



CURRICULUM VITAE

MURRAY TONKS

ENVIRONMENTAL PLANNING CONSULTANT

INTRODUCTION

Murray Tonks is a sole-operating consultant with Birman Consulting Limited, based in Napier, New Zealand. Murray has over twenty-eight years experience in environmental management and planning – working in New Zealand, Indonesia and PNG. His specialist areas include Environmental & Social Impact Assessment; Environmental Management; Planning & Policy Analysis, Demographics; Community Consultation, and management of statutory approval processes under the Resource Management Act 1991.

SPECIALIST AREAS

- Environmental Impact Assessment & Environmental Management
- Community Consultation
- Statutory Approvals under the RMA

EDUCATION

- **University of Otago** - Masters degree in Regional and Resource Planning, 1989.
- **University of Otago** - Post Graduate Diploma in Science (Geography), 1986.
- **University of Otago** - Bachelor of Science degree (Geography), 1985.

AFFILIATIONS

- Member, Resource Management Law Association (NZ).
- NZ Geothermal Association

LANGUAGES

- English
- Spanish (basic conversational)

PUBLICATIONS

- **Regulatory Management of Geothermal Development** – Experience with the NZ System. Paper to the 2015 International Conference on Geothermal Energy in Taiwan (Oct 2015)
- **The Forest Industry:** Opportunities for Self-regulation Under the Resource Management Act. Proceedings of the 1993 Conference of the NZ Institute of Forestry.

- **Contemporary Control of Forestry Among Territorial and Regional Authorities:** Keynote paper to Forestry and RMA Workshop / Seminar, Wellington, March 1993.
- **EIA's: How Good Are Our Assessments?** A Paper to the New Zealand Association of Impact Assessors, March 2001.
- **Environmental Protection Measures on NZ State Highway Roading Projects:** Transfund Research Report No. 224 / 225 (2002).
- **Resource Consent Procedures for Road Maintenance Works in New Zealand:** Transfund Research Report No. 236 (2002).

PROFESSIONAL HISTORY

- **Birman Consulting Limited**, Consulting Director (August 2018 to present)
- **Mitchell Daysh Ltd** : Senior Consultant (Sept 2016 – July 2018)
- **Environmental Management Services Ltd** : Director & Senior Consultant (Sept 1994 to Sept 2016)
- **Works Consultancy Services Ltd**, Napier Regional Office. Manager of Planning (March 1992 - Sept 1994).
- **Works Consultancy Services Ltd**, Wellington. Consultant Planner (June 1990 - March 1992).
- **Works Consultancy Services Ltd**, Hamilton, Consultant Planner (March 1990 - June 1990).

