



# Heavy metals in coastal and estuarine sediment 2009 and 2012–2018

## Title

Heavy metals in coastal and estuarine sediment 2009, 2012–2018

## Publisher

New Zealand's Environment Reporting Series: The Ministry for the Environment and Statistics  
New Zealand

## Description

This indicator measures the concentrations of four heavy metals (lead, copper, zinc and cadmium) against the Australian & New Zealand Environment and Conservation Council (ANZECC) guideline values for toxic substances in estuarine sediment. Heavy metals occur naturally in estuaries, but high concentrations suggest contamination from another source. The metals can be transported along waterways from urban environments (and, for cadmium, from farmland) and accumulate in estuarine and coastal sediments. Heavy metals are toxic although some such as copper and zinc are classed as micro-nutrients at very low concentrations. They accumulate in sediment, where they can be taken up by organisms, and are harmful to species and habitats. They also bio-accumulate (are found in higher concentrations in species further up the food chain).

## Source

Unitary, district, city, and regional councils (Auckland, Bay of Plenty, Canterbury, Hawke's Bay, Manawatu-Wanganui, Marlborough, Nelson, Northland, Otago, Southland, Tasman, Waikato, Wellington)

## Rights

Creative Commons Attribution 4.0 New Zealand

## Rights

Attribution 4.0 International

## Rights

<https://creativecommons.org/licenses/by/4.0/>

## Coverage

Auckland, Bay of Plenty, Canterbury, Hawke's Bay, Manawatu-Wanganui, Marlborough, Nelson, Northland, Otago, Southland, Tasman, Waikato, Wellington

## Identifier

EA2019/07

## Type

Dataset

## Language

eng-nz

## Subject

Environmental reporting series: