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Committee Environment Committee
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***Take Charge* area investigation: Drain Six, Wharemauku Stream**

1. Purpose

To provide the Committee with a summary of the key points and lessons learnt from applying *Take Charge*, our pollution prevention programme, in a business area near the Wharemauku Stream, in Paraparaumu.

2. Background

Over the past year the Pollution Control team have applied the *Take Charge* work programme in an industrial/commercial area in Paraparaumu. The focus area has been the catchment of Drain Six, a tributary of the Wharemauku Stream. See Figure 1.



Figure 1: Drain Six industrial/Commercial areas

This area was selected because the Wharemauku Stream has been a focus of attention for Kapiti Coast District Council. In 2005, Kapiti Coast District Council completed a proposed Wharemauku Stream Freshwater Plan (2005). The objective of this plan is to provide an integrated management plan for the Wharemauku Stream. The plan suggested that running businesses through the *Take Charge* programme would be a useful way to reduce contaminant inputs to Drain Six and improve the water quality of the Wharemauku Stream.

This exercise also gave us an opportunity to apply *Take Charge* on an area basis rather than focusing on a specific industry sector, as had previously been done.

3. Wharemauku Stream

The Wharemauku Stream is a low altitude stream (<10m) with a catchment of 1322.9 Hectares. About a third of the catchment is urban space. A survey by the Department of Conservation in 1999 identified eleven fish species as habituating the stream, including the threatened species Shortjawed Kokopu, Giant Kokopu, Koaro and Banded Kokopu.

The ecological health of Wharemauku Stream has been assessed by Greater Wellington on two occasions, in 2002 and 2004, revealing reduced species variety and abundance, which indicated moderate pollution.

Stream sediment sampling conducted by Pollution Control staff prior to the *Take Charge* audits identified heavy metal contamination of the stream adjacent to the study area.

4. Investigation scope

The objective of *Take Charge* is to assess business activities, identify actual and potential pollution sources and to remove or reduce pollution inputs by providing advice to business on pollution control methods.

Greater Wellington Pollution Control Officers surveyed businesses in the target area to determine their number, type, and likely pollution risks. This survey determined that there were 92 businesses in the target area which directly discharged into the Drain Six catchment. These survey results were used to identify those business requiring further assessment based on their current activities and onsite stormwater management. During the business survey visits a brief explanation of the project was given outlining the investigation objectives and purpose.

After this initial assessment, the catchment was split into two areas, namely Drain Six South and Drain Six North. The Drain Six South area contained 36 businesses of which 8 were selected for a comprehensive assessment. The Drain Six North area contained 56 businesses of which 25 were selected for a comprehensive assessment. All site visits were completed between May and December 2005.

5. Key findings

Issues identified during the site inspections commonly included:

- Inappropriate storage of hazardous substances
- Wastewater discharges into stormwater drains
- Wastewater discharges directly to the stream
- Inability to operate and maintain pollution control devices (e.g. separators, interceptors etc.)
- Illegal discharges to air.

The types of problems identified at each of the sites visited is summarised in the following Table.

Table 1:

Problem	% of sites affected
Ineffective Storage	73%
Stormwater related issues	67%
Limited RMA awareness	64%
Discharges to Air, Land, Surface water	61%
Inadequate Infrastructure	30%

Officers recommended practical solutions to the pollution issues identified to improve the overall environmental performance at each business. These recommendations were conveyed verbally during the audit visit and followed up in a written report. A total of 148 formal recommendations were made in response to our investigations, ranging between 1 and 11 per site.

Several businesses were requested to immediately stop non-compliant discharges. These issues are being followed up by Pollution Control officers. One business has subsequently received an abatement notice to cease further discharges of wastewater to the stream after failing to comply with our initial request.

Sustainable business assessments were trialled with management at four sites to explore opportunities for waste minimisation, cleaner production and energy efficiency. These assessments were offered to all businesses in the letter sent out with the *Take Charge* assessment report.

Most staff and management interviewed during the assessments were unaware of the relationship between activities at their site and the stream quality and

ecology. However, the attitude of most business operators to the site audits and the focus on improving the quality of the Wharemauku Stream was positive.

6. Key lessons learnt

The methodology used for implementing *Take Charge* on an area basis was very successful and proved to be an efficient use of our resources.

Businesses were generally aware of the environmental consequences of their activities however they had limited knowledge of the Resource Management Act 1991 and the requirements of Greater Wellington's regional plans and rules.

The existing standardised *Take Charge* assessment sheet is appropriate for larger businesses, but too detailed for smaller businesses.

Most of the problems identified could be resolved by providing appropriate guidance materials.

7. Proposed changes to *Take Charge*

As a consequence of the lessons learnt from applying *Take Charge* in the Drain Six catchment, several changes are proposed to the way we implement *Take Charge*. These are outlined as follows:

1. Focused investigation of business areas adjacent to degraded streams will be factored into our process for determining where we do *Take Charge*. The success of the investigation has provoked consideration into how and where this type of investigation might be applied. The criteria chosen for the purposes of ranking a target area are:
 - The extent of industrial and/or commercial use in the catchment
 - The history of pollution incidents in the stream
 - The physical and chemical properties of the stream
 - The visual amenity characteristics of the stream
 - The ecological significance and health of the stream
 - Actual or perceived trends in the stream health
 - Whether the stream is the focus of a Care Group
 - Whether the method is applicable to the catchment area

This approach will help us to prioritise where we apply *Take Charge* but also allows some flexibility to address emerging issues or problems.

Applying this approach, the proposed areas for future *Take Charge* investigations are: the Porirua Stream, the Takapu Stream, the Montgomery Cres Drain, and the Makoura Stream.

2. *Take Charge* will be implemented as a mandatory compliance mechanism, rather than a voluntary educational programme.
3. The Pollution Control team is preparing a series of Pollution Solution brochures. These will be used by officers during business assessments to provide guidance information about specific topics relating to a particular site i.e. Chemical Storage, Car Grooming, etc.
4. We will examine opportunities for increasing general public awareness of the requirements of the Resource Management Act 1991 and the requirements of Greater Wellington's regional plans and rules at a regional level and collaboratively at a national level.

8. Communication

No further public communication is necessary for this report.

9. Recommendations

It is recommended that the Committee:

1. ***Receive the report; and***
2. ***Note the contents.***

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