

Annual Incident Report 1999-2000

**Prepared by:
Kathryn Hooper
Resource Investigations Department
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Executive Summary

The Wellington Regional Council provides a 24 hour, 7 day a week environmental incident response service for the Wellington Region. The purpose of this service is to provide an effective response to environmental incidents so that the Council can meet its obligations under the Resource Management Act 1991 (RMA). It also ensures compliance with the RMA, rules in regional plans, and resource consent conditions. The service receives complaints from members of the public regarding environmental pollution and issues. It aims to protect the environment by educating polluters, and where appropriate taking enforcement action.

This report presents a summary and analysis of the complaints received by the Wellington Regional Council between 1 July 1999 and 30 June 2000. It also makes a comparison with complaints received during previous years and discusses the pressures on resources in each of the territorial authority areas in the Region.

This report provides a general indication of the pressures placed on the environment in the Wellington Region and identifies significant resource management problems that need to be addressed to ensure that we can achieve sustainable management of the Region's natural and physical resources.

Three main resource management issues were identified in this report. These were; inappropriate discharges into stormwater systems, land contamination and inadequate control of silt discharges from subdivision sites. Inadequate buffer zones between potentially incompatible land uses were identified as an issue in 1998/1999, however, it appears that during 1999/2000 many of these issues were able to be resolved through placing tighter controls on odour emitting industries.

During 1999-2000, a total of 1176 complaints were received by the incident response service. This is a similar number to 1998-1999. The complaints were assessed according to the resource affected, i.e. air, water, and land.

Air complaints were the most common, accounting for 58% of all complaints received. Of the air complaints, odour was the most common reason for people to call the Incident Response Service. Odour was responsible for 49% of all complaints received in the Wellington Region. It is worth noting that unlike water incidents, one odour incident often results in numerous calls to the Incident Response Service. The suburbs of Happy Valley, Rangoon Heights and Lyall Bay were the most frequently affected areas.

Complaints about freshwater (rivers and streams) were the second most common, resulting in 21% of all complaints received. The most frequently affected waterbodies in the Region were Ngauranga Stream, Porirua Stream, Pauatahanui Stream and the Waiwhetu Stream. Liquid waste and hydrocarbons were predominant causes of complaints relating to these waterbodies. Many of these complaints occurred as a result of discharges of contaminants to the stormwater system. Incidents involving Coastal Water contributed to 8% of complaints.

Complaints relating to land accounted for 11% of all complaints received. The most frequent concerns were hydrocarbon discharges to land and the disposal of inappropriate waste at cleanfills.

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Analysis of complaints per capita revealed that people in the Wairarapa are just as likely to make a complaint as those in the western Wellington Region.

The performance of the service in responding to complaints and the environmental incidents that caused them is also assessed in this report. 94% of complaints (1105 complaints in total) were responded to within one hour of the complaint being received.

Most issues identified during incident investigations were satisfactorily dealt with using education and warnings. Where education and warnings were not sufficient, the Regional Council took appropriate enforcement action. During the year this enforcement action included 18 abatement notices, six infringement notices and one prosecution. The legislation allowing infringement notices to be issued came into effect on 1 February 2000 and this is proving to be a useful tool for enforcement.

Issues related to compliance with resource consent conditions were dealt with by the Consents Management Department and are discussed in the Resource Consents Annual Compliance Report.

1. Introduction

The Wellington Regional Council (the Council) provides a 24 hour, 7 day a week environmental incident response service for the Wellington Region (Figure 1). This is provided by the Resource Quality Section in the Western Wellington Region, and the Consents and Compliance section in the Wairarapa.

Environmental incidents include pollution incidents and incidents where activities fail to comply with the Resource Management Act 1991 (RMA), Resource Consent Conditions or Rules in Regional Plans. Pollution incidents generally involve the unauthorised discharge of contaminants into the environment.

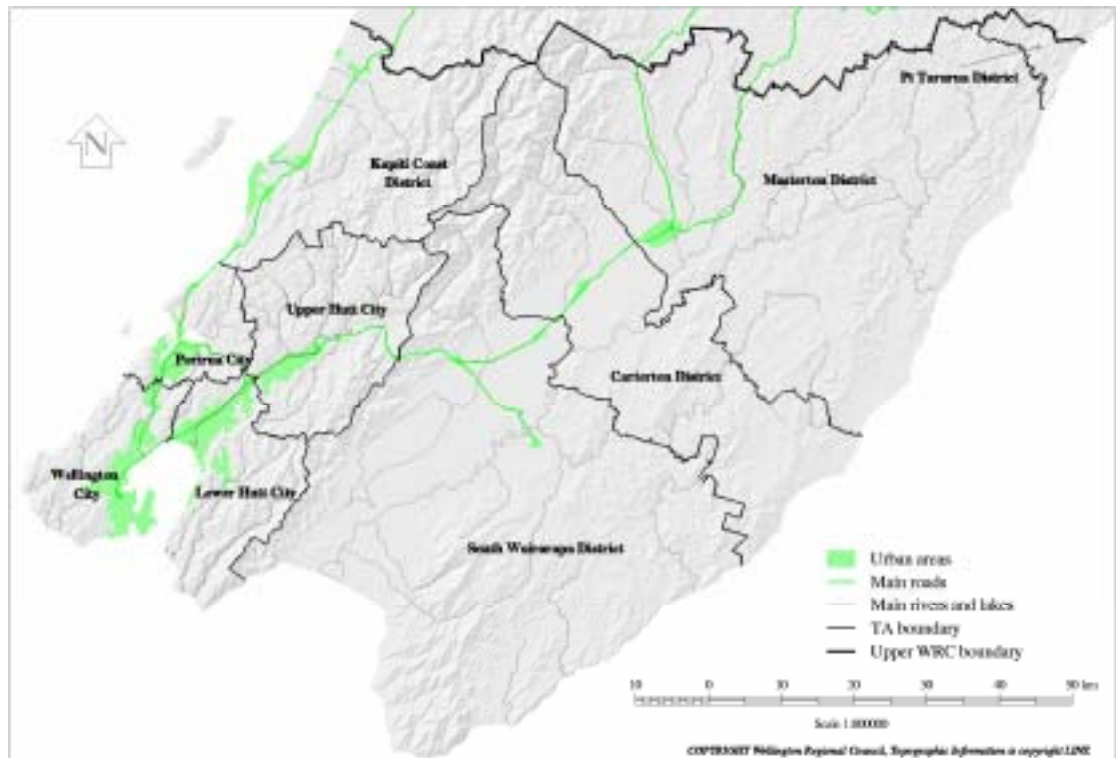


Figure 1: The Wellington Region.

The Council's incident response service investigates resource use issues and promotes sound resource management practices by maintaining a 24 hour pollution response service to respond to complaints about pollution and other environmental problems

Complaints about environmental incidents are sometimes unrelated to environmental effects, for example when they are motivated by disputes between neighbours or commercial interest. Some incidents can cause multiple complaints, for example odour. Other incidents can go unreported as the public may not realise there is a pollution response service, or they may not consider the effects important enough to complain about. Some members of the public also choose to deal with environmental concerns themselves. As a consequence the total number of complaints received does not necessarily correspond to the number of environmental incidents that actually occur. Nevertheless, these complaints provide a simple

indicator of pressures on the Region's natural and physical resources, and an indication of the environmental concerns of the public of the Wellington Region.

This report presents a summary and analysis of the environmental complaints for the Wellington Region that were received by the 24-Hour Incident Response Service between 1 July 1999 and 30 June 2000. The objectives of this report are to:

- Provide an indication of the pressures placed on the Region's natural and physical resources;
- Identify the sites in the Region most frequently under pressure;
- Identify resource management issues that need to be addressed to ensure that we can achieve sustainable management of the Region's natural and physical resources;
- Identify trends in the number of complaints received by the incident response service;
- Determine the adequacy of the incident response services response to complaints and the environmental incidents that caused them, and;
- Provide an indication of public awareness about the incident response service.

2. Regional Overview of Complaints

During 1999/2000, the Wellington Regional Council Incident Response Service received 1176 complaints. 1033 of these were responded to by staff in the Western Wellington Region and 143 were responded to by staff in the Wairarapa.

The Wellington Regional Council's Incident Database holds information about complaints dating back to 1991. The number of complaints received in 1999/2000 has increased slightly in comparison to 1998/1999 when 1145 complaints were received. Figure 2 compares the number of complaints received this year with those received in previous years.

Between 1996/1997 and 1997/1998 there was a substantial increase in the number of complaints received. This increase appeared to correspond with the greater emphasis placed on the provision and promotion of the 24-Hour Incident Response Service after the re-structure of the Wellington Regional Council Environment Division in 1995.

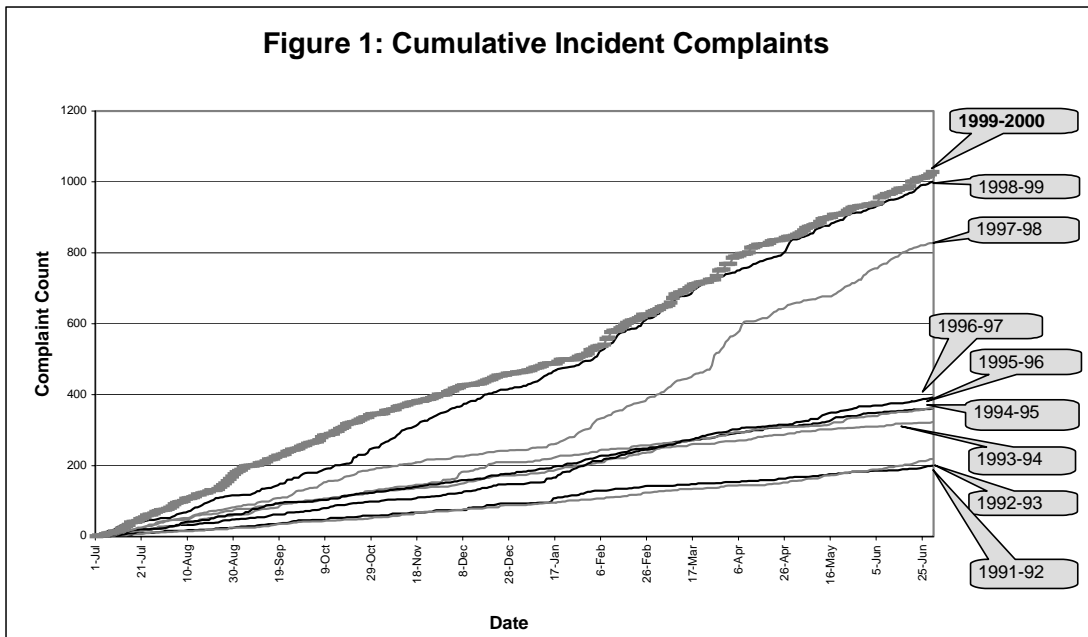


Figure 2: Comparison of the cumulative number of complaints received since 1991/1992.

2.1 Seasonal Distribution of Complaints

The types and numbers of complaints can vary greatly depending on climatic conditions. There are two key reasons for this. First, in fine weather, members of the public are more likely to be active in the environment and notice potential and actual pollution, and report it to the Council. Second, certain environmental incidents are more likely to occur in some weather conditions. For example, windless clear nights often lead to temperature inversions that trap odours near the ground, leading to increased odour incidents. During wet weather, pollutants are washed down stormwater systems and appear in coastal and river environments, and silt is washed off exposed areas of soil. This can cause discolouration and oily films in the receiving environment.

Figure 3 shows the seasonal distribution of complaints. During 1997/1998 numbers of complaints were significantly higher in the autumn. This was mainly due to the commissioning of the Moa Point Waste Water Treatment Plant at this that and its sludge dewatering facility at Careys Gully. In 1998/1999 and 1999/2000, however, the number of complaints received in autumn was not significantly greater than at other times of the year.

This analysis shows that while complaint numbers vary from day to day, there is little overall seasonality in the distribution of complaints received during 1999/2000.

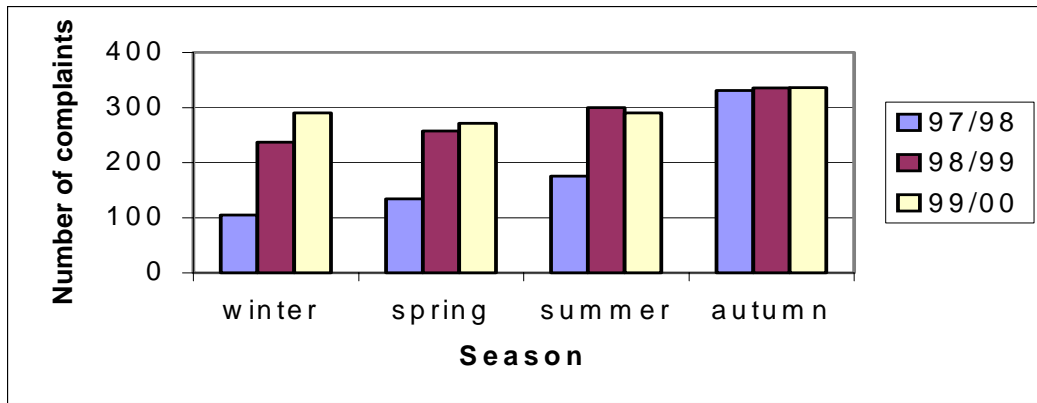


Figure 3: Seasonal distribution of complaints

2.2 Affected Resources

As in previous years, the Region’s air and freshwater are the most commonly affected resources in the Region. This year saw an increase in complaints related to air and land, and a slight decrease in those related to fresh and coastal water. This is shown in Figure 4.

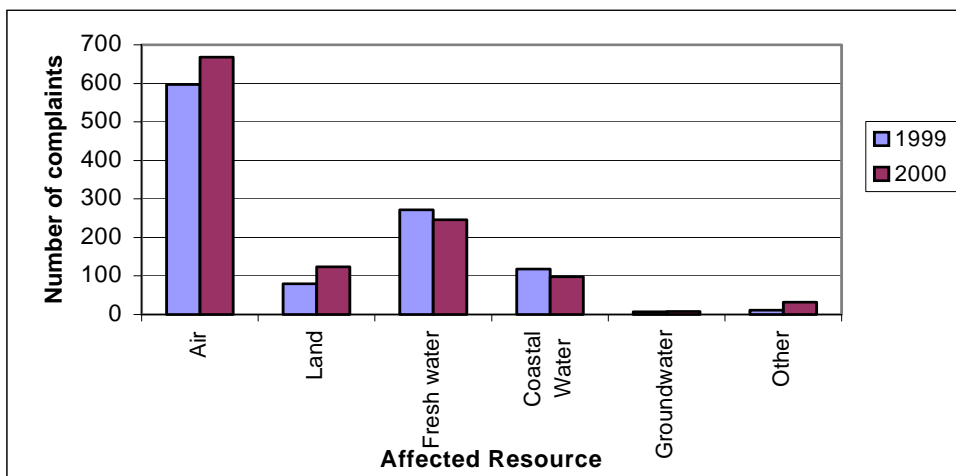


Figure 4: Comparison of complaints related to each resource.

Figure 4 indicates that the area of the environment under most pressure in the Wellington Region is our air resource, with the predominant issue being odour. It is noted that odour incidents frequently lead to multiple complaints about one incident because they can affect a large number of people at one time. Odour incidents are likely to re-occur given that they generally relate to an industrial process in an area. Not all complaints turn out to be caused by an odour that is deemed offensive or objectionable by an inspecting officer. In many cases, the odour has dissipated before officers arrive at the alleged location of the complaint. Further analysis of air incidents is reported in section 4 of this report.

In contrast, incidents involving fresh and coastal water generally lead to only single complaints, and many of the incidents that affect land resources often affect water resources as well, for example silt run-off from illegal earthworks and leachate discharges resulting from illegal discharges to land.

Complaints received about water resources typically only relate to the visible pollution or degradation of waterways. In many cases water pollution is invisible (e.g. nutrients and micro-organisms) and fewer complaints are received by the public. For these reasons the pressure being placed on the quality of water resources in the Wellington Region is likely to be more significant than is reflected in this report.

Further discussion about the pressure on water resources is made in sections 5, 6 and 7 of this report. Incidents affecting water resources can also be of a serious magnitude. For example a diesel spill of 10, 000 litres in the Waiwhetu Stream resulted in widespread pollution of the Waiwhetu Stream, Hutt River and northern end of the Wellington Harbour.

2.3 Location of Complaints

Figure 5 shows the distribution of complaints throughout the Region. It should be noted that only the western part of the Region is shown because no grid references were available for incidents occurring in the Wairarapa. It is anticipated that grid references will be entered during the coming year. This map clearly shows the high proportion of complaints received in Wellington City, and indicates the areas where complaints are most frequent within the city, for example the Happy Valley area.

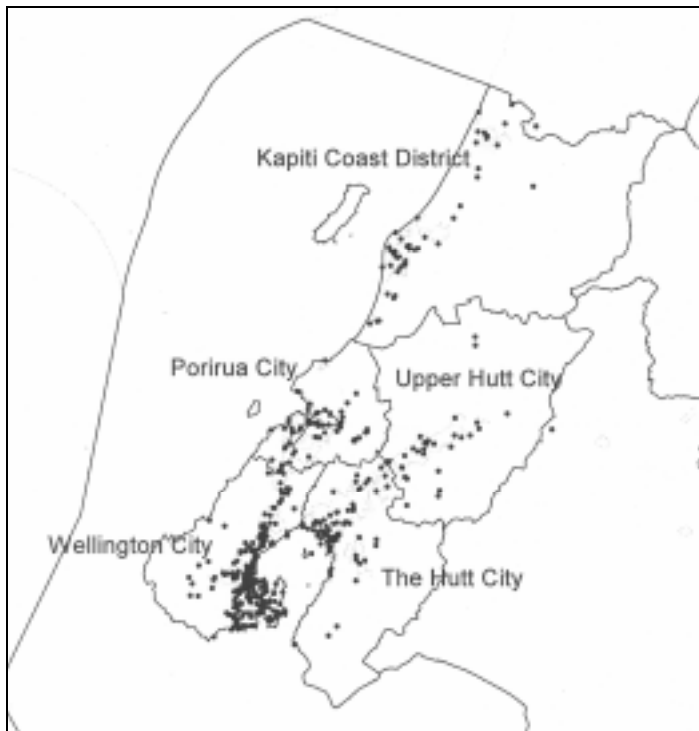


Figure 5: Distribution of complaints in the western part of the Region.

