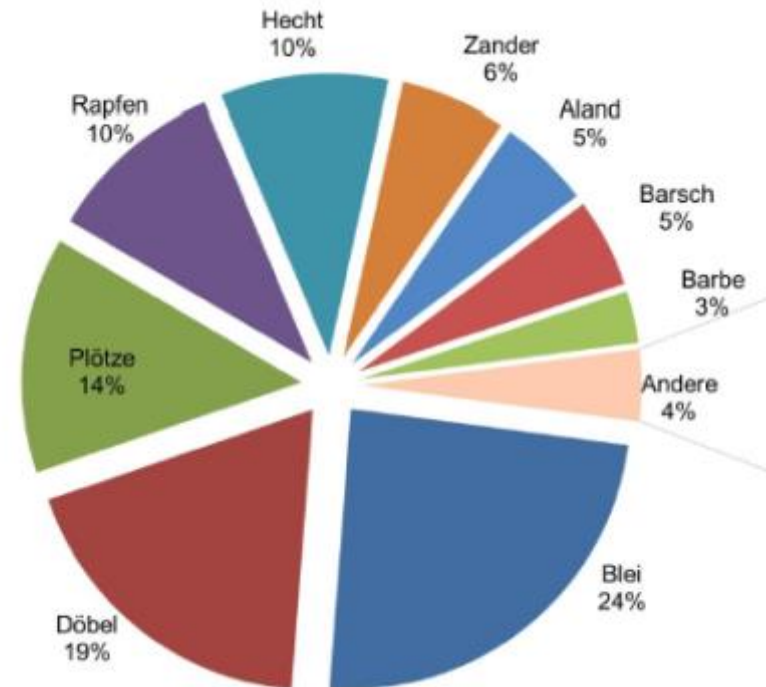


source: LfULG, Fischerei

## Monitoring points in the Saxon Elbe

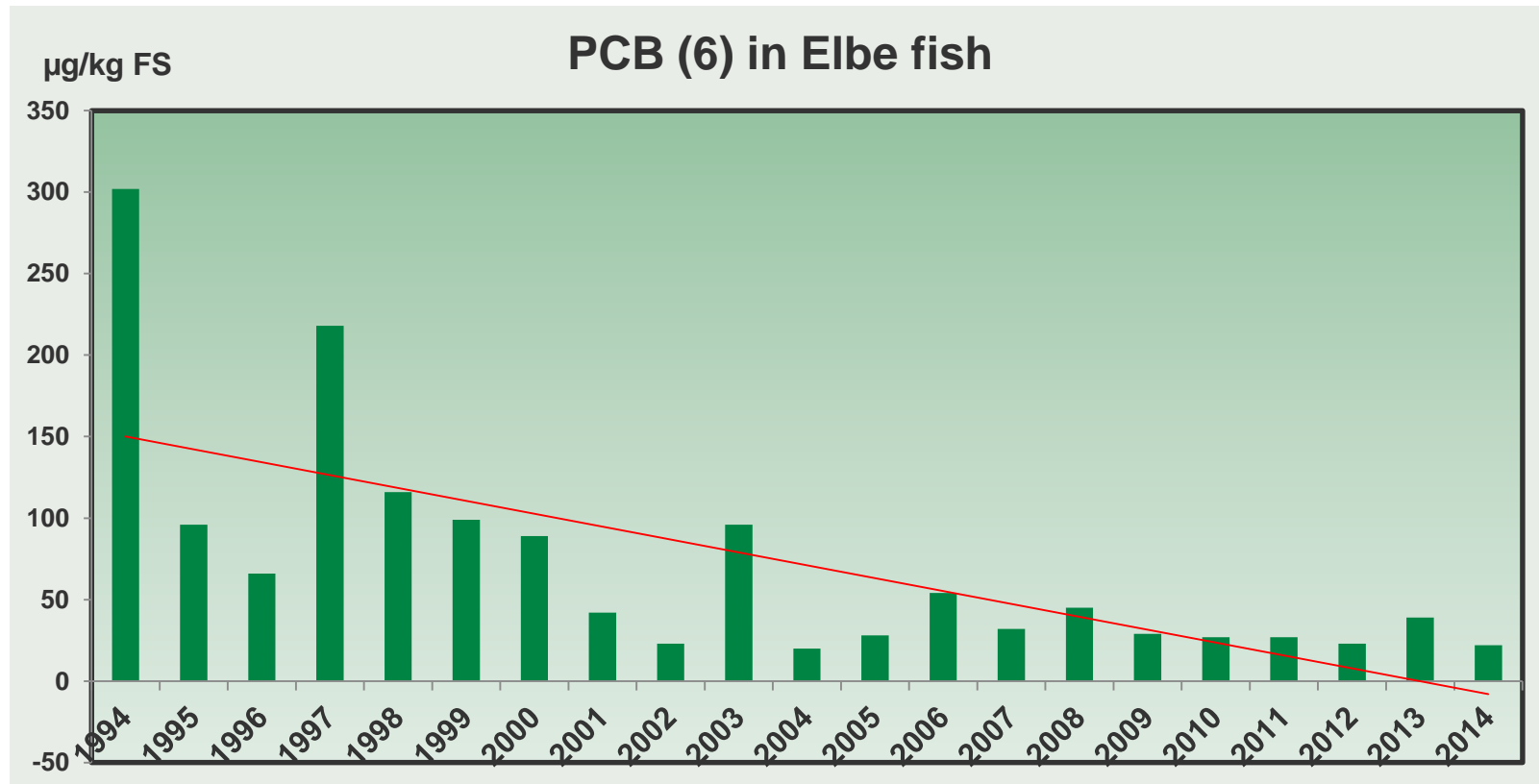


