



Terrestrial ecology

Our Terrestrial Ecology team offers all the services needed to meet your regulatory and non-regulatory needs. The team consults with our aquatic ecologists, engineers, planners, water resource scientists and land management advisors to provide you with a comprehensive view.

We specialise in survey and assessment of vegetation and wildlife. This includes identifying significant potential issues and opportunities to assist you through the Resource Management Act.

Our ecologists are often involved from the earliest stages of a project. They survey, assess effects, provide ecological input into engineering considerations and develop ecological mitigation plans.

As technical experts they attend hearings and the Environment Court, prepare management plans and monitor compliance to ensure consent conditions are met.

Expertise

Our specialist services include:

- Flora and fauna surveys
- Threatened species survey and management
- Mitigation plan planning and preparation
- Land and habitat restoration management
- Hearings and Environment Court expert evidence.

Experience

Our reputation for quality work includes:

- **Waimea Dam** is a 50 m dam and reservoir on the Lee River in Nelson. For this project we completed consent planning, geotechnical engineering and

engineering design. Our terrestrial ecology team completed baseline ecological surveys of birds, reptiles, pests and forest health. We also assessed effects, completed rare species management and prepared mitigation plans for revegetation, pest control, botanical salvage and propagation

- **Hunua Quarry**, south of Auckland, covers 40 ha of regenerating and secondary indigenous forest. We served as an expert witness and developed mitigation and offset plans for revegetation, pest control, wildlife and threatened species relocation and management. We also provided advice in relation to consent conditions, research investment and managed programme implementation
- **Newmarket Park Closed Landfill** is a contaminated site located in central Auckland. Here we completed baseline ecological surveys, and consulted with council, iwi, DoC and others to develop mitigation plans. These plans covered lizard relocation, pest management and revegetation plans
- **NZ Steel Landfill** covers 31 ha of degraded streams and farmland. We completed assessment of environmental effects and looked at options for mitigation. Ecological work which we completed included preparing restoration options for adjoining degraded riparian areas, coastal margins and remnant coastal forest patches. We also presented expert evidence at a hearing and the Environment Court
- **A vegetation and wildlife survey** that required our expertise in New Zealand forest botanical description. We also completed grassland and wetland assessment, reptile survey in grassland and forest habitats, and bird and bat surveys. Along with a significant invertebrate survey, pest

plant and animal identification, and assessment of periodic recreational release from the Waikaremoana scheme.

- **Didymo risk assessments** completed for TrustPower and NZ Defence Force. We prepared risk assessments and management plans that were designed to minimise the risk of transfer of between catchments
- **Bujagali Hydropower Project** was located on the White Nile and involved the greenfield construction of a 250 MW hydropower scheme. A World Bank project, it had to meet environmental safeguard policies. We completed environmental and ecological assessment, including:
 - Designing and implementing field investigations for water quality, algae, invertebrates, fish species and subsistence and commercial fisheries
 - Completing targeted field investigations of habitat availability and population distribution for seven cichlid fish species with high biodiversity value
 - MIKE11 modelling of sediment transport from construction activities, assessment of effects on fisheries and development and oversight of construction monitoring programme
- **River Ribb Irrigation Dam** was a proposed new 70 m high dam. We completed assessment of effects on fisheries, including:
 - Field investigations such as hydrological measurements
 - Assessment of before and after dam river flows
 - Physical habitat modelling to identify a suitable post-dam flow regime
 - Ecological effects assessment and reporting
 - Preparation of an Environmental Management Plan.