REPRESENTATIVE EXPERIENCE

ENERGY PROJECTS

- Tsak Valley Hydro Scheme, Papua New Guinea (2015). Project Manager and principal author of an Environmental & Social Impact Assessment (ESIA) assessing a proposed mini hydro development in the Tsak Valley, Enga Province, Papua New Guinea. Client: NZ Ministry of Foreign Affairs & Trade
- Hauauru ma raki-Waikato Wind Farm (2008 – 2011). Analyst and principal author for Off-set Mitigation and Recreation & Tourism reports for this project and for the presentation of evidence to the Board of Enquiry hearing panel on these issues. Client: Contact Wind.
- Ohaaki Marae investigations (2004 – 2013). Engaged by Contact Energy and the Ohaaki Working Party to assist in the completion of investigations and consultation associated with subsidence at Ohaaki Marae (Taupo, NZ).
- Hinemaiaia Fishing and Flow Study (2004/5). Responsible for conducting studies on the effects of alternative ramping rates on angler safety and bank erosion downstream of the Hinemaiaia Hydro Power Station (Taupo, NZ).
- Hinemaiaia Monitoring Plan (2004). Tasked to develop an easy-reference monitoring plan for operational staff at the Hinemaiaia power scheme to assist the station with meeting consented monitoring requirements.
- Wairakei Power Station Asbestos Removal Project (2000). Auditor of safety and environmental aspects for the removal and replacement of asbestos lagging from over 20km of steam pipelines.
- Wairakei Power Station Dump Sites Management Plans (1999). Responsible for the development of management plans for historic dump sites (including asbestos dumps) in the Wairakei steamfield (Taupo, NZ).
- Contact Energy Due Diligence Study (1999). Member of a consultancy team investigating due diligence matters for the sale of Contact Energy Limited. Responsible for assessing environmental and resource consent matters for Contact's New Zealand geothermal power stations.
- Rotokawa Due Diligence Study (1998). Responsible for assessing environmental and resource consent related matters as part of a due diligence team for the sale of Rotokawa geothermal power station (Taupo, NZ).
- Kamojang Expansion Project, West Java, Indonesia (Impact Assessor). Aug 1996 to Dec 1997. Contracted to oversee the preparation of an environmental impact assessment and associated consent documents in support of a proposed 60 MW power plant expansion associated with the Kamojang geothermal field. Responsible for reviewing, editing and compiling these documents in accordance with sound analytical practice, and according to the reporting requirements of Indonesian state law.
- Upper Clutha Recreation Opportunities Study, 1995 / 96. Principal analyst and author of a report examining changes to the diversity of recreational opportunities in the Queenstown / Wanaka / Cromwell area associated with alternative hydro development options for the Upper Clutha Valley. The study was carried out using a methodology derived from the Recreation Opportunities Spectrum (ROS) technique.
- Upper Clutha Land Use Study, 1995 / 96. Principal analyst and author for this report which provides a broad-view assessment of the potential impacts of alternative hydro development options in the Upper Clutha Valley, insofar as these options may affect existing land use and utilities. The report examines each of these options and ranks them according to their level of potential impact.
- ECNZ Afforestation Study (1994). Principal analyst and author of a report examining the potential for expansion of large scale commercial forestry into hydro catchments in the central South Island. The study investigated current planting activity and identified areas where climate, soil, and other factors may be conducive to future large scale forestry expansion in these catchments.
- Mangahao Power Station, Environmental Audit, 1992. Environmental planning consultant, engaged as part of a study team to conduct an environmental impact

assessment and compliance audit for the Mangahao Power Station in Manawatu. The audit covered all aspects of the operation of the power plant and provided advice on where action would be needed in order to ensure compliance with the requirements of the Resource Management Act 1991.

- Lower Clutha Hydro Development, preliminary study of potential impacts on the Beaumont settlement and community (1991). Environmental planning consultant engaged as part of a small team to examine the potential impacts of partial inundation of the Beaumont settlement on the Lower Clutha River in conjunction with the development of a proposed hydro dam.
- Upper Clutha Transmission Study (1995). Assisted in the completion of an investigation into alternative transmission route options for the Upper Clutha power developments. The investigation assessed and compared the relative merits of a range of alternative transmission alignments and the likely impact of each of these options on the local environment.
- Rotokawa Power Station emergency steam discharge consent (1997). Consultant engaged to prepare an assessment of effects and resource consent documentation for the operation of emergency discharge valves for the Rotokawa Geothermal Power Station (Taupo).

INDUSTRY (GENERAL)

- One Pure Water Bottling Plant Resource Consent (2014/15). Engaged by One Pure International Ltd to secure resource consent, and provide other services, for a new water bottling plant at Awatoto in Napier.
- Higgins Maraekakaho Quarry (2009 – 2014). Responsible for completing the securing of resource consents for a new gravel quarry in the Ngaruroro river valley for Higgins Aggregates. Also for later variations of consent.
- Endsleigh Road Landfill (2009). Advisor to Higgins Contractors on RMA consent matters relating to the continuation of a contested landfill development near Havelock North.
- Simply Squeezed Fruit Juices (2008 – 2015). Consent renewal for plant wastewater disposal (using disposal to land) and securing of new consents for plant expansion.
- Pan Pacific Forest Industries Ltd landfill, consent renewal (1996). Principal consultant with responsibility for carrying out a full environmental impact assessment of current and future use of the Pan Pacific Whirinaki landfill and preparing necessary documentation for renewal of consents for the landfill under the Resource Management Act 1991.
- Port of Napier Wharf No.1 Development (1993 - 1994). Principal Planning Consultant in charge of co-ordinating all environmental impact assessments as part of a multidisciplinary team involved in the development of a new wharf expansion at the Port of Napier. Environmental investigations included an assessment of impacts relating to dredging and off-shore dredge waste disposal and general construction activity, as well as consultation with affected and interested parties.