## Composition of fish species in the catches



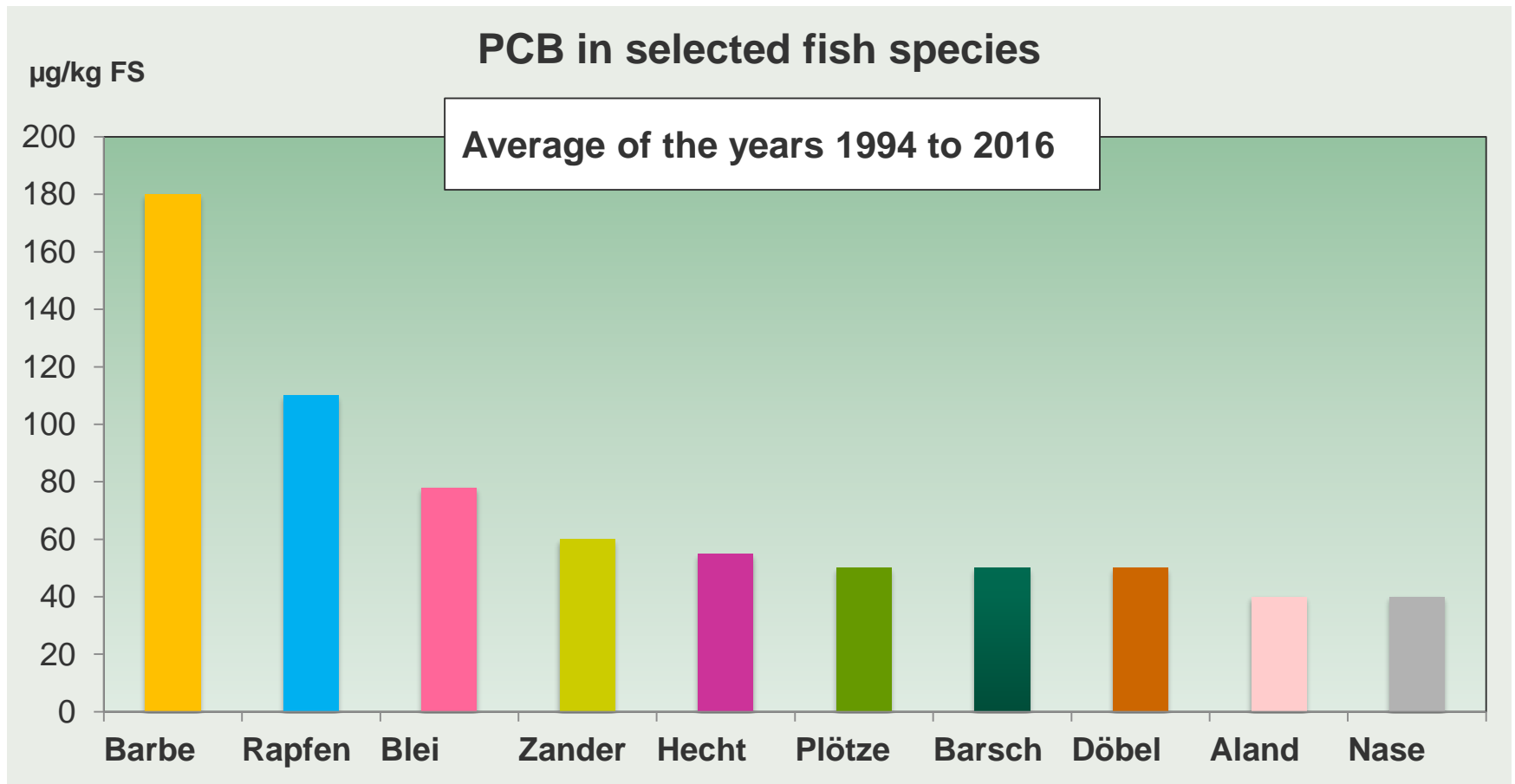
Source: LfULG Fischerei

# Long-term data on the pollution of