

CURRICULUM VITAE

Wolfgang Adrian Kanz (MSc cum laude)
Member Environment Institute of Australia and New Zealand Inc.

Personal Details:

Date of Birth: 02/02/1974	Address: 630 Nelson, Makauri, Gisborne, 4071
Email: wolfgang.kanz@gmail.com	Tel: +64 21 027 44522
Full Drivers Licence	Married

Skills, competencies, and strengths

- Ability to lead and work together with multi-disciplinary teams, leading through partnership and trust
- Extensive experience in the local government and private sector, working in the environmental management, science and engineering space, and significant RMA experience (evaluating and processing consents, auditing compliance, and managing AEEs and consent applications)
- Subject matter expert in wastewater, freshwater, stormwater, water quality and stream and wetland ecology, and constructed wetland design
- Freshwater assessments, including
- Wastewater, including options assessments, value engineering, centralised and decentralised systems
- Stormwater engineering and ecological technical input into the Proposed Auckland Council Unitary Plan stream and stormwater provisions, also participating in expert conferencing and the production of practice notes
- Track record of successful CAPEX and OPEX procurement, project management and delivery, contract management, major, large and small projects – a proven track record and understanding of the energy and focus required to effectively drive projects to completion
- Strategic planning experience, including systematic conservation / biodiversity planning, policy, consents and compliance, structure planning, and prioritising projects spatially
- Well-developed communication and people skills, extensive consultation and collaboration experience, ability to build trusting relationships with interest groups and colleagues, and communicating and consulting with various departments, both internal and external
- Excellent understanding of the NPS Freshwater Management, LTP, and local policy
- Input into development applications, including Assessment of Environmental Effects and consent applications, across the full range of activities
- Previous experience in development of climate change policies and strategies, including offsets
- Experience in both rural and urban environments, including forestry
- Ability to integrate development and nature, achieving balanced outcomes
- High quality reporting to the appropriate standards and on time, excellent written and verbal skills
- Ability to multi-task, learn new skills very quickly, and a very high work ethic
- Health and safety experience
- Experience in delivering training

Educational Qualifications

2001 Master of Science (cum laude)

School: Applied Environmental Science

Award / Achievement: Best MSc Thesis in South Africa in discipline

BSC Honours (Grassland Science)

BSC Botany, Zoology, Grassland Science

1996 Bachelor of Science (Honours)

1995 Bachelor of Science (University of KwaZulu-Natal)

1992 Matriculation

Exemption at Higher Grade.

Training / Professional Development

- Electric Fishing certified
- Water Quality Monitoring and Analysis. Environmental Impact Assessments Ltd
- Stream Ecological Valuation (SEV)
- Lake Ecosystem Restoration New Zealand (LERNZ). Workshop.

- Lake Ecosystem Restoration New Zealand (LERNZ). Seminar.
- Riparian Zone Management, ARC Training and Education Programme
- HEC-HMS hydrological modelling training
- Farm Hydrology and Diffuse Pollution Attenuation Tools, NIWA
- Rain Garden Design Workshop - 13 February 2012. Auckland Council, Manukau
- Stormwater Device Inspection and Maintenance Workshop – 15 February 2012. Auckland Council Manukau
- NZQC, Implementing and Auditing Environmental Management Systems (EMS, ISO 14001)
- Auckland Council Training and Education Programme, Stormwater Management Design Training Course (TP10) - Best practice in stormwater management
- Environmental Impact Assessments - Real World EIA – Practical Application of Basic Assessment and Full EIA (Metamorphosis Environmental Consultants)
- Introduction to the National Environmental Management Act, 1998, Environmental Impact Assessment Regulations (IQPC)
- NZ Marine Oil Spill Response Training
- New Zealand Planning Institute – Negotiation, Beyond the Basics
- National Onsite Wastewater Recycling Association (NOWRA)
 - A-Z Intro to Onsite & Wastewater
 - A-Z Soil Treatment (Soil Evaluation, Treatment, & Dispersal)
 - A-Z Operation & Maintenance
 - Design - Soil Properties
 - Making Infiltrative Decisions
 - Soil Water Movement
- Sewage wastewater management under the RMA. Enviroknowledge.
- Te Kunenga o te Ao Tikanga (Level 4), Te Wānanga o Aotearoa (Gisborne); a Tikanga course
- NAMS Introduction to Asset Management and Writing Asset Management Plans

