

Challenges and pressures due to microplastics in the Danube watershed

Gábor Bordós

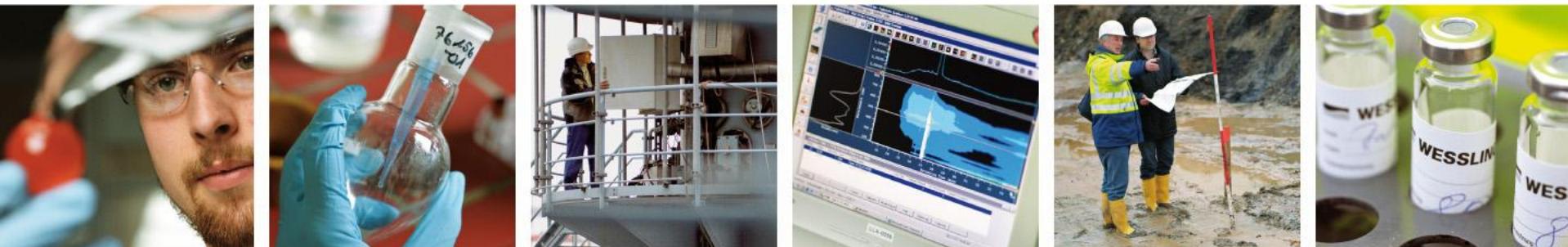
Projekt manager

ANALYSIS

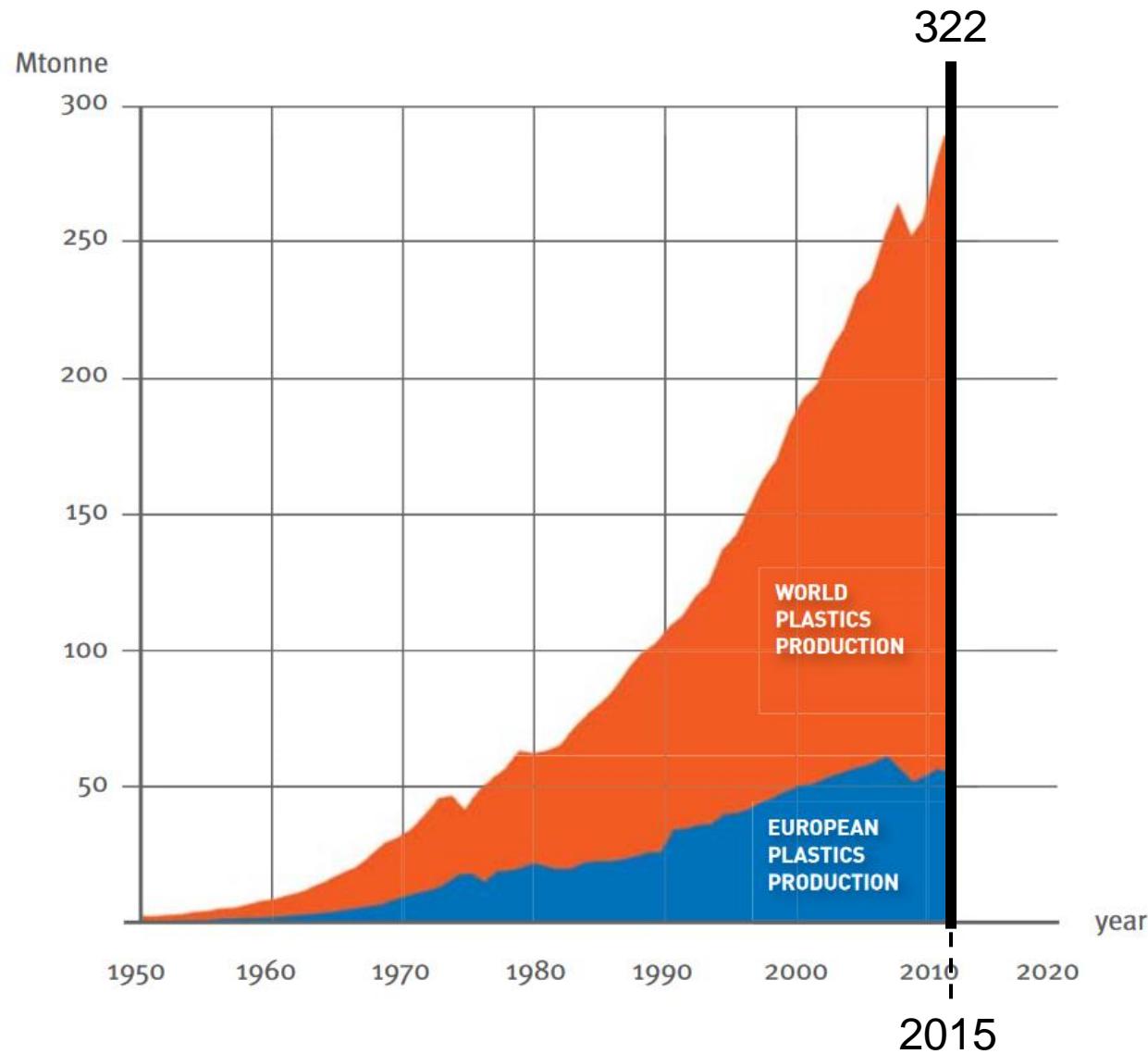
CONSULTANCY

PLANNING

SINCE 1983



Background



