

Manaaki Taha Moana

Manaaki Taha Moana (MTM) is a research programme to restore and enhance coastal ecosystems and their services of importance to iwi/hapū, through a better knowledge of these ecosystems and the degradation processes that affect them.

We utilise Western Science and Mātauranga Māori and participatory modelling tools and processes to assist iwi/hapū to evaluate and define preferred options for enhancing/restoring coastal ecosystems. This evaluation of options is assisted by innovative IT and decision support tools (e.g. digital libraries, simulation modelling, interactive mapping, 3D depiction, real-time monitoring).

Action plans are being produced for improving coastal ecosystems in each of the case study regions.

The research team works closely with iwi/hapū in the case study regions to develop tools and approaches to facilitate the uptake of this knowledge and its practical implementation.

Mechanisms will also be put in place to facilitate uptake amongst other iwi throughout NZ.



MTM Research Providers



Find us on the Web | www.mtm.ac.nz

MTM Digital Libraries



Enhancing the expression of kaitiakitanga
with the aid of information technology



MTM Digital Library

Lack of access to information limits the ability to effectively engage in decision-making. 'Digital Libraries' were created to house published information, data, maps, photographs, reports and articles of relevance to the Tauranga Moana and the Horowhenua case studies.

This information system has been updated throughout the MTM programme and thus provides online access to researchers, and local Māori alike to directly relevant information, much of which was previously difficult to locate. This greatly reduces the effort that was previously required to identify and then source information.

Waka Digital initially built the MTM Digital Library using Greenstone - an open source suite of software used for building and distributing digital library collections.

Greenstone is produced by the New Zealand Digital Library Project at the University of Waikato and developed and distributed in cooperation with UNESCO. It is an open-source, multilingual software platform issued under the terms of a General Public License.

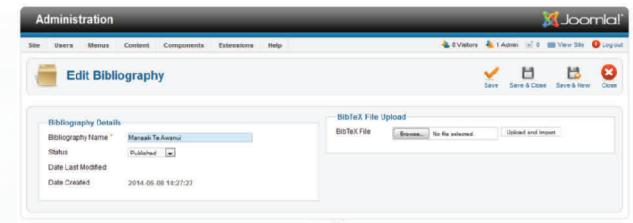
Greenstone was chosen as a good fit for Manaaki Taha Moana as its aim was to empower users, to build their own digital libraries, using contemporary standards.

Digital Library Manaaki Te Awanui			
Author	Year	Title	Reference Type
sadet.com;	1988	Redman v. State of California	Case
		Biochemical oxygen demand	Web Page
Abrahim, G. M. S. and Parker, R. J.	2008	Assessment of heavy metal enrichment factors and the degree of contamination in marine sediments from Tauranga Harbour, New Zealand	Journal Article
Abrahim, G. M. S. and Parker, R. J. and Nichol, S. L.	2007	Distribution and assessment of sediment toxicity in Tauranga Harbour, New Zealand	Journal Article
Acosta, H. and Forest, B. M.	2009	The spread of marine non-indigenous species via recreational boating: A conceptual model for risk assessment based on fluid flow	Journal Article

Greenstone was also chosen as it runs on all versions of Windows, Unix/Linux and Apple (OSX) operating systems, requires little installation and was able to be deployed from a cloud server where it interoperates with standard web-server software (e.g. Apache).

Greenstone was also chosen for its interoperability, it has two separate interactive interfaces, the Reader interface and the Librarian interface. End user access to the digital library is possible through the Reader interface, which operates within a web-browser. The Librarian interface is a Java-based graphical user interface (GUI), (also available as an applet) that makes it easy to gather material for a collection (i.e. downloading it from the web where necessary), enrich it by adding metadata, designing the searching and browsing facilities that the collection will offer the user to build and search the collection.

"Plug-ins" are used to ingest externally-prepared metadata in different forms and plug-ins exist for: XMLMARC, CDS/ISIS, ProCite, BibTex, Refer, OAI, DSpace, METS. Plug-ins were also utilised for the Digital library also used to ingest documents. For textual documents, there are plug-ins for: PDF, PostScript, Word, RTF, HTML, Plain text, Latex, ZIP archives, Excel, PPT, Email (various formats), source code. For multimedia documents, there are plug-ins for: Images (any format, including GIF, JIF, JPEG, TIFF), MP3 audio, Ogg Vorbis audio, and a generic plug-in that can be configured for audio formats, MPEG, MIDI, etc.



Waka Digital further developed the digital library software by writing a Joomla plug-in which allows the ability to easily replicate and share such a tool on websites to as many iwi and hapū that require it. Users are able to view the projects various endnote bibliographies on a website. More information can be found on the Manaaki Taha Moana website www.mtm.ac.nz.