fish of the Saxon Elbe with PCB



source: LfULG, Fischerei

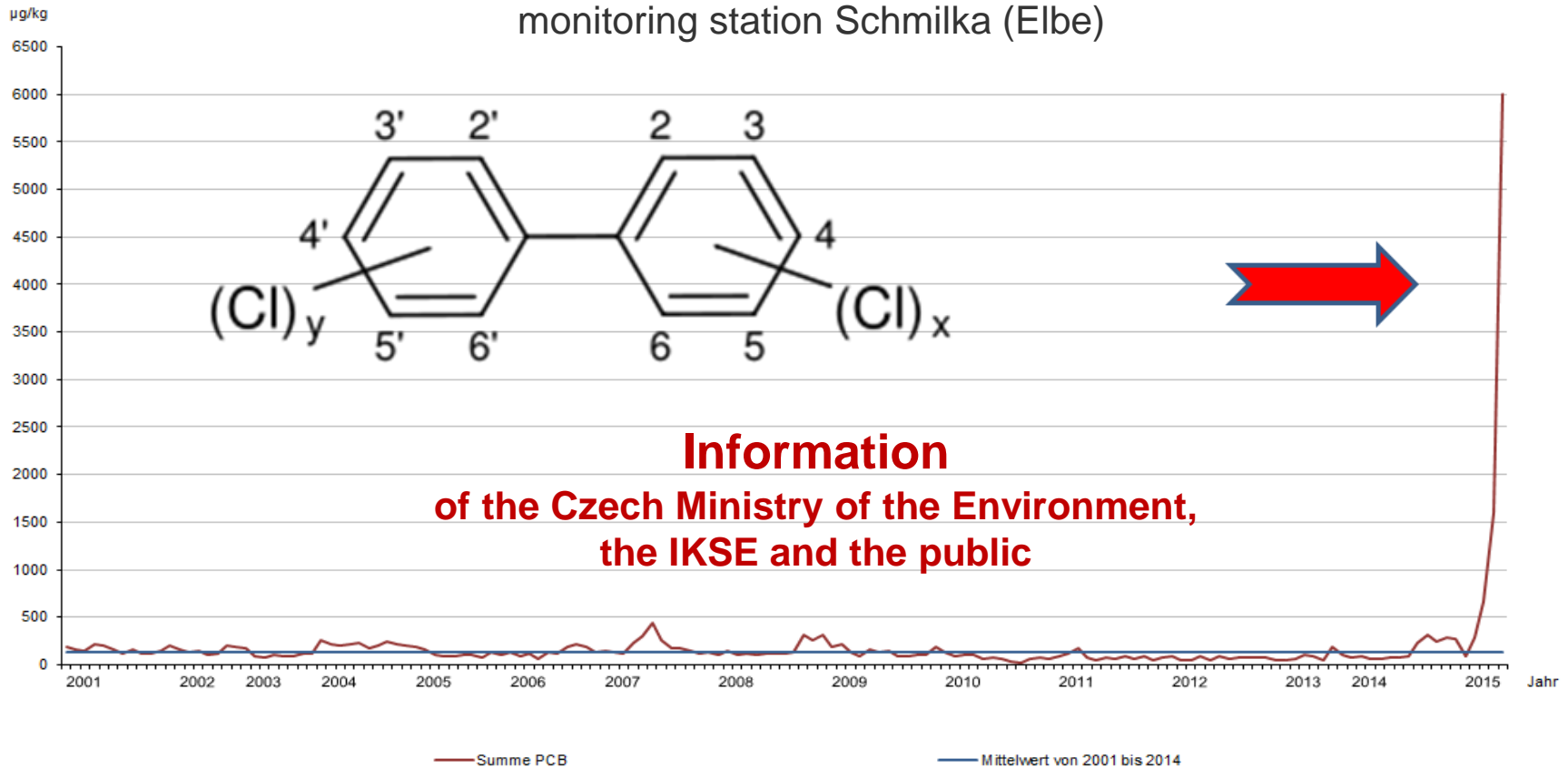
## PCB accumulation in selected fish species



