

Report No.	20-165
Information Only - No Decision Required	

AGRICHEMICAL NO SPRAY REGISTER RISK MANAGEMENT

1. PURPOSE

- 1.1. The purpose of this item is to outline an issue with the way in which drain 'no-spray' requests are managed and the steps staff are taking to manage this risk.

2. EXECUTIVE SUMMARY

- 2.1. A significant activity in the river management area is the inspection and maintenance of 1,100 km of drain. Much of that maintenance activity involves the application of herbicides to control weed growth. A recent issue has highlighted systemic deficiencies in managing requests from landowners who do not wish to have herbicides used on or adjacent to their property. Improvements to systems/ processes are outlined and are being progressively implemented.
- 2.2. Accommodating such requests create challenges not only in ensuring compliance but also with ensuring that network functionality is not compromised and operating costs are not significantly impacted, important considerations particularly with climate change and a likely rise in the number of no-spray requests.

3. RECOMMENDATION

That the Committee recommends that Council:

- a. receives the information contained in Report No. 20-165.

4. FINANCIAL IMPACT

- 4.1. Financial impacts associated with the required system development and changes to the notification process are relatively small. The main impact is in the area of revised maintenance programmes (alternatives to spraying that retain drain conveyance). The main alternative is more frequent mechanical cleaning – the cost of mechanically cleaning a section of drain is around ten times the cost of spraying. At present levels this is a manageable and relatively small additional cost.
- 4.2. There are other potential alternatives such as careful / judicious use of planting to provide shading and reduce weed growth but staff are mindful of not generating other maintenance issues as a result (e.g. high volumes of branch debris accumulating in the drain, increased access difficulty for mechanical cleaning). Those alternatives clearly have an initial cost but also (with the right consideration) are likely to have lower long-term costs with other potential benefits.
- 4.3. There is no statutory or other mechanism to recover any increased maintenance costs associated with no spray requests - the schemes absorb those costs. While it is feasible to amend targeted rate classifications to reflect such requests, this has the potential to significantly increase administrative costs and is not seen as a viable solution.

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5. COMMUNITY ENGAGEMENT

- 5.1. No specific community engagement has been undertaken in relation to the matters addressed in this item. Drain maintenance is a topic frequently raised at scheme meetings although not typically matters related to agrichemical use.

6. SIGNIFICANT BUSINESS RISK IMPACT

- 6.1. There is no significant business risk associated with this item. The main risk with the current situation is one of reputational damage, a risk significant enough to warrant the focus that is summarised in this item. The activity also creates a potential liability for Council, particularly where scheme drains intersection organic dairy farm operations.
- 6.2. Complying with those no-spray requests does generate other risks, principally the consequences / impacts (in the absence of viable alternatives to spraying) to other landowners with sections of drain maintained to a lower standard i.e. potential exacerbation of flooding or drainage issues upstream. This is considered to be, in general terms, a relatively low risk.

7. CLIMATE IMPACT STATEMENT

- 7.1. As this item deals with systems / process relating to drain spraying, climate change impact is minimal. The only notable observations are that warmer temperatures are likely to add to maintenance challenges as they relate to weed growth (and that other aquatic weeds might become established in the Manawatu) and that more frequent severe weather will place added emphasis on the need to retain network conveyance. Less use of herbicide is also likely to require more mechanical cleaning, increasing emissions, albeit to a very small degree.

8. BACKGROUND

- 8.1. A significant component of river management operational activity is the maintenance of over 1100km of open drain. Drain dimensions and fall, soil type, catchment characteristics and operating context vary greatly; seasonal and climatic variation add further complexity. Much of the operational activity sits within the lower Manawatu floodplain; approximately 900km of drains with over 1000 different rateable properties of which over 70% will have a scheme drain running through or alongside their property.
- 8.2. Weed growth and the accumulation of sediment can reduce the effectiveness of the network over time. Methods to address weed growth mainly involve the application of a herbicide; mechanical cleaning is also occasionally used for this purpose but its main use is to address sediment accumulation.
- 8.3. Spraying is carried out using a mix of works staff and contractors; drain spraying capability exists within both our Kairanga and Marton depots. External contractors used are those that have registered an interest in the work through a supplier panel process that encompasses all river management requirements in regard to casual use of plant and equipment.
- 8.4. The main herbicide used is Glyphosate; Reglone (the active ingredient being diquat) is used increasingly to control submergent weed. Both are currently permitted by **Environmental Protection Agency (EPA)** for use over water. Staff and contractors handling / using agrichemicals are required to be Growsafe certified (www.growsafe.co.nz).
- 8.5. Submergent weed can be a major challenge to maintaining levels of service at particular times of year as it can clog / overload pump station screens. Application rates used by staff and contractors are judicious for that reason – avoiding a mass of dead weed clogging weed screens – but also to retain overall drain stability (targeting the invert but not the

