Case Study



NEW ZEALAND PILOT OF THE CORPORATE ECOSYSTEM SERVICES REVIEW CASE STUDY: CONTACT

ABOUT CONTACT

Contact is one of New Zealand's largest electricity generators and retailers, with around 567,500 customers across the country. Powering the country with electricity, natural gas and LPG, their team of around 1,050 lives, works and operates in communities throughout New Zealand.

Contact generates electricity from geothermal, gas and hydro sources, with hydro dams on the Clutha River accounting for 45% of their total production in 2014. The Clyde Dam is one of two dams on the Clutha and the largest.

WHY CONTACT PILOTED THE ESR

Contact felt participating in the Ecosystem Services Review (ESR) pilot would give them a different (external) perspective on aspects of their operations and performance. They thought that using an independent, internationally tested and recognised external framework would provide a means and opportunity to engage a wide range of stakeholders in potentially sensitive discussions. They also believe that this pilot is a step towards an emerging new model of managing natural resources.

Contact undertook a pilot ESR project for their hydro generation operations on the Clutha River as it gave them a geographically discrete ecosystem with clearly identified stakeholders to invite to participate in the project. The objective of this pilot assessment was to trial the ESR methodology to better understand the benefits and impacts, risks and opportunities of their operations on the river.



"We are unanimous that the forum and structure the ESR provides for stakeholder engagement, plus the different "lens" through which to view our operations and the ability to pull previously disparate information and streams of work together, has been invaluable."

Nicholas Robinson, GM Corporate Affairs, Contact

HOW CONTACT USED THE ESR PROCESS

Contact developed a project development plan including objectives, benefits of participation, project team (consisting of staff from Land and Environment, Consenting, Community Relations and Sustainability teams and including the appointment of a project sponsor, project manager and working party), timeline and budget and resource requirements. This plan was presented to and approved by Senior Management.

The pilot followed the steps described in the ESR¹. This involved a prioritisation workshop to identify those ecosystem services most relevant to business performance. It also looked at the hydro generation activities on the Clutha River and what areas it has impacted or depended on. The prioritisation workshop involved a range of stakeholders including agricultural and environmental interests, community and iwi representatives, council staff and a wide range of Contact staff.

After an assessment was completed of the condition and trends of these priority ecosystem services, a second workshop was used to identify the risks and opportunities related to each one. This was an internal process involving the working group, as well as staff from the trading, risk and assurance, regulatory and dam safety and operations teams. This led to the development of a strategy and set of actions to mitigate the risks and capitalise on the opportunities.

SCOPE OF ASSESSMENT

The scope chosen for the ESR was the area defined under the Contact operating easement for their hydro generation activities on the Clutha River. This went from Lake Hawea to just downstream of the Roxburgh Dam.

"A key learning from this process was to ensure the scope of the project is of a manageable scale. Although this was a point discussed at length during our stakeholder sessions, the decision was made to restrict the scope and this proved critical in terms of our ability to manage the project effectively, in particular the data gathering."

- Craig Griffiths, Community Relations Manager

PRIORITY ECOSYSTEM SERVICES

The ESR enables the company to prioritise a few key ecosystem services by evaluating the degree of the company's dependence and/or impact on a range of ecosystem services. To determine the priority ecosystem services, all ecosystem services with negative effects were included and those with positive impacts were excluded. Crops and livestock and erosion and natural hazard mitigation were merged as they had similar impacts. The priority ecosystem services identified for Contact were:

Crops and livestock – Closely linked to freshwater, the development of irrigation-based dairy farming in the Clutha catchment has seen dramatic changes in both the use and appearance of the local landscape, and the resulting demand for resources, in particular water. The arrival of Didymo has had significant impacts on the Clutha and the ability to draw water straight from the river, resulting in an increasing number of groundwater (bore) takes.

Capture fisheries and habitat – Native and sport fish migration patterns have been affected by the presence of Contact's dams. Recent research showed fish species diversity in the Clutha catchment averaged 3.6 species per site, which was lower than the Otago average (2012) of 4.5 species per site.

Freshwater – Increasing demand for freshwater from nontraditional uses in the Clutha catchment i.e. irrigation-based agriculture and horticulture, local population growth and increased numbers of both domestic and international visitors. As a result, tension exists between competing uses of freshwater, i.e. economic development vs environmental value.

Erosion and natural hazard mitigation – Contact's operations on the Clutha have the potential to affect natural events such as erosion, flooding, landslides and build up of sediment, however our activities do not influence the occurrence of natural hazards such as subsidence or earthquakes.

Tourism and recreation – Popular in both summer and winter, Central Otago's natural attractions draw large numbers of both international and domestic visitors. Outdoor pursuits are particularly popular with many water-based sports activities prominent. Contact's operations have affected the natural (white water) flows but created lakes popular with fisherman and recreational boaties.

