

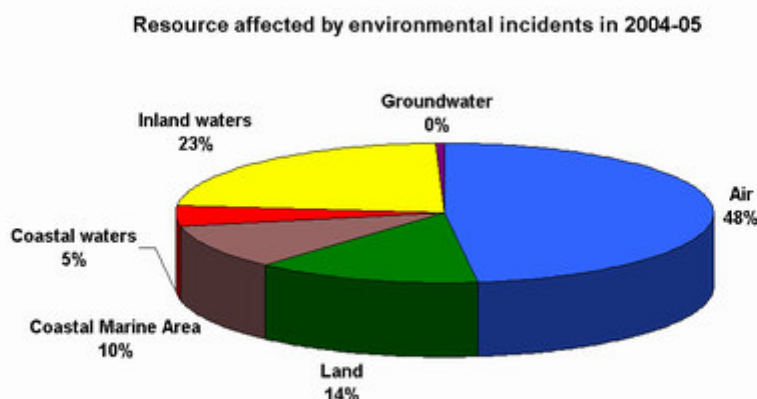
ENVIRONMENTAL INCIDENTS

Northland Regional Council operates a 24-hour, seven day environmental hotline where people from anywhere in Northland can report environmental incidents to the freephone number 0800 504 639 ranging from water pollution to spraydrift, earthworks to odour problems.

There were 961 incidents reported to Northland Regional Council in the 2004-05 financial year, only slightly more than last year. All environmental incidents reported to the Council are recorded in a database including important information such as type, location, details of the incident, alleged offenders, resource affected and impact on the environment, to meet the Council's performance targets (refer page 10) for response to environmental incidents. For a map showing the distribution of incidents reported refer to page 2 and for a tabulated breakdown of the incidents and their impact on the environment refer to pages 3 and 4.

Resource Affected

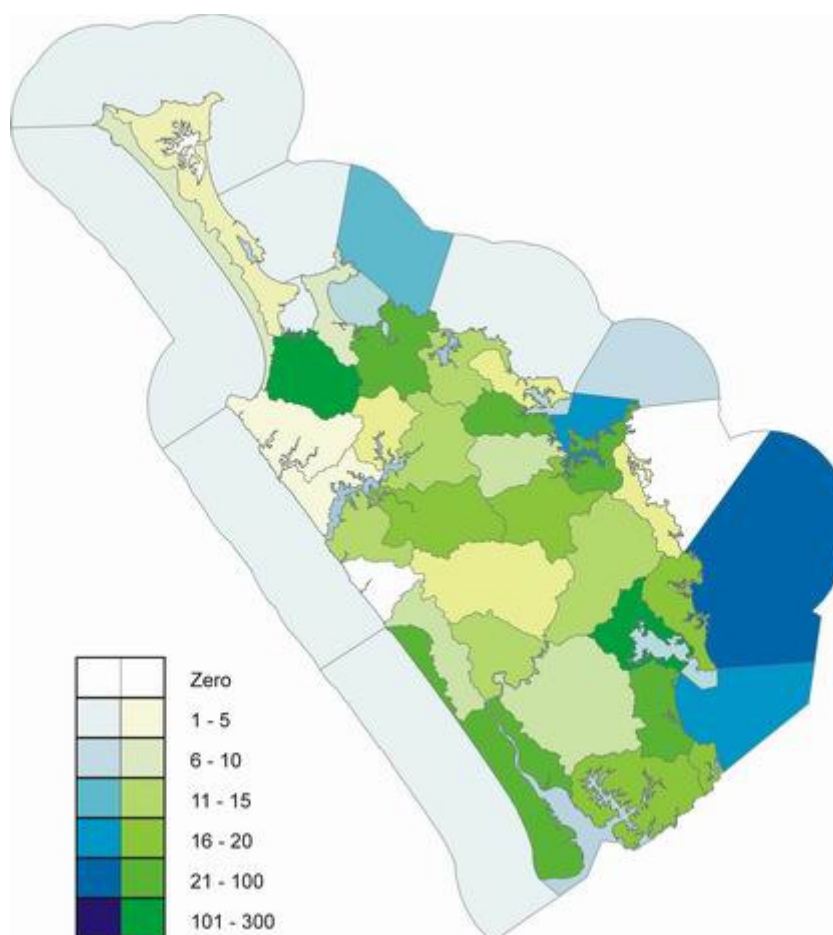
Of the 961 reported, 459 (48%) were air related (page 5) incidents. Other incidents were recorded as affecting inland waters (page 6) (222 incidents), land (page 7) (132 incidents), coastal marine areas (page 8), coastal waters (page 9) or groundwater, as shown in the figure below.



There were only four environmental incidents reported as affecting groundwater resources, which contributes 0.4% to the total number of incidents, which is why it is shown as 0% on the graph above. Of these three were related to water abstraction and the other was water pollution.