sides to avoid slumping). Clearly there is also a fundamental imperative with the use of herbicide to ensure that the minimum amount is applied to effectively complete the task.

- 8.6. The exact maintenance regime employed for any given part of the network is largely set by works staff. On average most drains are sprayed at least once a year with mechanical cleaning taking place on average once every 5-10 years. Spraying typically commences around late October and runs through to mid-May depending on weather and growing conditions. Notification of that programme is made at the start of the season by way of notice in local newspapers. Landowners are also contacted when staff or contractors enter property to undertake drain spraying.
- 8.7. There are a number of landowners who for various reasons do not wish to have agrichemicals applied on or adjacent to their property. In those instances staff either (depending on where the section of drain sits in the network) increase the frequency of mechanical cleaning (not without its own impacts) or accept a lower standard of conveyance.
- 8.8. A recent issue within the Manawatu Drainage Scheme has highlighted the manner in which staff manage no-spray requests from landowners – a lack of system / process around capturing those requests and ensuring both staff and contractors adhere to those requests.

9. DISCUSSION

- 9.1. There are essentially three components to managing the risks associated with this issue; improvements to the way in which we notify landowners, a more robust process for capturing no-spray requests and better verification that staff and contractors are complying with those requests.
- 9.2. In regard to notification, while the effectiveness of newspaper advertisements has waned somewhat in the digital age the audience would suggest that the use of social media and other related tools is not likely to provide much improvement. The most effective way is to advise individual landowners directly, compiling scheme-specific address lists. Staff time associated with establishing those address lists is seen as relatively modest. It's also intended to create a place on Council's website for those notifications.
- 9.3. The obvious solution to managing no-spray requests in a more systematic fashion is to harness the capabilities of the new asset management system. Staff intention is to build functionality into the system that allows no-spray information to be captured, managed and interrogated in the field as a 'single source of the truth'. Both staff and contractors have access to mobile devices that in turn will enable the information to be accessed in the field.
- 9.4. In regard to quality assurance, a degree of staff verification already takes place but clearly something more robust is required. Staff are looking into new technologies that enable chemical application to be recorded spatially, technology already being explored by the New Zealand Transport Agency and others with roadside drain spraying. Contractual requirements will also be more clearly spelt out and Growsafe certification audits will be undertaken.

10. COMMENT

- 10.1. One related issue that has been raised at scheme meetings are the powers Horizons has to enter private property for the purposes of drain inspection and maintenance. Unlike flood protection activities where a specific statute - the Soil Conservation and Rivers Control Act – applies, the only statute relevant to drain maintenance is the 1908 Land Drainage Act. Without providing a full treatise here, application of the Land Drainage Act is somewhat problematic and is not commonly used.

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- 10.2. Legal advice has been sought as to options in this area, with the recommendation being the adoption of a Bylaw that would be promulgated under the Local Government Act. That has not been progressed further by staff at this time.

11. CONSULTATION

- 11.1. No specific consultation is envisaged – the matter and the intended approach will be highlighted as part of the scheme meeting programme for 2021.

12. TIMELINE / NEXT STEPS

- 12.1. In regard to actions, incorporating no-spray requests into Council's asset management system is already underway. A demonstration of that and reporting around the other actions identified will be scheduled for the April 2021 Catchment Operations Committee meeting.
- 12.2. Scheme contact lists already exist in partial form and those will be more fully develop along with the notification letter; staff will work with Communications staff to modify the website to accommodate notifications.

13. SIGNIFICANCE

- 13.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

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ANNEXES

There are no attachments for this report.