Ethical and spiritual values – Perceptions of these values varied between stakeholders. Ngāi Tahu's relationship to the Clutha-Mata-au River as tangata whenua were essential to the use, management and protection of the river. Historical links to early European settlers were seen as important as was preserving and promoting the history and historical importance of the area.

Educational and inspirational values – The changing "aesthetics" of the Clutha catchment is important as are the educational opportunities provided to local schools via tours of the dams.

TRENDS, RISKS AND OPPORTUNITIES

The ESR guides an analysis of the conditions or trends in the ecosystem services prioritised, as well as drivers of environmental change that significantly influence those trends. The ESR then helps evaluate how trends can impact the company, either positively or negatively.

A number of risks and opportunities were identified:

Crops and livestock – Irrigation-based farming in the Clutha catchment is a divisive issue. As demand for water from the Clutha increases, so too will the discussion regarding allocation and "best" use of that water. As a local hydro generator this is a critical discussion for Contact.

Capture fisheries and habitat – The Clutha and Roxburgh Dams inhibit the natural migration of native fish, specifically Tuna (elver) and Kana-kana (Lamprey), and introduced sport fish like salmon. Fish management programmes are in place to provide passage for native Tuna and Kana-kana – including physical relocation of Tuna over the Roxburgh Dam. However, this continues to be an issue of concern for local iwi and environmental groups.

Freshwater – Increasing demand for freshwater from uses such as irrigation-based agriculture and horticulture has led the Regional Council to decide to review management of water allocation on the Clutha. This may impact on allocations under Contact's existing consents. Future management of Didymo and other periphyton may require Contact to "flush" the Clutha, with possible negative impacts to downstream fisheries. The local community has differing opinions on the benefits of irrigation-based farming (economic development vs environmental issues), indicating this is an important issue for Contact.

Erosion and natural hazard mitigation – Contact has Erosion Management Plans to mitigate erosion, but erosion is a continuous process that needs constant and careful management. Contact has some ability to mitigate flooding (by managing flows out of Lake Hawea), but the scope depends on lake levels. This needs to be better communicated to the Clutha community.

Tourism and recreation – Tourism is critical to the Central Otago economy. Contact has a role as lakes, river flows and access to land is important for a number of tourism activities. Opportunities exist to assist local developments such as local cycle ways and river-based events and facilities.

Ethical and spiritual values – Opportunities exist for Contact to grow and develop their relationships with Ngai Tahu including being led by iwi to develop a Mahinga Kāi programme. There is also potential to help promote historical links to "Gold Rush" communities lost through flooding of Kawarau Gorge. **Educational and inspirational values** – There is an opportunity to increase and better deliver school tours of Contact's facilities, develop a hydro generation school curriculum unit, internships and school holiday work programmes for local youth.

STRATEGY AND NEXT STEPS

The ESR contains a number of processes and attributes that are relevant and are of value to Contact's business. There is significant potential for the ESR framework to assist in further embedding sustainability and in particular helping Contact move to a Material Aspects approach across the organization. The ESR project identified some actions for further refinement, including strategic long/short-term positioning around key issues (such as increasing water demand), new stakeholder partnerships to capitalise on new opportunities and continuing new stakeholder engagement activities around river issues.

OUTCOMES AND ADVICE

The ESR pilot has delivered two key immediate benefits.

- Fresh thinking Through the ESR process, coupled with a willingness to try something new, Contact staff have seen how an independent framework and neutral "lens" (through which to approach what have been historically regarded as "tricky conversations" regarding the environmental effects of our operations) can mutually benefit Contact and its stakeholders.
- Increased engagement Asking stakeholders to "put themselves in Contact's shoes" and review Contact's business using their subject expertise has helped develop a better understanding of each other's issues and concerns and started what is hoped will be an ongoing process of collective consultation.

"The ESR is a useful adjunct to the Resource Management Act process and its focus on adverse effects. The ESR's broader analysis allowed us to look also at the range of interdependencies that have developed among the community of river users. It shows that others depend on us and our impacts both positive and negative."

- Rosemary Dixon, Special Counsel- Environment, Contact

www.contact.co.nz

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ABOUT SBC ECOSYSTEM HEALTH PROGRAMME

The Sustainable Business Council (SBC) is an executive-led group of companies that catalyses the New Zealand business community to have a leading role in creating a sustainable future for business, society and the environment. Ecosystem Health is one of the priority areas in the SBC work programme, with projects that aim to help members understand their dependencies and impacts on the ecosystem and how this affects their business strategy and resource use.

www.sbc.org.nz



In collaboration with:



Department of Conservation Te Papa Atawhai



Landcare Research Manaaki Whenua