Distribution of Incidents

The map below shows the distribution of incidents throughout Northland, where the darker the blue or green the greater number of incidents for that area. Both Whangarei and Awanui had the highest occurrence of incidents with 254 and 109 incidents respectively, while none were reported for Parengarenga Harbour, Whangaruru Harbour, Whananaki Coast and Waipoua Catchment areas. The high number of incidents in the Whangarei area is related to the urban nature of the catchment and greater population density, while the incidents in the Awanui area are mostly industrial emissions from the Juken Nissho (JNL) Timber Mill.



Different Incident Types

The table below shows the different types of incidents reported in terms of numbers and percentage of the total 961 incidents. Also the area that had the highest occurrence of each incident type is shown with the percentage that occurred in that area shown in parentheses.

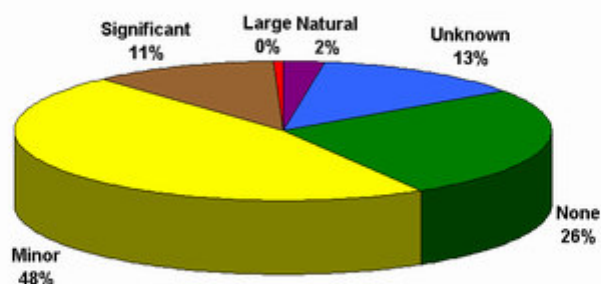
Burning and smoke nuisance and odour incidents were by far the most common incidents in Northland, however this may be related to the fact that these two incidents types are more likely to be noticed by people than other incident types. As expected the highest occurrence was in the Whangarei area for most incident types, which as discussed already is related to the urban nature of the catchment.

Incident type	Number	Percentage	Area with the highest occurrence
Abrasive Blasting	0	0	
Burning & Smoke Nuisance	142	14.8	Whangarei (49%)
Contaminated Stormwater	40	4.2	Whangarei (53%)
Dead or Dying Organisms	12	1.2	Whangarei (25%)
Dead Stock	24	2.5	Awanui, Kerikeri & Whg East coast (all 12.5%)
Discolouration, foams & scums in Water	19	2.0	Whangarei (42%)
Diversions & Drainage Works	16	1.7	Kerikeri (19%)
Dust Nuisance	70	7.3	Whangarei (46%)
Earthworks & Vegetation Clearance	74	7.7	Whangarei (16%)
Farm Dairy Effluent	24	2.5	Wairoa/West Coast (29%)
Flooding Hazards & Erosion	13	1.4	Wairoa/West Coast & Oruru/Oruaiti (both 15%)
Hazardous Substances	8	0.8	Whangarei (63%)
Industrial Emissions	74	7.7	Awanui (81%)
Miscellaneous	21	2.2	Awanui (19%)
Natural Phenomena	8	0.8	Whangarei Harbour (38%)
Odour	118	12.3	Whangarei (36%)
Oil, Diesel & Other Fuel Spills	10	1.0	Whangarei (50%)
Other Agency Responsible	11	1.1	Whangarei (36%)
Other Coastal Activities	32	3.3	Whangarei Harbour (16%)
Other Contaminant Discharges	37	3.9	Whangarei & Whangarei Harbour (both 27%)
Other Water Pollution	17	1.8	Whangarei (29%)
Refuse & Other Dumping	32	3.3	Awanui (12.5%)
Sewage	80	8.3	Eastern Bay of Islands (14%)
Spraydrift	51	5.3	Kerikeri (22%)
Structures in Waterbodies/CMA	15	1.6	Hokianga Harbour and Bay of Islands coast (both 20%)
Water Abstractions	13	1.4	Kerikeri, Whangarei, Bream Bay & Oruru/Oruaiti (all 15%)
TOTAL	961	100	

Impact on the Environment

The impact of every incident on the environment is categorised and reported to the Council on a monthly basis. Of the 961 incidents reported to the Council in 2004-05, 41% were recorded as a natural event, having an unknown or no impact on the environment as shown in the figure below.

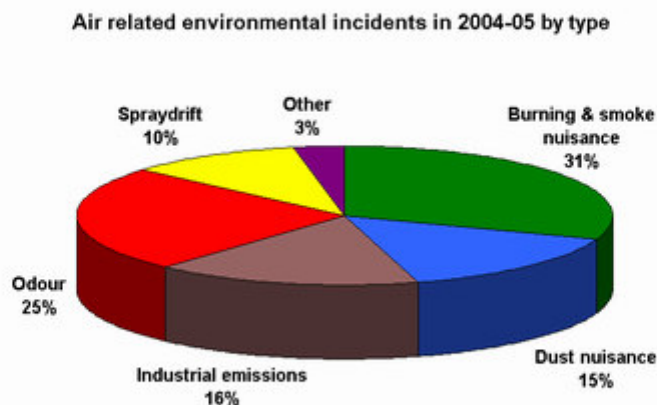
Impact of environmental incidents on the environment in 2004-05



