What is Wairarapa Moana

Wairarapa Moana, comprising primarily Lakes Wairarapa, Onoke and Pounui plus their associated wetlands, is the largest wetland complex in the lower North Island. Lake Wairarapa is the third largest lake in the North Island, being slightly smaller than Lake Rotorua (and similar in size to Wellington Harbour). It is situated at the southern end of the Ruamahanga River catchment covering 40 percent of the Region, i.e., it is the sink for the catchment.

Historically Lake Wairarapa had an area of 210 square kilometres. Today it is just over a third of this size, covering some 78 square kilometres. It is nationally and internationally recognised for its indigenous plant and animal communities, e.g., turf species, mudfish, giant kokapu, and short- and long-finned eels. A national water conservation order was placed on Lake Wairarapa in 1989 acknowledging its national importance as a habitat for water and wading birds (primarily the eastern shoreline).

The Wairarapa Moana is important to the mana of local iwi because of its production of food and materials, e.g., eels, flax and raupo. Such water bodies are known to be the most productive ecosystems. The lakes were the basis of the traditional Maori economy through the efficient harvest of the abundant eel fishery made possible by the natural closing of the outlet of Lake Onoke to the sea. This enabled Maori to effectively manage the harvest, processing and trade of tuna on a massive scale.

Management of the lake outlet was wrested from mana whenua in the 1890s. This followed decades of dispute with local farmers whose sheep based agriculture was diametrically opposed to that of Maori aquaculture and required the Onoke outlet to be maintained throughout the year. The loss of Wairarapa Moana signalled the end of Maori economic independence for a century. Developments in agricultural technology in the latter part of the 20th century dramatically increased production on lands at Mangakino in the central North Island that had been received from the Crown in acknowledgement of the loss of the lakes. Today the descendants of the original owners are also shareholders in Wairarapa Moana Incorporated, a dairy farming company that is the largest locally owned business in Wairarapa. Individuals, whanau and hapū are claimants for the return of Wairarapa Moana; a matter which is likely to be resolved within the next five years.

The Ruamahanga River floodplain was identified by the early settlers for its potential for agricultural development. Thus from early settlement there was a tension between local hapū interests and the development of land for agriculture. To be an agricultural success, the floodplain needed to be drained and the impact of flooding reduced. By the commencement of the 20^{th} century agricultural development was in the ascendency and this continues to this day.

Today the floodplain is extensively drained, stopbanked, two large rivers have been diverted (Ruamahanga and Tauherenikau Rivers), the barrage gates have been constructed to control Lake Wairarapa lake levels, there have been numerous minor diversions of waterways with the installation of culverts and flood gates (resulting in the blocking off of passage in waterways). Land use has intensified with the installation of

centre pivot irrigators on dairy farms and the removal of vegetation. Lake Onoke is opened mechanically within river level guidelines to protect the stopbanked infrastructure.

Similarly there have been changes in the Ruamahanga River catchment with the clearing of vegetation, development of pastureland, increased stock intensification, settlement on the floodplain, including discharges of treated sewage and today non-point discharges from rural areas into the waterways, introduction of plant and animal pests, demand for water for irrigation and increased pressure by the general public to harvest species such as whitebait, eels and flounder.

Wairarapa Moana, though highly modified, still fulfils important ecological roles. Lake Wairarapa is supertrophic. It is stable and in a poor state, with high levels of nitrogen, total phosphorous and algal biomass, and low water clarity. Lake Onoke is classified as having a moderate ecological vulnerability because of sedimentation, nutrients and the loss of saltmarsh and aquatic macrophyte habitat. The eel population is low, as is the occurrence of other native fish. Plant pests are found in both the Moana, e.g., hornwort, lagarosiphon, and on land, such as alders.

With the completion of the Lower Wairarapa Valley Development Scheme (LWVDS), the focus at Wairarapa Moana has shifted to operating and maintaining the scheme, and the protection of the eastern lakeshore and wetlands for wading birds and water fowl. These sites are protected by a National Water Conservation Order. Increasingly the environmental impact of the development of the scheme and the potential to enhance and restore the environment is being discussed. The Department of Conservation (DoC) initiated this discussion by convening all interested parties to develop a set of "target" lake levels for Lake Wairarapa. Subsequently DoC has convened a Lake Wairarapa Coordinating Committee, which has assisted DoC to develop management plans. Because of the lack of funding, DoC has not implemented all of its management plans. The Coordinating Committee is frustrated and wants to see some action to improve the condition of the lake, rather than the continued explosion of plant and animal pests.