Results on sedimentological and geochemical analyses of the Krka River and its tributaries

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LAGUNA, ZIMO, IRB

SECOND MEETING

Integrated evaluation of aquatic organism responses to metal exposure: gene expression, bioavailability, toxicity and biomarker responses (BIOTOXMET)

Zagreb, 15th December 2021

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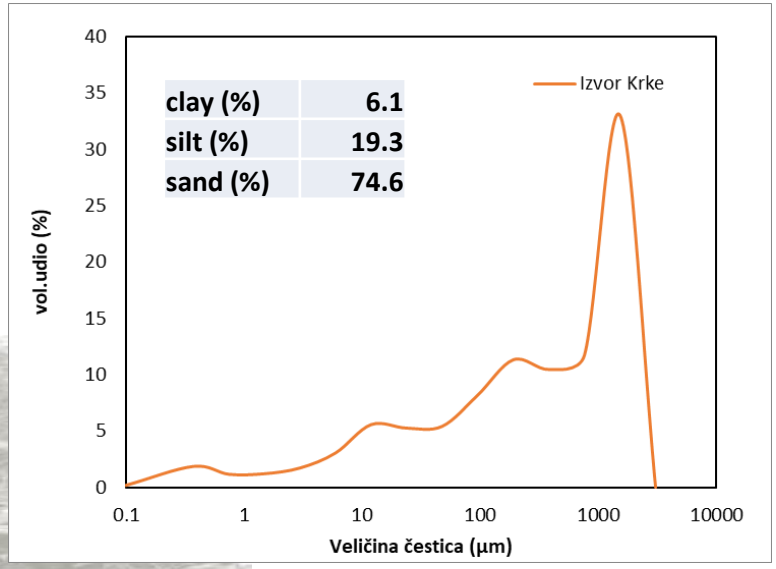
BIOTOXMET

Sampling stations:

1. Source of the river Krka (KRS)
2. Krka near Knin, with the discharge of municipal wastewater (KRK)
3. Lake Brljan (KBL)
4. Tributary Krčić (TKR)
5. Tributary Orašnica (TOR)
6. Tributary Butišnica (TBU)
7. Tributary Kosovčica (TKO)
8. Industrial wastewaters near Orašnica (IWW)

1 Source of the river Krka (KRS)



High levels of:
Mg, Ca

Lowest levels of:
Lithogenic elements (+ REE)

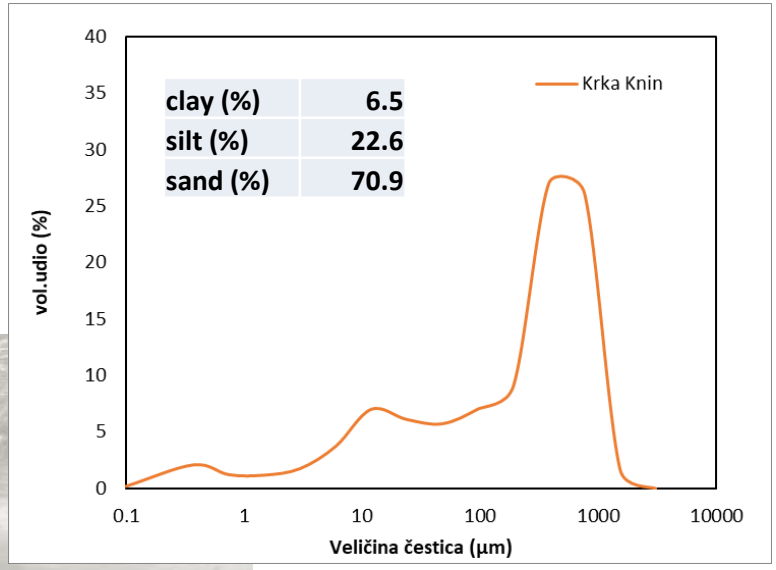
Data comparable with data for nearby Zrmanja