Work Experience

February 2021 onwards

Name of employer: Awamoana Limited

Position: Director / Consultant

- Freshwater surveys & monitoring, spawning assessments
- Stream Ecological Valuations
- Development of freshwater survey frameworks
- Fish relocation / rescue
- Water quality monitoring
- Soil surveys for wetland delineation, stormwater, and wastewater disposal
- Ecological Impact Assessment (EclA)
- Freshwater catchment plans (Southern, Waimatā, Waikanae)
- Wetland management
- Fish passage design
- Auditing of residential construction projects against resource consent / building consent requirements (Civix & McKenzie)
- Stormwater and wastewater solutions, and consent input
- Stormwater management incl. monitoring plan Bunnings Trade Centre
- Compliance auditing of stormwater plans for Gisborne District Council
- Production of stormwater technical guidance documents for Gisborne District Council
- Stormwater Integrated Catchment Management Plan development for GDC
- Water NZ Māori responsiveness strategy
- Wastewater treatment design
- MfE Mahinga kai Māori freshwater value NPSFM – implementation guideline for MfE
- Delivering Mauri Compass training (Taranaki Regional Council and Ngāti Mutunga)
- Preparation of successful 2021 Freshwater Improvement Fund application, including work programme required for Deed of Funding
- Freshwater consulting (incl. draft Spartina eradication strategy for Kainga Ora Funding application, Rapid Habitat Assessment, MCI)
- Tangata whenua engagement
- Community engagement (incl. tangata whenua)
- Farm management

November 2019 to 16 July 2021**Name of employer:** Gisborne District Council**Number of years in the position:** 4 months**Position:** Four Waters Strategy Advisor, Lifelines

- Strategy development (Four Waters)
 - Input into Asset Management Plans, including upgrades and renewals strategies
 - Member of the KIWA Group (a Tangata Whenua reference group)
 - Tangata Whenua engagement on wastewater overflows into city rivers
 - DrainWise engagement
 - Consenting process for wastewater overflows into city rivers
 - Consenting of marine wastewater discharge
 - Delivering stormwater capital works
 - Stormwater, wastewater, and freshwater input
 - Stormwater and industrial / trade activity management plans
 - NZ Water Stormwater Committee Member
 - Freshwater ecology and water quality specialist input
- In addition to ongoing work / input on the below tasks

November August 2018 to October 2019**Name of employer:** Gisborne District Council**Number of years in the position:** 11 months**Position:** Team Leader Storm and Waste Water, Lifelines

- Managing stormwater and wastewater operations and maintenance
- Technical input into infrastructure projects
- Addressing Requests for Service from customers
- Management of Council's Inflow & Infiltration programme
- Tangata Whenua engagement on water allocation
- Management of Council's Inflow & Infiltration programme (DrainWise)
- NZ Water Stormwater Committee Member

In addition to ongoing work / input on the below tasks

November 2016 to July 2018**Name of employer:** Gisborne District Council**Number of years in the position:** 16 months**Position:** Senior Wastewater Wetlands Project Manager, Lifelines

- Wastewater treatment design input; incl. wetlands, woodchip denitrifying filters, vertical sludge treatment beds, algal ponds, UV
- Project management and procurement
- Options analysis of wastewater treatment plant upgrade
- Te Karaka wetland concept design
- Tamarau wetland scoping, design, and delivery
- Investigations on Alternate Use and Disposal of treated wastewater
- Key stakeholder consultation
- Consultation
- Technical water input
- Input into the Assessment of Environmental Effects for wastewater overflows into city rivers
- Long Term Planning
- Cross-council stormwater, wastewater and freshwater input, including reviews of stormwater aspects of consent applications
- Technical input into Stormwater Management Plans and Industrial & Trade Activity Management Plans