TRANSPORTATION

- Hawke's Bay Wider Region Transportation Study (2012). An analysis of transportation issues in the wider Hawke's Bay Region beyond the Heretaunga Plains and in connection with other regions. Principal Researcher and author of the report. Client: HB Regional Council and NZTA.
- Hawke's Bay Travel Demand Management Study (2007). An investigation and assessment of travel demand management strategies for the Hawke's Bay Region. Principal Researcher and author of report. Client: Transit NZ
- Gisborne Travel Demand Management Study (2007). A report on alternative travel demand strategies for Gisborne District Principal Researcher and author of report. Client: Transit NZ
- Hawke's Bay Rural Transportation Study (2006). A project for the Hawke's Bay Regional Council. Principal consultant and author of the report. The results of the study have been used in the subsequent development of the Hawke's Bay Regional Transportation Strategy.
- Ahuriri Road Stopping (2003/4). Consultant to the Napier City Council, responsible for completing planning assessments and public consultation for the proposed closure of three streets in the Ahuriri light industrial area.

- Resource Consents for Highway Maintenance (2002). Principal Researcher for a Transfund New Zealand study of the benefits costs and alternatives to resource consent procedures for highway maintenance works. The research paper, Resource Consent Procedures for Road Maintenance Works in New Zealand, was published by Transfund in December 2002.
- Environmental Research (2002). Principal Researcher for Transfund study Environmental Protection Measures on NZ State Highway Rooding Projects, involving a review of previous environmental issues and protection measures affecting state highway rooding projects in New Zealand under the RMA.
- Logging Traffic Projections Study (2001). Principal Researcher for a Transit New Zealand study to predict future logging traffic volumes on all state highways in the Hawke's Bay Region through until the year 2027.
- Road – Rail Study (2000). Principal Researcher, engaged by the Hawke's Bay Regional Council and Transit New Zealand to undertake a study of the likely impacts of the potential closure of the Napier – Gisborne rail link on heavy traffic volumes on State Highway 2.
- Airport to Taradale Road section of the Napier – Hastings Northern Motorway Extension environmental investigations. Principal Planning Consultant and Project Manager (1992 - 1994). Work included extensive environmental impact assessment of alternative rooding options across the Ahuriri Estuary and the successful securing of statutory planning approvals under the Resource Management Act 1991. Also responsible for planning evidence in a 1999 Environment Court appeal over the designation.
- Eland to Glengarry State Highway No.5 Realignment (1994). Principal planning consultant responsible for overseeing the preparation of environmental impact assessments and public consultation for the project - including the securing of relevant statutory consents under the RMA 1991.
- Planning Information Monitoring. Principal Planning Consultant overseeing and administering the Planning Information and Monitoring Service (PlanIMS) to Transit New Zealand in the North Island East Coast Region (1990 - 1995). Service included the monitoring of notified planning consent applications and District and Regional Plan reviews to advise on issues of potential interest or concern to Transit New Zealand.
- Bay View District Plan Review (1994). Principal Planning Consultant to Transit New Zealand responsible for the preparation of submissions and presentation of evidence at hearing, including evidence before the New Zealand Planning Tribunal on issues relating to the management of roadside stalls.
- Waioira District Plan Rural Zones Variation No.3 (1993). Principal Planning consultant to Transit New Zealand. Work involved the preparation of submissions and presentation of these submissions to the Waioira District Council. Issues included the subdivision of rural land alongside State Highways within the District.
- Waikanae retail shopping development on State Highway No.1. Principal Planning Consultant to Transit New Zealand. Project involved the assessment of rooding safety for the proposed retail shopping development, as this related to the State Highway. Submissions were presented in opposition to the development, with recommendations for methods to improve traffic safety to a standard acceptable to TNZ.
- Wellington Urban Motorway (1991). Planning Consultant, as member of the public consultation team on behalf of Transit New Zealand, Wellington.
- Silverstream 4-laning project, Hutt Valley, Wellington (1991). Responsible for the preparation of environmental impact assessments for the proposed 4-lane widening of SH 2 at Silverstream.
- State Highway 58 Belmont realignment, tasked with the preparation of environmental impact assessments for this project (1990).
- State Highway Rooding Strategy Studies, Waikato (1990). Consultant responsible for land use planning input into the completion of Strategy Studies in the Waikato Region.

