# What is a wetland?



## Wetlands are permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions\*.

Wetlands aren't always 'wet'; they can be dry at certain times of the year. They provide habitat for wildlife and support an ecosystem of plants and animals that have adapted to living in wet conditions. Wetlands occur where surface water collects or where groundwater seeps through to the surface.

In Hawke's Bay we have examples of many types of wetlands. People often think of Pekapeka Swamp, but there are many other wetlands of various sizes on public and private land.

Wetlands include anything from small on-farm swamps and seeps, to large, regionally recognised areas.

Wetlands are crucial to our environment. They connect land and water, help regulate the flow of water across the landscape, filter out sediment and nutrients, and support a greater concentration of wildlife than any other habitat in Aotearoa New Zealand. Only four percent of our original wetland extent remain in Hawke's Bay, so it's important that we all work together to protect the wetland areas we have left.

\*Resource Management Act 1991

Find out more about wetlands at hbrc.govt.nz, search: #wetlands



### Wetlands benefit your farm, catchment and wider environment by acting as....

### **Sponges**

Wetlands act like giant sponges in the landscape, and regulate the flow of water. Wetland plants slow the flow of water off the land, soak up and store excess floodwater, and then slowly release it to maintain summer water flow in streams. More wetlands mean greater resilience to both floods and droughts.

### Sinks

Like forests, wetlands are sinks for excess carbon. They can draw down and store carbon from the atmosphere. Peaty wetlands like those around Lake Poukawa are especially effective carbon sinks.



### **Biodiversity** hotspots

Wetlands provide habitat for a diverse range of plants and animals especially adapted for wet conditions, many of which are rare and threatened species. Wetlands can be important breeding sites and nurseries for young fish and birds. They can support additional bees for pasture pollination and birds for bug control.

### **Kidneys**

the earth's kidneys as they filter nutrients and sediment. The plants in wetlands trap sediment and phosphorus suspended in the water and reduce faecal bacteria, making the water cleaner. Bacteria and plants living in wetland soils absorb and break down nitrogen and other nutrients from farm run-off and leaching, improving water quality.



### Wetlands also...

- · Are culturally important to Māori, who value these places as precious taonga (treasures). Many wetlands are important wāhi tiki kai (a place where food is gathered) .
- Can be a hazard for stock. Returning a permanently boggy patch of farm to a fenced wetland can eliminate the need to rescue stuck sheep, saving time and reducing stock losses.
- · Support biodiversity in your farming system. This can create stronger brand 'stories' for consumers. On-farm sustainability actions like protecting and restoring wetlands can make your products more marketable.
- Are great recreational spaces, with high aesthetic value.



### What do wetlands look like?



Hawke's Bay has some awesome native wetland plants. Some common species include:



Sharp spike sedge (Eleocharis acuta)



Cutty grass/rautahi (Carex geminata)



**Wire Rush** (Empodisma minus)



Edgar's rush/wīwī (Juncus edgariae)



**Pukio** (Carex secta/virgata)

Mānuka and raupō are also common in wetlands, and provide important habitat structure for birds.

### Identifying wetlands can be tricky as no two wetlands are the same!

The process to identify a wetland relies on vegetation, soil and hydrology assessments and may require specialist help.

Some wetlands can appear dry:

**Ephemeral wetlands** are highly seasonal. They collect water from the rain and groundwater during winter and spring, and they can completely dry out in summer months or in dry years.

**Seepage areas** are usually on slopes, and are fed by groundwater and surface water. They may be permanently wet, or temporarily dry. The water table is usually either above or below the ground surface.

Marshes are often periodically inundated by water, so can have big changes in water level throughout the year. They can temporarily dry out in between these influxes of water. Marshes are a common type of wetland in Hawke's Bay.

These are still wetlands, and provide important ecosystem services, biodiversity and habitat.



Ephemeral wetland, Hawke's Bay



Seepage area, Hawke's Bay



Marsh, Hawke's Bay

Check out this great wetland identification guide from Greater Wellington Regional Council.

www.gw.govt.nz/environment/our-naturalenvironment/our-unique-ecosystem-types/ wetlands/identifying-a-wetland/



### Think you have a wetland?

### Take time to observe and get to know your wetland.



- · Is the water standing or flowing?
- · Permanent or temporary?
- · What is the water level like compared to the past?
- · Are there birds around? What species are they?
- · How do bird and plant species change with the seasons?
- · What is the extent of the wetland? Does this change overtime?

#### The most important things you can do are:

### **Protect** (Fencing)

Protect wetlands from stock, feral browsers (deer and goats), and predators (possums, stoats, cats). This will allow the wetlands to provide maximum benefits.

Protecting stock from wet areas

= fewer stock losses

#### Restore

(Planting and weeding)





- · Plant appropriate native vegetation to increase the wetland's health and productivity benefits, and
- · Remove aggressive exotic weeds, and any close by that could be a seed source. Check the HBRC Pest Hub online to identify problematic invasive species.

### Get in touch with us for help and more info on protecting and restoring your wetland!

Given the importance of wetlands to the environment, activities in around wetlands are regulated by local and national rules. For example, you need a consent from Hawke's Bay Regional Council for earthworks around wetlands. To learn more about the regulations, search for the following hashtags on the HBRC website:

- #wetlandmanagement for wetland rules and regulations, definitions, and management
- #stockexclusion for the rules on excluding stock from waterways

Contact us on 0800 108 838 for help. We can provide advice and potentially funding to help you make the most of your wetland area.