May 2016 – November 2016**Name of employer:** Auckland Council**Number of years in the position:** 6 months**Position:** Freshwater Principal, Wai Ora Healthy Waterways

- NPS Freshwater Management – technical lead on NOF and Auckland-specific attributes, input into identification of FMUs, and Values, Objectives, Limits Allocation workstream

- Development of operational policies
- Development of strategic tools and models
- Project managing environmental improvement projects - Taiaotea Stream Daylighting and Wetland Construction; Rawiri Stream Enhancement; D'Oyly Reserve Stream Daylighting and Wetland Construction; Sherwood Reserve Floating Vegetated Island
- Freshwater ecology and water quality specialist input; incl. monitoring, fish passage, SEV, watercourse assessments, spawning assessments
- Stormwater representative on working groups:
 - o NPSFM Values, Objectives, Limits, Allocation - Auckland Council
 - o NPSFM Attributes lead - Auckland Council
 - o NPSFM Values of Wetlands - Auckland Council

March 2014 – May 2016

Name of employer: Auckland Council

Number of years in the position: 16 months

Position: Senior Stormwater Specialist, Strategic Planning

- Proposed Auckland Council Unitary Plan expert technical input stream and stormwater provisions – Expert conferencing, stream classification, policy; peer review of Stormwater Management Area Flow (SMAF) controls for the Unitary Plan
- Proposed Auckland Council Unitary Plan stormwater water quality and flow control input
- Input into the Auckland Council Stormwater Bylaw and Code of Practice
- Development of operational policies
- Development of strategic tools and models
- Technical input into Catchment Management Plans, Network Discharge Consents, stormwater consents, stormwater projects, and structure planning
- Project managing environmental improvement projects - Taiaotea Stream Daylighting and Wetland Construction; Rawiri Stream Enhancement; D'Oyly Reserve Stream Daylighting and Wetland Construction; Sherwood Reserve Floating Vegetated Island
- Technical review of wetland design in RMA applications and Special Housing Areas
- Freshwater ecology and water quality specialist input in Stormwater matters across the unit, and collaborating with other departments, including HPO, Parks, NRSI, City Transformation, Environmental Services Unit (including Biosecurity, Biodiversity, Land & Water, and Sustainable Catchments), Research Investigations and Monitoring Unit, Council Controlled Organisations, and local boards
- Stormwater representative on working groups:
 - o NPSFM Values, Objectives, Limits, Allocation - Auckland Council
 - o NPSFM Attributes lead - Auckland Council
 - o NPSFM Values of Wetlands - Auckland Council
 - o New Zealand Fish Passage Advisory Group
 - o Auckland Council representative on the Surface Water Integrated Management (SWIM) group
- Production of guideline documents / technical reports.

Project manager and subject matter expert:

- o Environmental cost-benefit assessment tool
- o Intermittent Stream Ecological Valuation (SEV) development
- o Fish Index of Biotic Integrity - Auckland region

Technical input and reviewer:

- o GD04 Water Sensitive Design for Stormwater

Author:

- o 'Green Infrastructure and Natural Asset Policy' for stormwater
- o Stream loss offset policy, including mitigation 'banking'
- o Best Management Guideline: Constructed Wetlands for Stormwater Management
- o Drainage system classification (Practice note for the Unitary Plan)

November 2011 – March 2014

Name of employer: Auckland Council

Number of years in the position: 2.5 years

Position: Stormwater Technical Specialist, Stormwater Unit

- Freshwater ecology specialist input in Stormwater matters across the unit, working with other departments
- Technical input into design of devices for water quality and quantity (e.g. ponds and wetlands) and Low Impact Design (Water Sensitive Design) – TP10, TP124
- Unitary Plan expert technical input
- Unitary Plan watercourse classification practice note
- Input into growth projects, on a local scale (e.g. design of stormwater mitigation) and strategic
- Technical input into Catchment Management Plans, Network Discharge Consents, stormwater consents, stormwater projects, and structure planning
- Production of guideline documents / technical reports (as a project manager and / or subject matter expert):
 - o Ecological responses of streams to stormwater
 - o Temperature as a stormwater contaminant
 - o Aquatic macrophyte selection for constructed wetlands
 - o Aquatic weed management in stormwater ponds and wetlands
 - o Prioritising environmental improvement and protection