# Long-term observation

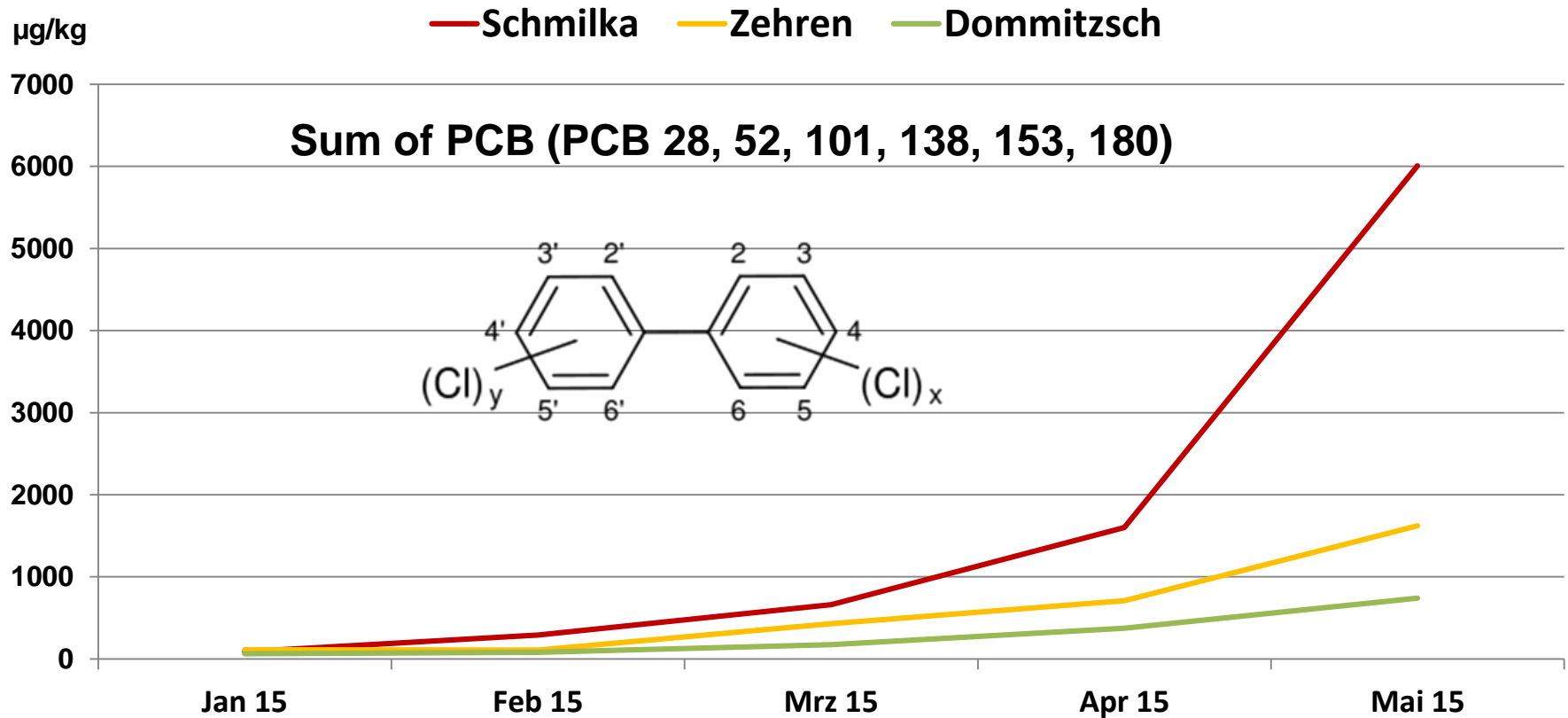
Data from the water quality monitoring station  
Schmilka (Elbe) in suspended particulate matter

PCB concentration in the monthly pooled sample (suspended particulate matter),  
monitoring station Schmilka (Elbe)



2015

Development of PCB concentration in suspended particulate matter (monthly pooled sample, fraction < 2 mm)



