CAWTHRON

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ROLE DESCRIPTION | ARO TŪRANGA

Title	Senior Environmental Research Scientist - Biosecurity (Scientist Level 4)
Group	Biosecurity
Reporting To	Team Leader - Invasion Ecology and Management
Date Prepared/Revised	November 2026
Staff Responsibility	Nil

CAWTHRON PURPOSE | TŌ TĀTOU ŪMANGA

Our purpose: Impact through world-class science and mātauranga.

Our vision: Creating a better future for oceans, rivers and lakes and the communities that depend on them.

Our outcomes: Healthy Ecosystems - Prosperous blue economy – Thriving people and communities

CAWTHRON VALUES | NGĀ UARA









ROLE PURPOSE | TE TŪRANGA

Lead and participate in multidisciplinary research and consultancy projects concerning the ecology, environmental impacts and management of marine invasive species and other marine biosecurity risks. Design and conduct research that improves understanding of threats to marine ecosystems and informs environmental management policies, plans, risk assessments and practical interventions. Provide senior scientific expertise on complex and novel environmental issues to achieve science excellence and contribute to Cawthron's strategic and financial goals.

KEY ACCOUNTABILITIES | KAWENGA TAKOHANGA

Key Result Areas	Key Accountabilities
Research and Consulting	• Conceive, lead and integrate major or multidisciplinary environmental research and consulting projects and programmes involving unique problems, complex issues and multiple areas of expertise relevant to ecology and management of marine pests and diseases. • Act as a senior environmental science adviser to Cawthron, government, industry, iwi, clients and research collaborators on the ecological effects, environmental and biosecurity risks, prevention and management of marine invasive species, pests and diseases

	• Develop, evaluate and provide scientific advice on environmental policies, plans, standards, monitoring approaches and management interventions to prevent, reduce or respond to marine biosecurity risks and environmental harm. • Communicate and integrate findings from related projects or disciplines into coherent scientific advice, client solutions and recognised research outputs, including significant peer-reviewed publications. • Set expectations for scientific excellence across projects and ensure scientific outputs and client solutions are robust, integrated and appropriate to their intended purpose. • Build, maintain and leverage an extensive national and international network of clients, collaborators, funders and end users to strengthen Cawthron's scientific influence, partnerships and strategic opportunities in invasion ecology and biosecurity. • Initiate and lead cross-group, cross-institution and multidisciplinary collaborations of strategic importance to Cawthron in marine biosecurity. • Where required, undertake or contribute to environmental risk and impact assessments, technical reviews, regulatory advice and expert evidence, including for Environment Court and Environmental Protection Authority processes.
Funding and Project Coordination	• Develop, secure and lead major research or consultancy projects, or substantial integrated components of major programmes, in invasion ecology and biosecurity, with accountability for overall scientific, financial and stakeholder outcomes. • Secure significant external funding and shape a sustained pipeline of major research and consultancy opportunities aligned with Cawthron's strategy and the biosecurity group's programme priorities. • Lead major funding proposals or lead major and clearly defined components of proposals requiring integration across disciplines, organisations or workstreams. • Determine and coordinate capability, staffing, resource and funding requirements across projects or connected projects. • Provide scientific and programme leadership across teams, integrate related projects, and resolve complex delivery, resource or scientific issues. • Hold overall accountability for the scientific direction, financial performance, delivery and stakeholder outcomes of major projects within delegated authority. • Maintain and manage significant relationships with clients, collaborators, funders and partner organisations across major programmes, balancing scientific, financial, resource and stakeholder requirements. • Develop and promote effective programme and R&D-management practices across connected projects and teams.
Quality and Strategy	• Provide scientific leadership and guidance across broad areas of strategic environmental importance to Cawthron, particularly marine invasion ecology and biosecurity. • Set or influence scientific direction by anticipating developments, identifying emerging opportunities and defining issues of major importance to Cawthron.

	• Establish, champion and review expectations for robust, defensible and high-quality science across major programmes, disciplines or areas of organisational importance. • Review significant reports, publications and integrated scientific findings across major programmes or areas of responsibility. • Translate scientific, sector and business trends into new strategic initiatives, research directions and significant commercial or funding opportunities for the Invasion Ecology and Management Team and the Biosecurity Group. • Maintain broad knowledge across relevant disciplines, technologies, sectors and markets, and apply this to strategic scientific decisions. • Lead significant improvements in scientific systems and practices and champion collaboration across groups, disciplines and institutions. • Influence organisational priorities and investment decisions by providing senior scientific advice on opportunities, risks, capability and future needs. • Build scientific capability by mentoring established and developing scientists and creating opportunities for them to contribute to major programmes, proposals and collaborations. • Identify capability gaps and strategic investment or CAPEX priorities that support major programmes or areas of organisational importance. • Align major R&D initiatives in biosecurity with Cawthron's strategy and contribute to organisational scientific and business planning.
Vision Mātauranga and Tāngata Tiriti	• Ensure Te Ao Māori values and Te Tiriti obligations are considered and respected across all activities. • Enable initiatives to be co-designed with whānau, hapū, iwi, and Māori enterprise to utilise their mātauranga (knowledge system) and where possible determine their own priorities for the initiative. • Seek/identify opportunities where our research and capability can deliver benefit to Māori beyond our existing industry partners. • Seek/identify opportunities for increased Māori engagement with research (e.g., as researchers, summer students).
Cawthron Citizenship	• Behave in a way that reflects Cawthron's values. • Manage time effectively and without supervision. • Contribute to a safe environment for all people by taking responsibility and action when activities or situations compromise safety and/or well-being. • Apply sustainability principles and practices • Stay up to date with knowledge of marine pests and unwanted organisms that may occur at the CAP including the symptoms of Category A and B diseases listed on the Unwanted Organisms Database. • Participate in projects and other duties as requested to support Cawthron's success.

FORMAL DELEGATIONS | MĀNGAI WHAKAHAERE

- No formal responsibility for staff.
- No authority to commit to expenditure or to enter into contracts.

PERSON SPECIFICATION | PŪKENGA Ā-TANGATA

- Ph.D. in marine invasion ecology, marine ecology, environmental science, environmental management, biosecurity with a substantial environmental or ecological focus, or another closely related environmental discipline, with a minimum of 10 years' relevant experience in an applied research or commercial environment.
- Advanced specialist knowledge of scientific approaches and methodologies, with an extensive research or technical background relevant to role purpose.
    - Internationally recognised as an authority and scientific leader in marine invasion ecology, environmental biosecurity or the management and protection of marine ecosystems.
    - Demonstrated experience designing and conducting environmental research, analysing ecological or environmental data, and translating findings into practical environmental management advice, policy or interventions.
- Proven project management skills with ability to effectively organise resources and establish priorities on major research programmes.
- Proven scientific advisory skills and high levels of success as a manager of science and scientific teams.
- Significant publication record in peer reviewed international journals in specific area of expertise.
- Track record of securing significant external funding opportunities.
- First class technical writing skills (e.g. consultancy reports and/or science publications) including preparation of material for general readership, in business cases, and in commercial proposals.
- Strong computer literacy skills including with MS Office Suite and statistical software.
- A team player with strong interpersonal and communication skills, and the ability to work effectively with a wide range of groups in a diverse community.
- Ability and willingness to effectively guide and/or mentor post-graduate students and developing scientists.
- Professional approach to dealing with clients and representing Cawthron.
- Strong organisational skills, self-directed, and innovative.
- Willingness to learn and ability to adapt.
- Ability to carry out field work safely and efficiently.
- Vaccinated, or willingness to be vaccinated, for job specific vaccines as per H&S Procedure Manual.

WORKING RELATIONSHIPS | NGĀ TINO HONONGA

Internal	External
• Manager - Biosecurity and Team Leaders • Biosecurity Scientists and Technicians • Scientists in other Cawthron groups • All Cawthron Staff	• Academic and research organisations • Clients in government and industry • International collaborators • Other stakeholders and iwi

ACCEPTANCE | WHAKAAETANGA

I confirm that this role description identifies key elements of the Senior Environmental Research Scientist - Biosecurity position.

Manager - Biosecurity	Date

I accept this role description identifies key accountabilities of the role.

[Employee Name]	Date

NOTE: This role description may be reviewed with the employee during the annual performance review.