Author:

- o Caring for Urban Streams - [Caring for Urban Streams](#) | [TR 2013-020](#)
- o Chelsea ponds environmental management plan
- o Standard Operating Procedures: Grass Carp
- Review of Stream Walk Assessment methodology and Watercourse Management Plans
- Review of Stream Ecological Valuations (SEVs) and offset proposals
- Fish passage design, stream enhancement, erosion control
- Stormwater representative on working groups:
 - o Freshwater Interest Group
 - o Biodiversity Strategy: Ecosystem Goods & Services
 - o Biodiversity Strategy: Knowledge & Information
 - o Biodiversity Strategy: Species & Ecosystems

January 2011 – November 2011

Name of employer: Auckland Council

Number of years in the position: 11 months

Position: Senior Consents and Compliance Advisor, Natural Resources and Specialist Input unit, Stormwater and Industrial Trade Processes

- Processing of consent applications for Stormwater applications and Industrial Trade Processes
- Reviewing assessments of environmental effects
- Input into earthworks and streamworks consents
- Freshwater ecology specialist input
- Stormwater specialist input
- Compliance monitoring and pollution prevention

March 2005 – January 2011

Name of employer: Afzelia Environmental Consultants

Number of years in the position: 6 years

Position: Director, company owner

Consent Planner, Project Management, Environmental Assessment Practitioner, Regional Planning, Stakeholder Engagement, Natural Resources Specialist

- Environmental Scientist and Ecologist
- Resource consenting and technical input into residential, commercial and industrial development.
- Ecological and Ecosystem Goods and Services Advice, Analysis of Data, Specialist Ecological and Biodiversity Assessments, and Reporting
- Soil surveys, wetland delineation
- Environmental Management Plans and Programmes (infrastructural and natural resource based)

- Strategic environmental planning and reporting for councils (Zululand, uThukela, Impendle – Biodiversity Sector Plans)
- Stormwater management, constructed wetlands, riparian management, water quality monitoring
- Water supply schemes
- Wastewater treatment
- Engagement / public participation / consultation
- Management of consent processes, completing applications, writing effects assessments, consultation with government departments and the public
- The full range of industrial, commercial, residential, transport, three waters, conservation and agricultural development
- Environmental expert in hearings
- Site control, environmental auditing and compliance monitoring of environmental authorisations
- Contract management and reporting
- Basic GIS
- Finance / Accounts Management, Business Administration
- Staff management, mentoring and supervision

March 2005 – July 2006

Name of employer: Ezemvelo KZN Wildlife (EKZNW); KwaZulu-Natal Nature Conservation Service (Provincial Authority) – similar to NZ Department of Conservation / Regional Authorities

Number of years in the position: 16 months

Position: Biodiversity Planner, Integrated Environmental Management Department

- Integrated Environmental Management, Biodiversity Planner
- Reviewing resource consent applications and effects assessments, from a biodiversity and ecological perspective
- Site / field inspections, meeting with applicants & environmental consultants, review of compliance with conditions of resource consents, conflict resolution
- Interacting with District Conservation Officers, Regional Ecologists and research departments within the organisation
- Report writing, providing key stakeholder comment / decisions on biodiversity elements of consent applications (infrastructural, developmental, and agricultural)
- Review of Structure Planning, Development Facilitation Act (DFA) and Town Planning Ordinance Applications
- Extension work with farmers and rural communities
- Member of the Licence Assessment Advisory Committee for forestry consent applications
- Multi-sectoral consultations

2001 - 2005

Name of employer: Royal & SunAlliance, Albis (subsidiary of Rebus), Inter-Hannover

Location: South England, United Kingdom

Number of years in the position: 4 years

Position: Various risk assessment and finance related positions; travel and work in the UK.

