

Minutes of meeting in Manapouri on wastewater strategy May 6 2008

Apologies: Diane Ridley and Russell Smith

Justin and Murray completed their presentation on the proposed wastewater strategy for the Te Anau Basin, emphasising that this proposal will still have to go through the consents process and so there would be more consultation with the public before it was definite. The meeting was then opened up to questions.

The factors used in the maximum flow to land

Murray said the peak time and population growth estimates were optimistic so the equations could work out the highest quantity the ground could deal with.

It's all about Te Anau sewage – is Manapouri being considered in future stages?

There is provision for this, but Manapouri's consent is for 20 years so it won't be immediate. However it's reasonable to consider the need for higher quality and reducing the output to Home Creek.

Will Manapouri residents be expected to fund this?

The Manapouri CDA has not funded any component of this plan. If Manapouri becomes part of the scheme, then the community will fund it.

If Manapouri has another viable option for a sewerage scheme and doesn't hook up to this, will our rates still be subsidising it?

Justin said he would say no, but it would be a Council decision.

Concerns over no animals so grass and trees around the new airport

Any trees planted on the land would not be in the airport flight path.

Will hormones be present in the end result water?

There isn't a definitive answer to this as there has not been enough research done. It will be an issue in the future. However, it is believed passing wastewater through soil is the best way of removing hormones and the ponds will also have a long retention time. It's a pretty safe system.

Can we be assured Council will monitor that?

The world authority is not concerned about these contaminants but we regularly monitor the required standards.

Will the grass still be okay as stock food?

There are two mechanisms to kill off any bugs – through UV radiation they die off naturally and the ponds also kill most. When the waste is sprayed to the land, the bugs will be exposed to sunlight.

What smell will there be?

There is a likelihood of a very low risk of odours as treatment is predominantly aerobic. Ponds will create sludge and it is prudent to deal with that routinely.

What affect will it have on water levels on the other side of the property from the ponds?

The ponds will have a synthetic liner and completely isolated from groundwater. The liner is impermeable and it's key to make sure there is no buildup of weeds and mosquitoes.

What monitoring of the land/groundwater will there be?

Monitoring is planned both upstream and downstream.

Jack Murrell said he was not at the meeting to support the proposal but he did have a thorough knowledge of the flat and spray on the land was highly unlikely to leach to the Mire. Any old watercourses were down under 30m of sand and gravel. From his point of view, it will be extraordinarily safe and the process is not likely to hurt anyone.

What happens to the land if you don't get consent?

Council will make a decision on what to do with it.

Does the Te Anau sewerage scheme need work now?

The present consent expires in 2014 but Council got it with conditions that a new plan was developed.

Attendance register (Appendix 1)

MANAPOURI

Alison Youlton
Rob Bootsma
* Shirley Smith ^{150/105 Manapouri} - apology from Russell Smith
Sandra Sparrow
Ruth & Palley
Lance Shaye - apology
* Amber Shaul
* Melaine Maley-Shaw - R.D.I Te Anau
Colleen Hampton
Clayton Barnes
Cliff Barnes
Fred Gude - Te Anau
Gregory Munnell * MANAPOURI!
John Munnell - Te Anau
0 Kellyn Munnell
Edna Field Munnell - apology to Hagg
201 Munnell Munnell
Shirley Mount
Sallie + Hazel Allen - apologies Dave Allen
* Eithan McBride - Te Anau PO Box 211
Jim Morgan Manapouri
John Wornall Manapouri
Katie Corcoran Manapouri
PHIL WORNALL MANAPOURI
John Engel Eric S'land
DAVID PRENDERGAST Te Anau Community Board
Don Poirin Manapouri
Ray Hauser Manapouri

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The same process was followed with the presentation first and questions second.

Does the \$12 million cost include the cost of land?

Yes it does.

How do the nutrients in the spray compare to typical farming practices?

It is waste water on to land to grow grass. The amount of dry matter does have to be considered.

Will it be applied through winter?

There will be less in winter and the pasture for application will be chosen specifically for that purpose. The advantage with your community is that the peak season is in summer and the waste water volume is less in winter.

Where can the grass cut off the sprayed land go?

It can't go to dairy farms but it can go to sheep or beef farms. The cutting of the grass will be a commercial operation – cut and carry.

How toxic is the existing flow?

It's not toxic but there is more expectation for higher quality and there are nutrients going into the Upukerora River, which can lead to algae growth. Environment Southland promotes discharge to land and a high value is placed on the Lake Te Anau waters.

What is the cost of the carbon footprint to pump all the way to Manapouri?

We haven't looked at carbon credits but any pumping will be carbon neutral because it is water care. The power to pump to the block will be modest.

What about the earthquake risk to the pipeline?

If there is an earthquake that shears the pipeline, there will be consequences but there will be sensors that will stop pumping if something happens and there is storage at both ends. The current proposal gives us flexibility. The risks are integrated into the design and if there is a big earthquake in Te Anau, there will be huge issues with power and water and this pipeline would survive better than others.

Why add more pipe when the population grows, why not just put the bigger pipe in now?

