## Living Lake, Changing Catchment 2011 Te Waihora/Lake Ellesmere integrated catchment symposium

19/11/2011 Te Waihora field trip notes, Lower Selwyn Huts Department of Conservation

- **My role:** manage delivery of Area wide terrestrial, freshwater and marine biodiversity programmes
- DOC responsibility for PCL: DOC has significant responsibility for lake's ecosystem health through management of 2750 ha of lake margin public conservation land (PCL). This represents approx 36% of entire lake margin (see map)
- Wildlife Act: DOC also has responsibility under the Wildlife Act for fauna

   168 different bird species recorded at lake. Most important wetland
   habitat of its type in NZ (brackish bar-type lagoon).
- Ecosystem optimization: One of DOC's 8 intermediate outcome objectives is to ensure "a full range of NZ's ecosystems is conserved to a healthy functioning state". DOC currently engaged in nationwide programme (called ecosystem optimization) to identify these ecosystems (management units) and cost out the management of pressures (threats) to identify where conservation dollars will provide the greatest benefit. Te Waihora has been identified as one of these management units. This work will direct our effort in the future.
- Ecosystem services: Good to see Steve Wratten refer to 'ecosystem services' during the symposium. All too often spending on the environment is seen as a (unaffordable) cost rather than an investment in our future prosperity. Awareness of services provided by the environment will lead to understanding and a willingness to act locally.

- Collaboration: There has never been a time in the recent past where so much attention has been devoted to the lake and its catchment (refer the Kens' graph – day one summary of the symposium). There's now a need for cooperation and collaboration to use the available financial resources wisely.
- Willow control: At a time of significant funding constraint and budget cuts in DOC, DOC is pleased that the Selwyn-Waihora Zone Committee has recognized the need for willow control and have provided \$5000 this year for work on PCL on the Western shore (Wards Wildlife Management Reserve) and that the Regional Committee is keen to contribute to willow control and other projects too. Between 1983 and 2007 (24 years) exotic crack and grey willow have increased in extent from 67 ha to 140 ha.
- DOC work programmes: Current DOC programmes on the lake margins or within the catchment include:
  - limited willow control and restoration planting in conjunction with Ngai Tahu at 4 sites (Waikekewai Creek, Lakeside Wildlife Management Reserve, Timber Yard Road Conservation Area and Selwyn Wildlife Management Reserve)
  - predator control, planting and support for fencing beside the lower Kaituna River
  - o weed control at Kaituna Valley Scenic Reserve
  - possum and goat control at the head of the Kaituna in Mt Herbert Scenic Reserve
  - control of the weed purple loosestrife in the Halswell catchment and elsewhere
  - willow control, riparian planting and predator control at Harts Creek
     Wildlife Management Reserve in conjunction with the Tramway
     Reserve Trust and other local volunteers
  - management of the Motukarara-Little River Rail Trail for public recreation and enhancement of indigenous biodiversity.

- Grazing concessions: DOC currently provides grazing to eight tenants on PCL. Mixture of sheep and cows. Conservation benefits of grazing progressively being assessed (e.g. new fences at Selwyn WMR and Lakeside WMR to exclude sheep grazing from lake margin). Where grazing is stopped, need to anticipate adverse effects (e.g. expansion of gorse, willows and rank exotic grass – mention Kaitorete dunes example where sheep grazing is assisting with management of tree lupin seedlings) and have the resources available to manage appropriately. Grazed PCL represents huge opportunity for large-scale restoration planting.
- Conclusion: let's apply scientific knowledge to planning and resource the plans adequately. As practitioners we're keen to make a tangible improvement to this significant natural resource. We'll do our bit to manage the pressures, monitor the results and measure the outcomes.

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