1994 to 2001

Various research positions

Name of employers:

- Dr Peter Zacharias, Environmental Consultant
- Department of Range and Forage Resources, School of Applied Environmental Science, University of KwaZulu-Natal, Dr Tim O'Connor
- Prof Tim O'Connor, Environmental Consultant
- Department of Grassland Science, Dr Grant Hatch, University of KwaZulu-Natal

Conferences and Other

- Kanz, W.A., Buckthought, L., 2024. NPS-FM Naturally Occurring Processes, Auckland region. Internal Report prepared for Auckland Council. April 2024.
- Peter Moeau, Kennzy Hotene & Roxanne Smith (Ngā Uri o Te Kooti Rikirangi), Wolfgang Kanz (Awamoana Limited)(2023). Te Maungārongo o Te Kooti Rikirangi. Implementing the National Objectives Framework. Prepared for the Gisborne District Council.
- Kanz, W.A., Buckthought, L., Yan, D., 2023. Auckland-specific NPS-FM Ecosystem Health attributes for rivers, groundwater, and lakes. Report prepared for Auckland Council. May 2023.
- Ruru, I., Kanz, W., Afoa, E., Clarke, C., Nutsford, D., Lowe, M., Jelich, A., & Shivan, S. (2022). [A kete for implementing mahinga kai within the National Policy Statement for Freshwater](#)

Management Prepared for the Ministry for the Environment by Maumahara Consultancy Services Ltd and Awamoana Ltd.

- Christchurch, New Zealand. NZ Water Conference 2022. Implementing Mahinga Kai as a Māori Freshwater Value.
- Tauranga, New Zealand. Water NZ Stormwater Conference 2022. Māori Assessment / Decision-Making Frameworks.
- Kanz W.A., Ruru I.H., and Wilson D. (2020) Mauri Compass – Integrating Mauri into Stormwater Management
- Kanz W.A., West N.B, and White C. (2020) Gisborne's Approach to Reducing Inflow and Infiltration – It's a Lot About Stormwater.
- Ruru I.H. and Kanz W.A. (2019) The Mauri Compass – a Mātauranga Māori Tool for Assessing the Mauri of Water. Version 01
- Hamilton, New Zealand. Water New Zealand Conference 2017, Paper – Co-author: Balancing a Community's Wastewater Aspirations with Affordability – The Gisborne Experience.
- Kanz, W (2013). Caring for urban streams. Auckland Council technical
- Trainer at 'Guideline Document 01 Industry Training', Auckland (GD01 replaces TP10)
- Nelson, New Zealand. NZ Water Stormwater Conference 18 – 20 May 2016, Paper – Author: Green Infrastructure and Natural Asset Policy Development
- Auckland, Unitec (Institute of Technology) guest lectures: Issues in Bioresources – Case Studies of Development Impacts on Bioresources, and Developments in Constructed Wetlands (2010 & 2014)
- Christchurch, New Zealand. NZ Water Stormwater Conference 2014, Paper – Author: Aquatic Vegetation Management in Stormwater Ponds and Wetlands
- Wellington, New Zealand. NZ Water Stormwater Conference 10 – 11 May 2012, Paper – Author: Chelsea Ponds – The Complexity of Water Quality Management of de facto Stormwater Ponds
- Perth, Australia. International Water Association. Attendance. 25 – 29 November 2012. Constructed Wetlands
- Auckland, University of Auckland. Constructed Wetlands, TP10 and proposed changes. 2013.
- Auckland, New Zealand. World Wetland Day, 2 – 10 February 2012. Presenter: Constructed wetlands
- South Africa, IAIA Presentation: Biodiversity in Integrated Environmental Management: Towards Best Practice: Strategic Tools, 2010
- South Africa, South African National Biodiversity Institute (SANBI) Presentation: (Council) Biodiversity Sector Plans / Bioregional Plans, 2009
- Kanz et al. 2010 (Zululand). The uThukela District Municipality Biodiversity Sector Plan
- Kanz et al. 2011 (uThukela). Biodiversity Sector Plan for the Zululand District

Interests

I am keen on the outdoors, and we go camping and tramping at least 3 times a year as a family. We also enjoy fishing and boating.

I am a keen sportsman, having played rugby at representative level, and I enjoy playing touch rugby. I keep fit by running.