* highest

Medium Sand
Trimodal, Very Poorly Sorted

2

Krka near Knin, with the discharge of municipal wastewater (KRK)

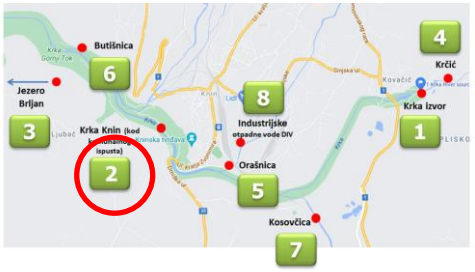


Highest levels of:
Ca

Low level of:
Lithogenic fraction

Data comparable with data for **location 1** with exception of: As, Bi, Mg, Mo and Sb

Medium Sand
Bimodal, Very Poorly Sorted



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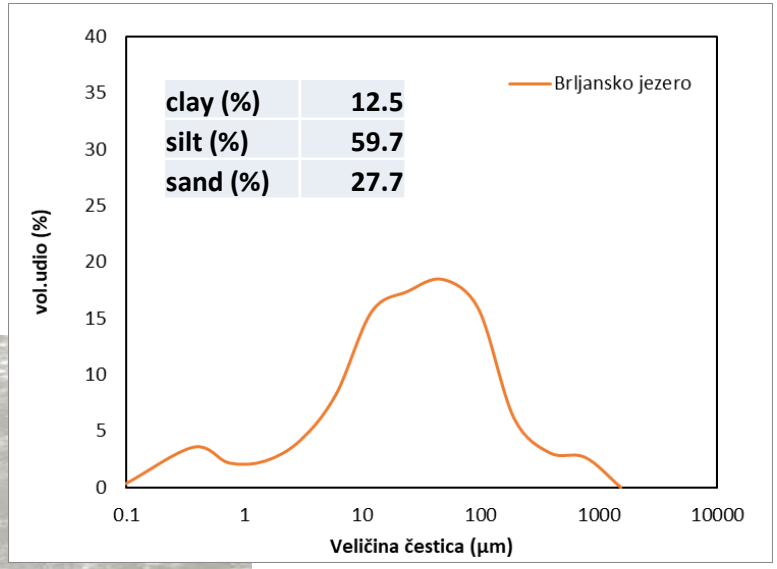
3 Lake Brljan (KBL)



Carbonate + lithogenic fraction
No maxima!

Very Coarse Silt
Bimodal, Very Poorly Sorted

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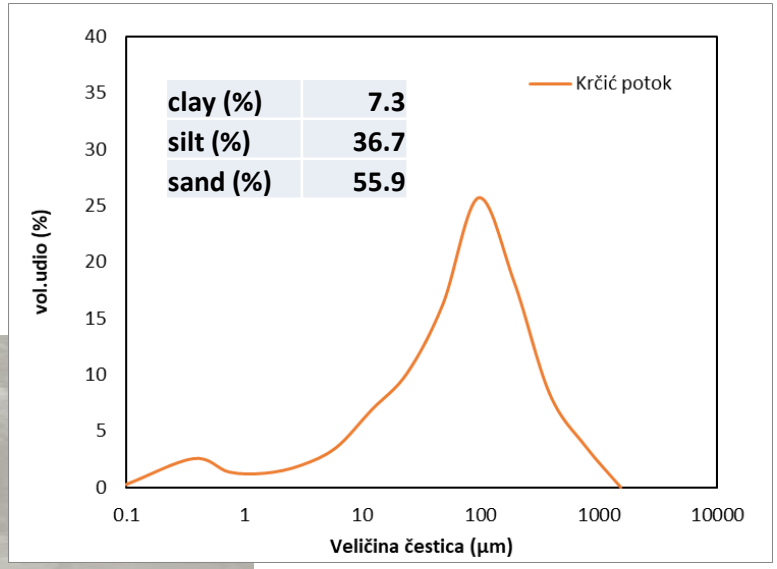
4 Tributary Krčić (TKR)



