Contents

DW Discharges to Water and Land

The explanation/principal reasons for the provisions in this section have been moved to Appendix 1.

This section addresses the adverse effects of point source discharges of contaminants to water, discharges of water to water, and discharges of contaminants onto or into land where the contaminant may enter water as controlled by section 15 of the Act.

The discharge of contaminants to water in estuaries, harbours or the open coast is subject to the conditions in the Bay of Plenty Regional Coastal Environment Plan.

Discharges of geothermal fluid to water or into or onto land are addressed by the provisions in the Geothermal Resources section of this regional plan. Discharges of geothermal fluid to surface water bodies may also be subject to the relevant provisions of this section of the regional plan.

Discharges of stormwater (including surface runoff from roads) is considered to be a discharge of contaminants, which is addressed in this section of the regional plan.

Sediment is defined as a contaminant if it is discharged to water, or to land where it may enter water, as it may have adverse effects on water quality and aquatic biota. However, sediment is not considered to be a contaminant in all situations. Sediment is not considered to be a contaminant in this section of the regional plan where it is discharged to land and the sediment does not enter a surface water body. Sediment discharge to land will be considered as a contaminant only where the sediment contains another substance that changes or is likely to change the physical, chemical or biological condition of the land onto or into which it is discharged.

Discharges of Contaminants or Water to Water

Issues

DW I1 (Issue 18) **Discharges of contaminants to water have the potential to degrade water quality below that necessary to sustain heritage values and allow for use of water by the community, and degrade the mauri of the water body.**

Matters relating to the discharge of contaminants to water that are of particular concern in the Bay of Plenty region are:

1 Degradation of the mauri of water bodies. Tangata whenua believe that the use and cultural values of rivers, streams and lakes are adversely affected where contaminant discharges degrade the mauri of a water body. The discharge of sewage to water may be particularly culturally offensive to Maori.

2 Discharges of contaminants to water are increasingly unacceptable to the community. People are becoming more informed about the consequences of discharges of contaminants to water and are less tolerant of subsequent water degradation. This is particularly true where water is used for wastewater disposal. Industries are also becoming more sensitive to the market consequences of their environmental performance.

3 The discharge of untreated wastes into water, the beds of rivers, stream, lakes and wetlands, and riparian areas. Car bodies and household wastes are being dumped alongside rivers and streams in the region, as particularly evident in the Western Bay of Plenty. Discharges of untreated sewage from boats can be a problem.
4 The discharge of persistent toxic contaminants that can accumulate in receiving environments (including soil and water). Some of the Rotorua lakes and Tauranga Harbour are at particular risk of accumulating contaminants, including sediment and heavy metals. Accumulating sediment is a particular risk in estuaries and harbours, including Ohiwa Harbour.
5 The cumulative effects of many, small-scale, point source discharges of contaminants to water on water quality. Many relatively small-scale discharges of contaminants can cumulatively cause significant adverse environmental effects, and are usually more difficult to address than single, larger discharges.
6 Discharges of contaminants to water have the potential to degrade the life-supporting capacity of aquatic ecosystems.

Adverse effects of discharges of contaminants on water quality can include:

(a) Increased levels of bacteria, sediment, nutrients, heavy metals or other contaminants.
(b) Decreased levels of dissolved oxygen.
(c) Changes to the clarity or colour of the water.
(d) Increases in water temperature.
(e) Changes to the visual appearance of the water body as a result of oil, grease films, scums, foams, or floatable or suspended materials.
(f) Odour.
(g) Changes to the mauri of the water body.
(h) Degradation of water quality below that necessary to sustain use by the downstream community, including instream uses (e.g. recreational use) and abstractive uses (e.g. stock watering and domestic use).
(i) Degradation of water quality below that necessary to sustain the life-supporting capacity of the water body, including adverse effects on aquatic life.

