



Welcome to this Wetlands' Edition of the Wildlands' newsletter. We take pride in our experienced and skilled team of South Island Ecologists.

Otago Regionally Significant Wetlands

Wildlands has been mapping and re-delineating wetland boundaries for tens of thousands of wetlands in Otago since 2021 to support protection and regulatory compliance. Where there was some uncertainty around the borders, wetlands were ground-truthed and delineated in the field, using vegetation, soil and hydrology tests.

Management Plans for Wetlands in the Manuherekia

Generic wetland management plans were developed for landowners to use throughout Manuherekia Catchment for the Manuherekia Catchment Group. The plans highlighted the different management requirements for a range of wetlands found throughout the area.

Extensive Wetland Delineations Across the South Island

When potential wetlands are present that may be affected by activities requiring consent, wetland delineation is required, as outlined in the National Policy Statement for Freshwater Management. Wildlands' staff have delineated wetlands, and assessed their ecological value and effects upon them, for a range of projects – including proposed rezoning, subdivisions, and restoration and remediation works of Whakaora Te Waikēkēwai.

Improving Climate Change Resilience of Alpine Wetlands

Wildlands worked with Department of Conservation to explore management opportunities to improve the climate change resilience of alpine wetlands in the Taiari catchment. This involved describing the ecological and social values of these wetlands and the threats they currently face, using up-to-date climate modelling to understand future climate change impacts. Priorities were determined by investigating the costs, benefits, and urgency of different management opportunities.

Wetland Identification at a Proposed Residential Development - Queenstown

Six natural inland wetlands were identified and delineated at a proposed residential development in Queenstown, with recommendations provided to the developer on how to protect and enhance these ecosystems.

Wetland Mapping and Delineation

Wildlands has been mapping and re-delineating wetland boundaries for over 170 regionally significant wetlands in Otago since 2021 to support protection and regulatory compliance. We have also mapped and classified thousands of wetlands across Canterbury, Otago, and Southland using a combination of desktop surveys and internationally-recognised delineation methods, including vegetation assessments, soils, and hydrology indicators.

Wetland Condition Assessments

We conduct scientifically robust assessments of wetland condition using established standardised methodologies. These evaluations inform restoration priorities, policy implementation, consent decisions, and long-term monitoring. Our assessments consider vegetation, hydrology, invasive species, and land-use pressures, and are tailored to meet regional council and NPS-FM requirements.

Hydrology

Our team has strong expertise in wetland hydrology, including assessment of surface and subsurface flows, hydroperiods, and drainage impacts. We provide hydrological input for wetland delineation, restoration design, consent assessments, and policy implementation.





Roland Payne - Senior Ecologist

Roland has undertaken numerous wetland delineations, condition assessments, and significance evaluations to support ecological impact assessments, restoration planning, and compliance with national and regional policy frameworks, including the National Policy Statement for Freshwater Management (NPS-FM). Roland has surveyed wetland vegetation in diverse environments throughout Aotearoa/New Zealand.



Erin Gallagher - Senior Ecologist

Erin has conducted hundreds of assessments including threatened plant surveys, vegetation monitoring, desktop assessments, wetland delineation, HCV evaluation, turf surveys and ecological impact assessments. These surveys and assessments have been in a variety of ecosystems including: braided rivers, lake margin turf, wetlands (ephemeral, marsh, swamp, seepage, fen and bog wetlands), drylands, subalpine herbfields and more.



Dr Morgan Tracy-Mines - Vegetation Ecologist

Morgan is an ecologist with extensive experience in wetland assessments and delineations across a range of South Island environments. Since joining Wildlands in early 2023, she has contributed to over 100 ecological projects, including numerous wetland surveys, significance assessments, and vegetation mapping to support resource consent and policy compliance. Her wetland work integrates detailed botanical knowledge, field-based plot and transect methods, and a strong understanding of hydrological and ecological indicators.



Dr Meredith Davis - Senior Freshwater Ecologist

Meredith is an expert in the usage and implementation of molecular (eDNA and genomics) and microbial techniques. Her area of specialty is engaging communities on how to improve public health by maintaining resilient freshwater and estuarine ecosystems. She approaches her research and projects with an understanding that environmental, animal and human health are interconnected. She believes knowledge sharing and collaboration with a foundation in mātauranga Māori is essential to achieving long-term freshwater restoration goals in Aotearoa.



Richard Storey - Senior Freshwater Ecologist

Richard has 22 years' professional experience researching the ecology of lakes, wetlands and streams, and applying ecological knowledge to monitor, understand, mitigate and reverse the impacts of human activities on fresh waters. His experience includes 15 years in the Freshwater Ecology Group of NIWA and two years in the Aquatic Ecology Centre of Kathmandu University, Nepal. His roles have ranged from field data collection and analysis to proposal writing, project management, client liaison, subcontracting, reporting, academic publishing and supervision of students.



Dr Kelvin Lloyd - Senior Principal Ecologist

Kelvin is a highly experienced ecologist with specialist expertise in wetland ecology, mapping, and monitoring. He has described, assessed, and mapped wetlands throughout the lower South Island, and has provided expert ecological evidence on wetland extent, condition, and pressures in Southland. Kelvin has contributed to regional-scale wetland investigations, including reporting on the causes of wetland loss, and has undertaken quantitative wetland monitoring in both Otago and Canterbury. Kelvin regularly provides expert advice to councils, landholders, and developers on wetland management, restoration, and policy compliance.