Benefits vs. threats

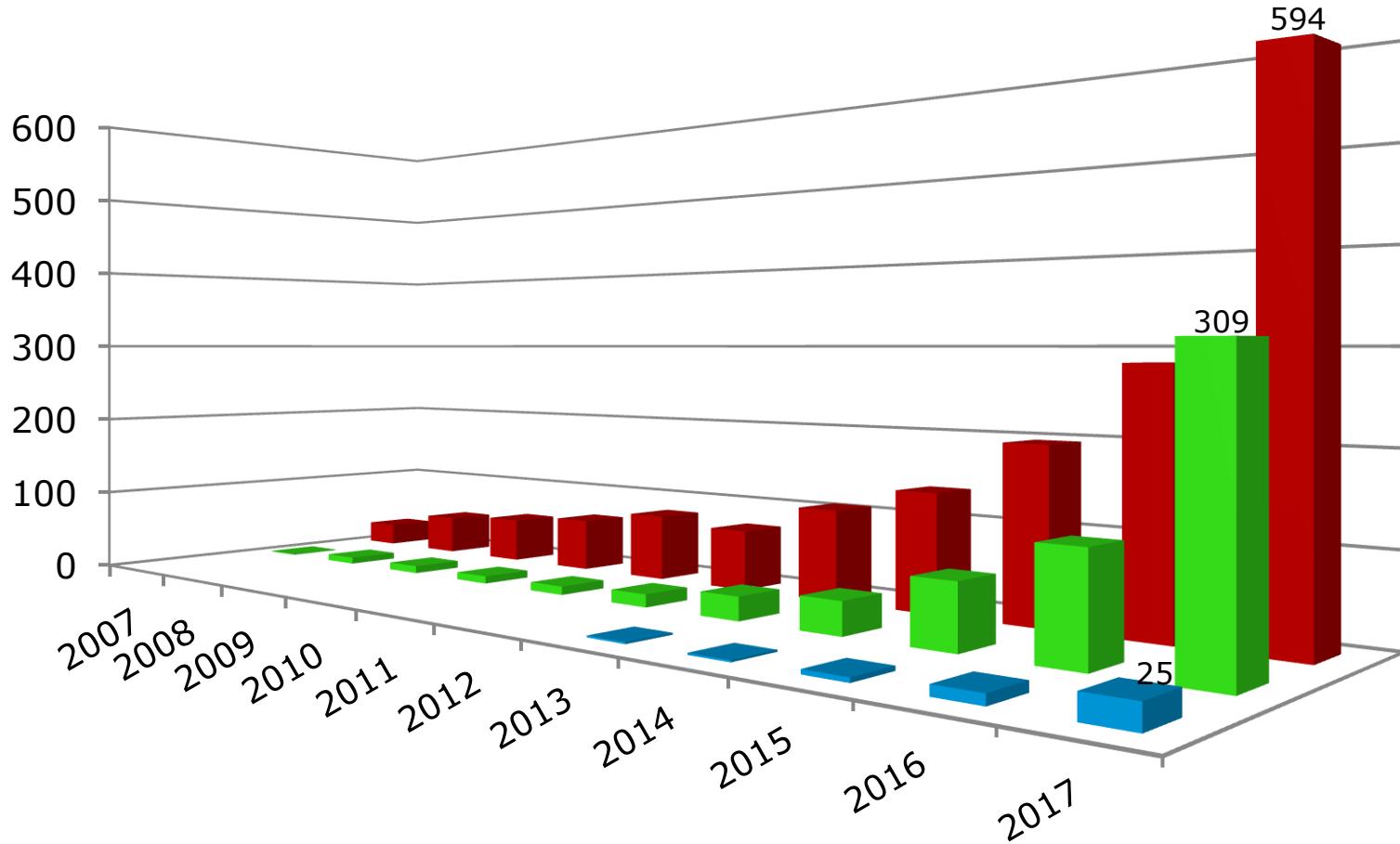


About MPs in a nutshell



The 5Gyres Institute

- Microplastic AND freshwater
- title, abstract, keyword
- Microplastic
- title, abstract, keyword
- Microplastic
- all fields



