Thanks to the geografical position and specifics of relief county Šibenkso kninska has significant amount of quality water which is prerequisite of good and healy life.

According to the Ministry od Enviromental and Nature Protection county Šibensko-kninska has excellent rates of water and sea quality. On 93 patterns only 2 are good quality and 1 pattern is sufficient quality while others are excellent rated. Those 2 (good quality) are measured in Zaton and beach Banj while the lowest quality water in county Šibenkso kninska has Skradin.

Šibenik harbor is located in the lower part of the Krka river estuary. During last fifty years in the southeastern part of the Šibenik harbor (southern shore of the peninsula Mandalina) military port and repair shipyard were located.

In order to define its influence on the environment, we measured total mercury, cadmium, lead, copper and zinc concentrations in the water columns from three sampling sites. Measured concentrations were compared with ones from referent site located in the western part of the Šibenik harbor (Martinska). Concentrations of the ecotoxic metals were also analyzed in bulk and the fine fractions (< 63µm) in the sediment. Ecotoxic metals concentrations found in the water were not significantly elevated indicating weak anthropogenic influence.

On the other hand, measured concentrations of the ecotoxic metals in sediment samples are significantly higher of naturally present concentrations. That is consequence of strong input of 3rd International Conference on Ports and Waterways –– POWA 2008 279 ecotoxic metals in the past period. These elevated metal concentrations in sediment are high threat for benthic communities.