3. Complaints in each Territorial Authority Area

Figure 6 shows the numbers of complaints received from each Territorial Authority area in the Region.

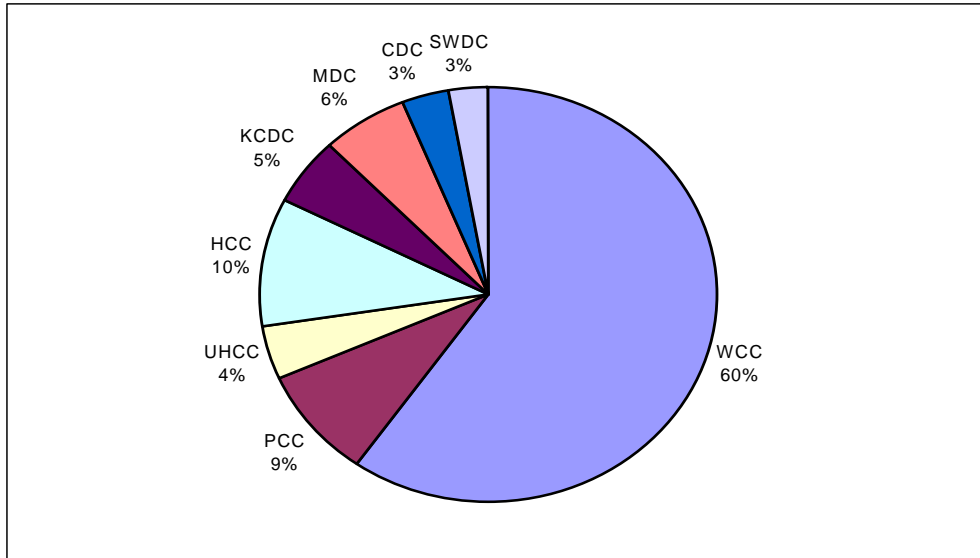


Figure 6: Complaints Received from each Territorial Authority.

3.1 Complaints per Capita

Figure 6 clearly shows that the majority of the complaints (60%) are received from the Wellington City area, but this is to be expected given the percentage of the Regions population that live there.

Figure 7 shows the number of complaints received per 1000 people for each Territorial Authority. This shows that Carterton District had the highest number of complaints per capita. In 1999/2000 Masterton and South Wairarapa Districts also had significantly more complaints per capita than in 1998/1999, while Hutt City, Upper Hutt City and Kapiti Coast District had fewer complaints per capita than in the previous year.

This analysis indicates that the 143 complaints received in the Wairarapa are proportional to the population of this area. People in the Wairarapa are probably just as likely, if not more likely, to notify the Council of an environmental incident as people in the more urban environments.

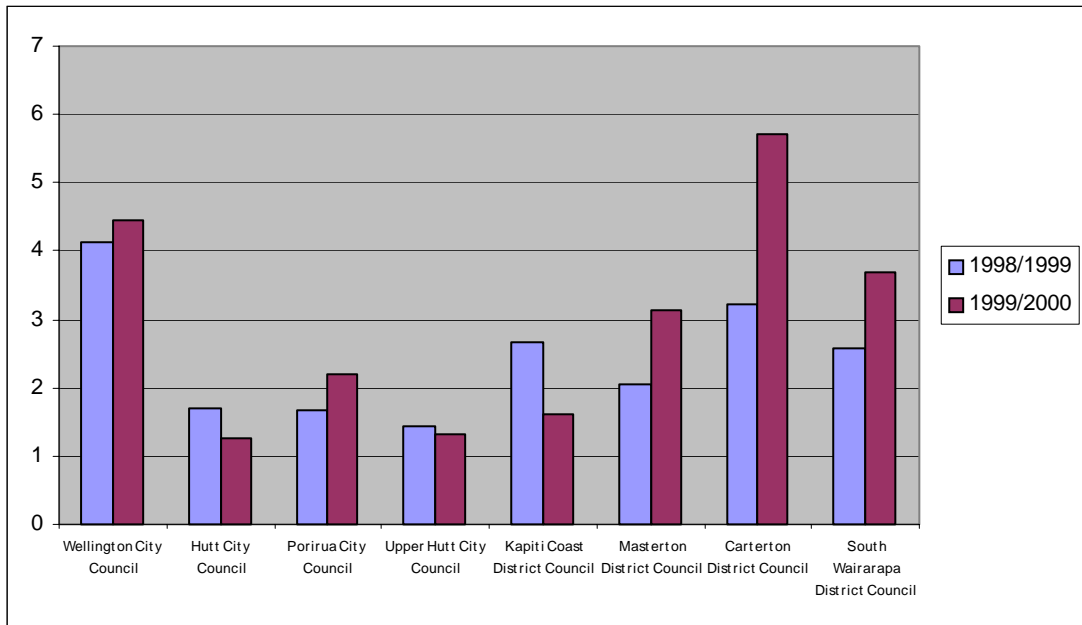


Figure 7: Comparisons of Complaints per 1000 population.

There are three possible explanations for fewer complaints per capita from areas such as the Kapiti Coast and Porirua City. First, the Territorial Authorities sometimes choose to deal with more of the incidents related to the environment. This is the case on the Kapiti Coast due to the time it takes Regional Council officers to reach environmental incidents up there. Secondly, there may be fewer environmental incidents occurring in these areas and subsequently no reason to notify the Council. Thirdly, the people in these areas may not be aware who to direct enquiries to, or even that the 24 Hour Incident Response Service is available to deal with environmental concerns.

If the third explanation is true, the Council may need to promote its 24-Hour Incident Response Service in these districts. With the apparent stabilisation of complaint numbers, and the positive environmental results shown at many of the industries that have caused significant incidents in the past, now may be a good time to more actively promote the incident response service.

3.2 Analysis by Territorial Authority Area

It is apparent from this preliminary analysis that different parts of the Wellington Region face different environmental pressures. The following sections describe the incidents occurring in each of the Districts in the Region and outline the pressures being faced in each area.

In each section, the sources of pollution, and affected resources are described. These incidents are then discussed in terms of their relationship with air, freshwater and coastal water monitoring in the Region, and potential links between incidents and resource quality concerns identified.

3.3 Wellington City

Sixty percent of all complaints received over 1999/2000 came from the Wellington City area. Figure 8 shows that odour continues to be the most significant cause of complaints in this part of the Region, accounting for 65% of complaints received from the city.

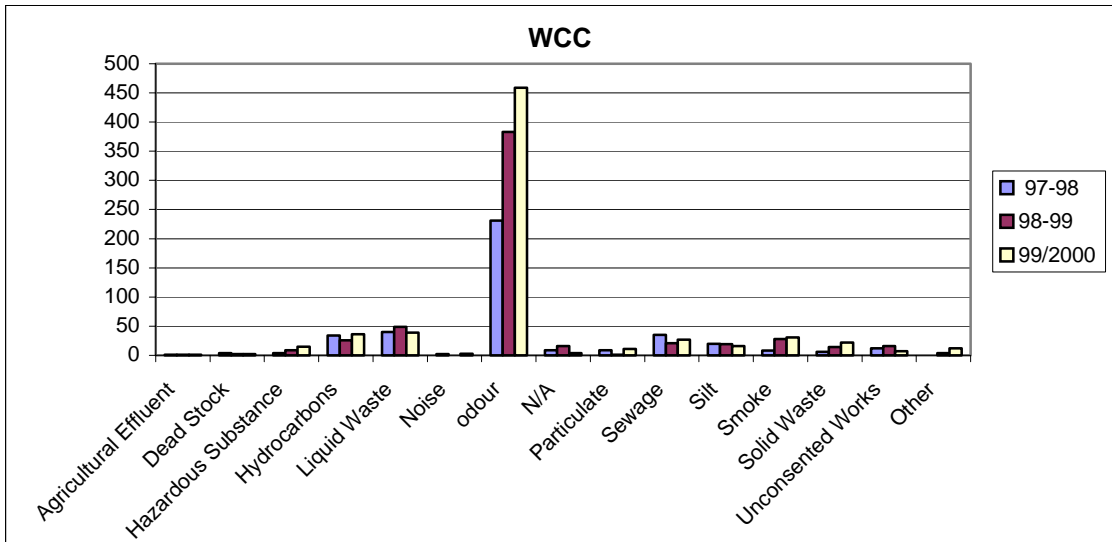


Figure 8: Complaints from Wellington City

3.3.1 Sources of Complaints

Most of the incidents which occurred in Wellington City were from commercial/industrial sources (82%), as shown in Figure 9. Eleven percent were from domestic sources, and many of these incidents were passed on to the Wellington City Council for further action because they involved issues such as smoke discharges from domestic chimneys. These are covered under the Health Act 1956 that is administered by territorial authorities.

A small proportion, (4%) were natural incidents such as pollen or algae and phytoplankton blooms in Wellington Harbour.

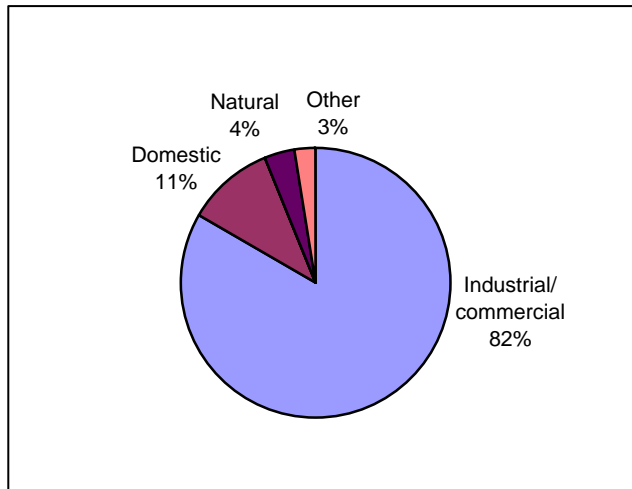


Figure 9: Sources of complaints in Wellington City, 1999/2000.

3.3.2 Consented Activities

A number of incidents responded to related to activities allowed by discharge permits. Among these are the main sources of odour complaints, including the Wellington City Council Southern Landfill, the Anglian Water International (AWI) Sewage Sludge Dewatering facility at Careys Gully (Happy Valley, on the same site as the Southern Landfill), Medical Waste Limited incinerator in Miramar, and Taylor Preston Limited's Abattoir in the Ngauranga Gorge.

All of these have discharge permits and were breaching conditions of these permits by emitting odours which are offensive or objectionable at or beyond the boundary of their property. A number of the companies causing complaints have made significant improvements which have resulted in fewer odour incidents, particularly in the latter part of the 1999/2000 year, and it is anticipated that these improvements will be reflected in the analysis of incidents in the coming year. These activities are discussed individually below.

3.3.2.1 Moa Point Waste Water Treatment Plant

The Moa Point Waste Water Treatment Plant caused 34 complaints. Sixteen of these were responded to after hours by the Incident Response Service, with 18 received during working hours and responded to by the Consents Management Department.

Although there has been a noticeable reduction in odour from the plant since the covering of the clarifiers, odour complaints about the plant continued to be received during 1999/2000. There were two confirmed complaints during this period and odour from the stack appears to still be a problem on the golf course in light southerlies.

Because of the continuation of complaints, Anglian Water International (AWI) are planning modifications to the stack to further disperse and dilute the discharge using a venturi device. This alteration requires planning permission and a building consent from the Wellington City Council before it can proceed. It is anticipated that this system will be installed over the 2000/2001 year.

3.3.2.2 Sewage Sludge Dewatering Plant – AWI

Wellington City Council holds the discharge permit for the sewage sludge dewatering plant at Carey's Gully (Happy Valley). The permit was granted in 1999/2000 to discharge odour produced by the sludge dewatering plant during the treatment of centrate. The plant continues to be operated by Anglian Water International Ltd and on the day of the compliance inspection carried out by the Consents Management Department, all consent conditions were complied with.

Water quality is also an issue at this site. There were two spills of centrate reported the 1999/2000 year, one of which entered a nearby stream. The Wellington City Council is currently updating the Site Management Plan to include procedures to prevent and clean up spills.

3.3.2.3 Taylor Preston Ltd

There were 93 complaints about Taylor Preston over the 1999/2000 year, with 52 of these responded to by the Incident Response Service.

Taylor Preston Ltd operates an abattoir and rendering plant in Ngauranga Gorge, Wellington. The company was granted a discharge permit in 1996 for discharges to air associated with the abattoir and the rendering processes.

The Council received a high number of complaints over the summer months relating to discharges of rendering odour from the plant. These complaints were from residents in Khandallah, Rangoon Heights, Broadmeadows, Raroa and Johnsonville. Taylor Preston Ltd has been in breach of their discharge permit on several occasions this year. A meeting between the Consents Management Department and the company in April 2000 identified several problems in the plant and these are currently being remedied.

Some improvements relating to general maintenance and plant cleanliness have been made at this plant in the last year to reduce fugitive odours. Taylor Preston has also engaged a consultant to assess the odour issues and are intending to hold public meetings later in the year to discuss issues with affected residents and other members of the public.

3.3.2.4 Medical Waste Wellington Ltd Incinerator

Medical Waste Wellington Ltd operates a medical and quarantine waste incinerator on Shelly Bay Road in Miramar. The company was granted a discharge to air permit in 1995 for emissions from the incinerator.

During 1999/2000 the Council received 31 complaints relating to the discharge of smoke and odour from the plant, 23 of which were responded to by the incident response service. On four occasions these discharges were confirmed to be in breach of the company's discharge permit.

In November 1999, the Council reviewed the conditions of Medical Waste's resource consent. The review was initiated in response to the results of emission testing which indicated the plant was discharging relatively high levels of some contaminants, including dioxins.

The company has been set interim emission limits and stricter limits which become effective on 1 September 2001. Until 1 September 2001 the company is required to undertake several additional measures, these include:

- three monthly emission testing;
- installation of additional emission monitoring equipment;
- accurately logging volumes of waste material incinerated;
- preparation of plant decommissioning reports; and
- the establishment of a community liaison group.

Medical Waste has confirmed its intention to close the plant before 1 September 2001.

3.3.2.5 MKL Asphalts

MKL Asphalts operate an asphalt plant in Kinleith Grove, Porirua. The company was granted a discharge permit in August 1999 and commenced operation April 2000. Up until 30 June 2000, the Council had received five complaints all relating to the discharge of a bitumen odour. While investigating one of the complaints, the Council confirmed odour to be in breach of MKL's discharge permit.

In response to the incidents, MKL intends to trial a de-odourising agent to mask the odour. The company has purchased the agent and the trials are expected to commence during 2000/2001.

3.3.3 Non-consented Activities/Permitted Activities

The main role of the Incident Response Service is to monitor compliance with the permitted activity rules in the regional plans for the Region.

One of the main areas of concern during 1999/2000 was the number of incidents involving discharges to air from activities in the Wellington City Central Business District. A large number of these complaints related to emissions from restaurants and cafés. Discharges from restaurants/cafes that are found to be offensive or objectionable at or beyond the boundary of the premises are in breach of Rule 5 of the Regional Plan for Discharges to Air.

There were 65 complaints (14% of all odour complaints in Wellington City) related to food premises in Wellington City during 1999/2000, with Indian restaurants and chicken roasting premises the most common cause.

The Resource Investigations Department worked with six different food premises over the 1999/2000 year to ensure they complied with the Regional Air Quality Management Plan. In all but one instance an agreement was reached and the Plan complied with. The final case is still being negotiated.

Coffee roasting premises were also the source of significant levels of odour, again covered by Rule 5 of the Air Quality Management Plan. Two coffee roasting premises were approached over the 1999/2000 year to ensure Plan compliance. Both premises were co-operative and the issues were resolved.

3.3.3.1 Rongotai Industrial Area

There were 100 complaints received during the year about emissions from the Rongotai Industrial Area. These related to three premises;

Spartan Engineering Co. Ltd operates a foundry in this area, which was assessed as being the source of many of these incidents. The company installed a wet scrubber to treat emissions from their process in March 2000 and this appears to have been successful, with a significant reduction in complaints since its installation.

3 Foot 6 Ltd operates a small forge to make props for movies. Smoke and odour from this forge was assessed as objectionable, and the stack on the forge has been raised to ensure compliance with Rule 12 of the Regional Air Quality Management Plan.

Flight Group Ltd operates a plastic extrusion plant in the Rongotai Industrial area. Discharge of odour from this operation is characterised by a strong smell of melting plastic, and led to complaints from residents in Lyall Bay. This industry has taken steps to minimise odour emissions. A number of vents from the building have been sealed and doors are now kept closed to minimise fugitive emissions from the factory.

3.3.3.2 Wellington City Council Sewage System

The Wellington City Council sewage system was attributed as the source of 44 complaints around the city. (This does not include odours from the Careys Gully sludge de-watering facility or from the Moa Point Waste Water Treatment Plant). No one particular source caused on-going complaints. The majority of complaints were referred to the Wellington City Council for action. In most cases this involved the sealing of manhole lids to prevent odour, or the clearance of blockages in the system.

3.3.3.3 Discharge of Contaminants to Stormwater

48 complaints in the Wellington City area involved the discharge of contaminants into stormwater. No one industry stood out as being a regular cause of stormwater complaints, however the main types of contamination identified were:

- Hydrocarbon spills from vehicles onto roads and subsequently into the stormwater system
- Silt discharges from earthworks activities
- Discharges of sewage from blocked/overflowing sewage systems.
- Discharges from automotive/mechanical premises. (e.g. automotive products including hydrocarbons, antifreezes and lubricants)

- Discharges of contaminants from commercial cleaning and/or blasting activities
- Discharges of paint or paint wash water from domestic properties.

All of the incidents involving unauthorised discharges into stormwater in Wellington City were dealt with through educational mechanisms such as pamphlets and letters.

3.3.3.4 Unconsented Works

Unconsented works were not a significant problem Wellington City. Seven complaints were investigated during the year, with only one of these resulting in further action. This incident occurred in the Porirua Stream at Glenside, and related to unauthorised bank protection works. The parties responsible were required to stop work until they had obtained a resource consent from the Council.



Figure 10: Unconsented bank protection works near Tawa, 9 March 2000.

3.3.4 Most Commonly Affected Resources in Wellington City

Air was the most commonly affected resource in Wellington City, accounting for three quarters (459) of all complaints (see Figure 11). Almost all of these complaints were motivated by objectionable odours during 1999/2000.

The remaining resources affected were freshwater, land, coastal water and ground water.

