

한국 주요하천 및 유역 연안의 과불화합물(PFASs) 분포 특성

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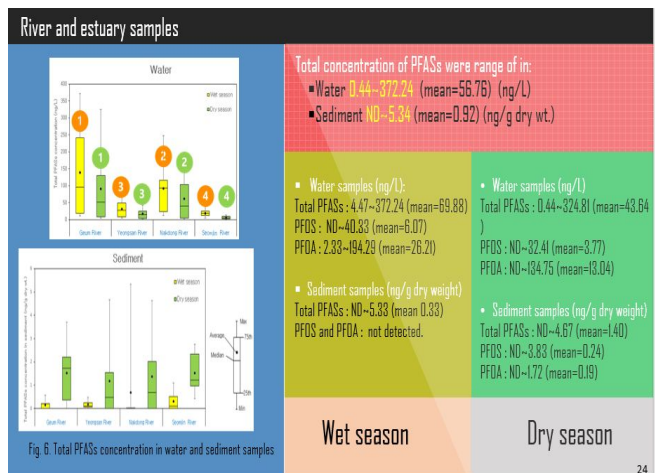
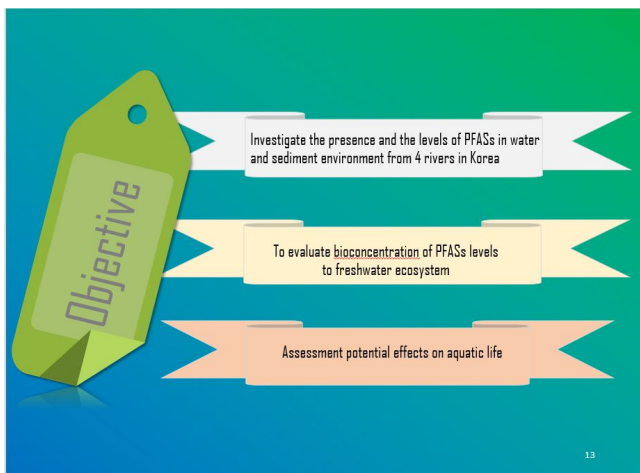
Distribution of perfluoroalkyl substances (PFASs) in major river and nearby coastal areas in Korea

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Risk assessment for PFASs in aquatic organisms

Bioconcentration is the process that causes an increased chemical concentration in an aquatic organism, compared to that in water, due to the uptake of chemical by absorption from water only, which can occur via the respiratory surface and/ or the skin (Voutsas, et al., 2002).

The extent of bioconcentration of a chemical substance is usually expressed in the form of a bioconcentration factor (BCF) which is the ratio of the chemical concentration in organism (C_o) and the water (C_w): (Gobas and Morrison, 2000)

$$BCF = C_o / C_w$$

Conclusion

- 01 Widely contaminated of PFASs in water, sediment and meekaka habitat samples
- 02 High concentration of PFASs focused on lake and river sites (st-5) Seom River-Nakdong River-Yeongsan River-Seomjin River
- 03 Percentage composition of PFASs was conversely between two sampling periods (wet and dry season)
- 04 Aquatic life in freshwater ecosystem was not adversely affect by PFASs concentration

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