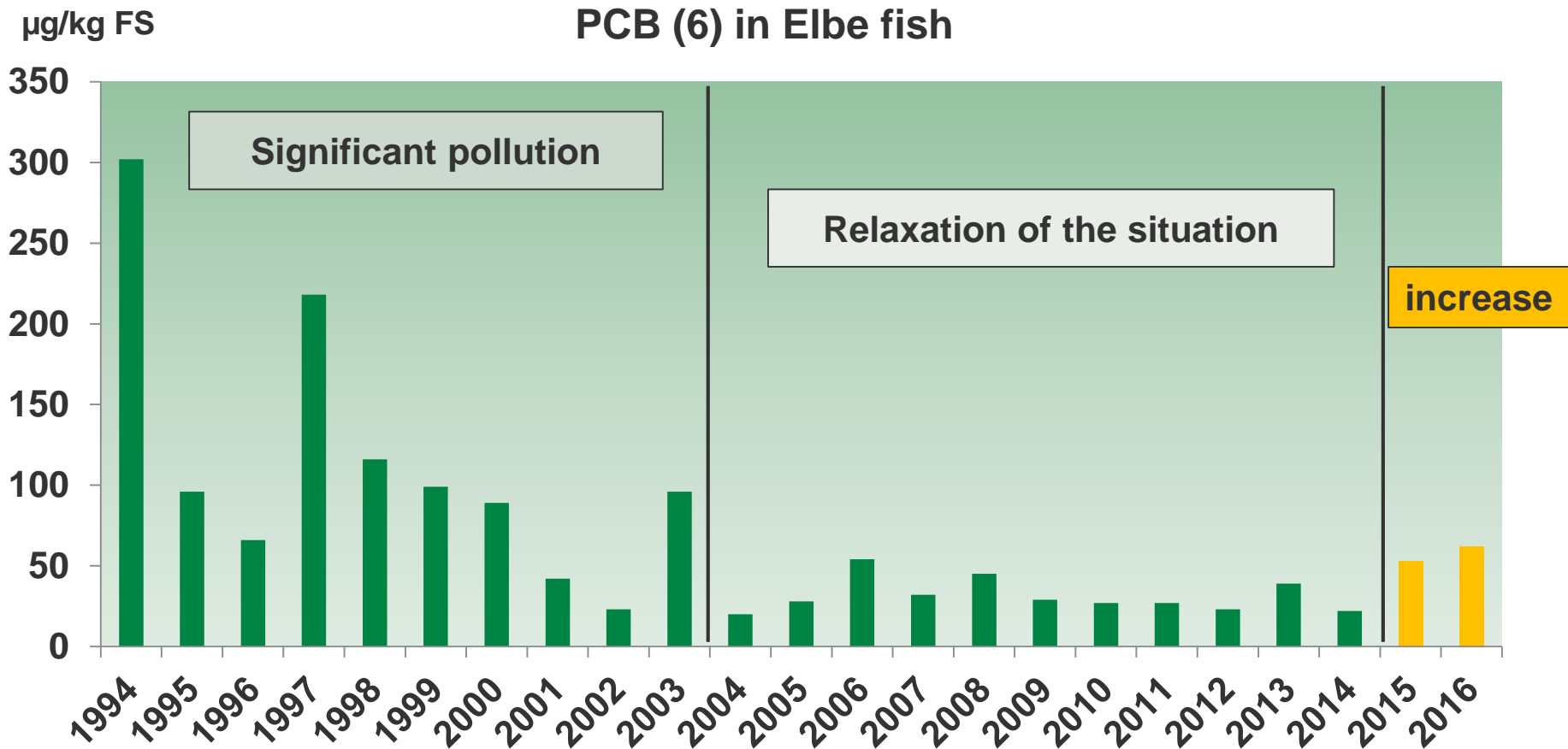


## 29. June 2015 – Special sampling PCB (6) concentration in ug/kg at Prossen/ Schmilka

Fish species	number of fishes	Average 2004-2014	Special sampling 29. June 2015	Number of fishes
bream	40	30	52	2
chub	49	16	46	7
asp	27	103	138	2
barb	28	151	233	
nase	12	21	78	6

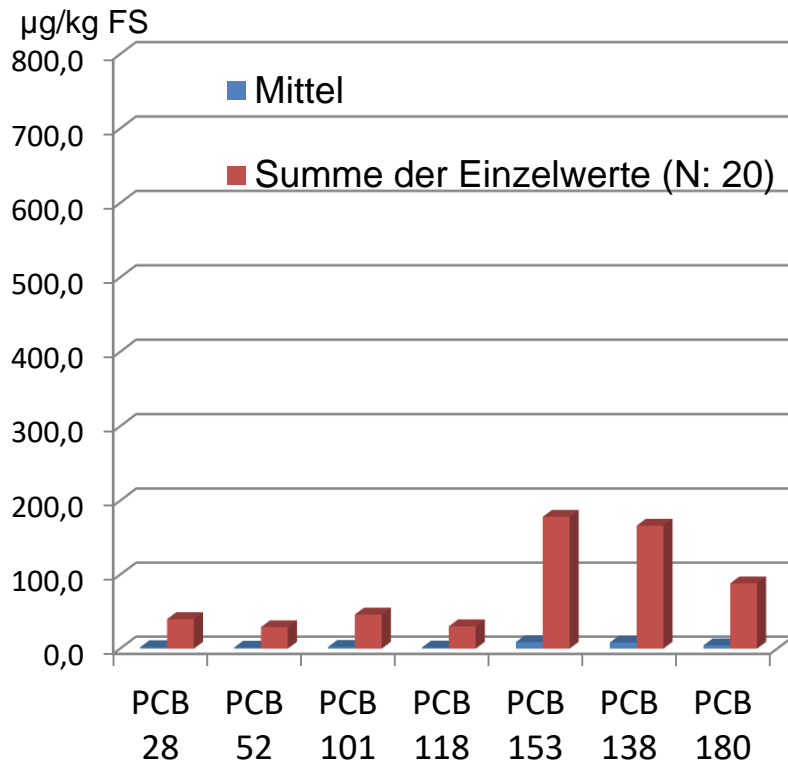
**Severe Increase of PCB concentration  
compared to the 10-year average**