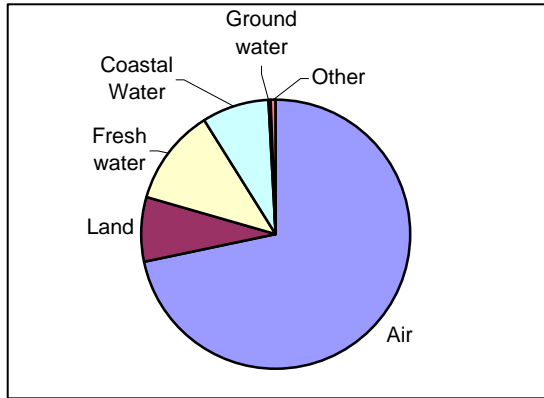


Figure 11: Complaints by affected resource in Wellington City 1999/2000

Fifty one complaints were about freshwater, and 72 were about coastal water. The freshwater bodies affected most often were the Karori Stream (16 incidents) Porirua Stream (7 incidents), Kaiwharawhara Stream (7 incidents) and the Ngauranga Stream (5 incidents). About half of the complaints received about fresh and marine water arose from discharges to the stormwater system. Only a small number were associated with unconsented works, and sewage discharges led to in 19 complaints.

Only twelve complaints were received relating to inappropriate disposal or discharge of solid waste in Wellington City.

3.4 Hutt City

Approximately 30% fewer complaints were received about resources in Hutt City over the 1999/2000 year when compared to 1998/1999. (Figure 12)

As in Wellington City, odour was the most common cause for complaints, accounting for over a third (42 complaints) of all complaints over the 1999/2000 year.

Incidents involving the discharge of sewage were the most frequent issues associated with freshwater, accounting for 13%(15) incidents. Many of these were sewer overflows, about which the Hutt City Council notified the Wellington Regional Council. These usually occurred during heavy rainfall events.

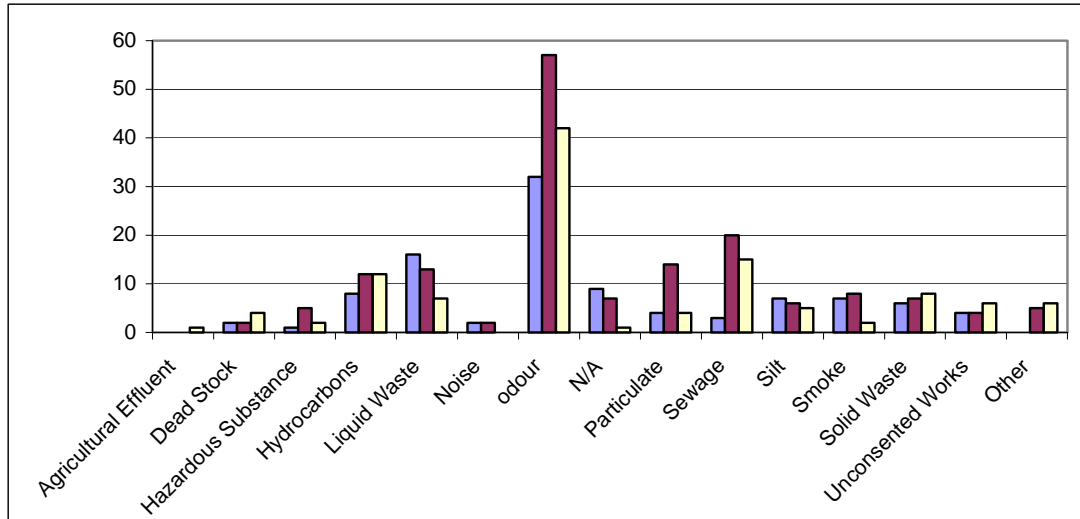


Figure 12: Complaints from Hutt City

3.4.1 Sources of Complaints

Figure 13 shows that over half the complaints received in Hutt City arose from Industrial/commercial premises. “Other” complaints are those which don’t fall into any of the distinct categories. This is usually because the source is unable to be identified. There were a number of incidents of this nature in Hutt City during 1999/2000, 11 were discharges from stormwater drains that were unable to be traced back to their source. These predominantly occurred in the Seaview/Gracefield area, discharging to the Waiwhetu Stream, Hutt River, or Wellington Harbour.

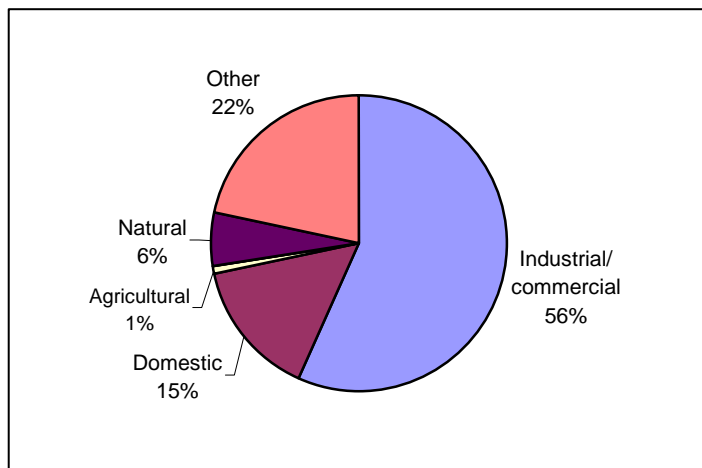


Figure 13: Sources of complaints in Hutt City 1999/2000.

3.4.2 Consented Activities

A number of the main industrial/commercial sources of complaints in Hutt City have resource consents for their discharges.

3.4.2.1 Chemwaste Industries Ltd

Chemwaste Industries Ltd (formerly Refined Solvents Ltd or RSL Waste Ltd) runs a chemical waste disposal service in Seaview, Lower Hutt.

Sixteen complaints were received about odour emissions from this site during 1999/2000. Two of these were responded to by the Resource Investigations Department, with 16 responded to by Consents Management during working hours. Odour was confirmed to be coming from the premises on 11 occasions, however on no occasion was it considered to be offensive or objectionable. It was evident that the company was taking all practicable steps to prevent odour emissions. The number of complaints was slightly less than last year (18).

3.4.2.2 Lever Rexona Ltd

Lever Rexona has had a history of causing numerous complaints in the Lower Hutt area during the last 4-5 years. During 1999/2000 only four complaints were received, none of which were confirmed as offensive or objectionable. This is a significant improvement on previous years, where complaints have led to abatement notices being issued to the company and even prosecution.

Lever Rexona Ltd received special mention in the Resource Consent Annual Compliance Report 2000 due to their pro-active attitude towards minimising environmental effects of their operations.

3.4.3 Non-consented/Permitted Activities

A number of non-consented activities were frequent causes of complaints in Hutt City.

3.4.3.1 Seafresh NZ Ltd

Seafresh NZ operates a fish processing factory in Gracefield, Lower Hutt. During 1999/2000 five complaints were received about fish odour from this site. On no occasion was the odour deemed to be offensive or objectionable by officers of the Wellington Regional Council.

3.4.3.2 British American Tobacco/Imperial Tobacco NZ Ltd

This factory is on Richmond Street in Petone. Four odour complaints were received alleging unpleasant odour discharges from this site, however on two occasions odour was confirmed as objectionable and offensive.

Two distinct odours were emitted from this site, the first is a strong sweet vanilla odour which arises from the flavouring added to the tobacco, and the second is a strong tobacco odour which comes from the steam plant where tobacco leaves are "rehydrated" prior to manufacture of products.

The company took commendable steps over the 1999/2000 year to reduce fugitive emissions from the factory and direct all odour and air discharges through their stack. This appears to have mitigated much of the odour.

3.4.3.3 Discharges to Stormwater

One of the key areas of concern in Hutt City is the number of incidents involving unauthorised discharges to the stormwater system. During the year, nineteen incidents that involved discharges to the stormwater system which subsequently entered waterways were reported in Lower Hutt.

These discharges most commonly involved:

- Hydrocarbons; and
- Liquid waste from industrial premises

No one industry was responsible for the discharges, which were sporadic and often unable to be traced back to a particular source.



Figure 14: Foam discharging to a stream from a stormwater pipe, 30 July 1999.

3.4.4 Most Commonly Affected Resources in Hutt City

Freshwater and air were the most commonly affected resources in Hutt City, as is shown in Figure 15. Forty two percent of complaints were about air quality, predominantly odour, and concerns about freshwater caused 33% of complaints. There could be fewer complaints about air in this area because the Hutt City Council addresses many incidents themselves under provisions related to nuisance in the Health Act.

The waterbodies most commonly affected in the Hutt City area were the Waiwhetu Stream which runs through Gracefield (13 incidents), Hutt River (13 incidents), Wellington Harbour (9 incidents) and Opahu Stream (4 incidents). The Opahu Stream runs past the Hutt City Council, through Woburn and into the Hutt River.

The Waiwhetu Stream is identified in the Annual Freshwater Quality Report 1998/1999 as one of the most severely degraded waterways in the Wellington Region. This is discussed further in section 5 of this report. The Waiwhetu Stream is also identified in the Regional Freshwater Plan as one of the water bodies requiring enhancement. The on-going concerns about discharges of stormwater to this stream indicate that this catchment needs to be targeted with stormwater education programmes, and subsequent enforcement action where necessary, as soon as possible.

The contaminants most commonly reported in the area were sewage discharges to waterways (most of these were reported by Hutt City Council as required by resource consents), unconsented works in the beds of rivers and streams and hydrocarbon contamination of waterways. Other prominent incidents involved the dumping of cars in the Hutt River and on its banks, and dead stock in or around the Hutt River.

Four complaints of non-cleanfill being disposed at cleanfill sites were received. Investigations showed these allegations to be correct on all four occasions. This indicates that this is an issue worth investigating further in this area. In all four instances the non-cleanfill consisted of green waste and/or reinforcing steel, and was removed at the request of Council officers.

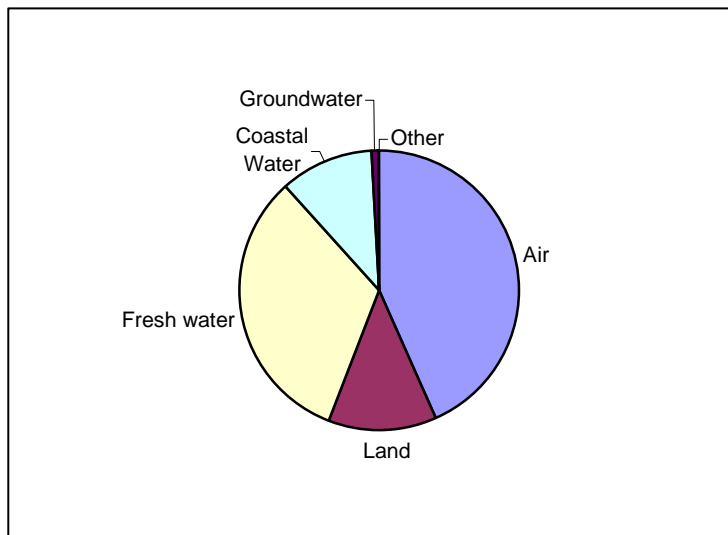


Figure 15: Complaints by affected resource in Hutt City, 1999/2000.

3.5 Porirua City

There were 102 complaints received from Porirua City during the 1999/2000 year. By comparison, 78 complaints were received in 1998/1999.

Figure 16 shows that 38% of complaints were about silt discharges. This reflects the strong public awareness in this area of the impacts of silt on the Pauatahanui Inlet. The number of silt complaints received increased dramatically as a result of a quarry operation in the area, plus a large number of new subdivisions being developed in and around Whitby. Porirua City Council and Wellington Regional Council are currently working towards controlling the discharges of silt from subdivision works. Complaints about unconsented works were second most common (9, or 10%), with only seven (6.5%) complaints about odour received.

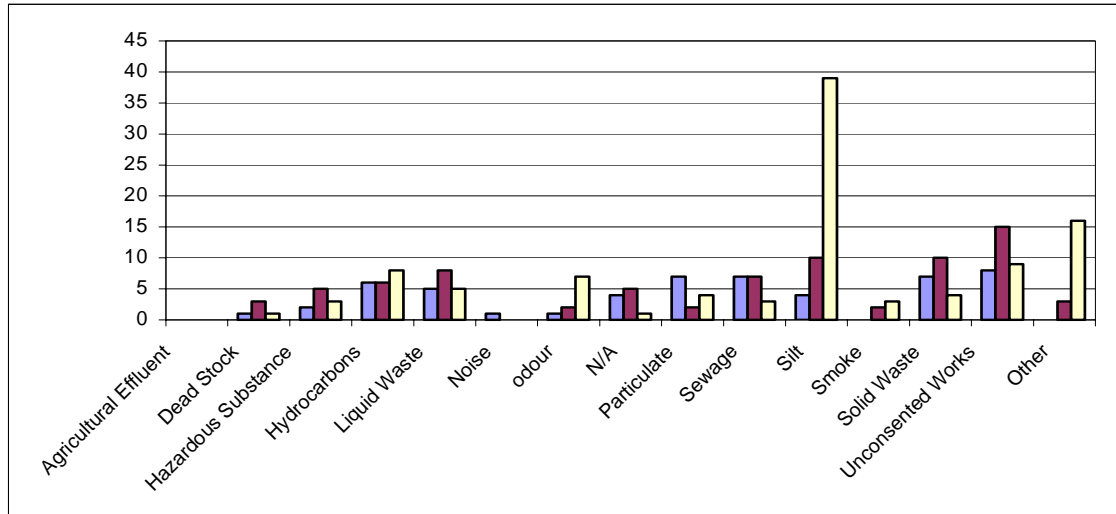


Figure 16: Complaints from Porirua City

3.5.1 Sources of Complaints

Almost half of the complaints received from Porirua City were about industrial/commercial operations. Figure 17 shows that a significant proportion (10%) were natural events, mainly associated with pollen being deposited in the Pauatahanui Inlet and on beaches in this area. This pollen deposition occurs in late winter to early spring and is regularly reported by members of the public as pollution because it resembles sulphur. In anticipation of this, press releases are now made by the Incident Response Service at this time of the year warning people to be aware of pollen and letting them know not to be alarmed if it builds up on beaches and in waterways.

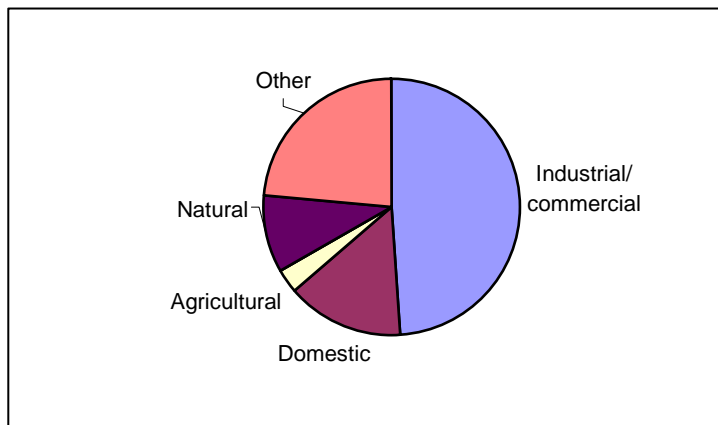


Figure 17: Sources of complaints in Porirua City 1999/2000.

3.5.2 Consented Activities

The only consented activity to cause complaints during 1999/2000 was Pacific Wallcoverings in Porirua, formerly Ashley Wallpapers.

3.5.2.1 Pacific Wallcoverings

Pacific Wallcoverings operate a wallpaper manufacturing plant in Mohuia Crescent, Porirua. The plant was granted a discharge permit in February 1996 for emissions associated with the manufacturing process. The plant has recently installed additional manufacturing and pollution control equipment from a plant decommissioned in Auckland.

Three complaints about this site were received during 1999/2000. These incidents involved the deposition of “sticky stuff” at a nearby primary school, and were caused by faulty equipment. The situation was resolved quickly through negotiation with managers at the plant.

3.5.3 Non-consented/Permitted Activities

3.5.3.1 Wharfe’s Quarry

Wharfe’s Quarry is operated by John Ray Ltd, and is located on the edge of the Belmont Regional Park in Judgeford.

During 1999/2000, thirteen complaints were received about silt discharges from this quarry. These were received during and after wet weather events.

As a result of investigations by Regional Council staff, abatement notices were issued to John Ray Ltd. During rain, silt continued to be discharged from the quarry, contravening this abatement notice. When these were not complied with, two Infringement Notices were served on John Ray Ltd. These were paid immediately.

Porirua City Council are currently hearing land use consent application for the quarry. A prosecution case has been brought to the Environment Court against the quarry by individual parties and a decision is expected shortly.

3.5.3.2 Whitby Coastal Estates Ltd

Whitby Coastal Estates Ltd is responsible for a large subdivision on Navigation Drive in Whitby. On two occasions in May 2000 discharges of silt from the silt retention ponds on the site were brought to the attention of the Wellington Regional Council. Figure 18 shows this site.

Samples of the discharge from silt retention ponds on the site were taken by investigating officers, which revealed levels of suspended sediment in the discharge of 33,000g/m³. This is well in excess of the limit imposed by Rule 1 of the Regional Freshwater Plan of 50 g/m³.

In response to complaints works on the subdivision were ceased in June 2000, and a number of silt control mechanisms were employed to try and reduce the levels of silt in the discharge. At the end of June 2000 the company was still investigating effective means of silt control, with work continuing into the 2000/2001 year.

Work is not anticipated to recommence on the site until 30 October 2000.



Figure 18: Subdivision works at Whitby Coastal Estates lead to silt discharge, 12 May 2000.

3.5.4 Affected Resources in Porirua City

Water was the most commonly affected resource in Porirua City, with the predominant pressure from silt discharges. Thirty five complaints (34%) related to high levels of silt in waterways in the area. The Pauatahanui Stream affected on 26 occasions and the Pauatahanui Inlet affected on a further 16 occasions.

Silt was the contaminant of most concern in Porirua. This is significant given the concerns in Porirua about sedimentation of the Pauatahanui Inlet, and while it may reflect a heightened community awareness of this problem in the area, the number of confirmed incidents indicates that there is a serious issue about illegal silt discharges to this environment. On a number of occasions officers undertaking surveillance in the area observed other unauthorised silt discharges which were followed up immediately with the people responsible.

Of the 35 silt related complaints, 29 were associated with the Pauatahanui Inlet. Also significant is the magnitude of some of the silt related incidents, particularly the discharge from the Whitby Coastal Estates Ltd Subdivision.