The biggest pipe that can be afforded will be put in now but there are technical issues with oversized pipes too – the 300 pipe will be lazily loaded at the early stages to allow us to turbo charge it later.

In Rotorua, sewage has been irrigated into forestry. Why not here?

Variables have to be considered – Rotorua has a sophisticated system that goes through forest and wetlands before it reaches the lake. Large scale centre pivot irrigation is cost effective and you can't use centre pivot in forestry, the alternative distribution system has higher risks as it is harder to locate any problem.

Cost is about \$12 million for this proposal, have you investigated the costs for a full treatment plant?

Yes, and the operating costs for this proposal are significantly cheaper. The costs to build are \$12 million for this proposal and \$20 million for a plant. The gap widens when operating costs are included.

What is the life cycle of the system?

That will be determined by any consent we might get with a maximum length of 35 years. Technology keeps changing and cleaner waste water flows will be able to be achieved as well.

More research is being done with bio-diesel, harvesting algae as well.

Costs could be disputed as plants in Australia are cheaper. The infrastructure is expensive and difficult to change and the world, as you say, is changing (Ted Loose).

The Mire is a big attraction to bird life and there are a lot of birds there. Spraying to land will attract more – what about the airport? How far will the runway be from the ponds?

It will be 2km away from them.

We have discussed the proposal with the CAA and they don't believe there will be a problem.

I find it incredible the CAA says it is okay – birds will be attracted to it.

A lot of the operations won't attract birds – the birds are attracted to worms which come up to the surface. A lot of birds flock around occasional irrigation but this won't be occasional. All the bits that birds would be interested in the effluent will have been removed in the first treatment.

What about the Mire – what if it becomes a popular attraction?

Boardwalks can be considered and the public safety is a key issue. Some places overseas have eel farms in their ponds.

How much land will be used at a time and will new grass be sown?

Some of these details are not finalised – it will vary during summer and winter and there will be rehabilitation areas – we are looking at every five years. Landcorp will continue to use the land at market rental.

Would you consider laying the two sets of pipe now to save money?

It would save some interest but would add extra cost not needed at present. We have weighed up the trenching costs etc.

What happens if the population doesn't increase?

The investment in the land was key and we can spend more later. However, we have to have a plan as part of our present consent conditions.

What will the pipeline route be?

We are thinking down the road as we can use road reserve and have better access to it.

Would you look at another block of land?

Of course we would, subject to suitability for irrigation.

Attendance register Appendix 2

Feedback sheet Appendix 3

ATTENDANCE REGISTER

Nick Robertson P.O. Box 67 Te Anau

RAY WILLET TE ANAU

Margaret Hall Te Anau.

Neil Robertson Te Anau

Lana Curran Te Anau

Lynne Moffatt TE ANAU

KEITH THOMPSON TE ANAU

* BILL JARVIE TE ANAU, PO Box 68

DAVID FLEMMERGAISE TE ANAU Community Services

Te Anau wastewater proposal feedback

Responses compiled from feedback sheets and email

Ted Loose

Concerns: length of pipe line, earthquake prone, carbon footprint of pumping to selected block, birds attracted to site in dry times, no consideration given to recycling, run off under wet conditions.

No benefits

Concerns not answered

Irene Barnes

Concerns: None – the resource application process will sort any concerns out.

Benefits: Improved wastewater disposal, being prepared when next consent for existing ponds is refused

Concerns answered

What more would you like to know: If this proposal is turned down where do you go next?

Unknown

Concerns: The upkeep of pipeline, pumps and sprinklers will be significant and an earthquake risk; birds being attracted which puts the new airport at risk; the ground will have a life as to what it can absorb – what then; heavy rain will mean run-offs; smell, if not managed correctly; not a good look for tourists flying in.

Benefits: I see no benefits to this scheme. Could a treatment station at the existing site be investigated further by people that have an open mind – such a scheme would have none of the above problems, particularly a life! As new technology comes along it would very likely become more efficient and be able to handle more waste with no increase in size.

Concerns answered: Not at all, the message received was that a few people had made up their minds that this was going to happen, good or bad. In fact ratepayers' money is already to be spent buying 300 hectares of land for what they tell us is only a proposal!

What more would you like to know? What is available in the way of treatment plants putting clean water in to the lake and the cost of these units from several different sources?

Allan Youldon

Concerns: The length of pumping and why a more isolated location was not used.

Benefits: The filtration of effluent through the land.

Concerns answered: Not fully. I am still concerned as the proximity of location to Manapouri, and Airport, and the length of pumping.

What more would you like to know? What effect frost will have on spraying onto the land especially during hoer frosts? Will the ice prevent absorption into the ground, and will planting trees around the area compound this? Will farmers between Te Anau and the wastewater disposal be able to use some of the water for irrigation in dry times? Will all the water be able to be absorbed during heavy rainfall? Water lays on some of that land now after high rainfall. How long can the system be without power before spillage at Te Anau? How many pumping stations will there be, and what backup is needed? What size and type of pipe is to be used? Will there be any valves to isolate sections? In the case of a pipe rupture or fracture, how long can the system be down before repair? If this occurred in winter could the cater freeze in the pipe causing the pipe to split, so compounding the problems?