# Long-term data on the pollution of Saxon Elbe fish with PCB

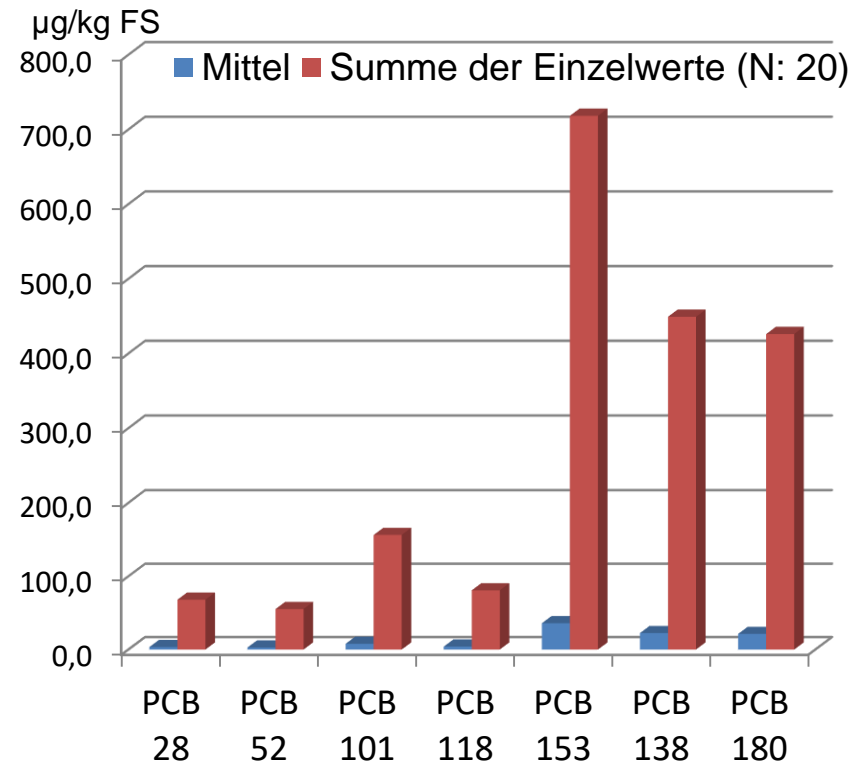


# Comparison of PCB(6) concentrations in fish at Prossen

2014



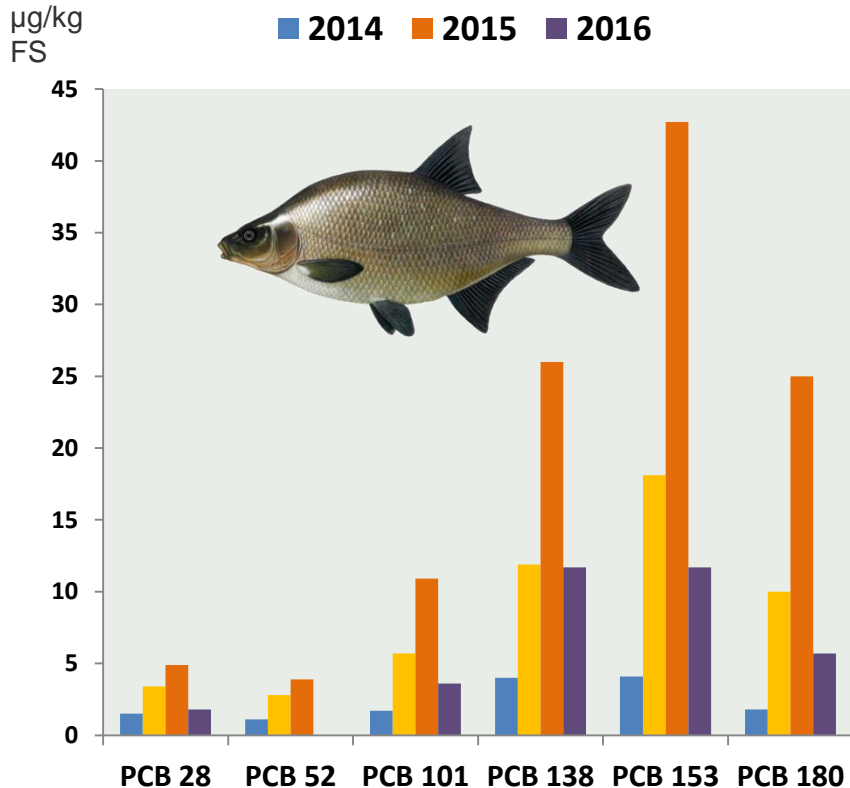
Special sampling June 2015



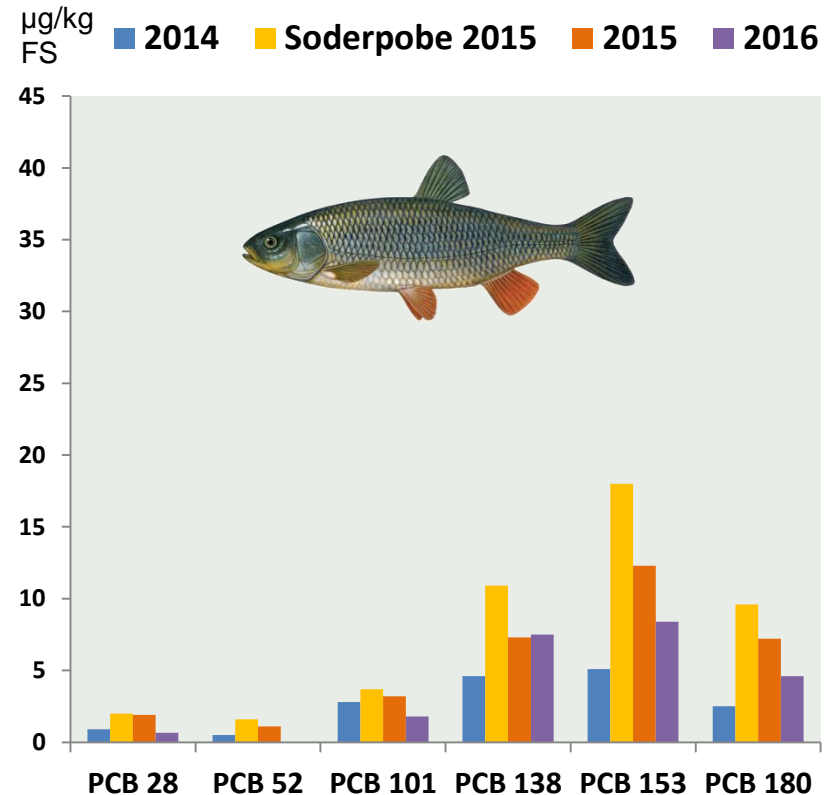
source: LfULG, Fischerei