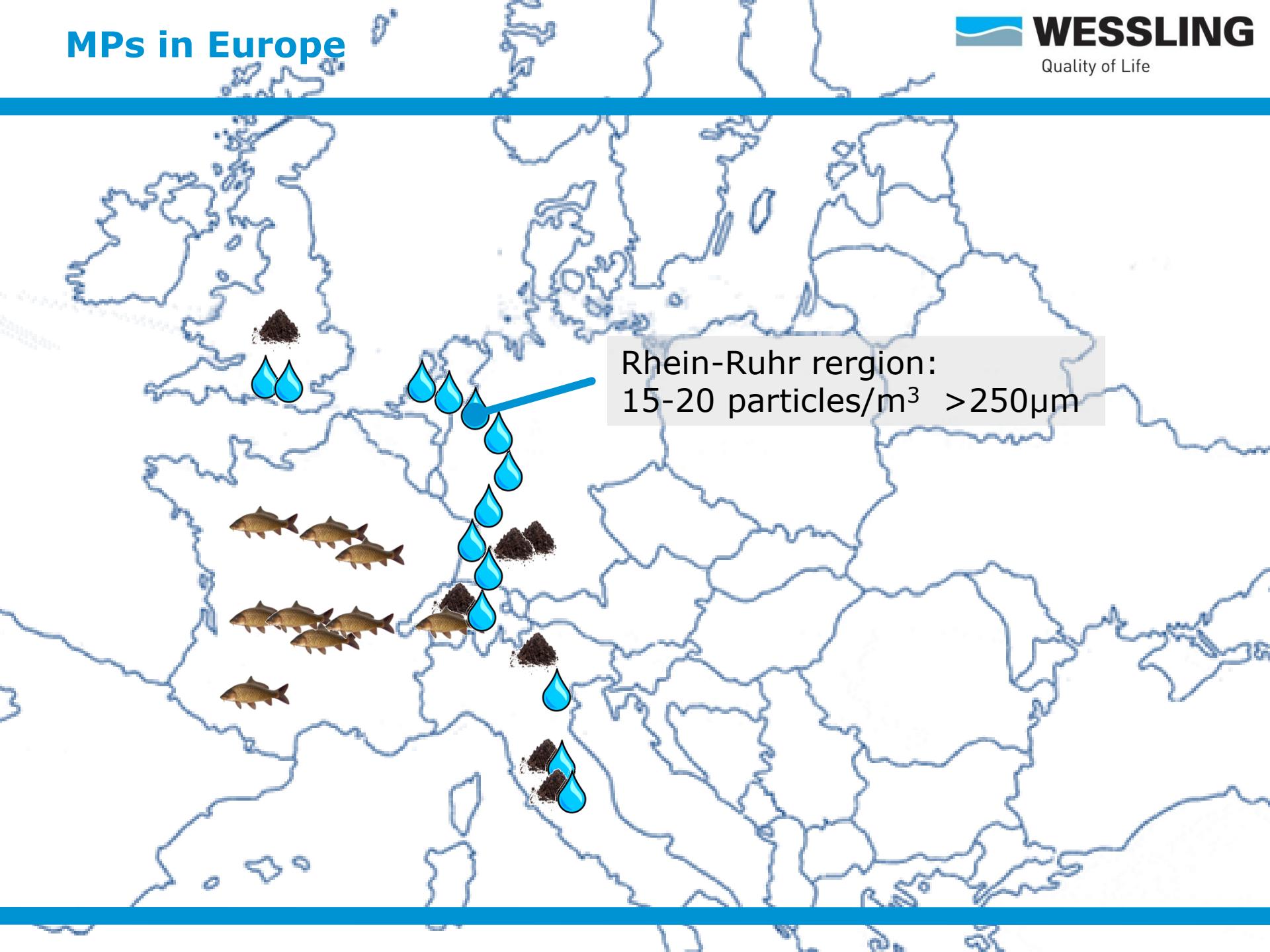
Daily life & freshwater



<http://nrclabs.com/irrigation-water/>



<http://bettasource.com>



MPs in the Danube Region

0.3 particles/m³ >500 µm

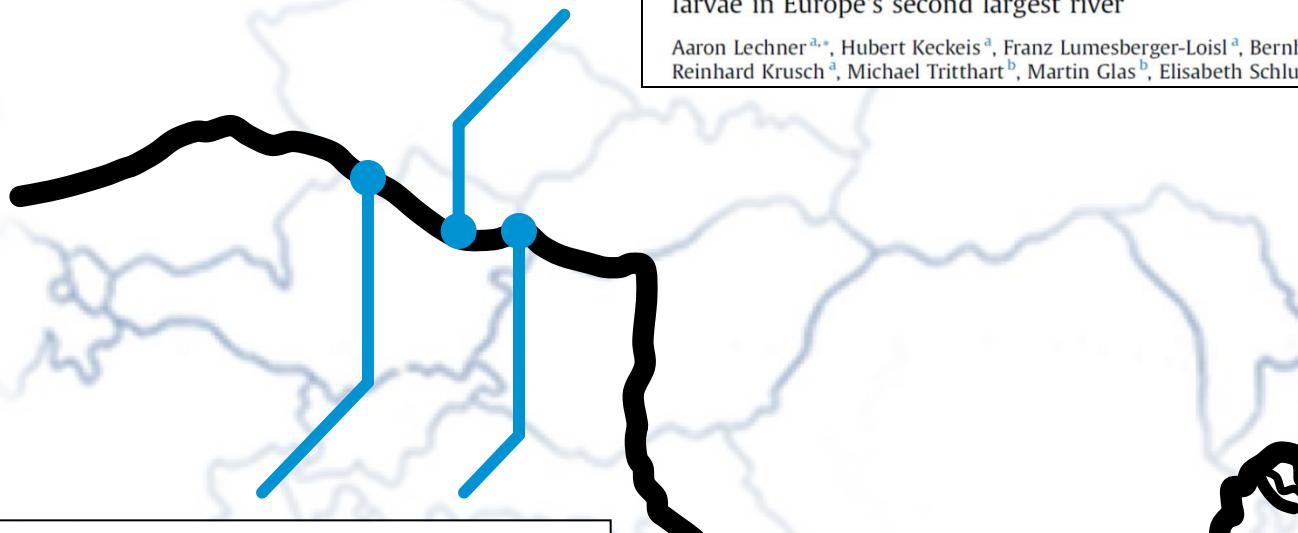
Environmental Pollution 188 (2014) 177–181
Contents lists available at ScienceDirect
Environmental Pollution
journal homepage: www.elsevier.com/locate/envpol



Short communication
The Danube so colourful: A potpourri of plastic litter outnumbers fish larvae in Europe's second largest river

Aaron Lechner ^{a,*}, Hubert Keckeis ^a, Franz Lumesberger-Loisl ^a, Bernhard Zens ^a, Reinhard Krusch ^a, Michael Tritthart ^b, Martin Glas ^b, Elisabeth Schludermann ^a