The majority of incidents (48%) were recorded as having a minor impact on the environment, which means that effects were localised and/or short-lived with non-significant deterioration of the environment. On the other hand 107 incidents (11%) had a significant impact and a further 4 had a large impact on the environment, two of which were related to sewage spills. Similarly to the entire incident dataset for 2004-05, the incidents with a significant or large impact had the highest occurrence in the Whangarei, Awanui and Kerikeri areas and burning/smoke nuisance and odour incidents were the most common. However sewage contamination incidents were more common (16.2%) in the significant incident dataset than in the entire incident dataset (8.3%). This highlights that sewage related incidents are often reported as having a greater impact on the environment due to the associated health risks.

Air related Incidents

As you can see from the figure below, burning and smoke nuisance and odour incidents were the most common air related incidents, followed closely by industrial emissions, dust nuisance and spray drift. Other types of incidents affecting air quality included dead stock, farm dairy effluent, other contaminant discharges and hazardous substances. There was no abrasive blasting incidents reported in 2004-05.



Burning and smoke nuisance, odour and dust nuisance incidents had the highest occurrence in the Whangarei area. While the Kerikeri catchment area had the highest percentage of spraydrift incidents related to the dominant horticultural land use and 81% of all industrial emission incidents occurred in the Awanui catchment area due to discharges from the Juken Nissho (JNL) Timber Mill.

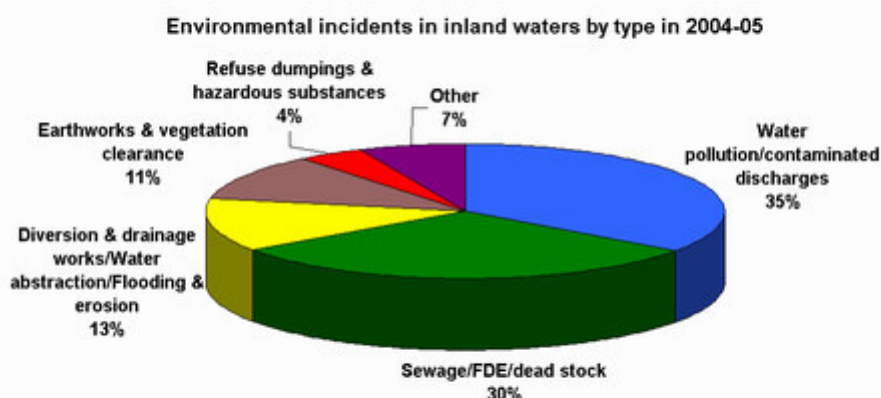
The number of air related incidents has steadily increased from 297 in 2001-02 to 459 reported to the Council in 2004-05.



A typical smoke nuisance incident in Northland.

Incidents related to Inland Waters

The different incident types affecting inland waters have been grouped into logical categories as shown in the figure below. The water pollution/contaminated discharges group includes contaminated stormwater, discolouration/foam and scums, other contaminant discharges, oil and diesel spills, other water pollution and spraydrift. While diversion and drainage work, water abstraction and flooding hazard and erosion incidents have been grouped, as they are all related to water quantity and/or flow rates. Incident types where one of the main concerns is bacteriological contamination and associated human health risks have been grouped, which includes sewage, dead stock, dead or dying organisms and farm dairy effluent incidents.

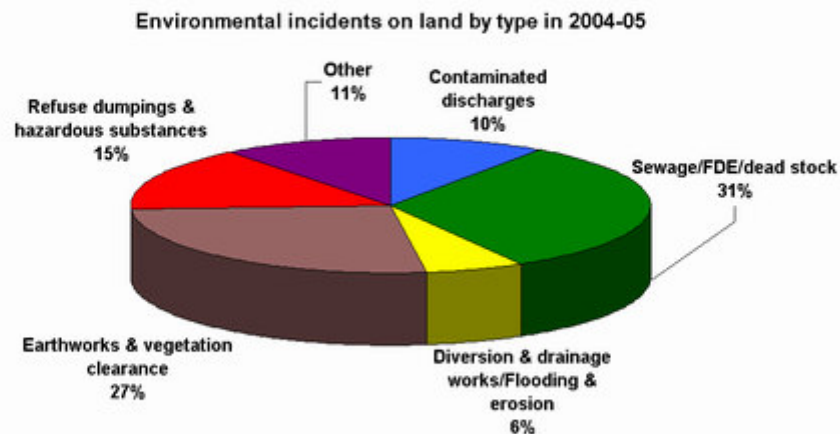


The greatest proportion of the inland water incidents were related to contamination of waterways with 35% in the water pollution group and 30% in the FDE/sewage/dead stock group.