Objective	*DW O1, DW O3, DW O5, DW O6*
Policy	*DW P1, DW P4, DW P5, DW P12, DW P7, DW P8, DW P10, DW P11*
Method	*LM M18, IM M10, IM M23, DW M1, DW M2, DW M3, DW M4, DW M19, DW M20, DW M7, DW M21, DW M8, DW M9, DW M11, DW M12, DW M13, DW M14, DW M15, DW M16, DW M17, DW M18*
Rule	*DW R1, DW R2, DW R3, DW R5, DW R20, DW R7, DW R8*
Schedule	*9*

DW I2 (Issue 19) **The discharge of water to water has the potential to:**

(a) Lead to the flooding of property.
(b) Adversely affect Maori cultural values where there is a discharge of water into another catchment. Effects on Maori cultural values should be assessed on a case by case basis with tangata whenua of the activity site.
(c) Cause the erosion of the beds of surface water bodies.
(d) Adversely affect ecological values.

Objective	*DW O4*
Policy	*DW P9*
Method	*LM M18*
Rule	*DW R3, DW R5, DW R6, DW R8*

DW I3 (Issue 21)

Spills of hazardous substances to the environment can contaminate land and water, damage aquatic and terrestrial ecosystems, adversely affect users of affected water bodies, and present a risk to public health.

Inadequate provision for the safe storage and handling of hazardous substances can increase the risk of adverse effects on the environment due to hazardous spills, ignorance of spill detection, and inadequate emergency response procedures.

Objective	*DW O2*
Policy	*DW P2, DW P3*
Method	*DW M5, DW M6, DW M20, DW M9, DW M11*
Rule	*DW R88*

Objectives

DW O1 (Objective 23) Discharges of contaminants to water are managed to meet the following goals:

(a) After reasonable mixing, discharges of contaminants to lakes, streams and rivers meet the water quality classification of the receiving water bodies as a minimum; and have no more than minor adverse effects on heritage values, existing users in downstream areas, and lakes, harbours and estuaries.

(b) Discharges of contaminants to water are in a manner that takes into account the cultural values of tangata whenua acknowledged for that area.

DW O2 (Objective 24) Increased level of:

(a) Contingency planning by users of hazardous substances to prevent unauthorised discharges of hazardous substances.

(b) Emergency response to manage the impact of unauthorised discharges of hazardous substances.

DW O3 (Objective 25) Prevent the accumulation of persistent toxic contaminants in the environment, particularly in lakes, estuaries and harbours and their catchments.

DW O4 (Objective 27) Discharges of water to water avoid, remedy or mitigate adverse effects on the environment as appropriate to the values, uses and existing environmental quality of the activity site.

DW O5 (Objective 28) Cumulative effects of small-scale discharges of contaminants to water and land are managed appropriately to avoid, remedy or mitigate adverse effects on water quality (including coastal waters), and soil health and ecosystems.

DW O6 (Objective 29) Prevent the following discharges of contaminants to the environment:

(a) The discharge of untreated sewage to water.

(b) The discharge of petroleum hydrocarbons to land as dust suppressants.

(c) Fly-tipping of wastes, including car bodies and household rubbish, and agricultural wastes to the beds of streams, rivers, lakes or wetlands, and riparian areas of these water bodies, and coastal margins.

Cross-Reference Also refer to KT O6, IM O1, RL O1, IM O3, IM O4, IM O5, IM O6 and LM O4.

Policies

DW P1 (Policy 38) Discharges of contaminants to water are to comply with the following requirements:

Table DW 1 Contaminant Discharge Requirements

	Receiving Environment	Discharge Requirement
(a)	Lakes	(i) Direct discharges of contaminants to lakes are discouraged, while allowing for minor discharges that are unlikely to have adverse effects on water quality. (ii) There shall be no net increase of nitrogen or phosphorus in lake catchments. This does not preclude the use of nutrient trading within the same lake catchment to achieve this policy. (iii) Where discharges are made directly to lakes, the discharge is to: • Meet the water quality classification of the lake after reasonable mixing. • Avoid, remedy or mitigate adverse effects on heritage values and existing users of the lake. This will include implementing appropriate treatment and mixing methods for the discharge.
(b)	Rivers and streams	(i) Discharges of contaminants to streams and rivers with Water Supply or Natural State (river) water quality classifications are avoided where practicable. (ii) Discharges to rivers and streams are to: • Meet the water quality classification of the stream or river after reasonable mixing. (a) Avoid, remedy or mitigate adverse effects on heritage values and existing users in downstream areas. This may include consideration of appropriate mixing methods for the discharge. (iii) For discharges to rivers and streams that are tributaries of lakes, there shall be no net increase of nitrogen or phosphorus in lake catchments. Full regard will be given to the effect on the TLI of the lake, including cumulative effects. (iv) For discharges to rivers and streams that flow directly to the open coast, or are tributaries of harbours and estuaries, the effect on the water quality of coastal waters will be given full regard. This includes cumulative effects. (v) For discharges to streams that are not shown on the 1:50,000 Water Quality Classification Maps, the discharge shall comply with the Regional Baseline water quality classification as a minimum, subject to an assessment of the appropriate water quality classification in accordance with IM M26. Where the assessment determines an appropriate water quality classification, the discharge will be considered relative to the higher water quality classification. (vi) Where a river or stream has more than one water quality classification along its length, a discharge will be assessed relative to the water quality classification at the point of discharge, as shown on the Water Quality Classification map. (vii) The owners or operators of hydroelectric generation dams are required to gain resource consent for the discharge of contaminants associated with dredging activities and extraction of bed materials necessary to maintain the function of the dam. Dam owners and operators are not responsible for contaminants discharged within the catchment above the dam.
(c)	Ephemeral flowpaths	Discharges of contaminants to ephemeral flowpaths will be considered to be discharges to land, or discharges to land where the contaminant may enter water, whichever is appropriate to the individual circumstances.

Note:

1 Refer to IM O3 and IM P1(a), (b), (c) and (g) for the intent of this regional plan to manage water quality to meet specific water quality classification standards and criteria.

2 In relation to DW P1(b)(v), a 1:250,000 scale water quality classification map is attached to this regional plan for information purposes. The same map has also been prepared at 1:50,000 scale, and resource users are advised to consult this scale map to accurately determine what water quality classification applies to a proposed discharge. Copies of the 1:50,000 scale water quality classification maps can be obtained from the Regional Council, including electronic copies.

DW P2 (Policy 39) To require contingency plans for the prevention, detection, containment and remediation of unauthorised discharges of any hazardous substance which may adversely affect water quality, or result in the long-term contamination of soil or groundwater.

DW P3 (Policy 40) To participate with other organisations to develop and implement processes to minimise the adverse effects of unauthorised discharges of hazardous substances on the environment.

DW P4 (Policy 41) To encourage the change from the discharge of contaminants to water to the land-based treatment and disposal of contaminants, where this is environmentally sustainable.

DW P5 (Policy 42) To recognise and provide for the effects on the mauri of the receiving environment caused by the discharge of contaminants to water by:

(a) Where appropriate, encouraging early and ongoing consultation with tangata whenua during the consideration of wastewater treatment systems to take into account the cultural values of tangata whenua acknowledged for that area.

(b) Where reasonable and practicable to do so, take steps to promote better use of freshwater by discouraging disposal of toxic materials via wastewater systems.

(c) Encouraging a shift to land based treatment and disposal systems, where appropriate and environmentally sustainable and socially, technically and economically feasible. This includes disposal of sewage by passage through land, soil or wetlands.

(d) Avoid, remedy or mitigate adverse effects on water, land and geothermal resources or sites that are of significance to tangata whenua, where such resources or sites have been identified by tangata whenua.

(e) Avoiding physical degradation of the life-supporting capacity of receiving waters.

DW P6 (Policy 43A) When considering any application for a discharge the consent authority must have regard to the following matters:

(a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water; and

(b) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided; and

(c) the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their contact with fresh water; and

(d) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their contact with fresh water resulting from the discharge would be avoided.