In response to these concerns, Porirua City Council and Wellington Regional Council has committed time and resources to working more closely with building site developers, and also to tighten controls on their subdivision consents.

In contrast to other areas in the Wellington Region, complaints about air were uncommon in Porirua. It is thought that the reason for this is that the nature of industries and the topography in this area does not lead to significant numbers of odour emissions. The Porirua City Council also chooses to deal with some of the odour incidents in the area under provisions in the Health Act.

The higher proportion of land incidents in Porirua compared to some other areas reflects the nature of the silt discharge from Wharfes' Quarry. This is technically a discharge to land in a manner that can enter water, and therefore enters the "land" category, although it affects freshwater and coastal water.

Figure 19 shows the types of complaints received in the Porirua area.

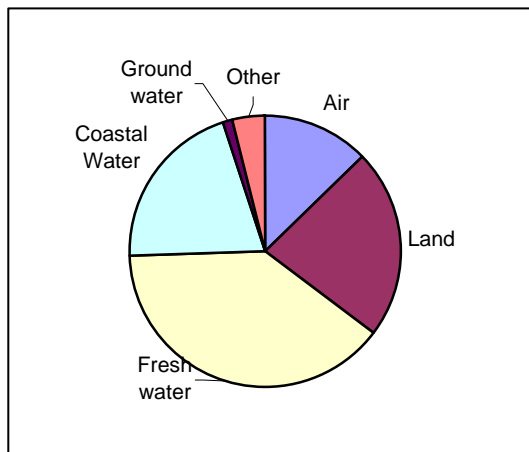


Figure 19: Complaints by affected resource in Porirua City, 1999/2000

3.6 Upper Hutt City

Complaints about odour accounted for almost half of the complaints received from the Upper Hutt City area (Figure 20). The main cause of these complaints was the Schering Plough Animal Health facility on Whakatiki Street.

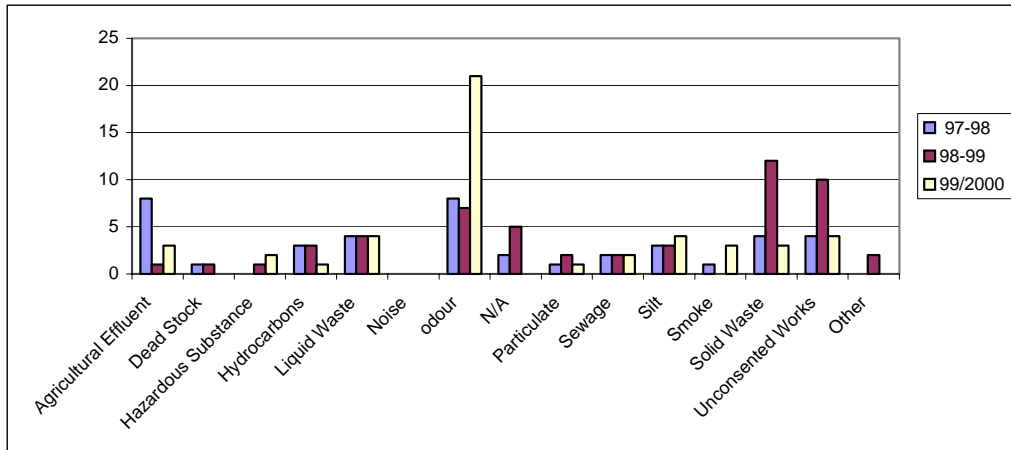


Figure 20: Complaints from Upper Hutt City

3.6.1 Sources of Complaints

Industrial and commercial premises were the source of 64% of the complaints dealt with in the Upper Hutt Area (Figure 21).

Agricultural and domestic sources also accounted for a significant proportion of the complaints, particularly as nearly all industrial/commercial incidents were caused by odour emissions from one company. (Schering Plough Animal Health Ltd).

Complaints about agricultural activities mainly involved unconsented earthworks in the bed of streams and rivers and illegal discharges of agricultural effluent. Domestic complaints related to smoke problems and discharges of contaminants (predominantly paint and hydrocarbon products) into the stormwater system, and the inappropriate disposal of old vehicles.

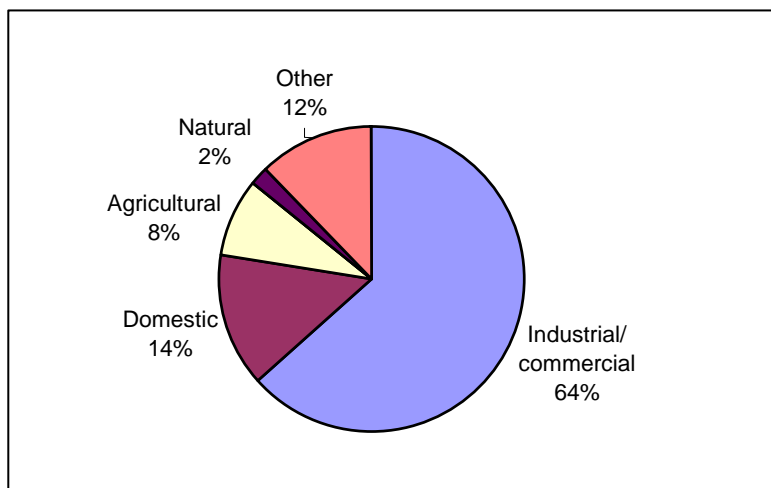


Figure 21: Sources of complaints in Upper Hutt City, 1999/2000.

3.6.2 Consented Activities

3.6.2.1 Schering Plough Animal Health

Schering-Plough Animal Health operates an animal vaccine manufacturing plant in Whakatiki Street, Upper Hutt. The company was granted a discharge to air permit in February 1997 for discharges to air associated with the vaccine production process.

During 1999/2000 the Regional Council received 20 complaints relating to the discharge of odour from the plant. The Council confirmed the discharges of odour to be in breach of the company's resource consent on one occasion.

Since notifying Schering-Plough of the confirmed incident, the company has agreed to install further pollution control equipment. The company also intends to modify the plant by passing air from other parts of the plant through the existing pollution control equipment.

3.6.2.2 Gabites Piggery

Gabites Piggery is in the Mangaroa Valley, Te Marua. The piggery holds 4000 pigs, and has recently upgraded its land based effluent disposal system to include a series of wetlands. The piggery does not discharge effluent to water as a matter of course, however on two occasions during 1999/2000 discharges of effluent reached Blakeys Stream, and subsequently the Mangaroa River. One incident occurred as a result of a broken pipe between the piggery and the treatment system causing untreated effluent to discharge directly into the stream. The other was after heavy rain that flooded the wetland system resulting in partially treated effluent being discharged. A third complaint was unsubstantiated.

The Council has been working closely with the owner of the piggery to ensure such discharges are not repeated.

3.6.3 Non-Consented/Permitted Activities

3.6.3.1 New Zealand Bark Resources

New Zealand Bark Resources Ltd is located on Jupiter Grove, Upper Hutt. This company provides bark to clients in a number of different forms, including a very fine powder like form for potting mix.

The large piles of this powdery bark are stored outdoors, and during windy conditions there have been complaints from residential properties neighbouring the site about the deposition of fine bark on their properties.

Monitoring of the rate of deposition of bark around the area was carried out by the Council during 1999/2000. Preliminary assessment of these results indicates that deposition rates on nearby property are higher than is acceptable. It is anticipated action to remedy this problem will be required during the 2000/2001 year.

3.6.3.2 Derelict Cars

Leaking fuel and oils from derelict vehicles can pollute water and soil. When dumped in rivers and on river banks, derelict vehicles also present a flood danger and pose a safety risk to recreational users of rivers, e.g., swimmers and kayakers.

Dumping derelict cars over the bank into the Akatarawa River at Clouston Park in Upper Hutt is an on-going problem. In May 2000 the Council arranged for seven derelict cars to be removed from the Akatarawa River by a local four-wheel drive club. This resulted in some positive publicity for the Council, which hopefully raised community awareness of this problem.

Cars are also regularly dumped in other areas in Upper Hutt, including along the banks of the Hutt River. Most of these vehicles are removed by the Wellington Regional Council Flood Protection Department.

3.6.3.3 Discharges to Stormwater

Discharges to stormwater did not appear to be a significant issue in the Upper Hutt area. It is not certain whether this is because the Upper Hutt City Council chooses to deal with more of these issues themselves, whether there are simply fewer incidents, or whether there are incidents that the Incidents Response Service does not hear about.

3.6.4 Affected Resources in Upper Hutt City

Figure 22 shows that air was the most commonly affected resource in Upper Hutt, reflecting on-going complaints about Schering-Plough Animal Health on Whakatiki Street.

A significant proportion of complaints related to freshwater. Three of the complaints related to freshwater involved alleged unauthorised discharges from Gabites piggery in Te Marua. These discharges affect Blakeys Stream, and the Maymorn Stream. No significant adverse effects were noted from any of these discharges.

There were also a number of incidents in the Upper Hutt area about unconsented works in the beds of rivers and streams. The water bodies affected in these instances were the Moonshine Stream, Mawhaihakona Stream and Mangaroa River.

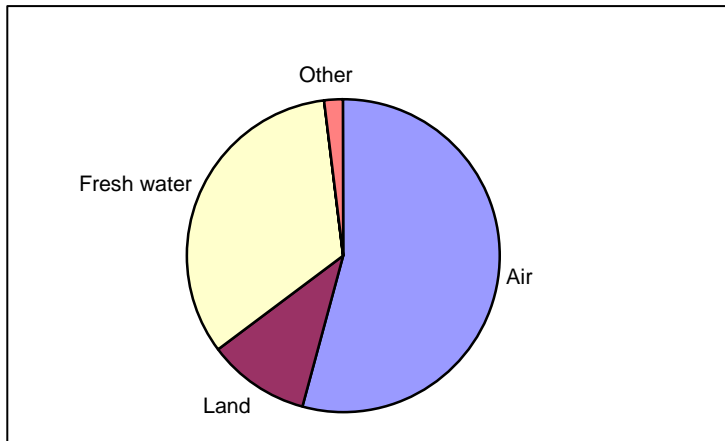


Figure 22: Complaints by affected resource in Upper Hutt City, 1999/2000.



Figure 23: An eel overcome by silt, 9 March 2000.

3.7 Kapiti Coast District

Odour was the most frequent concern in Kapiti Coast District during 1999/2000, although the number of incidents involving odour was significantly lower than in previous years. This is due to fewer complaints being received about the Paraparaumu Waste Water Treatment Plant during 1999/2000. Figure 24 shows that unconsented works were also a significant cause for complaint on the Kapiti Coast, highlighting the predominantly rural nature of this area district.

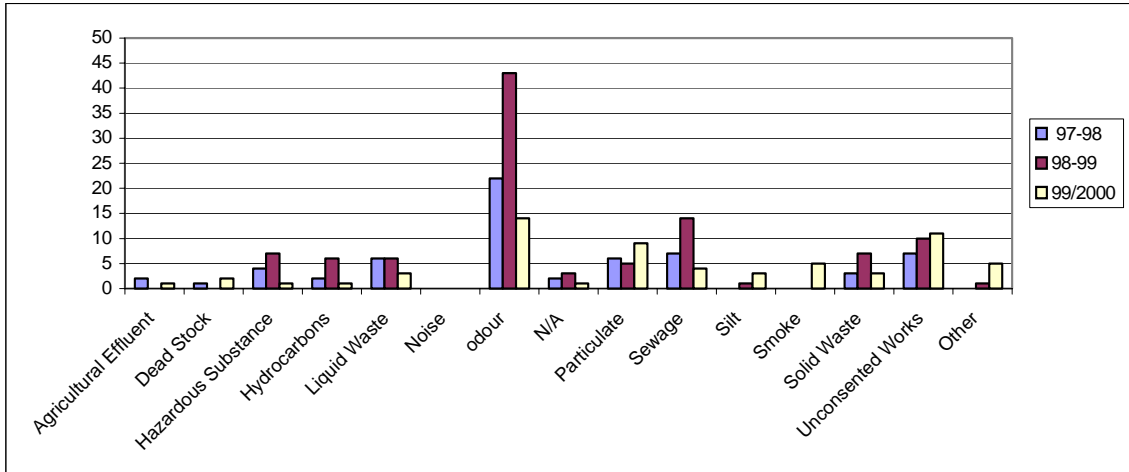


Figure 24: Complaints from Kapiti Coast District

3.7.1 Sources of Complaints

Industrial and commercial premises were the source of 48% of incidents (Figure 25) and include odour discharges from industries and sewage discharges. Pressures from domestic sources include unauthorised water takes for domestic use, and unconsented works (e.g. construction of culverts) on domestic lifestyle blocks, which are becoming popular in this part of the Region.

The pressure of water takes on groundwater resources in this area will be investigated by Resource Investigations over the 2000/2001 year.

Incidents caused by “natural” events included a number of incidents involving algal blooms in various lakes in the area. The algal blooms concerned were caused by natural temperature and nutrient changes in the lakes.

Complaints about spraydrift were the most common cause of complaint from horticultural sources. None of the three complaints investigated were substantiated. In 1999/2000 the Council distributed a pamphlet about spraydrift to all rural addresses in Otaki.

Complaints from agricultural sources were mainly related to unconsented works in rivers and streams and the inappropriate disposal of agricultural effluent or dead stock.

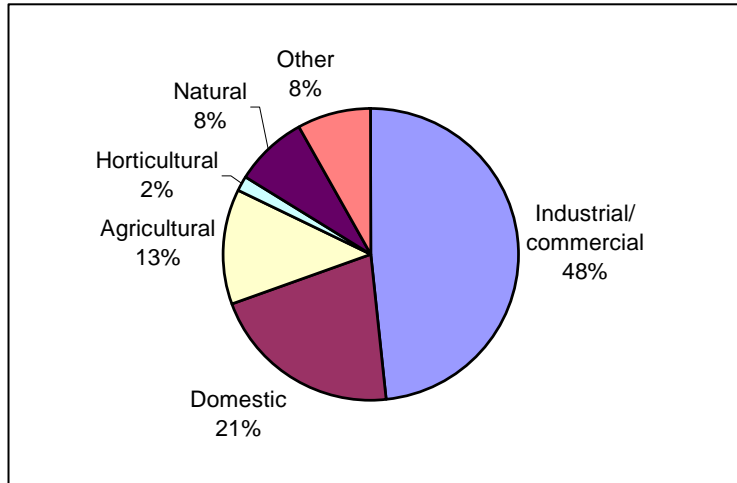


Figure 25: Sources of complaints in the Kapiti Coast District, 1999/2000.

3.7.2 Consented Activities

3.7.2.1 Paraparaumu WWTP

The Wellington Regional Council received only six complaints about odour associated with the Paraparaumu Waste Water Treatment Plant during 1999/2000. This compared to 34 complaints during 1998/99. The reason for the decrease in complaints is probably because the permit holder stopped using sludge lagoons at PWTP and instead opted to transport fresh sludge to its Otaki Wastewater Treatment Plant for stabilisation.

Kapiti Coast District Council also covered inlet channels to the plant during 1999/2000 and this is also thought to have led to the decrease in complaints.

3.7.3 Non-consented /Permitted activities

3.7.3.1 Sang Sue Ltd Market Garden

One of the issues that was addressed in the Kapiti area during 1999/2000 was the emission of odour from Sang Sue Ltd, a Market Garden on State Highway One just north of Paekakariki. An abatement notice was issued requiring that the discharge of offensive or objectionable odour be ceased. This notice was appealed, and subsequently withdrawn. A second abatement notice issued on 25 May 2000. The second notice was also appealed, and this case was resolved through mediation at the Environment Court.

Sang Sue Ltd committed to the following operational procedures to reduce odour emissions:

- To stockpile manure at least 200m away from the state highway
- All areas to which manure is applied are to be disked or rotary hoed within 4 hours of application
- That prior to effluent application, complainants will be advised

- That they will endeavour to store and apply manure in accordance with best practice guidelines.

It is anticipated that this will reduce any further odour complaints from this site.

3.7.3.2 Corporate Furniture Ltd

The deposition of sawdust from Corporate Furniture Ltd, a furniture manufacturing company, onto neighbouring premises in Paraparaumu was the cause of 3 complaints. On each occasion, Council staff confirmed the deposition of significant amounts of sawdust was observed on a neighbouring property.

An abatement notice was issued and no further complaints have been received since the deadline of this notice.

3.7.3.3 Borren Metal Forming Ltd

Borren Metal forming is a small foundry operation that manufactures fittings from a ceramic casting process.

Odour emissions from the foundry in Paraparaumu were investigated and found to be objectionable beyond the boundary of the premises. This problem was resolved through negotiation with the site owner, who as a result increased the height of the stack on the foundry to comply with the Regional Air Quality Management Plan, and addressed a number of fugitive emissions from around the site.

3.7.3.4 Sewage Discharge Notifications

Sewage overflows occurred on four occasions during the year. None of these resulted in significant adverse environmental effects and the Wellington Regional Council was notified promptly about the discharge by the Kapiti Coast District Council as is required by resource consent conditions.

3.7.4 Affected Resources in the Kapiti Coast District

Figure 26 shows that air was the most commonly affected resource in the Kapiti Coast area during 1999/2000.

Pressure on freshwater in the Kapiti area was also significant, and came from a number of sources. Eleven complaints were received about unconsented works affected various water bodies in this area. The Waimeha, Pekapeka, Ngatoko, Mangapouri and Mangaone Streams were all affected by such incidents. Negotiations are still continuing in two cases of unconsented works, involving the Mangaone and Mangapouri Streams. The remainder either complied with permitted activity conditions under the Regional Freshwater Plan or have been resolved through negotiation with the parties concerned.

Complaints about land were predominantly associated with unconsented works.

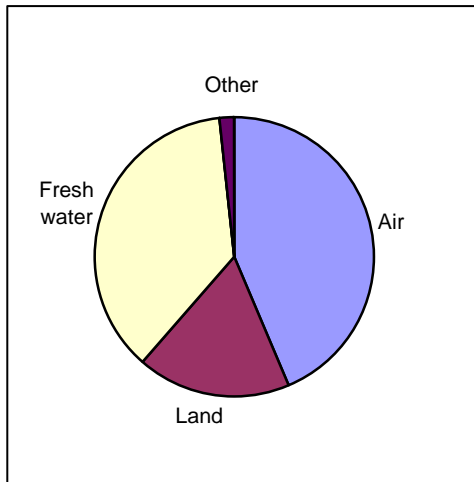


Figure 26: Complaints by affected resource in the Kapiti Coast District, 1999/2000.



