Overview of current research projects in the field of land application

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BACKGROUND

Over the last three years the Land Treatment Collective (LTC) Technical Committee has been debating the future of the LTC and how well members are benefiting from the information supplied. This process has highlighted the importance of research and how the information is disseminated. Changes in research funding, research organisation's structure and the conclusion of several major investigations over the last 10-years have resulted in a decrease in the number of research projects currently being undertaken in the land application of wastes area.

The reduction in research is believed to be a combination of two factors. Firstly, research undertaken by various organisations has provided answers to research generated questions and therefore a natural conclusion to ongoing research has occurred. Secondly, end users have not being vocal in identifying their research needs and their priority.

Both these factors have led to a decrease in the current land treatment research output within New Zealand. This decreased research output makes it extremely difficult for the LTC to fulfil its obligations to its members.

LTC OBJECTIVES FOR RESEARCH

A vital component of the LTC is the dissemination of research information. The objects surrounding this are:

- (1) Identify research capabilities in the treatment of wastes and waste products by land application;
- (2) Identify research gaps;
- (3) Avoid duplication;
- (4) Establish key R&D needs of the industry; and
- (5) Identify funding bodies.

STOCK-TAKE PROCESS

The Collective's Technical Committee have embarked on a stock-take process to redefine research needs of end users and research capabilities of science providers. This is being achieved by a series of meetings and workshops with researchers to identify current research projects, current capabilities and possibly opportunities. In parallel, stakeholders are being canvassed to ascertain current gaps in knowledge that could be fulfilled by research.

A summary of research capabilities and research projects will be identified and presented at the 2007 conference. At the conference, members will be asked to identify additional research requirements and assist with prioritising research needs. The Collective's Technical Committee will then assist research providers with the development of funding bids to satisfy member requirements.

COORDINATION OF RESEARCH

While there are no major land treatment projects currently underway in New Zealand, there are a number of smaller projects on the go. These projects are being undertaken by industry groups with the help of industry organisations to address specific industry problems (such as a number of dairy shed effluent irrigation trials). This information is likely to be of great interest to the LTC and an attempt should be made where possible to disseminate it to LTC members. Such research may also be the precursor to coordinating larger ongoing projects. It can also be used to demonstrate the need for ongoing research and assist with the procurement of further funding.

The LTC has a great opportunity to assist with this coordination; however it needs to be able to work with the researchers and people/groups wanting the information.

REVIVING RESEARCH

Public Good research funding in New Zealand is largely user driven. Money is allocated where there is perceived to be a need. As there is a limited pool on funds, allocation is made to the highest priority (and in some cases profile) projects.

With the conclusion of many major projects, the disestablishment of several major industry research bodies (such as MIRINZ) and a greater emphasis on industry to collect their own information, publicly funded land treatment research has been seen as a lesser priority. Consequently it has fallen off the funding allocation radar.

In order to put land treatment research back on the funding radar the following approach is suggested:

- 1. Identify current research projects;
- 2. Identify research capabilities;
- 3. Identify funding opportunities;
- 4. Identify research needs;
- 5. Priorities research needs; and
- 6. Small-scale research projects (use a number of small scale research projects to demonstrate the need for a larger and more comprehensive area of investigation.)

Currently the LTC is at the stage of working out what needs to be done and establishing priorities. Once this has been done it is intended that small-scale projects will be initiated with funds from an array of lesser value funding sources, such as EnviroLink. Once several of these projects are up and running, it will hopefully demonstrate there is the need for further ongoing research. This is especially so as these (smaller scale) funding sources are end user

driven, which in itself will demonstrate that there is a need further research funding allocation.

SUMMARY

In order for the ongoing functioning of the Collective, it is essential that new research projects are identified and initiated on a coordinated and ongoing basis. Therefore it is vital that new research areas are identified and incorporated into a comprehensive and coordinated research programme. This will mean that it is important to prioritise research needs. It will also mean that the priority can change from year to year. The process of identifying research capabilities, funding opportunities or identifying research projects is a team effort.

For the ongoing advancement of land treatment in New Zealand, and the survival of the LTC, it is essential that end users identify and request further information.