

Saving our Lakes



The problem

Water quality is declining in several Rotorua lakes. The cause is nutrient overload. The amount of nutrients (nitrogen and phosphorus) and bacteria in the lakes has increased markedly over the past few decades, and continues to rise. Steps to reduce nutrient levels in the lakes need to be taken now.

FACT:

Developed properties along lake catchments are contributing to lakes' nutrient levels.

HOW?

- *Nutrients from septic tanks*
- *Soil erosion from building sites increases phosphorus levels*
- *Fertilisers*

The Rotorua Lakes Protection and Restoration Action Programme

This programme has been set up to achieve a standard of water quality in individual lakes which is acceptable to the community. It is overseen by a strategic partnership made up of Environment Bay of Plenty, Rotorua District Council and Te Arawa Maori Trust Board.

These partners work closely with the community and interest groups, and with independent technical advisory groups (land and lake) which evaluate options from a scientific perspective.

It is essential that each option is assessed and the community is consulted to ensure that the chosen actions will have a beneficial effect on lake water quality.



How are lifestyle blocks contributing to the nutrient overload of lakes?

A common assumption is that converting working farms into lifestyle blocks reduces the levels of nutrients produced. This is not always true.

Per hectare, lifestyle blocks with a septic tank, a few animals in combination with garden fertilisers, can produce the same level of nutrients as a working farm.

Every land owner, irrespective of how they use their land, needs to reduce the level of nutrients that they are feeding into the lakes.

Fixing the problem

Over the next 10 years the Rotorua District Council will spend approximately \$95 million on sewerage scheme projects.

The sewerage schemes are only one part of the wider solution to improve water quality within the lakes.

Although public perception is that nitrogen derived from septic tanks is low compared to the outputs from pastoral farming, sewage reticulation will stop this nutrient source from leaching into the lakes immediately. A nitrogen reduction from farming is gradual and benefits are realised over a longer period of time.

In addition to nitrogen reduction, sewage reticulation will reduce the public health risk within the lakes.

Rotorua District Council is attempting to procure funding from central government. The council is presently in the process of applying for up to 50% funding from the Ministry of Health. Some funding has already been obtained from Environment Bay of Plenty.

How are residents affected by a reticulation system?

Pipes need to be laid underground to connect properties to the main sewerage line. Provision is also made to lay pipes in areas that could be sub divided in the future.

Consultations on proposed works

Before digging the Rotorua District Council will invite landowners to participate in consultation. During the consultation process landowners can express their concerns and suggestions. Submissions will be duly considered before a final plan is agreed by councillors.

Sewerage Schemes for lakeside communities



Questions...and Answers

What's wrong with my septic tank?

Septic tanks were designed to reduce the carryover of solids in your wastewater into your disposal field/soak hole.

Some nitrogen is removed through anaerobic processes, but the vast majority of nitrogen will pass through to the lakes.

The same happens with bacteria and viruses that are present in your wastewater.

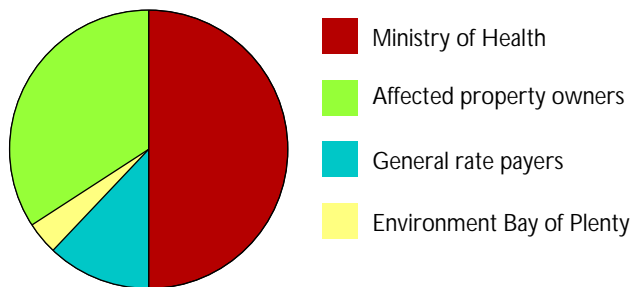
It doesn't make sense - didn't the council agree that I could install a septic tank?

In areas where sewerage reticulation is yet to be commissioned, septic tanks are one acceptable alternative.

In recent times many councils in New Zealand have become aware of the environmental impact caused by septic tanks, and Rotorua District Council and Environment Bay of Plenty have deemed that it is unacceptable to operate septic tanks in dense populations by lakes, hence the proposed sewerage schemes.

In 2010 regional council rule changes will mean that septic tanks will no longer meet requirements. Rotorua District Council is therefore installing sewerage schemes for affected residents to connect to.

Who is funding this scheme?



What about connection fees?

The costs vary. It is primarily dependant on the distance from your house to the connection stub. The connection from the house to the boundary is the responsibility of the property owner.

In addition to the above costs there will be an annual operational cost.

What are the alternatives to a septic tank?

Alternatives	Advantages	Disadvantages
Join sewerage scheme	Receive a \$1500 subsidy per property. Option to pay capital contribution off over 25 years.	Experience some minor inconvenience while pipes are installed.
Do nothing and react when the regional council rules change in 2010.	Time to explore alternatives.	Forgo the option to connect to the sewerage scheme. Install own high tech treatment system - costing \$15,000 - \$20,000.

What does it mean if you lay pipes over my land?

The council will return the land/area to the original condition. This means, if your drive is partially dug up, it will be reinstated to the same condition, or better

If pipes are laid on my land, does that pose any restrictions?

Not necessarily. Pipes are usually laid 5 metres within a property's boundary and current restrictions in the District Plan prevent people from erecting a permanent structure within 7.5 metres of the front and 5 metres from the back boundary.

What are farmers doing?

Environment Bay of Plenty is introducing new rules to cap the amount of nutrients leaving a property, and working with farmers to develop "best management practices". In addition to that, a computer programme (called NPLAS) is available to evaluate nutrient loss, and will be used to set nutrient budgets.

Is this a long term solution?

Installing a sewerage system for lakeside lifestyle blocks and communities to use is the only long term solution available to stop septic tank nutrient leakage.

Septic tanks were designed to service rural dwellings and only have about 20 year life spans. They were never designed to be effective in populated areas and no consideration was given to preventing leaching into nearby waterways.

What are the next steps?

The proposed sewerage schemes for lakeside communities are proposed to be implemented at various times between now and 2014.

This information has been prepared to inform residents of issues prior to consultation. Options for specific communities will follow. Consultation will progressively take place on a lake by lake basis, as the sewerage scheme programme is progressed.



Further information on saving the Rotorua Lakes can be obtained from one of the following;

- ▶ Environment Bay of Plenty ph 0800 ENV BOP (368 267) or www.envbop.govt.nz
- ▶ Te Arawa Maori Trust Board ph 0508 TE ARAWA (832 729)
- ▶ Rotorua District Council, Engineering Department, Utility Planning Section ph 07 348 4199 or fax 07 350 0185 or email greg.manzano@rdc.govt.nz or www.rdc.govt.nz