



EARTHCHECK

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# DART RIVER JET SAFARIS, NZ

Dart River Jet Safaris operates in one of New Zealand's most picturesque mountainous wilderness areas, on the outskirts of Queenstown. Tours by jet boat and inflatable kayak (Funyaks) take visitors through the Dart River Valley and the Te Wahipounamu World Heritage Area. The area is part of the 80-million-year-old Mt Aspiring National Park and served as the backdrop for movies such as Lord of the Rings.

The company is owned and operated by Ngai Tahu; a South Island Maori tribe whose ancestors first ventured into the area 700 years ago. They share their legends as part of the Dart River experience, while at the same time raising awareness of the environmental values of the park's landscape of glaciers, native forest and wild rivers.

While jet boating requires the use of fossil fuels in order to power the boats, Dart River Jet Safaris leverages advancements in fuel injection technologies, has made tour routing more efficient and given staff driver training to reduce fuel consumption.

The company recognises the vested interest it has in helping preserve the pristine feel of where it operates and serves as a notable example of how a company that might otherwise not be considered sustainable, is able to effectively manage, monitor and moderate their environmental footprint by taking meaningful steps using EarthCheck.

Having completed three years of EarthCheck benchmarking, Dart River Jet Safaris continues to implement new systems and practices to help the company further reduce its impact on the surrounding environment.

## EarthCheck benchmark results for 2010:

Potable water consumption was 26.4L per customer, **5.7% better than Best Practice**

Waste sent to landfill was 1.2 L per customer, **43.7% better than Best Practice**

Waste recycling rating was 88.9 points, **8.9 points better than Best Practice**

Community commitment was **100%, which is Best Practice**

Paper products rating was 88.9 points, **8.9 points better than Best Practice**

Cleaning products rating was 95.2 points, **15.2 points better than Best Practice**

Pesticide products rating was 91.3 points, **11.3 points better than Best Practice.**

## KEY PERFORMANCE AREAS

### REDUCING THE USE OF FRESHWATER AND WASTEWATER GENERATION

In 2009 Dart River Jet Safaris undertook upgrade of its bathroom facilities, resulting in reduced water consumption. All toilets are now low/dual flush and low flow tap fittings have been installed at a cost of \$100 per tap. **A 24% reduction in water** has been achieved and potable water consumption is now at just 26.4L per customer; **5.7% better than Best Practice.**

Maintenance and standard building checks are undertaken on a monthly basis to identify potential leaks or inefficiencies. This has helped deliver a water savings rating of 56.5 points; **6.5 points better than Baseline Level.**

Facility landscaping requires minimal irrigation, as native plant species have been used and the facility is located in an area with a relatively high water table, resulting in passive management of the gardens through normal rainfall patterns.

### ENERGY EFFICIENCY AND REDUCING GREENHOUSE GAS EMISSIONS

Daily operations rely on fuel use for jet boats and transfer vehicles, so reducing fuel consumption and maximising efficiencies was a key requirement. In order to reduce the fuel consumption of its jet boats, fuel efficient engines were purchased.

To reduce fuel consumption in vehicles, management utilises teleconferencing, which reduces the need for travelling to meetings and therefore the associated fuel consumption and emissions.

Dart River Jet Safaris are members of the Queenstown Lakes Biodiesel Consortium and for the past six months has been running 50% of their coach fleet on a 20% biodiesel mix, reducing impact on the environment.

Two 21-seat coaches were also replaced with a larger 44 seater. This vehicle is considerably more fuel-efficient per passenger.

Dart River Jet Safaris sources 100% of its power from sustainable sources. These include 36 small- to-medium hydro plants, as well as one large wind farm generator.

Dart River has undertaken an energy audit to identify areas where power consumption may be reduced. As a result, the company targets 'hot-spots' as it continues to encourage behavioural change and invest in energy efficient technologies.



To reduce electricity consumption by administration staff, the company shares a sales office with other partners.

Management actively promotes the switching off equipment when not used at night and have started to replace existing building heating with more efficient heat pump systems.

