

# SPATIOTEMPORAL CHARACTERIZATION OF METALS IN SMALL CRAFT HARBOUR SEDIMENTS IN NOVA SCOTIA, CANADA



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***This study aims to determine the distribution of As, Cd, Cr, Cu, Hg, Pb and Zn metal concentrations across three Oceans and Fisheries Canada Small Craft Harbour management regions within Nova Scotia and whether these may be harmful for local biodiversity.***

## **APPROACH:**

This study examined the spatiotemporal distribution of characterization of sediment metal concentrations in 31 small craft harbours in Nova Scotia, Canada. Data was collected from government sediment assessment reports over a period of 16 years (2001-2017).

## **MAIN FINDINGS:**

- Despite wide temporal coverage, large variation in sediment concentrations across small craft harbours were likely due to regular dredging activities preventing long-term accumulation of contaminants.
- Most sediment metal concentrations were below low effect level and >96% were below high effect level sediment quality guidelines, suggesting limited ecological impairment to marine biota.
- Despite wide temporal coverage, large variation in sediment concentrations across SCHs were most likely due to regular dredging activities preventing the long-term accumulation of contaminant.