Figure 27: Unknown substance in a Paraparaumu Lagoon, 7 January 2000.

3.8 Masterton District

In general there were significantly more complaints received from the Masterton district, with 55% more complaints received in 1999/2000 (69 complaints) than in 1998/1999 (47 complaints).

Complaints about air quality were the most common, accounting for 45% of complaints. Odour, particulate and smoke were the contaminants most commonly of concern (See Figure 28).

Complaints about the inappropriate disposal or discharge of solid waste accounted for 10% of all complaints.

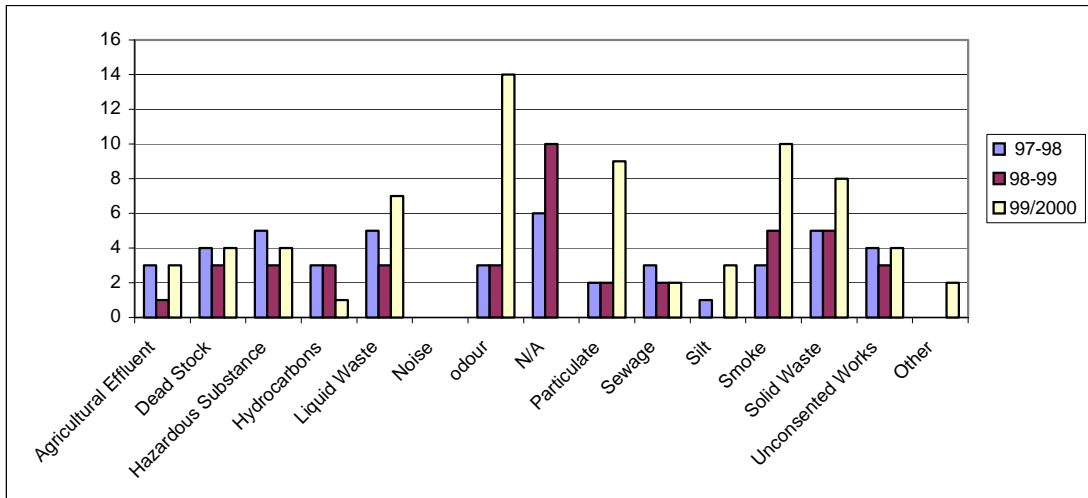


Figure 28: Complaints from Masterton District

3.8.1 Sources of Complaints

Figure 29 shows the sources of complaints occurring in Masterton. Incidents in the Masterton District were mainly from industrial/commercial sources. As is expected in a largely rural area, the proportion of complaints from agricultural sources is higher.

Few premises caused more than one complaint in Masterton. Those that did were a printing press, a sawmill, a spray painting operation, a private sewage system, and a landfill.

Agricultural complaints were mostly about inappropriate disposal of dead stock, or inadequate management of solid waste on rural properties. Wellington Regional Council staff were pleased with the low level of complaints about effluent management in the Masterton District.

Discharges from the stormwater system caused two incidents.

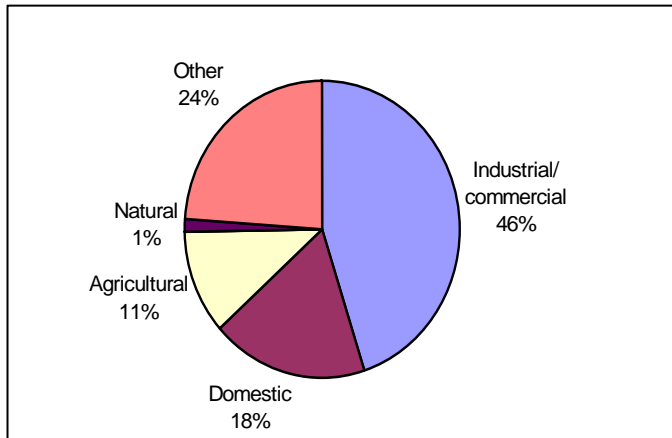


Figure 29: Sources of incidents in Masterton District, 1999/2000.

3.8.2 Affected Resources in the Masterton District

Air was the most commonly affected resource in Masterton (Figure 31), reflecting a number of incidents involving spraypainters and a sawmill in the area. Freshwater was also widely affected, and this reflects inappropriate disposal of dead stock and discharges from a private sewage disposal system.

One incident in this area involved groundwater.

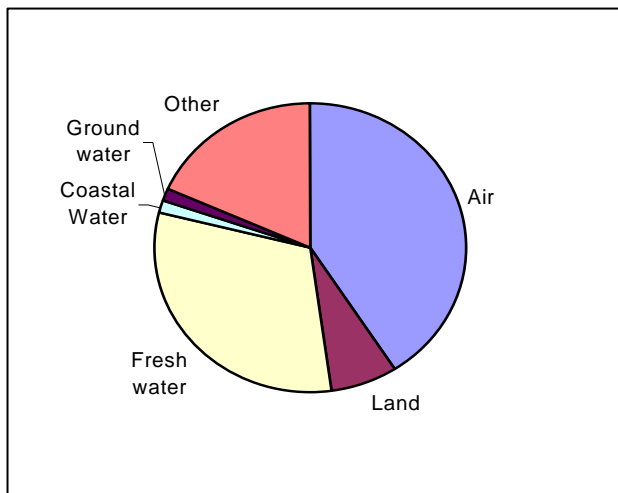


Figure 30: Complaints by affected resource in the Masterton District, 1999/2000.

3.9 Carterton District

Odour was the single largest cause of complaints in the Carterton District, with agricultural effluent the second most frequent cause of complaint.

Solid waste and unconsented works were the cause of five complaints each (Figure 31). This reflects the agricultural nature of activities occurring in this part of the Region.

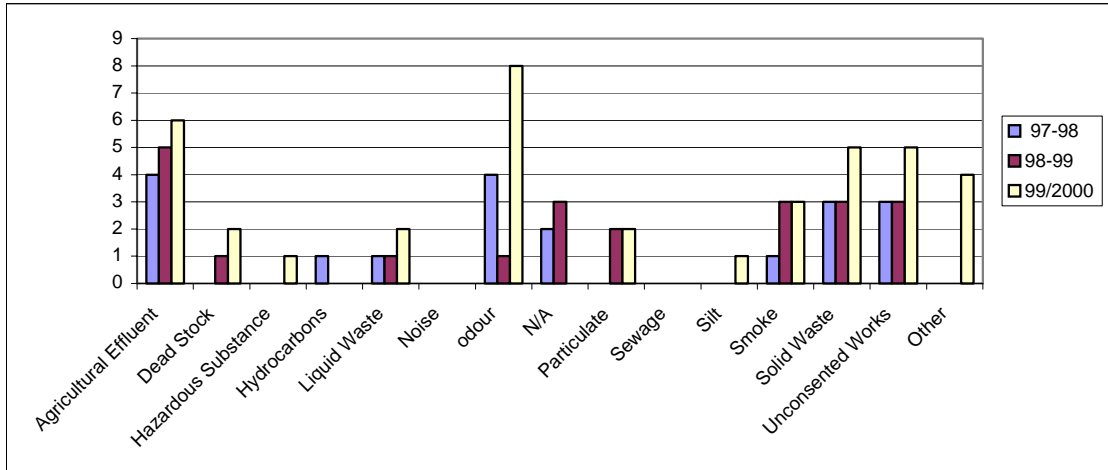


Figure 31: Complaints from the Carterton District

3.9.1 Sources of Complaints

Industrial/commercial and agricultural sources accounted for 74% of all complaints received from Carterton (See Figure 32).

Two premises caused multiple odour complaints in Carterton, one a piggery and the other a pet food manufacturer. All agricultural effluent complaints were single complaints, and in all cases the effluent problem was resolved after Council staff became involved.

A high proportion of complaints received related to unconsented works. The majority of these complaints related to illegal gravel extraction by commercial operators. This is an on-going problem throughout the Wairarapa. Staff are currently considering how best to deal with this issue.

Complaints from “other” sources were also common, and usually this was because the incident could not be confirmed or traced.

No complaints with domestic or natural sources were reported in the Carterton district during 1999/2000.

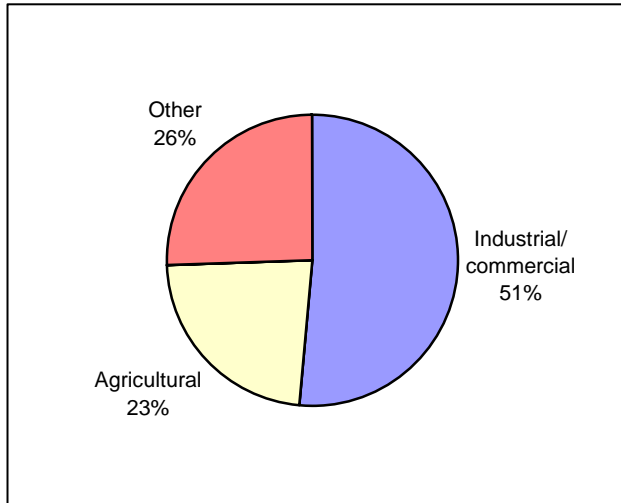


Figure 32: Sources of complaints in the Carterton District, 1999/2000.

3.9.2 Affected Resources in the Carterton District

Air and freshwater were the most commonly affected resources in Carterton. The major contributors were multiple odour incidents from two premises and a number of agricultural discharges to water.

Most of the complaints about unconsented works or solid waste affected freshwater resources.

Figure 33 shows the resources affected in the Carterton area.

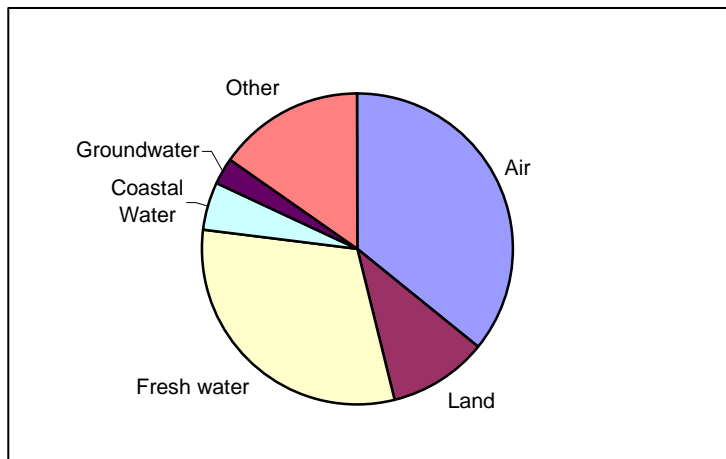


Figure 33: Complaints by affected resources in the Carterton District, 1999/2000

3.10 South Wairarapa District

Solid waste issues caused the largest number of complaints in South Wairarapa (Figure 34), with a significant issue in the district during the year was the abandoning of cars in river beds. In most cases these were removed by the Regional Council.

Inappropriate disposal of dead stock was also a significant cause of public complaint. In one case, a farmer dragged four dead cattle into the river beside a public bridge. In that case an abatement notice was issued, and two infringement notices were issued. The abatement notice was appealed and subsequently withdrawn, and one of the infringement notices was withdrawn. Stock were eventually removed.

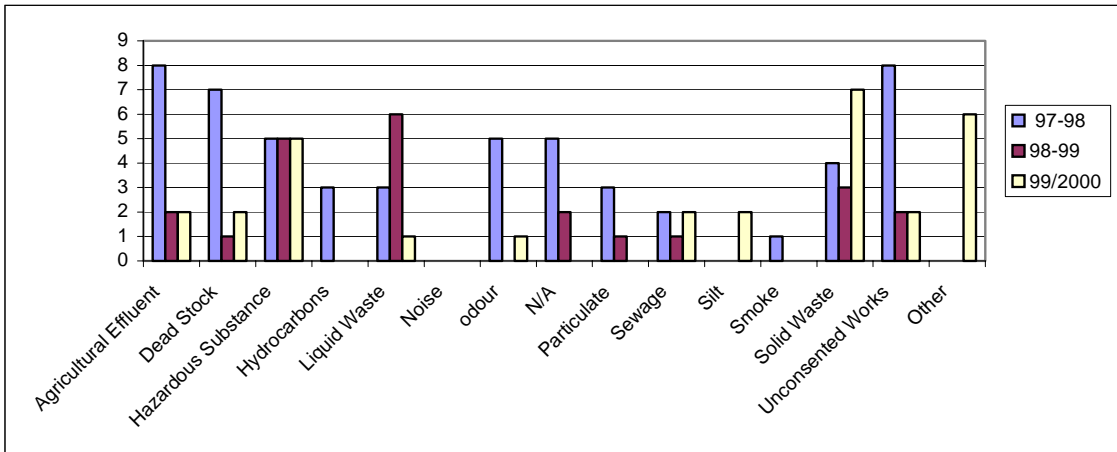


Figure 34: Complaints from South Wairarapa



Figure 35: A dead cow in a Wairarapa Stream causes water pollution.

3.10.1 Sources of Complaints in South Wairarapa

Complaints about agricultural and industrial commercial sources were the most common in the South Wairarapa District (Figure 36). No premises in South Wairarapa caused multiple complaints, and the majority of complaints were satisfactorily resolved after a single visit from the Council.

Domestic sources accounted for 15% of complaints, and are largely attributable to the high number of instances where derelict vehicles were dumped in the beds of rivers and streams.

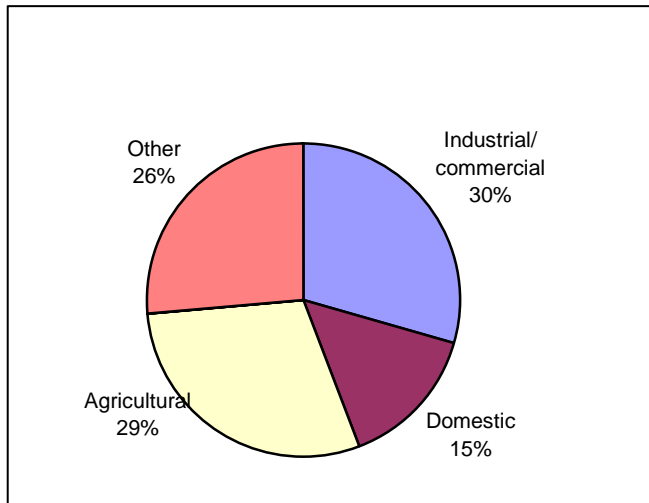


Figure 36: Sources of complaints in South Wairarapa, 1999/2000.

3.10.2 Affected Resources in South Wairarapa

Freshwater was the most commonly affected resource in the South Wairarapa, predominantly due to the number of discharges from agricultural activities, and the dumping of cars in river beds. Unconsented works in the beds of rivers or streams, and unauthorised gravel extraction were the cause of three complaints, however in all cases these activities were found to be compliant with Rules in Regional Plan or consent conditions.

There were no complaints about smoke or particulate, and only 2 complaints about odour in the South Wairarapa. This makes air one of the least commonly affected resources in this part of the Region.

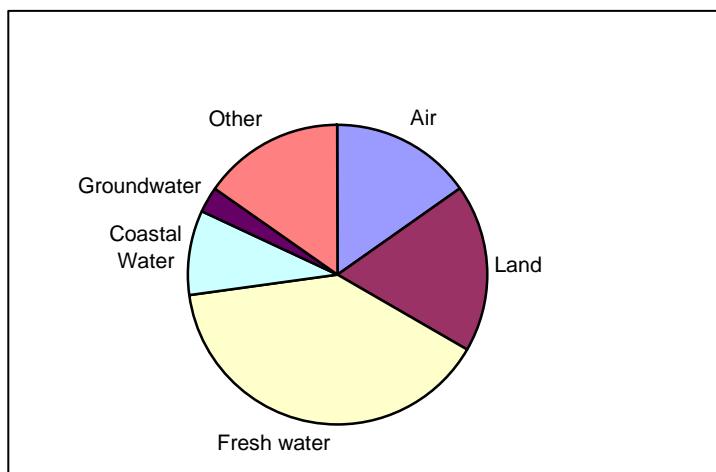


Figure 37: Complaints by affected resource in South Wairarapa, 1999/2000.

4. Air

A total of 685 complaints (58% of all complaints) about air quality were received by the Council during 1999/2000.

Figure 38 is a map showing the location and distribution of these complaints throughout the Western Wellington Region. Wellington City, Seaview/Gracefield, and the industrial areas on Whakatiki Street in Upper Hutt and Sheffield Street in Paraparaumu are clearly the areas where air incidents occurred most often.

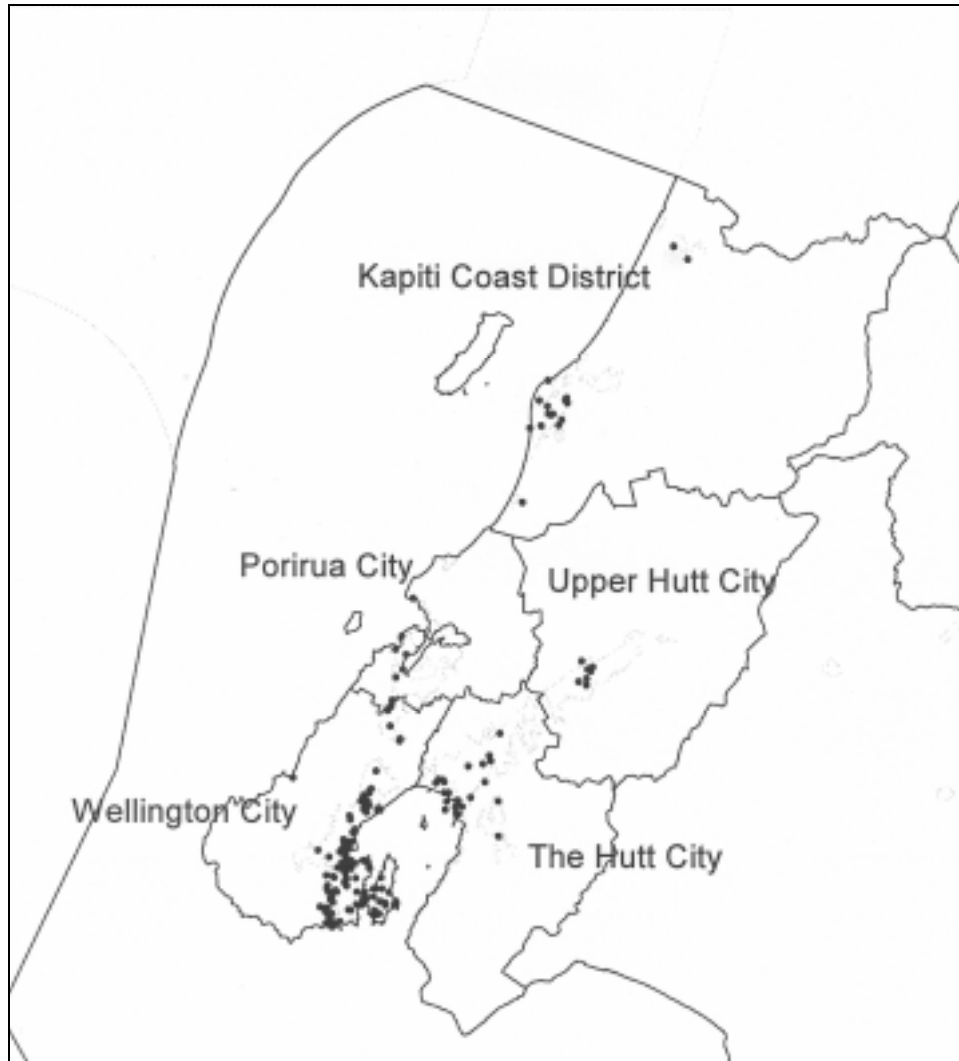


Figure 38: Distribution of complaints in the Western Wellington Region.