The total number of incidents affecting inland waters in 2004-05 was 222, which is slightly more than the previous year, where 198 inland water incidents were reported to the Council.

Land Related Incidents

The different incident types affecting land resources in Northland have been grouped as for inland waters. For example, all incidents associated with potential bacterial contamination are grouped including sewage, farm dairy effluent (FDE) and dead stock incidents as shown in the figure below.

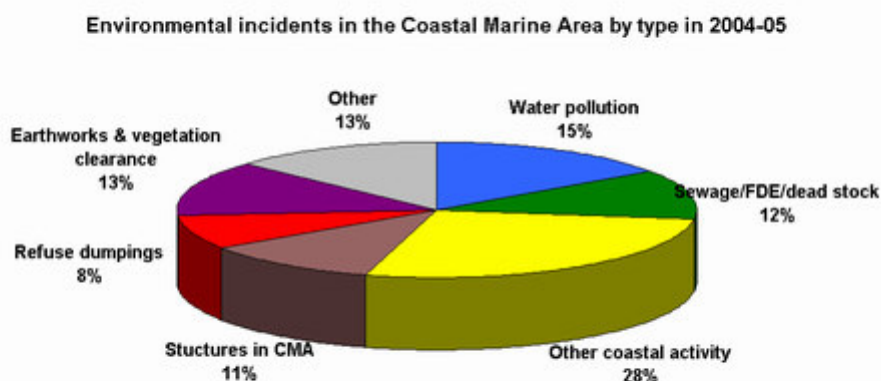


The sewage/FDE/dead stock group had the greatest number of incidents in 2004-05 with 42 reported, followed closely by 35 earthworks and vegetation clearance incidents.

The total number of land related environmental incidents reported to the Council in the 2004-05 year at 132 is slightly down compared to last year's 162 land incidents.

Incidents Affecting the Coastal Marine Area

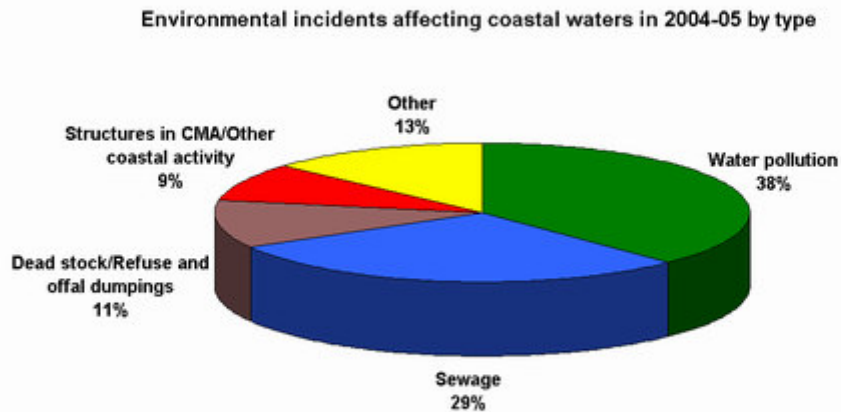
The Coastal Marine Area (CMA) covers harbours, beaches and estuaries and includes the foreshore, seabed, water and air space above the water. There were 99 incidents reported that were recorded as affecting the coastal marine area in 2004-05, of which 27 were described as “other coastal activities”. This includes a range of situations from cattle on beaches, dumping of rubbish to mangrove clearance and alleged sand extraction or deposition.



The number of incidents in the coastal marine area has stayed reasonably stable for the last 3 years with approximately 100 reported to the Council every year.

Incidents Affecting Coastal Waters

Coastal water is seawater and includes the water in any of the areas described as a 'Coastal Marine Area'. There were 45 incidents that were reported as affecting coastal waters. The majority were either sewage (29%) or water pollution (38%), which includes contaminated stormwater and oil/diesel spills.



Similarly to incidents in the CMA, the number of incidents in coastal waters has stayed reasonably stable for the last 3 years with approximately 50 reported to the Council every year.

The photo below shows the oil spill response team deploying a 'Ro-boom', which is relatively new equipment used to control oil spills in coastal waters. The 'Ro-boom' is deployed around the spill to trap the petroleum products and stop them from dispersing further on the water surface.



A 'Ro-boom' being deployed.

Performance Targets for Environmental Incident Response

To investigate and take follow-up action on incidents reported to the Council where there are adverse effects on the environment and/or alleged non-compliance with the Resource Management Act by:

- Providing a 24-hour, everyday environmental incident reporting, recording and response system.
- Reporting the response to incidents received to the incident reporter (as and when the follow up action is completed) and to the Council in the following month.
- Taking appropriate enforcement action in cases of significant non-compliance with statutory requirements.