The LPG driven drying system in the facility's wetsuit room was replaced in 2010 with an electric laundry drying system, which relies on renewable power sources and this significantly reduced their GHG footprint. The new system required an investment of **\$2,400 in capital and installation costs.**

They also use natural sources such as the heat of the sun and wind to assist with wetsuit drying whenever possible.

The installation of hot water tap regulators considerably minimised hot water consumption, thus minimising the energy required to generate hot water.

### SOLID WASTE REDUCTION

Dart River Jet Safaris operate highly efficient waste management systems. Various techniques have been implemented to ensure the most efficient waste disposal methods are undertaken to minimise the amount of waste sent to landfill.

The company runs a separation-based recycling system for different materials including; food, green waste, cardboard,

plastic, paper, and non-recyclable waste. Monitoring of separation is undertaken as waste is disposed of, and volumes of waste are recorded.

This process has enabled a progressive reduction in waste sent to landfill and allows a large portion of waste to be **recycled/reused/composted, measuring at 44.3% in 2009/10.** This increased from 33.1% in the previous year; a significant improvement.

A local contractor collects the waste while food scraps are provided to local facilities with pigs and chickens. As a result, waste sent to landfill was measured at 1.2L per customer; **43.7% better than Best Practice.**

This also reduced the costs associated with waste pickup from its premises by local council.

Dart River found this process was easy to implement and manage, with local operators providing the required disposal bins at only \$3.57 more than a recycling bin. As a result, their waste recycling rating was 88.9 points; **8.9 points better than Best Practice.**

### SUSTAINABLE PURCHASING TO REDUCE WASTE

The sustainability of Dart River's supply chain has significantly improved through the establishment of new partnerships and agreements with suppliers, with emphasis being placed on their environmental practices.

Suppliers are informed of Dart River's commitment to environmental sustainability, which not only promotes good environmental practice beyond their organisation but also encourages suppliers to act in an environmentally responsible manner.

One way in which Dart River encourages environmental practices and reduces waste sent to landfill is by reducing the amount of packaging in their delivery of supplies. Sustainable paper products such as recycled paper also are used by the company, which helped it achieve a paper products rating of 88.9 points; **8.9 points better than Best Practice.**

Environmentally friendly cleaning products are used throughout the facility to ensure harmful substances are not absorbed to the watertable or added to waterways. This resulted in a cleaning products rating of 95.2 points; **15.2 points better than Best Practice.**

The overall use of these products has proven to be effective in maintaining a good standard of hygiene and cleanliness on the premises.

Dart River does not use pesticides on its premises and only the very limited use of a weed killer in selected areas around the gardens.

This resulted in a pesticide products rating of 91.3 points; **11.3 points better than Best Practice.**

Dart River Jet Safaris understands that its local community is intrinsic to the uniqueness of its product. Consequently, it has initiated a number of programs to promote community empowerment and economic progress.

The company supports the local economy and workforce by employing 100% of its staff from within a 20km radius of the premises. This resulted in a community commitment of 100%, which is Best Practice.

To further support the local economy, Dart River Jet Safaris source a large portion of its perishable goods locally, and service contracts are primarily given to local contractors.

In order to encourage awareness of environmental management, staff members are made aware of sustainability issues and practices within the operation. Through this, employees are able to uphold the environmental values and practices of the organisation and ensure environmental impacts are kept to a minimum.

Dart River holds an annual 'Locals Day' fundraiser, whereby local people are provided the opportunity to experience its



#### COMMUNITY EMPOWERMENT AND SUPPORT

products at a reduced price. The fundraiser promotes community relations and goodwill as well as acting as a marketing opportunity through word of mouth promotion.

All proceeds from the day are donated to a worthy cause within the community; last year \$3,400 was presented to a local school in Glenorchy to enable them to purchase computerised training equipment for senior students.

The company also sponsors the endangered Black Fronted Tern program in the Dart Valley, which it has done for the past three years.

According to recent reports, this scheme has helped produce an annual mean increase of 1.1% in the Dart valley population compared with a 12.6% drop in an adjacent valley.

Additionally, Dart River Jet Safaris has been active for many years in supporting programs that help eradicate introduced predators and pests. These localised programs have resulted in community contributions of 82 points; **2 points better than Best Practice.**