RECREATION & LANDSCAPE STUDIES

- Hawke's Bay Rural Open Space Study (2007/2008). A review of the provision of rural public open space in the Hawke's Bay Region, defining the nature of existing open space and identifying network deficiencies. Principal Researcher and report author. Client: HB Regional Council.
- Ocean Beach Regional Recreational Context Study (2006). An assessment of the recreational context of Ocean Beach and the effects of alternative development scenarios on future recreational opportunity. Client: Hastings District Council.
- Napier City Landscape Assessment (2000). An assessment of significant landscapes in the Napier City Council area and review of mechanisms for landscape protection. Project Manager and Planning Advisor. Client: NCC.

HORTICULTURAL SECTOR

- Ravensdown Consent Hearings (2006/07). Planning Consultant and coordinator for the presentation of evidence on behalf of the Hawke's Bay Growers Group opposing the re-consenting of Ravensdown Fertiliser plant in Napier due to issues of historical crop damage

WETLANDS, CLIMATE CHANGE & COASTAL MANAGEMENT

- Te Aute Pump Drainage System (2012/13). Engaged to provide a comprehensive hydrological assessment for this scheme and to subsequently complete consenting requirements.
- Makara Dam Restoration (2013). Responsible for the preparation of report under s.84 of the Local Government Act for the HB Regional Council in relation to submissions on a Statement of Proposal for restoration of the Makara Flood Detention Dam. The dam was damaged in a major flood in 2011 and showed signs of potential failure in 2012, prompting a need to review the future of the dam, and consideration of how those works should be funded.

- Climate Change Study (2009). Analyst and author for a report on the implications of future climate change for long term urban development in the Heretaunga Plains. A contributory report to the Heretaunga Plains Urban Development Strategy. Client: Hastings District Council.
- Te Awanga – Haumoana Coastal Erosion (2009). Principal analyst and author of a report on options and recommendations for managing on-going coastal erosion. Clients: Hawke's Bay Regional & Hastings District Councils.
- Drainage Maintenance Access Report (2007) An advisory report to the Hawke's Bay Regional Council on facilities available to the Council to ensure continued access for maintenance of the Heretaunga Plains drainage network.
- Cape Kidnappers Environment Court Appeal (2005). Planning Consultant and overall coordinator of a case successfully taken to the NZ Environment Court by Gannet Beach Adventures Ltd opposing the proposed development of a tourist lodge on the Cape Kidnappers headland.
- Lake Poukawa Management Strategy (1995 – 1997). Principal environmental planning consultant responsible for determining a workable strategy for the long term sustainable management of Hawke's Bay's second-ranked wetland of regional importance. Investigations have involved detailed modelling and consultation with affected parties – including affected farmers, downstream irrigators, Maori trustees and conservation interests.
- Clive River Dredging and Restoration Project (1995 & 2007). Principal environmental analyst as consultant to the Hawke's Bay Regional Council. Responsible for coordinating all impact assessments and public consultation, and for the preparation of related consent documents for the project.
- Whakaki Lagoon Restoration Assessment of Environmental Effects (1995). Consultant to the Hawke's Bay Regional Council, responsible for carrying out an assessment of environmental effects for the completion of restoration works on the Rahui channel at Whakaki

lagoon on the East Coast of the North Island. The proposed channel works were undertaken to facilitate ecological and flood control improvements to the lagoon.

- Haumoana Beach Restoration (1998). An assessment of beach restoration options for Haumoana Beach, involving the use of groynes to retain shingle and maintain the position of the Tukituki River mouth. Consultant to the Hawke's Bay Regional Council.
- Lake Haupiri Management Plan (1989). Employed by the Department of Conservation West Coast Conservancy to draft a management plan for lake Haupiri - a peatland lake in the catchment of the Grey River. This plan examined issues relating to water levels, stock control, protection of aquatic biota and game bird management. The document was later adopted by DoC as the statutory management plan for the lake.