# Comparison of PCB (6) congeners in different fish species at Prossen

bream

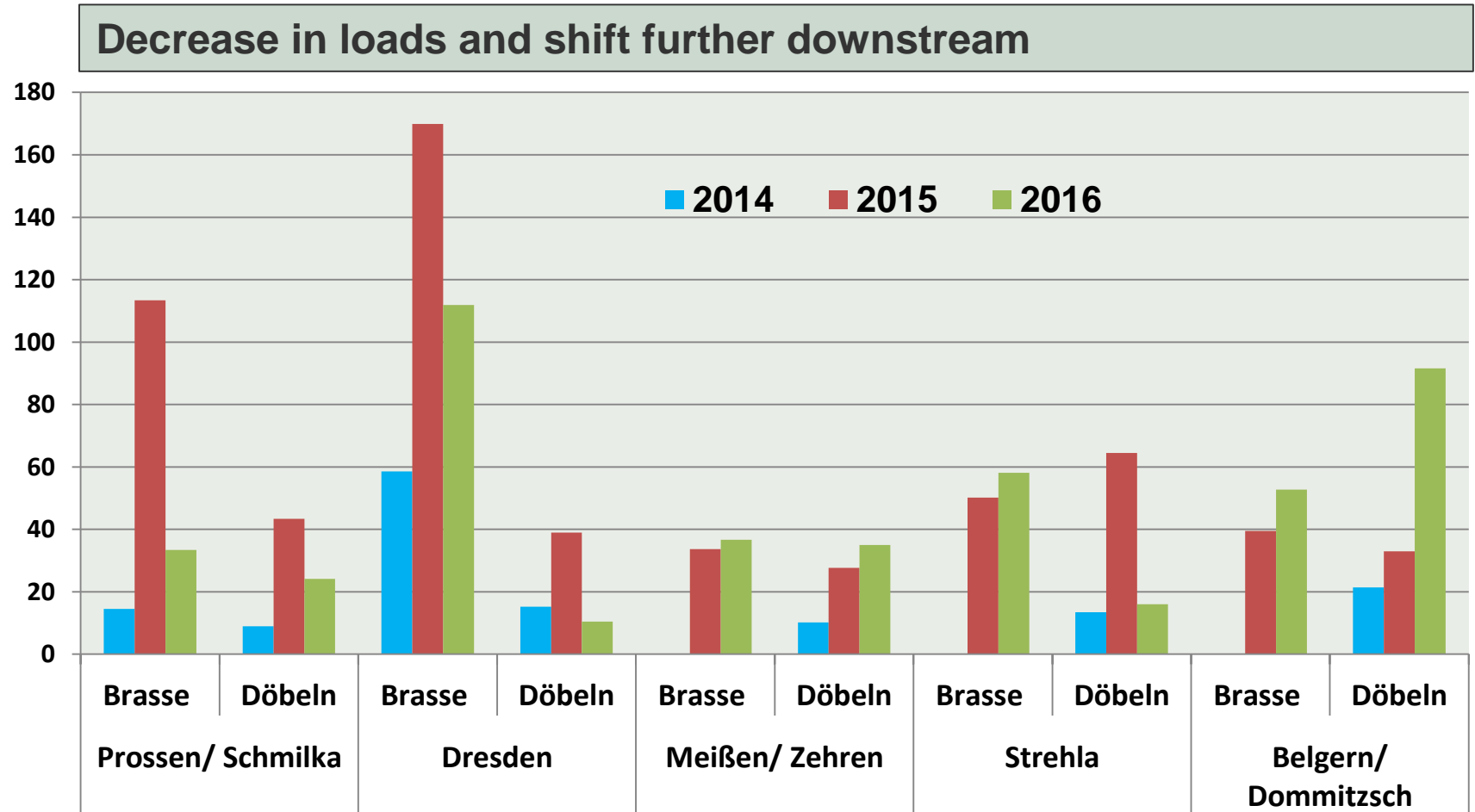


chub

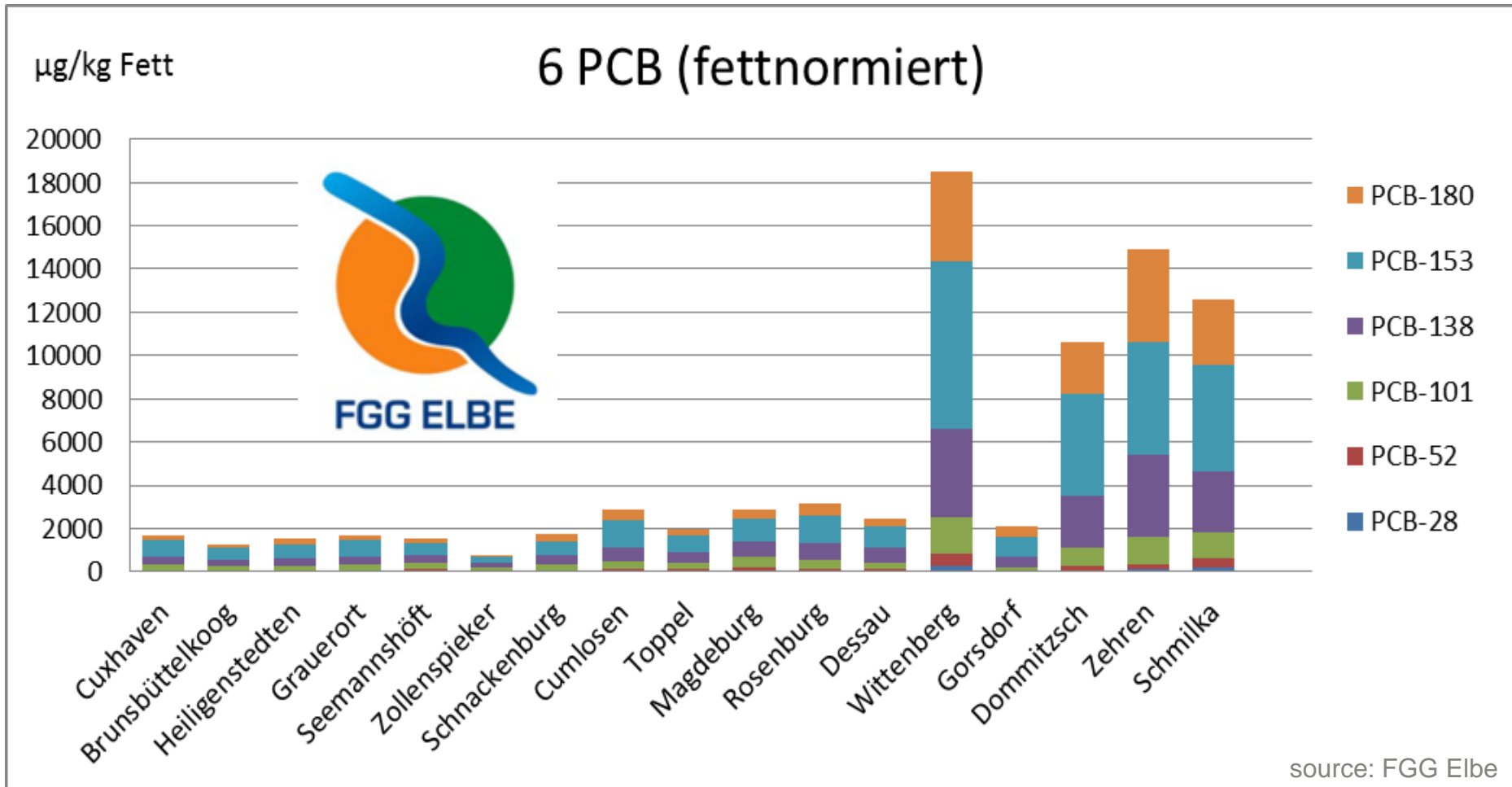


## Development of PCB (6) concentration

### Regular fishing in the Saxon Elbe section



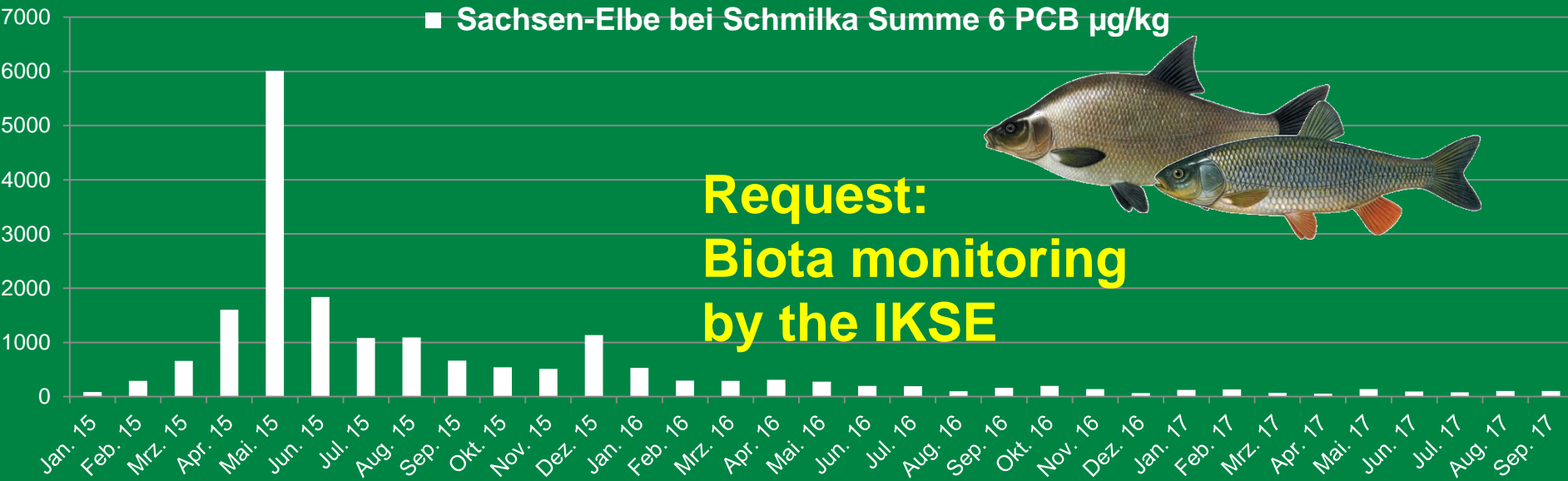
## Fish sampling by the FGG Elbe in 2016



# Current situation

suspended particulate matter concentrations are again in the typical range of the Elbe river

## Saxon Elbe at Schmilka Sum of 6 PCB $\mu\text{g}/\text{kg}$ suspended particulate matter



# Thank you for your attention