

ATLAS OF SEDIMENTS (CROATIA'S COASTAL REGION AND ISLANDS)

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The Atlas of coastal sea sediments in Croatia's coastal region and islands has been prepared. The goal of this Atlas is to evaluate and demonstrate the processes that control the level, transport and biological exposure to chemical elements; to present the distribution of concentrations of the elements K, Ca, Ti, Cr, Mn, Fe, Ni, Cu, Zn, Ga, As, Br, Rb, Sr, Y and Pb; to propose numeric criteria that define sediment quality; to evaluate marine sediment quality and to pin-point problematic ecological areas in the Croatian part of the Adriatic.

Special attention was given to sample collection from non-contaminated coves that would serve as a „normal concentration standard“, as well as collection from „hot spots“ in marinas and harbors that were extremely contaminated by the elements Cu, Zn, As and Pb. The mean values of concentration levels of the four biocide elements from the analysis of 418 coastal sediment samples in the clean non inhabited coves are found to be as follows: Cu = (16,2±8,8) µg/g; Zn = (31,4±16,9) µg/g; As = (5,9±5,2) µg/g and Pb = (9,0±8,0) µg/g.