PEST MANAGEMENT

- Tasman District Woody Weed Spray Programme (2014/15), Responsible for the preparation of an assessment of effects and consent application for Tasman District Council for the use of herbicides for the control of woody weeds on river fairways and river berms for flood protection purposes.
- Possum Control Environmental Assessment (2001 – 2014). Engaged by the Hawke's Bay Regional Council and local contractors to complete environmental impact assessments for various possum control operations (including aerial 1080 and ground baiting) on Department of Conservation land within the Region.
- 1080 Aerial Poisoning Programme (1995). Consultant to the Hawke's Bay Regional Council Works Group responsible for the completion of a detailed environmental impact assessment and consent application for the proposed aerial dropping of 1080 poison for possum control in Hawke's Bay. This was a highly contentious issue which attracted considerable attention from deer hunting and other lobby groups. The application was heard and approved by an independent commissioner. There were no later appeals

LAND DEVELOPMENT

- Frimley Retirement Village (2013). Principal Planning Consultant for this development, responsible for preparation and coordination of resource consents (granted July 2013). Also engaged to obtain consents for an adjoining standard residential development.

WASTEWATER

- Otane Wastewater Consents (2015 - 2017). Responsible for preparation and submission of applications for renewal resource consent for Otane township wastewater discharges. A project for CHB District Council.
- Waipawa / Waipukurau Wastewater Consents (2014). Engaged to assist Central Hawke's Bay District Council with environmental assessments, for consent purposes, for the establishment of a proposed dual system (including land disposal) for the treatment and disposal of wastewater from the CHB townships of Waipukurau and Waipawa.
- Napier City and Hastings City Wastewater Studies (1994 - 96). Coordinator of public consultation programmes relating to the Napier and Hastings wastewater strategy studies. Responsible for facilitating constructive communication between public, industrial, regulatory and Maori interest groups to arrive at a commonly agreed long term strategy for wastewater management in each of these two cities.

DEMOGRAPHICS

- Hawke's Bay Housing Development Forecasts (2009, 2012). A review of patterns of past housing growth and future forecast for housing development in the Napier / Hastings area for the Ministry of Education.
- Population Projection Studies (1994, 1996, 1998, 2000, 2004, 2005, 2006 & 2007). Engaged by the Ministry of Education to investigate population trends and enrolment patterns in Gisborne, Napier, Hastings and Central Hawke's Bay and provide roll projections for all state and integrated schools in these areas. The reports have subsequently been used by the Ministry to assess school property resources and future accommodation requirements in the East Coast region.

- Otatara Childcare Centre Roll Projection Study (2004). Appointed by the Eastern Institute of Technology to assess likely future roll growth and the need, or otherwise, for extensions to the existing childcare facility.
- Taupo Arterial Designation, Population Issues (2001). Engaged by Contact Energy Limited to provide a review of District Council population projections for the Taupo urban area (used by the Council in support of a proposed arterial road designation). The review identified a number of significant inaccuracies with the data.
- New Zealand Police, Demographic Studies (1994). Consultant to the New Zealand Police Force, engaged to provide demographic profiles of the Hawke's Bay Region and Wanganui Region to assist in planning for the location of neighbourhood police stations and geographic allocation of resources.

RMA COMPLIANCE AUDITING

- Port of Napier Environmental Audit (1993). Principal Auditor. At the request of the Port Company, a detailed evaluation was carried out to identify potential liabilities under the Resource Management Act, alongside more general opportunities for improving environmental performance at the Port. Specific recommendations were made for dealing with immediate or potential liabilities and for enhancing or improving other aspects of the Port's operations.
- ENZA Processors, Environmental Audit (1992). Principal auditor in charge of an environmental audit of the ENZA processing plant in Stoke (Nelson). This audit provided a comprehensive assessment of potential liabilities under the Resource Management Act 1991 and an evaluation of general environmental performance by the plant. Recommendations were made to the company on ways to avoid, remedy or mitigate their effects on the environment in the context of the Act.

WASTE MANAGEMENT

- Gisborne Hazardous Waste Substances Store (2002). Engaged by the Gisborne District Council to provide an independent environmental planning assessment and present evidence for a proposed hazardous waste storage facility in Gisborne.
- Wairoa District Council Transfer Station Siting (1994). Responsible for conducting an environmental impact assessment relating to the siting of new municipal transfer stations at Waikaremoana and Raupunga in Wairoa District.

ENVIRONMENTAL MANAGEMENT TRAINING

- Eastern Institute of Technology, Environmental Management Course curriculum writer (1997). Engaged by the Hawke's Bay Eastern Institute of Technology to draft a course curriculum for studies in Environmental Management. Teaching plans were prepared and adopted by the Institute for papers in Environmental Administration, Environmental Impact Assessment, Water Management, Solid Waste Management and Wildlife Management.