

Taking action in swamps and bogs

Assess needs/plan

Do this before anything else! Seek professional advice if you need to identify the management issues for your site. Write up a plan of action. Get a copy of the Wetland Management Plan template from www.waikatoregion.govt.nz/wetlandplan or 0800 BIODIV (246348).

Seek funding

Determine what actions are needed and how much each will cost before you apply for funding. You may need to obtain funding before you can start on the work. Call 0800 BIODIV for advice on funding sources.

Legal protection

If a site is not legally protected it's generally best to seek legal protection when the site is in good condition. However, if you plan to protect the site and you need to fence it, contact QEII National Trust first, as they usually pay a share of the fencing costs.

Monitoring

Take site photos **before you start** and during your work. Record which plants survived. Check for an increase in bird numbers and health of plants. Use the Wetland Monitoring and Assessment Kit (WETMAK) on www.landcare.org.nz/wetmak. If the project is large and needs a lot of funding use a professional monitoring programme to justify your application for the next round of grants.

Manage water

Wetlands need water, but maybe not all year round. Monitor water levels for a year (look for plants that like damp feet to tell you where the water levels come to). If you need to divert or dam water to restore your wetland, check with Waikato Regional Council - you will probably need a resource consent.



Control weeds

Tackle weeds as soon as all stock are out. Deal with weeds you are legally obliged to (see www.waikatoregion.govt.nz/pests)



Fertile wetlands are easily invaded by woody plants (e.g. willow, alder) that shade out shorter native plants. Be vigilant for weeds in nearby sites that are not in your native forest - yet!

Dense ground cover plants (e.g. reed sweet grass, flag iris) smother native seedlings and should be your next priority.

If you change water levels, wait a couple of years to see if the water kills off any weeds. Getting rid of some weeds just encourages others! Plant natives in their place. Get good advice on weed management.

Reduce pollution

If a stream flows into your wetland consider a silt trap and a planted swale to absorb excess nutrients from the water. See 'Planting' to deal with run-off from hill slopes.



Control stock

Grazing animals trample and eat plants, and pollute sites with dung and urine. The heavier the animal the greater the damage. A hot wire is a good start to keep cattle out in the wettest parts of the year.



Control pests

Pests in wetlands can include deer, pigs, goats, rodents, possums, stoats, ferrets, weasels, rabbits, hares and feral cats.



Target large animals first. They are easier to find and, if the site is well-fenced, may be eliminated. Use a trained hunter to shoot deer, goats and pigs. Other pests will need on-going

control. Pest fish may also be present and can be difficult to control. Do not transfer eggs/adults on equipment to other areas or waterways. Specialist advice is helpful to identify methods to control pest fish. Contact your local DOC office or Waikato Regional Council for advice

Planting

First plant the edges of the wetland to trap sediment and run-off. Then, if the site is of **unnaturally** low diversity and isolated from natural seed sources, consider enhancement plantings. If you have to remove a lot of weeds, plant natives as soon as possible to stop another weed filling the space. If you have used herbicide wait the stated number of days before replanting.

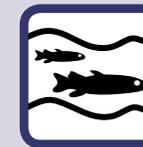


If your site is isolated from other natural areas consider planting corridors of vegetation to encourage birds to move between them. Plant very wet areas in drier months. Keep your plantings weed free until the plants are well-established. Small plants can be smothered by rank grass. Protect from rabbits, hares and stock.

Plant species which are characteristic of the area you are planting i.e. natural plant populations are placed back in their natural range. Check nearby areas for clues to the appropriate vegetation of the area.

Provide for fish

If the waterway connections between wetland and sea are broken by poorly designed culverts, dams with no fish passes, or other barriers, talk to your council. Work on downstream barriers first, so fish can get to the sea and back again. These actions may also provide access for pest fish species if not already present -



Encourage native animals

If the site is very depleted of native animals, monitor the situation for a few years to see what turns up naturally. If you want to re-introduce wildlife you will need a permit from DOC and/or the Fish and Game Council.

