Recovery of īnanga spawning sites following the Canterbury earthquakes

Date: Wednesday 29 June 2016

Time: 12pm – 1pm

Location: Room 208, Level 2, Te Ao Marama Building

Presenter: Shane Orchard

Abstract:

Inanga (*Galaxias maculatus*) are a culturally important species known to utilise specific locations for spawning. These sites are on riparian margins in upper estuarine areas close to the spring high tide waterline. Many anthropogenic activities that occur in the same area may present threats to the availability and condition of spawning sites. These factors suggest that spawning is a vulnerable stage in the life cycle and that spawning sites are an important focus for management.

Understanding the spatial ecology of spawning sites is a key requirement for assessing the impacts of various activities in space and time. Such sites may be susceptible to land use change and will undoubtedly be affected by sea level rise. This study tested the hypothesis that hydrodynamic changes associated with the earthquakes would cause a shift in spawning site locations and changed patterns of vulnerability with regards to human land uses. The results show that spawning sites were resilient to earthquake changes, but that vulnerabilities to human activities remain. Addressing these effectively is a current priority and presents an opportunity for improving outcomes within the wider context of earthquake recovery and waterways management.

Biography:

Shane is currently working on the application of ecosystem-based approaches to coastal and freshwater management and has an ongoing interest in the management of land-water boundaries. His PhD project ‘Planning for Resilient Shorelines’ is contributing to this field with a focus on the developing solutions for managing shorelines vulnerable to sea level rise.