Table 1 below shows air complaints as a percentage of total complaints for the last three years. This indicates that air complaints have been steadily increasing, and make up over half of all complaints responded to in the Region.

Table 1: Air incidents as a percentage of total incidents

Year	1997/1998	1998/1999	1999/2000
Total number of incidents	827	1145	1176
Air incidents as % of all incidents	45%	51%	58%

Initial analysis suggests that air is the resource under most pressure in the Wellington Region, with the predominant threat being odour. To qualify this, it is important to bear in mind a number of points when assessing complaints about air incidents.

- Air incidents frequently result in multiple complaints about one incident because they can affect a large number of people at one time.
- Odour and smoke regularly affect people in their homes and places of work, and can impact upon the enjoyment they have being on their own property. People who are personally affected may be more likely to call the Council than if they observe a polluted river, which does not affect them personally.
- Odour incidents often originate from one source and prove to be on-going, high profile problems, allowing people to be educated about what the problem is, and who to ring if they are affected. This increased awareness leads to increased numbers of complaints.
- In comparison, water and land incidents seldom affect people in such a widespread, on-going manner, with their impacts being mainly on stream ecology and wildlife than directly on people. Many incidents involving land or water are usually one-off and not identifiable as being from one particular source every time.
- Air incidents are regularly related to transient odours that are often not of an intensity or frequency to be deemed offensive or objectionable.

These points highlight that while odour is most commonly complained about, it seldom affects ecosystem or human health. Being predominantly odour complaints, effects seldom relate to long term sustainability issues which is often the case with discharges to other areas of the environment, e.g. silt into waterways.

4.1 Types of Air Complaints

Figure 39 summarises the nature of air complaints received during 1999/2000, and compares them to 1998/1999. The same trend was reflected in 1999/2000 as in 1998/1999, with odour the most common cause of complaint.

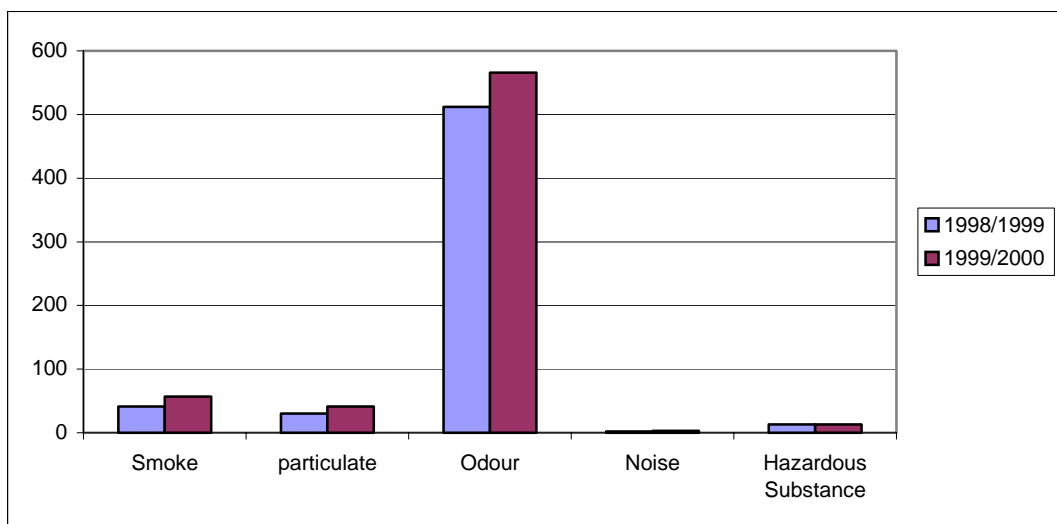


Figure 39: Types of air incidents

4.1.1 Odour

Odour is the generic term for the effect that a contaminant or group of contaminants has on the olfactory nerves, or our sense of smell. Odour occurs when gases are released into the environment.

4.1.1.1 Environmental Effects of Odour

Most odours have no adverse health effects, however some odorous gases can be toxic so every odour incident is responded to promptly and taken seriously.

Odours impact upon the quality of the air environment, and though they seldom disrupt ecological systems, people can experience a variety of reactions to odour. Some odours of course are pleasant, but objectionable or offensive odour (such as sewage for example) can impact on peoples well-being or cause stress, irritability, loss of appetite, sleep disturbance and nausea.

Odour can be an indication that there is something more serious wrong, for example a blocked sewer line, inappropriately stored waste, or a leak in a gas main or tank.

4.1.1.2 How the Wellington Regional Council Assesses Odour

There is no effective scientific instrument that can measure odour levels other than the human nose. For this reason, a set procedure exists for officers of the Council assessing odour. Five factors are taken into account, called the FIDOL factors, which are outlined below.

Frequency	How many times we detect the odour during the investigation
Intensity	Strength of the odour, usually rated on a scale of 0-5 (0 = no odour, 5 = overpowering and intolerable odour.)
Duration	The total length of time the odour is detected during the investigation.
Offensiveness	How unpleasant the odour is
Location	Where we detect the odour

All of the above factors are assessed together to determine whether the odour is offensive or objectionable.

If an offensive or objectionable odour is detected, the discharge is either breaching a resource consent, or a Rule in the Regional Air Quality Management Plan. It is then necessary to trace to source of the odour so the responsible parties can be notified and a remedy to the problem sought.

4.1.1.3 Odour in the Wellington Region

Forty nine percent of the complaints received related to odour. Figure 40 shows the annual cumulative number of odour complaints received in the Wellington Region for the last 3 years. This graph shows a clear spike in March/April in both 1998/1999 and 1999/2000, which coincides with increased complaints from residents

around Taylor Preston and the Southern Landfill. Cool, calm weather conditions at this time of the year generally lead to increased odour incidents.

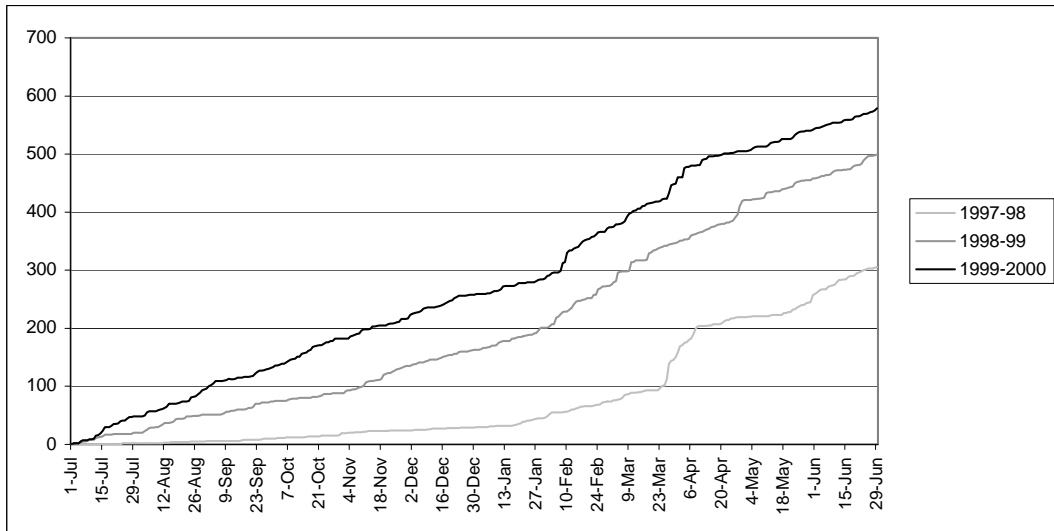


Figure 40: Cumulative totals of odour complaints for the last 3 years.

Of the 576 odour complaints received, the source of the odour was confirmed in 162 cases, or 28% of the time. In 14%, or half of the cases where an odour was present during the investigation, odour was confirmed as offensive or objectionable.

4.1.1.4 Location of Odour Complaints

Figure 41 shows the distribution of odour complaints in the Western Wellington Region. Happy Valley, Rangoon Heights, Gracefield, Whakatiki Street Upper Hutt and Sheffield Street in Paraparaumu were the areas where complaints were most frequent.



Figure 41: Location of odour complaints in the Western Wellington Region.

4.1.2 Particulate

4.1.2.1 Environmental Effects of Particulate Matter

“Particulate matter” consists of particles that are suspended in the air, or blown in to the air and deposit out onto property.

Very fine particles (called PM10, which refers to particles that are less than 10 micrometers across) can cause;

- Adverse human health effects
- Winter time “smog” incidents
- Atmospheric visibility
- Dust nuisance

Sources of particulate (especially PM10) include:

- Domestic fires
- Industrial combustion processes
- Motor vehicles

- Quarrying activities
- Natural sources such as sea salt particles.

4.1.2.2 **Particulate Incidents**

The complaints responded to by the Incident Response Service are unlikely to be specifically related to “PM10” emissions, but more likely to relate to general, or “total” emissions of particulate, smoke or dust. It is predominantly the larger particles that deposit on property, or the annoyance of smoke which attracts complaints from members of the public.

4.1.3 **Smoke**

The Incident Response service received a number of incidents involving domestic smoke in the Region. The majority of these were passed to the relevant Territorial Authority for action. Eleven complaints were reported to the Council that involved domestic smoke, either from their household fire or from burning occurring on residential properties.

Industrial emissions of smoke accounted for 35 complaints, 17 of these were from the Medical Waste Wellington Ltd incinerator in Miramar. Emissions from this facility have been tested and found to be high in dioxins. This is an issue currently being dealt with by the Consents Management Department.

Emissions of smoke from other industrial/commercial premises were the cause of 18 complaints. Discharges from chimneys/stacks on premises were the concern in half of these cases. In all cases it was checked that the stack complied with the recommendations in the Plan. These recommendations state that the stack/vent discharge should terminate at least 3 metres above the level of any adjacent area to where there is general access, e.g. roof areas or adjacent openable windows. If adjustment of the stack height did not resolve the problem, alterations in processing or the installation of emission reducing technology such as scrubbers was usually required to mitigate the smoke discharge.

Other smoke complaints were associated with the burning of waste/materials in yards or industrial premises. Both processes involve the discharge of PM10, and all confirmed incidents were in breach of the Regional Air Quality Management Plan. In most cases the materials being burnt were hydrocarbons or plastics, both of which emit gasses that are not permitted under the Plan.

Smoke from burning associated with land clearance prompted 7 complaints over the year, all of which were substantiated. These were passed to relevant Territorial Authorities for action. The burning of vegetation is permitted under the Rules in the Regional Air Quality Management Plan providing the person responsible takes all steps to minimise the effects of the smoke on visibility and neighbouring properties.

Many smoke discharges are accompanied by unacceptable levels of odour, and can affect visibility/air clarity.



Figure 42: Smoke from a burnoff in Upper Hutt affects air quality, 1999.

4.1.4 Dust/Other Particulate Sources

Sixteen complaints about sawdust were received by the Wellington Regional Council during 1999/2000. In the Wairarapa these were related to discharges from the sawmills themselves, whereas in the Western Wellington Region the emissions were from wood processing companies making products like furniture.

A sawmill in the Wairarapa was the source of a number of these complaints. Sawdust from furniture manufacture is of concern because some of the chemicals used to treat the timber before processing are toxic.

4.1.5 Other Air Contaminants

Motor vehicles, industrial combustion processes and domestic fires can all contribute to oxides of Nitrogen (NO_x) and Carbon monoxide (CO) emissions. Other combustion processes can lead to the emission of Volatile Organic Compounds, or VOC's. Of these three sources, industrial combustion processes are the only aspect which would concern the 24-Hour incident response service.

It was difficult to establish the number of incidents that related to emissions of gases from industrial sources during 1999/2000, because many of these were odour complaints that may or may not be related to gas emissions.

Nitrogen dioxide levels have been monitored at various points around Wellington. These have revealed that increased fuel consumption for home heating over winter results in higher emissions of NO₂ in some areas. Again, the correlation between NO_x and pollution incidents is difficult to establish.

5. Fresh Water

5.1 Freshwater Quality in the Wellington Region

The Council's Annual Freshwater Quality Report 1998/99 (WRC/RINV-G-99/00) identifies that urban streams in Wellington are subject to a number of pollutants not normally encountered in rural or forested catchments. Surveys showed that the macroinvertebrate communities in Wellington City streams indicated generally poor water quality, despite physiochemical monitoring indicating good water quality.

The results indicated that there are likely to be pollutants present that were not being picked up in the physiochemical monitoring, such as heavy metals and other compounds which affect stream flora and fauna. These contaminants usually enter waterways via the stormwater system.

The Annual Freshwater Quality Report 1999 identified eight streams/ivers in the Region where the MCI (Macroinvertebrate Index) indicated possible severe pollution. These were;

- Ngauranga Stream
- Waiwhetu Stream
- Porirua Stream
- Pauatahanui Stream
- Horokiri Stream
- Kaiwharawhara Stream
- Owhiro Stream
- Wainuiomata River
- Mangaroa River

In a number of cases, stormwater discharges were identified as the most likely cause of water quality degradation.

Figure 43 shows the distribution of freshwater complaints received throughout the Western Wellington Region. This map shows that freshwater incidents are quite widely distributed. This may indicate that there is a general public awareness about water quality throughout the entire Western Wellington Region.

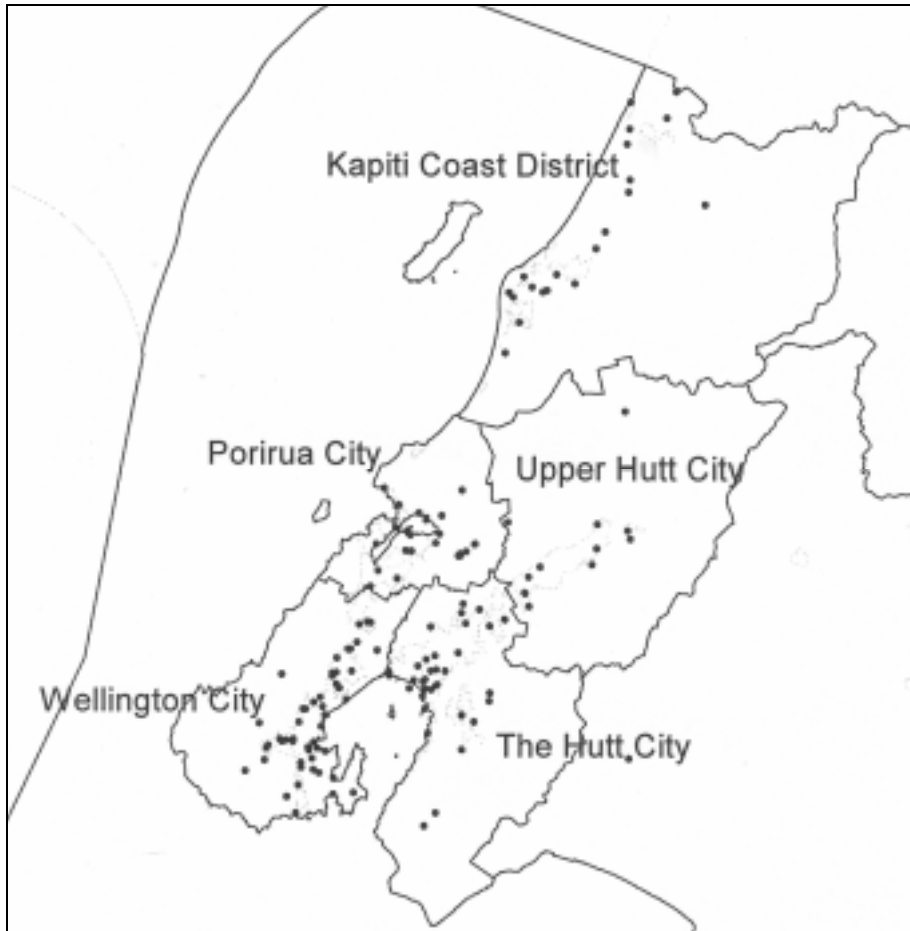


Figure 43: Locations of Freshwater Incidents in the Western Wellington Region, 1999/2000.

The **Ngauranga Stream** was identified as the most polluted stream in the Wellington City area, and had seen no improvement in water quality. Five incidents were reported in the Ngauranga Stream over 1999/2000. These related to silt or sewage discharges. There was also a report of very high pH levels in the stream, however the source of this was unable to be confirmed.

The **Waiwhetu Stream** was identified as the most contaminated stream in the Hutt City Area, and in the Region as a whole.

In 1998/1999 (the most recent year reported), there were nine incidents in this stream, five of which were related to sewage discharges. In 1997/1998 sewage discharges also accounted for five incidents, while a further four were associated with discharges of contaminants from the stormwater system.

The Regional Freshwater Plan identifies this stream as a waterbody needing enhancement, and incidents reported which are associated with this stream indicate that this classification is well justified. Unfortunately water quality in the stream does not appear to be improving yet.

Six incidents occurred in the **Porirua Stream**, all of which were related to disturbance of the stream bed or banks.

