

Jewel of the eastern Bay of Plenty

Ohiwa catchment sediment and nutrient management

Contaminants in freshwater tributaries affecting the harbour

1. Sediment.

From all land uses, this results in soft mud being deposited which has many detrimental impacts on most life forms in the harbour, encourages mangrove growth and slowly fills up the harbour.

We can see sediment deposition is high but we have little accurate data about exactly how much and where it's coming from.

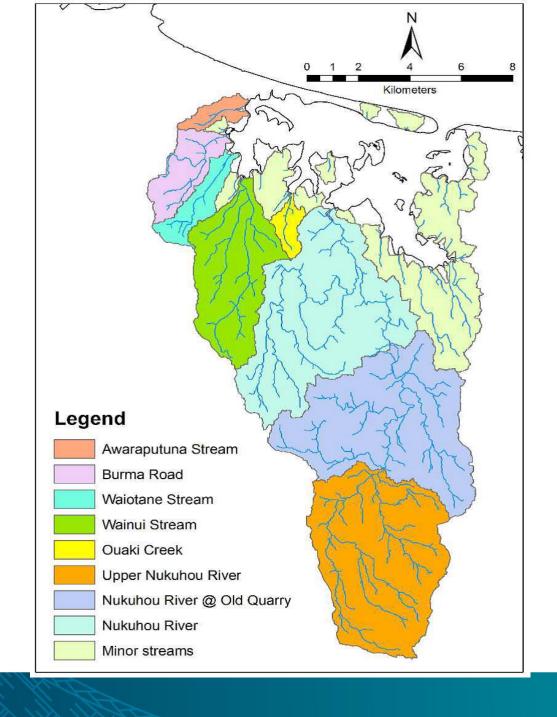
2. Bacteria

Bacteria (E.coli etc) largely comes from farm animals. We need to keep levels low enough so that swimming and shellfish gathering continue to be safe. We have a pretty good idea of where this is coming from but we only have data for the Nukuhou sub catchment.

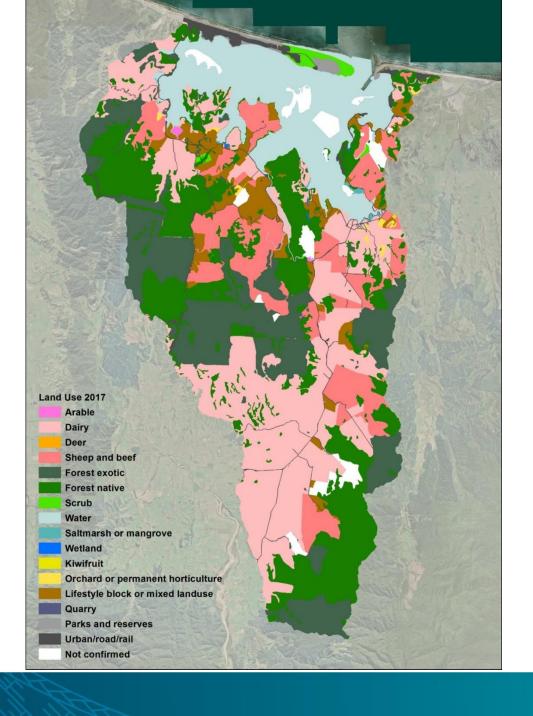
3. Nutrients

Principally nitrogen and phosphorus from farming (mostly fertiliser and cow pee). Currently these are not impacting noticeably on the harbour environment but we need to ensure that levels do not increase – and preferably decrease. We have fairly good data from the Nukuhou sub-catchment but nowhere else.

Ōhiwa sub-catchments



Ōhiwa catchment land use



Ōhiwa catchment existing and proposed monitoring sites

Legend

1

Existing NERMN site

2 - 5

Existing WQ monitoring sites

6 - 11

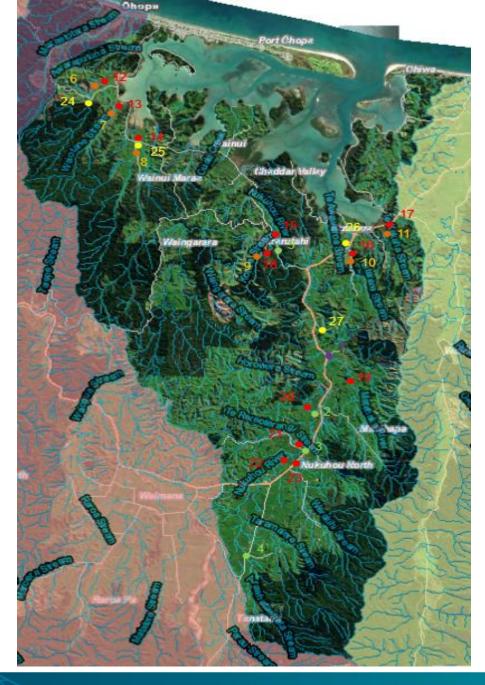
Proposed WQ monitoring sites

12 - 23

Proposed sediment monitoring sites

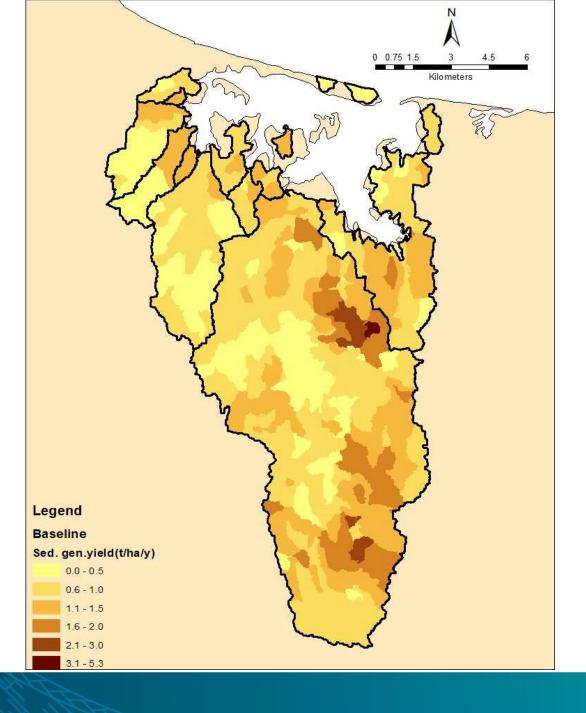
24 - 27

Existing ecological monitoring sites



Öhiwa catchment sediment yield (modelled)

Total sediment flowing into the harbour is <u>estimated</u> to be: about 14,000 tons/year





Mitigation activities already carried out

- The entire margin of the harbour is fenced (where necessary)
- 448km of stream/drain fencing in place (281km to go)
- Many thousands of riparian plants planted
- A number of sediment traps and detainment bunds in place
- Poplar pole planting, native planting, production forest planting has been carried out on some steep slopes
- 8 of the 17 dairy farms have farm environment plans (FEP's)

What needs to be done in the immediate future

- Ensure all dairy farms have FEP's and ensure all farmers are implementing them
- Work with all dairy farmers to ensure best land management practice
- Continue to get remaining streams fenced (and planted where appropriate)
- Encourage the retirement, planting or pole planting of steep slopes
- Develop and implement a bank stabilisation plan for the Nukuhou
- Map all wetlands and get them fenced
- Carry out hydrological survey of the harbour
- Target the larger drystock farms initially, ensure best land management practice
- Encourage the retirement, planting or pole planting of steep slopes