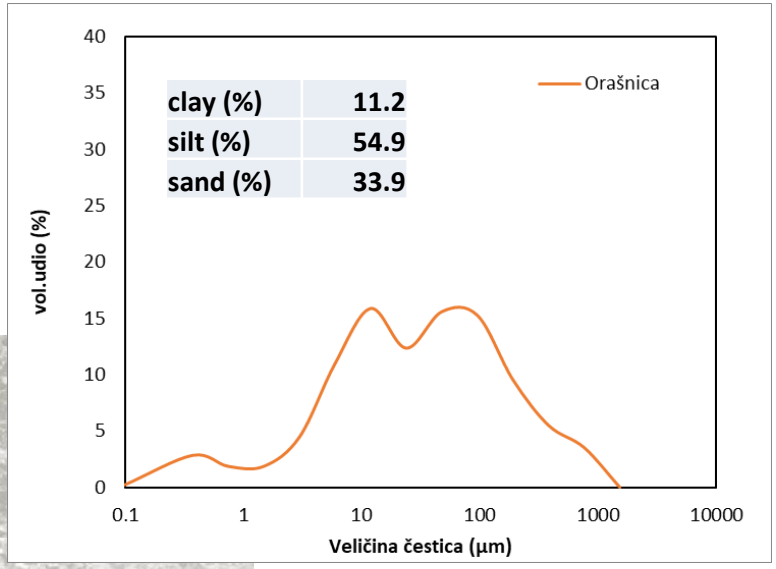
Carbonate fraction relatively high.

Comparable with average values for this region.

No maxima!

Very fine Sand
Unimodal, Very Poorly Sorted

5 Tributary Orašnica (TOR)



Very Coarse Silt
Trimodal, Very Poorly Sorted

High levels of:
Lithogenic fraction (Al, Be, Cs, Li, Sc, Rb, Ti, REE) + Cd, Co, Cr, Cu, Fe, Ni, Tl, V, Zn

* highest
* second highest

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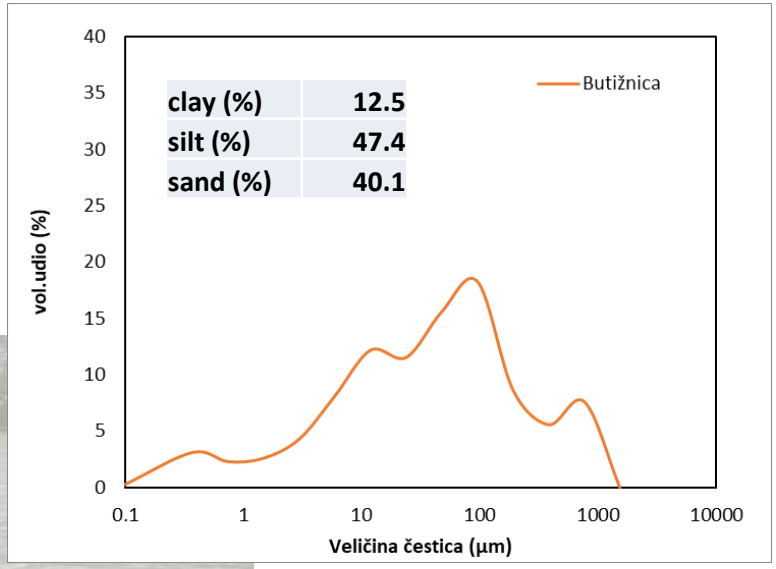
6 Tributary Butišnica (TBU)



High levels of:
Na, Mg, Ca

Very fine Sand
Polymodal, Very Poorly Sorted

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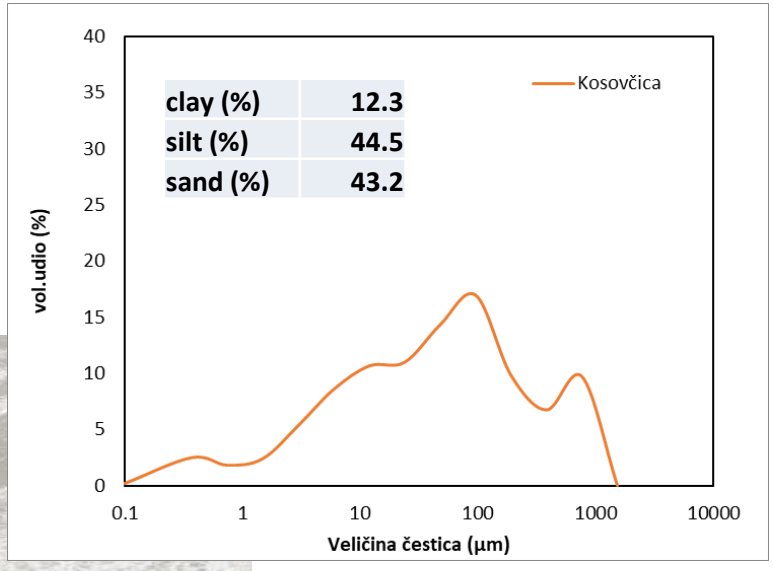
7 Tributary Kosovčica (TKO)



High levels of:
Lithogenic fraction (Al, Be, Cs, Li, Sc, Rb, Ti, REE) + Cr, Mn, V

* highest

Very fine Sand
Bimodal, Very Poorly Sorted

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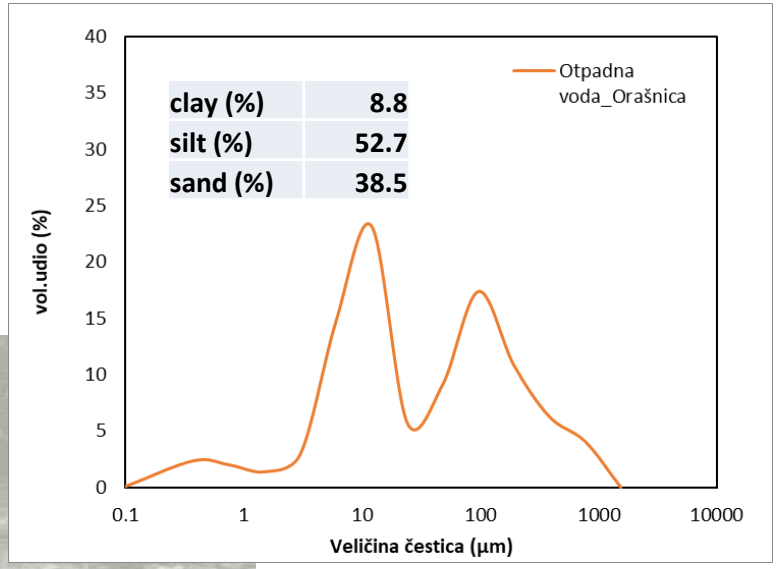
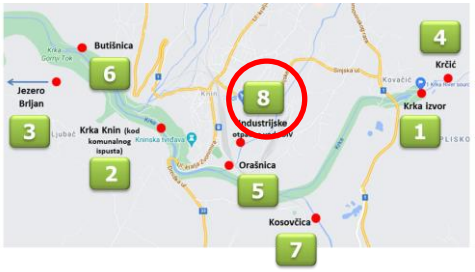
8 Industrial wastewaters near Orašnica (IWW)



Highest levels of:
As, Bi, Ba, Co, Cu, Cr, Mn, Fe, Mo, Ni, P, Pb, S, Sb, Sn, U and Zn

* ~100x higher
* > 300x higher

Very Coarse Silt
Bimodal, Very Poorly Sorted



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