ENVIRONMENT AGENCY AUSTRIA **umweltbundesamt^U**

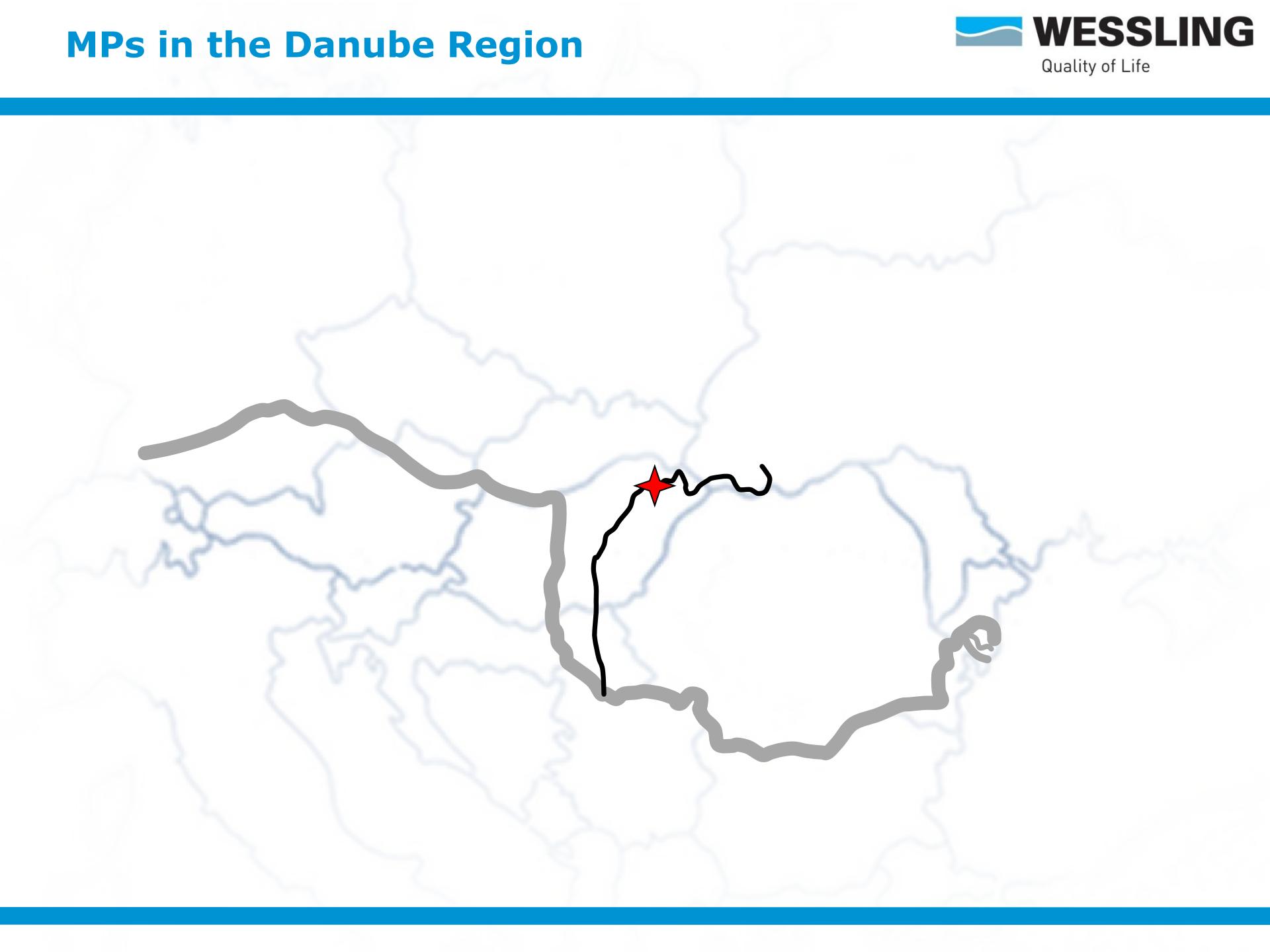
PLASTIC AND MICROPLASTIC IN THE ENVIRONMENT

P. Hohenblum, B. Liebmann, M. Liedermann

REP-0551
Vienna, 2015

6-66 kg/day >250µm

MPs in the Danube Region



MPs in the Danube Region



<http://www.eurofleets.eu/np4/419.html>

MPs in the Danube Region



Umweltbundesamt Austria
© Boku/M. Liedermann

4.9 particles/m³ >300 µm

62.5 particles/m³ >15 µm

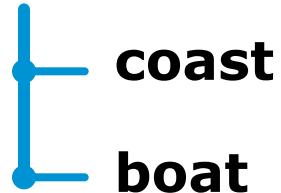
PP;PTFE;PE

1.76 particles/kg

PTFE; PS



- **Operation on universal platforms**



- **Enables sampling in different depth**
- **Fast & cost effective**
- **Easily transportable**
- **High sampling reproducibility**
- **High resolution (catches smaller particles)**
- **Good basis for standardisation**

Effects...???



Thank you for the attention.

 bordos.gabor@wessling.hu

www.wessling.hu

