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**Committee**                **Environment**  
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## **Muddy Waters Programme Update**

### **1. Purpose**

To provide an overview of the progress made on the Muddy Waters programme over the past year.

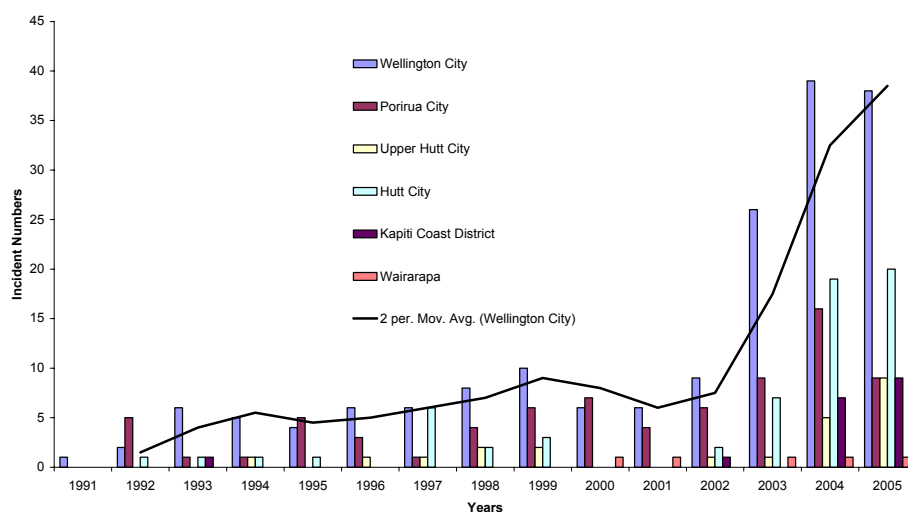
### **2. Background**

In 2002, Greater Wellington introduced its Erosion and Sediment Control Guidelines, which applied to sites of greater than 0.3 hectares. We also changed rule 2 of the Regional Freshwater Plan to improve control of stormwater discharges from earthworks sites greater than 0.3 hectares. However, neither of these measures by themselves adequately addressed the issues of erosion and sediment loss from vegetation clearance and earthmoving associated with the development on sloping and smaller sites. Many of the more sensitive freshwater and estuarine habitats found within the region were, and remain, at risk and face a growing threat from ineffective silt control measures.

Like many other hilly regions, urban development initially occurred on prime flat land. The limited availability of flat sites, coupled with the continued demand for new residential property, means that developers are increasingly building on sites that were previously not considered as suitable due to steep slope or space constraints. In the west of the region, from 1996 to 2003, nearly 700 hectares of land was developed as new residential areas. About 8% of this development has occurred on land with slopes greater than 20° (1 in 5).

By 2003, excessive sediment from earthworks sites was increasingly recognised as the most significant water pollution issue in the Wellington Region. (see Figure 1).

Figure 1. Incidents involving Silt



In an attempt to characterise all the issues of concern, Greater Wellington had discussions with western region territorial authorities, community groups and developers in the region. The key issues identified as requiring attention were:

- Improving regulatory consistency;
- Retaining a sufficient level of expertise in local authorities;
- Determining what constitutes best practice; and
- Improving information sharing.

In June 2004 a strategy for dealing with these issues was presented to the Environment Committee. This included a programme of actions to reduce future pollution by improving the performance of developers and the capability of regulatory officers. Specific actions proposed included:

- Developing resource materials for local authority staff and developers
  - Application and site assessment criteria and requirements
  - Standard conditions for resource consents
  - Small sites guideline
- Co-ordinating workshops for local authority staff
- Co-ordinating workshops for developers, consultants and contractors

### 3. Outputs achieved to date

The following outputs have been delivered by the Muddy Waters programme to date:

**Territorial Authorities’ Officers Workshops (December 2004).** Two workshops were attended by over 50 officers from throughout the region. Most of the territorial authorities’ officers indicated that they would benefit from receiving guidance from Greater Wellington regarding evaluation criteria for consent applications and assessments of environmental effects (AEE’s), and standard consent conditions relating to erosion and sediment controls. The

territorial authorities' officers also indicated that developing these resources and better information sharing would go a long way to addressing the problems currently faced.

**Developers, contractors, and consultants workshop (June 2005).** This was attended by nearly 60 consultants and contractors. Topics covered included site assessments and compliance tools, erosion and sediment control technology, and assessing environmental effects. We received very pleasing feedback from the session, and have noticed that some of the consultants now show a better understanding of our requirements and the technology available to manage earthworks sites and improved communication between parties.

**Pre-application information, site and assessment checklists:** We have developed and trialled three checklists which ensure that GW and territorial authority officers treat applications in a thorough and consistent manner. These have proven to be very successful tools.

**Small site earthworks guidelines:** Draft guidelines have been developed to provide straightforward advice to developers, land owners and contractors on wise and effective practices for small earthworks sites. They also assist GW and territorial authority officers in assessing small site activities. The guidelines fill a critical information gap, and should have a positive impact on reducing unconsented sediment discharges. Some work is still required to format the guidelines into a user-friendly and accessible brochure form, before they are released.

**Resource Consent Conditions 'Pick & Mix':** This is a document of standard conditions for managing the effects of earthworks. It contains conditions commonly used by the territorial authorities and GW for controlling sediment discharges.

**Training:** A two-day erosion and sediment control training course was held in June 2005 and was attended by staff from GW and the territorial authorities. The course was specially tailored for the Wellington environment. The training has improved staff capabilities to assess the effects of earthworks on large sites as well as dealing with sometimes complex practical problems on site.

**Development of a Universal Soil Loss Equation tool:** This is a computer based tool that estimates soil loss from earthworks. Greater Wellington has developed an easy to use tool for regulators and consultants, to enable quick accurate and standardised assessments for sites require attention.

**Chemical Dosing Trials:** We are currently trialling a batch-dosing method by which contractors can apply flocculent to muddy water coming from small sites, enabling it to be discharged to the stormwater system without problems downstream. The dewatering of trenches and excavations is a common source of muddy water discharges into stormwater systems, and this method aims to provide contractors with a cost-effective solution. It has been developed with the aid of staff from GW water treatment plants.

#### **4. Perceived benefits**

The Muddy Waters programme has provided the following benefits:

- Improved communication and relationships between regulators and, developers, consultants and contractors;
- Greater regulatory consistency between Greater Wellington and the territorial authorities;
- Improved quality of resource consent applications and assessments of environmental effects received from developers;
- Higher levels of performance in compliance; and
- Improved technical capability amongst council officers.

#### **5. Muddy Waters in 2005-06**

The key actions being considered for 2005-06 are:

- Holding 6-monthly forums with territorial authority staff;
- Holding further workshops for developers, contractors, and consultants;
- Producing a staff training and resource kit for local authority staff. This should be available both on the web and in hard copy form;
- Finalising the various site check lists, conditions tool-box, and small site guidelines;
- Forming a territorial authority 'champions group' to facilitate their respective council's Muddy Water interests;
- Producing short regional and territorial authority rule summaries to enhance collective understanding of jurisdictional overlaps; and
- Refining joint consent processing protocols to more specifically cover areas of cross-jurisdiction.

It should be noted that the western region territorial authorities will also consider a number of key actions relating to matters within their jurisdiction.

#### **6. Communication**

No specific external communications are foreseen at this stage, other than through ongoing work with TA officers, consultants, contractors and developers. However, in the future an *Elements* article may be appropriate as performance at earthworks sites continues to improve and data on environmental gains is more available.

## 7. Recommendations

*That the Committee:*

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

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