# LIVING

## WATER

www.livingwater.net.nz

VISION: A sustainable dairy industry is part of healthy functioning ecosystems that together enrich the lives of all New Zealanders

**WAIRUA RIVER, NORTHLAND** SITE FOCUS: reducing sediment loads into the Wairua River using solutions that both improve hydrologic functioning and build ecological resilience of the catchment

#### **Critical Issues**

- Significant loss of wetland and freshwater ecosystems and lowland habitat
- Poor water quality high levels of suspended sediment
- Highly modified hydrology in the lower catchment (Flood Scheme) to reduce the threat of flooding for landowners in the catchment
- Modification of the landscape in the catchment has impacted on cultural identity and activities
- Society has increased expectations of farmers/agricultural land owners in relation to water quality
- Landowners have an opportunity to engage more at a catchment level

#### Inputs

- · DOC & Fonterra staff
- Funding approximately \$300k/year
- Technical input
- Network of participating farmers
- Participation of key stakeholders, including iwi, regional councils and community organisations

#### **Activities**

- On-farm: Baseline reports, assessing biodiversity, QEII covenants, riparian projects, free plants
- Sub-catchment approach:
   Working with landowners to
   take action towards agreed
   freshwater outcomes
- **Tool trials:** Trialling detention dams, water quality & aquatic biodiversity monitoring
- Strategic partnerships: working with mana whenua, operational agencies and others
- Monitoring progress, telling our story and championing change

#### **Outputs**

- Farm Environment Plans (FEP), Biodiversity Assessments
- QEII covenants, fencing, riparian and wetland planting
- Beetle bio-control trial
- Silt detention bunds trial
- · Tool and intervention trials
- Strategic Partnerships –
  Wairoa Freshwater
  Improvement Fund, Mana
  Enhancing Agreement
- Sharing learnings through website, social media, professional forums, community events

#### **Outcomes/Impacts**

#### Short term (by 2020)

- All Fonterra farmers in the Okarika Pocket are implementing actions in their FEP's and are participating in trials for freshwater management on-farm
- Sediment reduction tools are being trialled and effectiveness monitoring is ongoing
- Okarika Pocket landowners are working towards an agreed freshwater outcome
- Living Water staff are using their partnership experience and successfully contributing to the Wairoa FIF programme and governance
- Mana whenua are actively involved in Living Water projects and mātauranga māori is integrated into our work

#### Medium term (by 2023)

- All Fonterra farmers in the Okairka Pocket understand what difference their management activities have on freshwater
- The hydrological and ecological functioning of the Okarika pocket water network has improved
- Sediment reduction tools have been trialled in the Okarika pocket to demonstrate if a measurable reduction in sediment can be achieved
- Living Water tool and solutions have been scaled up to other Northland catchments

### **Long Term Outcomes**

- Healthy resilient lowland freshwater ecosystems
- Profitable responsible dairying
- A shared understanding of the interdependence of agriculture, economy and environment by the broader community

