

Template for NZTIWF Abstract

MAORI CULTURAL CONSIDERATIONS IN DESIGNING AND OPERATING WASTEWATER SYSTEMS – CASE HISTORY EXPERIENCES

This paper will share the authors extensive experience over 40 years working with local authorities and local iwi and hapu groups from Bluff to Northland on a wide range of very small to many of the larger city wastewater development and consenting projects. The universal driver for many of the technological solutions and associated resource consent is the abhorrence to Maori of the direct discharge of human waste (domestic wastewater) to natural water almost regardless of the degree of treatment.

This experience will highlight the importance of early participation of iwi and hapu in a partnership approach consistent with the Treaty of Waitangi and the development of concepts and technology solutions that address cultural and spiritual matters. This encompasses the Part Two requirements of the Resource Management Act and the development and engineering of small solutions that can meet at least, in a compromised way the aspirations of local iwi and hapu.

Specific topics along with case histories that will be included are:

- Education and appreciation of different wastewater processes including how different processes use natural processes but in an engineered way.
- Developing holistic approaches that integrate Maori science with western science.
- Involvement of iwi and hapu groups in developing the project and supporting it through resource consents and other processes.
- The range of Papatuanuku – land contact arrangements now being used to spiritually cleanse treated human wastewater before discharge to water.
- The development of resource consent conditions encompassing on-going involvement and associated off-set mitigation with iwi and hapu groups.
- The on-going monitoring of wastewater scheme operation and the capacity building that can take place through appropriate activities.

Please enter all author names in the table below. Please mark the presenting author in **BOLD**

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