# **OUR STREAMS**



Healthy Streams From the Mountains to the Sea





# THE IMPACT OF LOW WATER FLOWS ON ESTUARINE HEALTH

During the recent period of low rainfall, we were asked why rural water restrictions were put in place, as water that is left to flow into the sea is seen as being wasted.

One reason is that the natural connection between rivers and oceans is vital for the sustainability, productivity and biodiversity of estuaries and coastal ecosystems.

Salinity: Many plants and animals that live in estuaries require a brackish mix of fresh and saltwater, and won't survive long periods with reduced freshwater entering the estuary. For example: salt marsh plant and animal communities, seagrass communities, or cockles.

Nutrients: A healthy/productive coastal ecosystem relies on the supply of inorganic and organic nitrogen and phosphorous compounds that are naturally flushed from the land into the sea. Inorganic nutrients are either flushed directly into the sea where they stimulate phytoplankton production, or are taken up by estuarine plants and trickle fed into the sea as organic nutrients.

These nutrients support coastal ecosystems, including wading birds that feed on intertidal flats and coastal fish species, for example snapper. Supporting the lifecycle of our whitebait species: Whitebait live their lives in both freshwater and salt water, and maintaining flow is important to ensuring they can complete this cycle at the right time – which coincides with the time of the year where low flows are most likely to occur.

If you would like to understand more about this issue, check out our video made by Cawthron Scientists explaining the issues with low flows in rural catchments. To view the video, go to nelson.govt.nz/healthy-streams.

## **COMING UP**

Nelson City Council and New Zealand Landcare Trust will be holding a Wakapuaka *Bursting with Life* public workshop later in the year to hear from the community and report on findings about *E.coli* levels in the catchment. Some solutions that are already being supported include:

- Appropriate fencing and planting solutions for creeks and rivers.
- Planning trials for small wetland filter systems.
- Advice on maintaining septic tanks.
- Water storage and drinking troughs.

nelson.govt.nz/healthy-streams

## **PREVENTING STORMWATER POLLUTION FROM DRAINS TO HARBOUR**

Nelson City Council's Healthy Streams programme is funding a new initiative, Drains to Harbour, to raise awareness about stormwater pollution and how it affects our freshwater and coastal habitats.

The programme will involve a series of free workshops to the public and to schools to highlight how best to prevent pollution of the stormwater systems that drain into waterways and Nelson Harbour.

The five-week schools programme will provide a classroom introduction to stormwater pollution sources and effects, a field trip to a local stream to investigate water quality, and associated classroom student activities. Hands-on experiences in the environment will encourage students to put their knowledge into action within the community.

Community workshops will provide information on stormwater pollution,

and aim to empower individuals to contribute to healthier waterways. Topics such as how to manage stormwater on residential property, environmentally responsible ways to wash your car, and other tools and techniques for reducing stormwaterrelated pollution.

Clare Barton, Group Manager Environmental Management says that the programme is extremely valuable for Nelson. "The health of our harbour is directly impacted by stormwater. The Drains to Harbour programme will raise public awareness and knowledge of stormwater pollution, and empower the Nelson community to contribute to healthy waterways."

Keep an eye on Council's website and Facebook page for information about free community workshops.

nelson.govt.nz/drains-to-harbour

# MANU HIKOI/FIELD TRIP - BIRDS

Join us for two nature-lovers events on Sunday 12 May, Mother's Day, to celebrate the bird life in the Wakapuaka catchment and learn more about our native bird species.

### **MANU HIKOI FAMILY PICNIC**

- When: 12 May, 11.30am-1.30pm
- Where: Hira Reserve
- **Bring:** picnic, field guides (Wakapuaka or Te Wairepo/York Stream)

• Enjoy: Devonshire teas, live music, children's activities and bird info After lunch, head down to Paremata Flats to join the Manu Hikoi Bird Bus trippers as they explore birdlife in the beautiful reserve.





#### MANU HIKOI BIRD BUS TRIP

- When: 12 May, 9am–3pm
- Where: starts at Hira Fire station, ends at Paremata Flats (with transfer back to Hira)
- **Bring:** picnic lunch, Wakapuaka field guides (more will be available on the bus), binoculars, note book.
- Enjoy: Guided bird journey from Hira, up the Lud Valley then back down to the Hira Reserve Family Picnic for lunch. The bird journey then carries on to Paremata Flats for the afternoon.

Priority on the bus will be given to those resident in the Wakapuaka catchment, other spaces on a first come first serve basis.

Please register to be sure of a seat at tinyurl.com/fieldtripbirds

Brought to you by Healthy Streams and Wakapuaka *Bursting with Life* initiatives of Nelson City Council. Information about the Field Guide project available at:

nelson.govt.nz/healthy-streams

Velson City Council te kaunihera o whakatū

Find out more at nelson.govt.nz

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