5.2 Types of Freshwater Incidents

During 1999/2000 a number of re-occurring freshwater issues were highlighted. Many of these issues were also highlighted in the 1998/1999 Annual Incident Report.

Figure 44 shows that silt, liquid waste, sewage and unconsented works were the most common causes of complaints in the Region over the 1999/2000 year. This is similar to last year, however there were significantly more silt complaints received over the year in review. The reason for this is the large number of complaints received about Wharfedes Quarry and subdivision activities in the Whitby area.

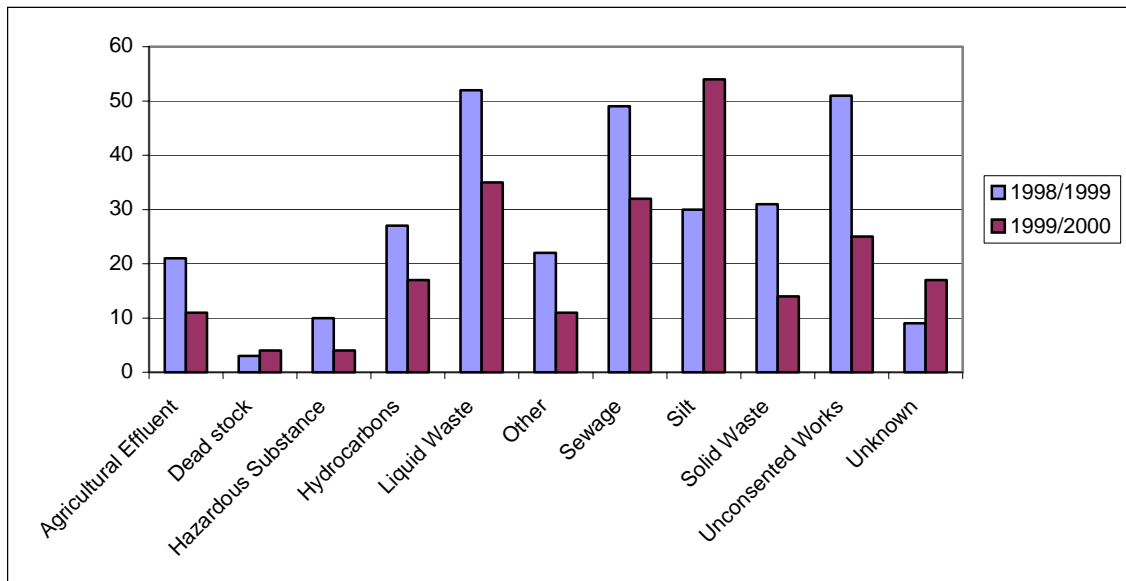


Figure 44: Types of incidents affecting freshwater resources in the Wellington Region.

5.2.1 Unconsented Works

Unconsented works accounted for significant numbers of complaints affecting freshwater quality in the Region. While they are not identified in the Freshwater Quality Report, the impacts on streams and rivers can be severe and long term.

5.2.1.1 Environmental Effects of Unconsented Works

Some works require resource consents because their potential adverse environmental impacts can be significant.

Rules 22-51 in the Regional Freshwater Plan control works undertaken in the beds of lakes, rivers and streams.

The unconsented works dealt with by the incident response service over the 1999/2000 year included:

- Channelisation of streams/rivers, which increases flow velocity and heightens the risk of erosion and flooding downstream.
- Crossblading and recontouring the river bed

- Construction of unauthorised structures such as bridges and stop banks on rivers, and unauthorised structures being constructed in the Coastal Marine Area
- Removal of gravel from river beds
- Removal of vegetation from stream/river banks in a manner that caused unacceptable levels of silt.
- Construction of flood control devices
- Damming and culverting of rivers and streams

5.2.2 Liquid Waste

Liquid waste accounted for 35 complaints received over the 1999/2000 year. Thirty of these were associated with discharges to the stormwater system. Ten involved paint or washings from painting activities, and a further ten involved discharges of washing water from industrial premises.

5.2.3 Stormwater Discharges

Stormwater is the water that runs off impervious roads, roofs, footpaths, pasture and industrial yards when it rains. In urban areas it is usually collected in pipes and discharges untreated to the nearest river, stream, lake or coastal area. Analysis of complaints received by the Council over the last three years has revealed that a lot of pollution is entering the stormwater system. This pollution can be accidental, or can occur through lack of awareness. Very few of the incidents attended were confirmed to be deliberate dumping of unauthorised substances down stormwater systems.

Stormwater discharges are identified as a key concern in the Wellington Regional Council Freshwater Quality Report, Coastal Water Quality Report and throughout this report.

5.2.3.1 Environmental Effects of Stormwater

Some of the environmental effects resulting from discharges to stormwater which were dealt with by the Incident Response Service over the 1999/2000 year included:

- fish kills from unknown toxic chemicals being discharged to streams,
- degraded streams and oiled wildlife caused by discharges of hydrocarbons through the stormwater system,
- faecal contamination of waterways from sewage discharges,
- the build up of silt in waterways due to run-off from construction sites and subdivisions and general degradation of water quality as a result of high levels of suspended sediment,
- Changes in water colour and clarity from miscellaneous discharges.

The number of incidents involving stormwater is of concern to the Council, because it suggests that there is a lack of awareness in the general community about stormwater, what it is and why it pollutes the environment.

The Council has printed two pamphlets about stormwater, one for households and one for industries. These are distributed in areas where problems with stormwater discharges are identified by incident response staff when responding to complaints.

In the future it is proposed to take a more proactive role and undertake site audits at targeted industrial sites to ensure there are no unauthorised discharges into stormwater systems.

In the Hutt City area eleven incidents occurred involving discharges from stormwater drains that were unable to be traced to a specific source. These predominantly occurred in the Seaview/Gracefield area, discharging to the Waiwhetu Stream, Hutt River, or Wellington Harbour. The Gracefield/Waiwhetu area is of particular concern and it is recommended that this area be targeted with education programmes and subsequent enforcement action.

Illegal discharges to stormwater can be of a serious magnitude, for example the discharge of diesel from the NZ Oil Services Ltd site in Seaview in October 1999 resulted in approximately 10,000 litres of diesel being discharged to the Waiwhetu Stream, Hutt River and subsequently Wellington Harbour.

Figure 45 shows the distribution of stormwater complaints received throughout the Western Wellington Region. This map shows that the complaints are mainly concentrated around the centre of Wellington, and the Seaview/Gracefield area in Lower Hutt.



Figure 45: Distribution of stormwater complaints in the Western Wellington Region, 1999/2000.

5.2.4 **Solid Waste**

Solid waste dumped into freshwater bodies was an on-going concern in the Wellington Region, particularly in the Hutt Valley (affecting the Hutt River and Akatarawa Rivers mainly) and in the Wairarapa.

Vehicles in waterways pose a flood hazard, can cause pollution, and present a safety hazard for river users. They are therefore a concern for the flood protection department and resource investigations.



Figure 46: Derelict cars dumped in rivers were a concern in the Hutt Valley and Wairarapa.

6. Coastal Water

6.1 Coastal Water Quality in the Wellington Region

The Coastal Water Quality Report 1999-2000 identified that enterococci (an indicator for bathing water quality) levels were of concern at thirteen Sites in the Region.

Bacteria are currently the only parameters routinely monitored in the coastal water environment. This means that many of the pollutants that affect marine ecological systems generally go undetected.

It was generally identified that sites located near stormwater outlets or river mouths had the highest levels of enterococci bacteria. In the report, it is suggested that to improve the quality of our Regions coastal water we need to focus on enhancing the quality of streams, rivers, sewers and stormwater systems.

Figure 47 shows the distribution of complaints that affected coastal water. These complaints are concentrated around Wellington and Porirua Harbours.

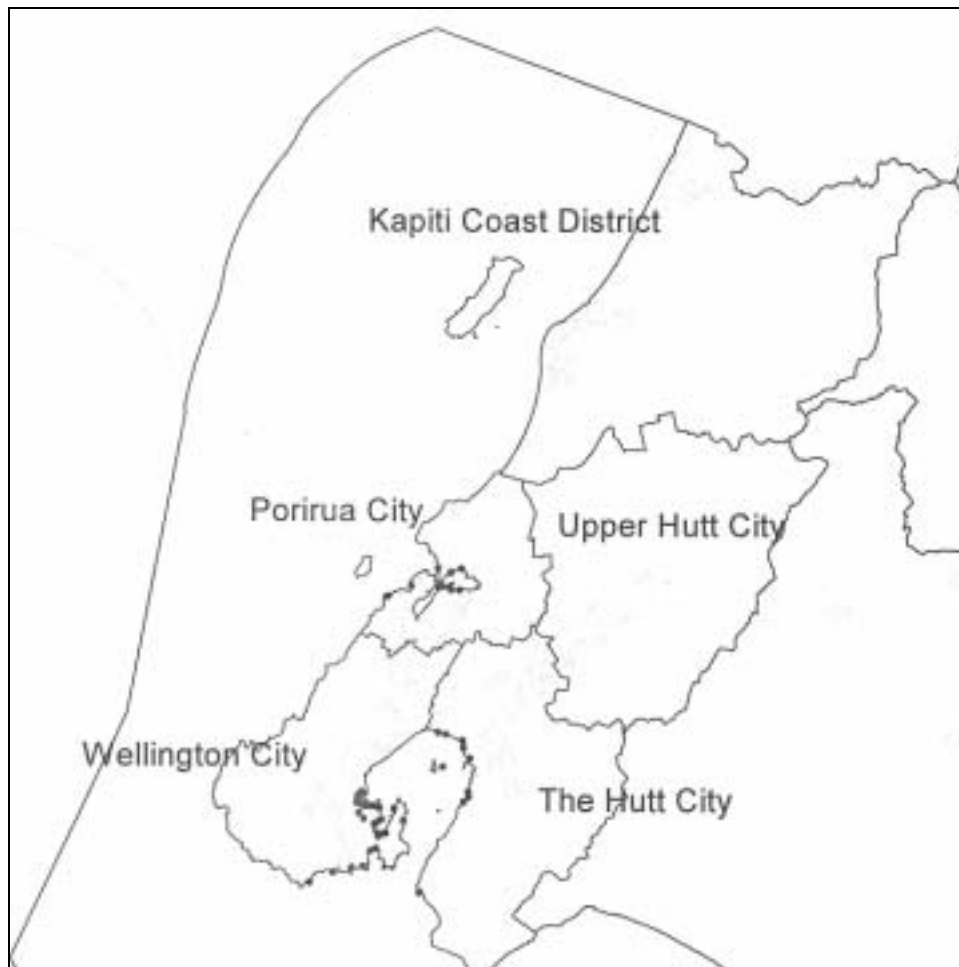


Figure 47: Distribution of complaints affecting coastal water quality in the Western Wellington Region, 1999/2000.

6.2 Types of Incidents

During 1999/2000 97 complaints were received about coastal water. Incidents involving the discharge of hydrocarbons were the most common cause of complaints, with numbers of “other” incidents and incidents about solid waste also being quite high.

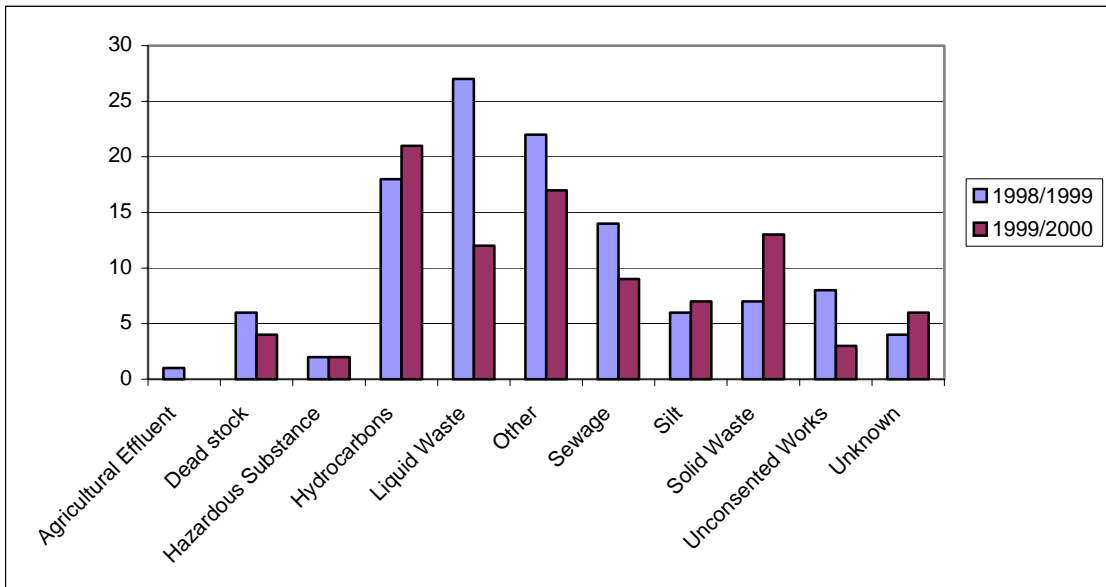


Figure 48: Types of complaints affecting Coastal Water.

6.2.1 Solid Waste

Complaints about solid waste in the coastal marine area included a number of complaints about people scraping paint and other matter off the hulls of their boats and discharging it directly into the water. A number also involved litter and concerns about debris dumped from pleasure boats and commercial fishing vessels.

6.2.2 “Other”

“Other” complaints included a large number of natural incidents. One of the incidents which caused the most complaints was a bloom of *noctiluca*, a non-toxic natural periphyton characterised by a pinky brown colour. This occurred in the Wellington Harbour.

In the Pauatahanui Inlet/Porirua Harbour a number of complaints were received about a yellow slick on the water, or yellow sulphur like substance washed up on beaches. This substance was pollen, which occurs naturally and is thought to be from pines and acacias in the Pauatahanui area.

6.2.3 Liquid Waste

Twelve complaints affecting coastal water involved inappropriate disposal of liquid waste. These generally involved discharges from the stormwater system, and

included such contaminants as paint washings, hydrocarbons and waste cleaning water from industrial sources.

6.2.4 Stormwater

Coastal water in the Wellington Region is also regularly affected by stormwater discharges. The impacts on the coastal receiving environment are similar to those occurring in freshwater, with impacts on the chemical composition of the water, visual clarity, and the potential for heavy metals to build up in sediment. This is relevant in Wellington as parts of the coastal marine area are low energy environments where contaminants can accumulate to levels that are toxic to aquatic life.

The coastal area also receives the discharge from streams and rivers in the Region, and if these are contaminated this can also impact on water quality in the coastal area.

Of the pollution from the stormwater system, two incidents involved paint washings from industrial sources and four were from industrial cleaning activities hosing contaminants down the drain.

Three incidents involved the discharge of a hydrocarbon substance smelling like creosote from a stormwater drain in Miramar. On one occasion a boom had to be deployed across the drain to prevent the spread of pollution. The substance comes from a contaminated gas works site up stream, where the product is leaching through the ground and entering the stormwater drain.

Four other hydrocarbon incidents were reported.

7. Groundwater

Six groundwater complaints were received during the 1999/2000 year, the same as in 1998/1999.

This represents a very small percentage of total complaints and reflects the “invisible” nature of groundwater contamination and exploitation. Contamination and unauthorised use of this resource is often difficult to detect unless it directly affects a groundwater users.

7.1 Types of Groundwater Complaints

Over the 1999/2000 year, the following incidents related to groundwater were confirmed;

- Concern that the high volume of groundwater taken by a local industry may result in depletion of the resource and unavailability of water for domestic use.

- Water seeping out of the ground might be contaminated with sulphur. This discharge was found to be natural seepage and not contaminated.
- Sewage was found to be discharging from a broken pipe and travelling via groundwater flows to a nearby stream in the Wairarapa.
- A ruptured bore in the Hutt Valley was located and capped.
- Spilled chemicals in a drain in Greytown had potential to contaminate groundwater. Residents were warned not to drink the water until it had been checked. Concerns about the toxicity of the groundwater resource were conveyed to the Regional Council and groundwater sampled. Results indicated no contamination.
- A market gardener in Kapiti was possibly taking more than 20,000 litres groundwater per day.

These incidents represent the wide variety of impacts that can affect groundwater resources.

8. Land

8.1 Types of Incidents

Disposal of solid waste was the most common cause of complaint relating to land. Spills of hydrocarbons, silt discharges, sewage spills and liquid waster disposal were also of concern over the 1999/2000 year. Figure 49 shows the types of land incidents dealt with over the 1999/2000 year.

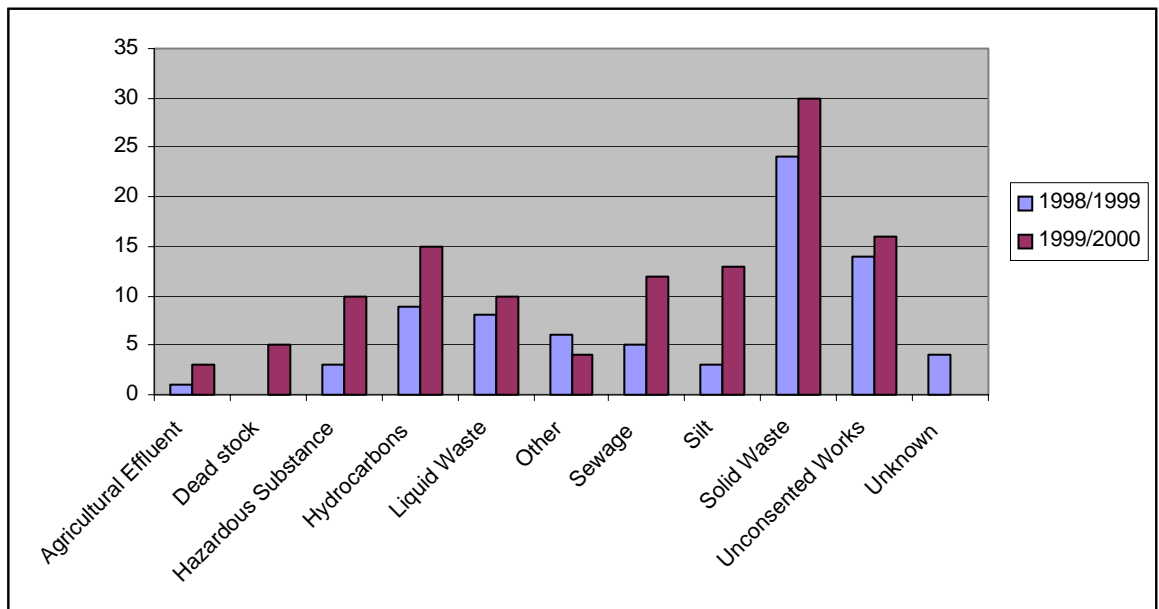


Figure 49: Types of land incidents

8.1.1 **Solid Waste**

Thirteen of the complaints about inappropriate disposal of solid waste involved non-cleanfill material being disposed of on cleanfill sites. The major concerns were about green waste being used as fill, which is not permitted.

