

# Proposed beach-head approach to shallow lake restoration in the Waikato – Lake Ngaroto pilot

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The term 'beach-head approach' comes from military strategy, where resources are focused in a smaller area (the beach-head) to create a stronghold, and from which broader gains can be made toward the bigger goal. This presentation describes a beach-head approach to lake restoration where resources are focused within an isolated bay of a lake to initially deal with the myriad of legacy issues of a degraded system on a comparatively small scale. Shallow degraded lakes in the Waikato have legacy issues, such as poor water quality, high internal nutrient loads, turbid algal dominated waters and populations of multiple pest fish species, which render them difficult to restore to a vegetated state with improved water quality. Our beach-head is a ca 2ha bay within which pest fish populations will be reduced and flocculation and sediment capping used to improve water quality and clarity to provide suitable conditions for re-establishment of submerged native plants. The proposed project is a multi-agency approach partnering with iwi to support the longer term vision, that the stronghold of the bay then provides a foundation, demonstrating methods and timeframes, from which Ngaroto and other shallow Waikato lakes can be restored.