

Marlborough Environment Awards Judges' Feedback, Community Innovation and Sustainable Living

Sound environmental management is good business



Project name Lochmara Lodge Sewage System

Owner/Person interviewed James Travers, Chairman of Directors

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Judges Vic Koller and Janet Steggle

Award category Community Innovation and Sustainable Living

Introduction

A new community sewage system in Double Cove is an excellent example of how to improve water quality in the Marlborough Sounds but it has been a long and expensive project for the bach-owners involved.

Lochmara Lodge is a family holiday settlement in Double Cove, Queen Charlotte Sound. (Some confusion has arisen with the more recent development of the eco-tourism venture with the same name in Lochmara Bay). However, the original Lochmara Lodge was set up by the Temple family at the end of World War II when they shipped in 12 Army huts.

Twelve families are now shareholders in the company that was formed to buy the settlement from the Temple family. Each shareholder has a deed of licence to inhabit their hut, which are now comfortable baches, and they are also responsible for maintaining their building. There is a caretaker who looks after the general areas (lawns, tracks, etc) and a maintenance person who monitors the sewage system.



The Sewage System



Lochmara Lodge is a traditional bach settlement with communal laundry, showers and toilet blocks, although some families have upgraded their baches to include their own facilities. The settlement is not used over winter but in summer each of the 12 baches could have 5 or 6 people staying there - this means that the levels of waste water vary greatly during the year and any sewage system has to cope with this.

James Travers is the chairman of the company. He has been the main contact with the Marlborough District Council and with the engineers and contractors during the sewage project.

In 2002 the MDC formally asked Lochmara Lodge to upgrade the septic tank system that had serviced the bay for about 50 years. This was due to very high faecal coliform readings in the bay. Lochmara Lodge Ltd engaged a wastewater treatment engineering consultant to design a new treatment system that would meet MDC compliance. This consisted of a primary tank, aeration tank, settling tank, UV treatment and sea discharge. In 2003 the new system was installed at a cost of \$90,000.

However, it was soon apparent that the new system was still unable to comply with consent requirements due to high load variation over the main holiday season. MDC therefore requested yet another upgrade in 2008. Davidson & Partners Engineers were engaged to design a system to cope with the load variations and the solution was to treble the storage area for raw sewage. This upgraded design and construction cost the shareholders another \$60,000.

The extra holding capacity better regulates the volume of raw sewage entering the aeration chamber, thus ensuring a much improved level of treatment. After the settling process of the aerated liquid is completed, the resulting effluent is pumped to an irrigation field with 2.4km of dripper lines.

The new system improved the Total Suspended Solids from peak 140g to 3g/m³ (Consent Requirement 30g/m³). Biological Oxygen Demand was reduced from peak 220 to less than 1 g/m³ (Consent Requirement 20g/m³). Due to land discharge Faecal Coliform monitoring is no longer part of the consent conditions.

James told us that the shareholders were not happy with the need to spend even more money and many could not see why the system needed further upgrading. It was a very high additional cost to their annual three-week summer holiday.

James said the Board decided not to press the shareholders to agree but pointed out the reasons why the Council had refused consent, the technical and financial aspects of the new system, why it was necessary, and how it would benefit everyone in the long term. The Board then left shareholders to consider the issues as they felt that pressure for a quick decision would be counter-productive and would also add to the "anti-Council" feeling that had been expressed.



In addition, the Board said it would be more involved in the development and installation of the upgraded system and would not allow a repeat of the problems with the initial system. This meant that the shareholders were reassured that the upgraded system would be the right one for the Lodge and no further major expenditure would be needed.

Gentle persuasion, questioning of Board members, and reasoned discussions meant that after some time all the shareholders agreed to support the project.

Current Activities

Since the new system was established the monitoring and sampling have shown great improvements in water quality. In 2009 the MDC reported that the Lochmara Lodge system was performing very favourably compared with some commercial operators in the Sounds.

James stressed that they are not complacent and are continuing with regular monitoring and maintenance. All shareholders are reminded to use environmentally friendly washing and cleaning products and peer pressure seems to work well in this regard. Notices are placed in the Community Room about day-to-day issues and problems which may affect everyone.

Problems and how they have been tackled

- High use of the sewage system over a short period and coping with this variation in load.
- High cost of installing a compliant system.
- Managing this process between 12 shareholders who live throughout New Zealand and only use their bach for several weeks over the summer.

Lochmara Lodge entered the Environment Awards not so much for the technical aspects of the sewage system but more for the co-operative approach in solving the issues. The company overcame shareholder resistance to spending more money on the upgrade to improve the wastewater treatment and meet compliance. Shareholders have also set up a monitoring and alarm system.

Summary

Lochmara Lodge is one of the few remaining traditional bach settlements in the Sounds. It is in a stunning location and the commitment to the sewage project shows the concern of families to look after their special environment for the next generation. The shareholder families are not necessarily well off so the cost was a major issue for most of them. It is admirable that the shareholders have stayed as a cohesive group throughout the project.

It could have been an option to sell the whole settlement for yet another multi-million dollar house in the Sounds. The fact that this has not happened is due to the strength of the shareholder commitment and each family's long history of holidays down the Sounds.

The way in which the board of the company encouraged the shareholders to participate in the project and to feel that they were owners of the project without "nagging" or pushing from the directors bodes well for the future of this community.

Suggestions

- This is an inspiring case study for other bach owners in the Marlborough Sounds. It shows how to turn MDC criticism into approval and praise.
- Keep up the enthusiasm and pass on the knowledge on how to look after the system to the next generation of families holidaying at Lochmara Lodge.
- Make contact with the Sounds Advisory Group and offer to speak at one of their meetings about your experience with wastewater management.
- Your participation in the Environment Awards will spread the word about wastewater systems and hopefully help other groups overcome similar issues.

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