Non-cleanfill can pose a number of environmental concerns, including the leaching of contaminants into ground and surface water, gas build up and contamination of soil. Figure 50 shows an example of inappropriate waste in a cleanfill.

Litter accounted for eight complaints, predominantly its inappropriate disposal to land. Many of these incidents were passed to the relevant Territorial Authority for further action.

Abandoned vehicles and unauthorised fill dumping in the beds of lakes and rivers and streams were also concerns over the 1999/2000 year. (In some cases the affected resource was water, however where fill or vehicles did not enter water, land was considered the affected resource.)



Figure 50: “Non-cleanfill” disposed of at a cleanfill site in Upper Hutt, June 2000.

8.1.2 **Silt**

The high number of silt complaints is mainly attributable to discharges from Wharfedale Quarry. This discharge flows through the land before discharging to the stream so is technically a discharge to land in a manner that enters water under the Regional Plan for Discharges to Land.

8.1.3 **Hydrocarbons**

The incidents involving hydrocarbon discharges to land were predominantly spills of diesel or petrol on to roads in the Region. These spills are attended by the fire service if they are severe, and Transit NZ or the territorial authority are involved in ensuring there are no accidents as a result of the spill. (e. g. placing of sand on roads etc)

The 24 Hour Incident Response Service becomes involved when the hydrocarbon product threatens to harm the environment. A key concern in such situations is whether the product is likely to enter waterways or drains. Wherever possible the Wellington Regional Council asks the fire service not to hose spills into drains or waterways, however public safety takes precedent.

Hydrocarbons can have adverse effects on the soil environment. Harmful compounds like poly-aromatic hydrocarbons, benzene, toluene, xylene and ethyl-benzene can pose a significant health risk and limit future uses of a site.

8.1.4 **Liquid Waste**

During the year 10 complaints about liquid waste affecting land resources were received. Seven of these involved unauthorised disposal of paint or paint washings, with the remaining three being associated with spills of fat or oil in the Wellington City Central Business District.

In all cases these were discharges to land that did not reach a water body, either because they were intercepted by staff of the incident response service, or because discharge to water was naturally impeded in some way.

9. **Response**

9.1 **Response Times**

Responding to incidents quickly is a critical part of providing an efficient 24 Hour incident response service. For this reason, the Wellington Regional Council has set itself performance criteria for responding to complaints about environmental incidents within specified time frames.

When received, each complaint is given a priority of red, yellow or blue, based on the nature of the complaint. These categories are defined in the Wellington Regional Council's Incident Response Manual. Target response times are as follows;

Red Response: The Duty Officer should respond to the incident within one hour, if possible. This may involve contacting other organisations for a co-ordinated response. This type of incidents usually involves immediate impact on the environment, for example discharge to water or odour.

Yellow Response: The Duty Officer should respond within 24 hours. This type of incident is unlikely to cause any detrimental impact on the immediate environment but still needs to be followed up on.

Blue response: The Duty Officer shall respond to the incident within one month. This type of incident does not warrant any further action apart from recording or following up on the incident at a later date.

Figure 51 shows the performance of the incident response service in meeting these target response times over the 1999/2000 year. On some occasions it is difficult to meet performance criteria due to the time it takes to travel to distant sites, like Otaki or Forest Lakes. If travel time has been the cause of not reaching an incident with the specified time frame, this is noted on the report about the incident.

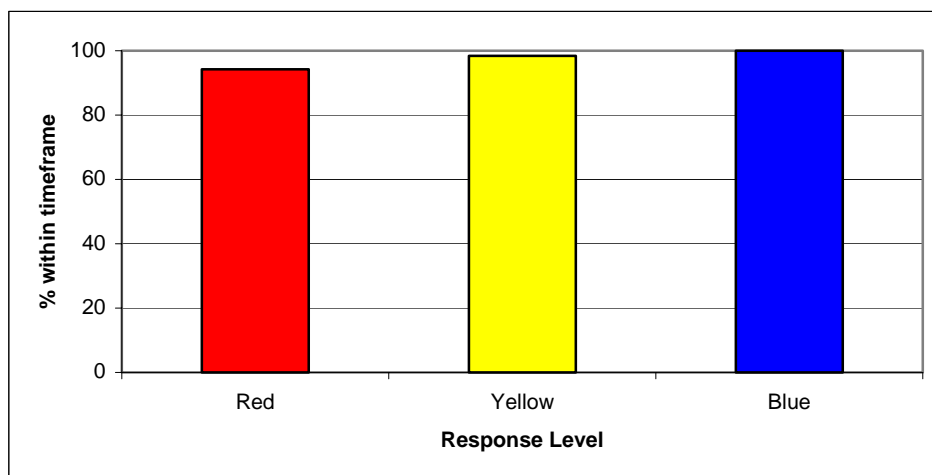


Figure 51: Percentage of complaints responded to within required timeframe

Details of complaints and the actions taken to investigate them and resolve incidents are recorded on the Council's Incident Database. This enables the information to be easily reported to the Council's Committees, and provides easy access to information which helps other areas of the Council carry out their duties.

9.2. Enforcement

When an environmental incident is verified, a negotiation approach is usually adopted in the first instance to try and resolve the problem. This involves education and warnings, and is usually successful.

If negotiation does not resolve the problem, a number of enforcement options are available.

During 1999/2000 a number of enforcement procedures were used by the Incident Response Service in relation to environmental incidents in the Region.

9.2.1 **Abatement Notices**

Eighteen abatement notices were issued over the 1999/2000 year. These are listed in Table 2.

Of these abatement notices, only two were not complied with. Both of these instances led to further enforcement action being taken against the parties responsible, and in both cases this further action consisted of infringement notices for failure to comply with an abatement notice.

Table 2: Abatement notices issued by the Incident Response Service, 1999/2000.

Name of recipient	Aim of notice	Section of RMA/ Rule in Plan breached	Date of service	Complied with (Y/N)
	Stop burning rubbish, and remove existing rubbish, Masterton	15 (1)	23 June 2000	Y
	Remove cattle carcasses from Opouawe river, South Wairarapa	15 (1)	6 June 2000	N
	Stop illegal extraction of logs from Ruamahanga river, Masterton	13 (1) (b)	26 May 2000	Y
	Remove illegal culvert from watercourse, Carterton	13 (1) (a)	27 January 2000	Y
	Stop dumping of fill in the coastal marine area, Masterton	12 (1) (d)	10 November 1999	Y
	Stop further burying and burning of meat processing waste, Carterton	15 (1)	10 September 1999	Y
	Stop dumping animal carcasses in Ruamahanga river bed, Carterton	13 (1)	3 Sept 1999	Y
	Stop dumping of fill in Waingawa river, Masterton	13 (1)	20 August 1999	Y
Sang Sue Ltd	Cease the discharge of offensive and objectionable odour, Paekakariki.	15 (2) (b)	11 May 2000	Withdrawn
Sang Sue Ltd	Cease the discharge of offensive and objectionable odour, Paekakariki	S. 17	25 May 2000	Y
Corporate Furniture Limited	Cease the discharge of objectionable dust from furniture manufacturing processes, Paraparaumu.	15 (1) (c)	11 May 2000	Y
Chicken Palace Ltd	Cease the discharge of offensive and objectionable odour, Wellington Central	S. 17	16 June 2000	Y
D.Soderberg, Wainuiomata.	Carry out remediation works after cross blading of stream, Wainuiomata.	13 (1) (b)	14 March 2000	Y

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Clive Taylor Ltd	Cease all operations which may have an adverse effect on nearby stream, including the discharge of chemicals from truck wash. Waikanae.	15 (1) (b)	15 February 2000	Y
John Ray Ltd	Undertake remedial works to ensure that works in a quarry do not cause conspicuous change in colour or visual clarity of stream. Porirua.	15 (1) (b), 15 (1) (d) and S.17.	1 February 2000	N
Industrial Spray 2000 Ltd	Cease the discharge of noxious, dangerous, offensive or objectionable contaminants to air from powder coating activities. Lower Hutt.	15 (1) (c)	21 July 1999	Y
Industrial Spray 2000 Ltd	Cease the discharge of noxious, dangerous, offensive or objectionable contaminants to air from powder coating activities. Lower Hutt.	15 (1) (c)	21 July 1999	Y
Tanner & Mansfield	Cease the discharge of offensive and objectionable odour from food preparation premise.	15 (1) (c)	8 July 1999	Y

9.2.2 Infringement Notices

The Resource Management (Infringement Notice) Regulations 1999 provide the Council with the ability to issue infringement notices for breaches of certain provisions of the RMA. These regulations came in to effect on 1 February 2000. Infringement fees are prescribed in the regulations and range from \$300 to \$1000 depending on the offence committed against the RMA 1991.

Six infringement notices were issued by the Council during 1999/2000. Three of these were paid, and two were appealed and have been referred to a court hearing. One notice was not paid and had not been appealed at the time this report was written.

Table 3: Infringement notices issued by the Incident Response Service, 1999/2000.

Name of Recipient	Reason for notice	Part of section 338 of RMA Breached	Fine (\$)	Date of service	Paid/ Appealed
	Dumping of cattle carcasses in river, South Wairarapa	13(1)(d)	500	23 June 2000	Paid
	Failure to comply with abatement notice	322(1)(a)	750	23 June 2000	Neither
John Ray Ltd	Failure to comply with abatement notice	322	750	26 April 2000	Paid
John Ray Ltd	Failure to comply with abatement notice	322	750	19 May 2000	Paid

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Wellington Port Authority Ltd	Discharge of contaminants into air	15(1)(c)/338(1)(a)	1000	12 June 2000	Appealed
Wellington Port Authority Ltd	Discharge of contaminants into water	15(1)(a)/338(1)(a)	750	12 June 2000	Appealed

9.2.3 Enforcement Orders

No enforcement orders were sought during the 1999/2000 year.

9.2.4 Prosecutions

Only one prosecution was taken during 1999/2000. This was in relation to a serious diesel spill that occurred in October 1999 from New Zealand Oil Services Limited in Seaview. This spill caused widespread pollution in the Waiwhetu Stream, Hutt River and the Wellington Harbour. New Zealand Oil Services Limited pleaded guilty. A sentencing date was still to be set at the time this report was written.

Table 4: Prosecutions undertaken by the Incident Response Service, 1999/2000.

Name of Recipient	Offence	Date of offence	Date of conviction	Fine
NZ Oil Services Ltd	Discharge of diesel to land in a manner which entered water.	November 1999	-	-

10. Costs of Providing the Incident Response Service

The cost of providing the incident response service for the Wellington Region in 1999/2000 was \$244,000 (including Wairarapa). This was \$74,000 above the budgeted cost. This increased cost was mainly due to the increased demand for incident response services.

11. Summary

A total of 1173 complaints were received and responded to by the 24 hour incident response service over the 1999/2000 year. This is a slight increase compared to the 1145 received during the previous year.

Complaints about air quality were the most frequent over the 1999/2000 year, accounting for 58% of complaints. 576 of these complaints were about odour, which predominantly affected the suburbs of Happy Valley, Lyall Bay and Rangoon Heights. The majority (459 complaints), of these complaints occurred in the Wellington City area with very few odour incidents occurring in Porirua (3). In Wellington City, Hutt City, Masterton, Kapiti Coast, Upper Hutt City and Carterton, odour was the leading cause of complaints.

Freshwater complaints were the second most common, (21% of all complaints), with coastal water the subject 8% of complaints. Freshwater was the most affected resource in Porirua City, with most incidents related to discharges of silt from quarries and subdivisions in the area. In Wellington City, Hutt City, Masterton, Kapiti Coast, Upper Hutt City and Carterton, activities affecting freshwater were the second most frequent cause of complaints.

In the South Wairarapa, solid waste issues were the most common cause of complaints.

60% of all complaints were received from the Wellington City area, and the most common source of complaints were industrial/commercial premises.

During 1999/2000 86 complaints were received about discharges to stormwater. The main types of contamination included:

- Hydrocarbon spills from vehicles onto roads and subsequently into the stormwater system
- Silt discharges from earthworks activities
- Sewage discharges from blocked/overflowing sewer systems
- Discharges from Automotive/mechanical premises. (E.g. Automotive products including hydrocarbons, antifreezes and lubricants)
- Commercial cleaning and/or blasting activities discharging contaminants (detergents, blasting residues)
- Discharges of paint or paint wash water from domestic properties
- Discharges of liquid waste from industrial premises

Stormwater has been identified as one of the main resource management issues facing the Region, and as an area requiring more detailed investigation by the Council.

There appeared to be a general lack of awareness about the stormwater system and the effects that unauthorised discharges to it can have on the environment. This results in lack of preparedness and few contingencies on sites to deal with spills to stormwater drains, or spills on sites which could lead to discharges to stormwater.

Inadequate buffer zones between odour sources and residential properties is an issue which continually appears in the Annual Incident Report, and this problem contributed to many odour complaints received. It appears however that many of these issues are able to be resolved through placing tighter controls on odour emitting industries. Tight enforcement of resource consent conditions appears to be resolving issues at some of the major odour sources in the Region (e.g. Taylor Preston, Moa Point WasteWater Treatment Plant, Paraparaumu Waste Water Treatment Plant and the Southern Landfill). Most of the improvements made to processes on these sites over the past year were as a result of pressure applied to site managers by the Wellington Regional Council. This pressure came as a result of complaints from members of the public that were responded to by staff at the Council. Despite these controls, the effect of odour on amenity values in residential areas is still considered unacceptable by many residents.

Complaints about discharges to land were predominantly related to the dumping of non-cleanfill (e.g. green waste, steel, old cars and organic material) into cleanfills. This issue was identified in 1998/1999, and continues to be a concern in 1999/2000. Continued surveillance of cleanfills is therefore recommended for the 2000/2001 year.

Groundwater resources are seldom the cause of complaints in the Region, indicating the “invisible” nature of groundwater degradation.

The number of complaints received during 1999/2000 was only slightly higher than the number received in 1998/1999. Until 1999/2000 a dramatic increasing trend in the number of complaints had been apparent, and the slowing of this trend may indicate a number of things;

- That a “critical mass” of the public is now aware that the Wellington Regional Council is the body to direct complaints about pollution to, and that 1000-1200 complaints per year is what to expect from the population in the Wellington Region.
- That the major sources of complaints in the Region are cleaning up their act environmentally.
- That the service was not widely promoted over the 1999/2000 year, as awareness of the service is a key factor in the number of complaints received.
- That more people were made aware of the service, however this was off set by fewer environmental incidents in the Region over the 1999/2000 year.

It is not anticipated that the numbers of complaints received over the 2000/2001 year will differ greatly from the number received this year.

All but 5.8% of complaints were responded to within one hour. This indicates that the incident response service is generally meeting its performance objectives, with the reason for delay in response usually being travel time to the sites concerned, or occasions when two incidents have occurred at the same time.

The majority of the complaints were dealt with using education and warnings. Where this approach did not achieve the environmental results required, appropriate enforcement action was taken. 18 abatement notices and 6 infringement notices were issued during the year, and one prosecution was undertaken. Infringement notices came in to force on 1 February 2000 and have proven to be an effective tool in dealing with some incidents. They have also proven to be an effective deterrent for polluters.

12. Recommendations

12.1 Recommendations from 1998/1999

As a result of issues identified in the 1998/99 Annual Incident Report, the following recommendations were made for the 1999/2000 year;

1. That surveillance monitoring be carried out at the sites and areas listed in that report as being under the most frequent pressure;
2. That noxious, dangerous, offensive and objectionable emissions to air, in particular odour emissions, be reduced through raising the awareness of potential polluters via a targeted education programme.
3. That the Wellington Regional Council Incident Response Service continue to closely monitor cleanfill operations to ensure no non-cleanfill is received.
4. That the Wellington Regional Council Incident Response Service continue to encourage the maintenance of adequate buffer zones between non-compatible land uses.
5. That the Wellington Regional Council Incident Response Service, in conjunction with other areas of the Council, generally undertake education programmes to increase public awareness of environmental pollution.

Actions taken in response to these recommendations are discussed below.

Due to time constraints brought about by a shortage of staff during much of this year, less surveillance work was undertaken that was anticipated. Surveillance of some areas was undertaken in response to on-going incidents. This included a number of odour surveys in the Rongotai Industrial Area and wet weather surveillance of subdivisions in the Whitby area to check for silt discharges.

Three major sources of odour incidents (Taylor Preston Limited, the Wellington City Council Southern Landfill and Moa Point Waste Water Treatment Plant) were dealt with closely over the 1999/2000 year by staff in the Wellington Regional Council Consents Management Department. As a result, these sites have made significant improvements to their processes over this year, and the benefits from this are likely to be felt strongly over 2000/2001. Liaison with territorial authorities specifically for the reason of discussing buffer zones was not undertaken during the 1999/2000 year, mainly due to time constraints.

Surveillance of cleanfills was undertaken on an informal basis. Most surveillance was undertaken in response to complaints.

Over the 1999/2000 period, a draft programme for pollution prevention was prepared by the Resource Investigations Department. This programme will be completed in the coming year and implemented as part of the Councils "Business Bridges" initiative.

12.2 Recommendations for the 2000/2001 Year

As a result of issues identified in this report, the following recommendations are made for the 2000/2001 year;

1. That surveillance be carried out at sites and areas listed in this report as being under most frequent pressure, and that this surveillance is recorded formally on the incident database.
2. That stormwater discharges in the following catchments be targeted as part of the pollution prevention programme;
 - Waiwhetu
 - Wellington Central Business District
3. That educational materials outlining good environmental practice be prepared for the following activities:
 - Painting/plastering contractors
 - Earthmoving contractors (e.g. resource consent requirements and silt control)
 - Automotive premises (including car valet and cleaning services)
4. That the Pollution Prevention programme be finalised and implemented.

References

All data was derived from the Wellington Regional Council's Incident Database.

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Annual Air Quality Monitoring Report 1999, Prepared by Perry Davy Resource Investigations Department, Wellington Regional Council, Publication No. WRC/RINV-T-99/33