This policy applies to the following discharges (including a diffuse discharge by any person or animal):

(a) a new discharge; or

(b) a change or increase in any discharge –

of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

Paragraph 1 parts a. and b. of this policy do not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management takes effect on 1 July 2011.

Paragraph 1 parts c. and d. of this policy do not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 takes effect on 1 August 2014.

Note: This policy was inserted to meet the requirements of the National Policy Statement for Freshwater Management 2011.

Note: This policy was amended to meet the requirements of the National Policy Statement for Freshwater Management 2014 and National Policy Statement for Freshwater Management 2014 (amended in 2017).

DW P7 (Policy 45) To consider requiring a bond or an acceptable alternative for any point source discharge of contaminants from industrial or trade premises where the contaminant is a hazardous substance, and the scale, intensity, duration or frequency of the effects of the discharge have a high probability or high potential to cause the long-tem contamination of soil, or adverse effects on water quality and aquatic ecosystems.

The amount of the bond will be sufficient to cover the future costs of site remediation, and will take into account the long-term management and monitoring of the activity site. Bond will be administered according to section 108A of the Act.

DW P8 (Policy 46) To avoid the adverse effects on the environment caused by:

(a) Discharges of petroleum hydrocarbons to land where such products are used as dust suppressants.
(b) Dumping of car bodies on the beds of rivers, lakes or wetlands.
(c) Deposition of waste onto the beds of rivers and lakes and wetlands, or on land where by-products may enter water.
(d) Discharge of untreated sewage to the environment, including discharges from boats into lakes and rivers.

DW P9 (Policy 47) To avoid, remedy or mitigate the adverse effects of discharges of water to water on:

(a) Flooding.
(b) Any relevant Maori cultural values.
(c) Stability of the beds and banks of the receiving water body.
(d) Ecological values.

DW P10 (Policy 48) To encourage, as appropriate, discharge activities to comply with current best engineering practices and best practicable options to avoid or mitigate adverse effects on the environment so that the requirements of this regional plan and other Regional Council requirements are met. Best engineering practices are relevant where the scale, intensity and potential adverse effects require such engineering practices.

DW P11 (Policy 49) To set a reasonable mixing zone in conditions of resource consents to discharge contaminants to water where relevant, having regard to the criteria specified in DW M16.

Cross-Reference Also refer to Policy 77, KT P11, IM P1.

Methods of Implementation

The Regional Council will:

Education, Promotion and Provision of Information

DW M1 (Method 97) Provide information to the community on the known environmental effects of discharges of contaminants to water and land.

DW M2 (Method 98) Encourage the use and appropriate management of land based treatment and disposal systems, including artificial wetlands, where these systems are proven to be effective to treat and absorb contaminants, are economically and technically feasible, and are appropriate to the local environment.

DW M3 (Method 99) Encourage the development and implementation of methods to reduce the volume and toxicity of wastewater, including:

(a) The avoidance and reduction of the production of wastes.
(b) Reuse and recycling of wastes, and recovery of by-products.
(c) Closed loop industrial systems.
(d) Best practicable options.
(e) Codes of practice or industry guidelines.
(f) Environmental management systems.
(g) Appropriate treatment of wastewater.
(h) Recovery of by-products.

DW M4 (Method 100) Raise community awareness about the correct disposal of wastes, and adverse environmental effects of inappropriate discharges of contaminants to land or water. This may be carried out in conjunction with city and district councils, where appropriate.

Working With Other Resource Management Agencies and the Community

DW M5 (Method 102) Participate in the Hazardous Substances Technical Liaison Committees.

DW M6 (Method 103) In conjunction with city and district councils, raise community awareness of the significant adverse effects on land and water resources from the inappropriate use, storage and disposal of hazardous substances.

DW M7 (Method 105) Liaise with city and district councils on the provision of signage at boat launch sites to inform the community of the prohibition on discharging sewage and other wastes from boats or any other source, on rivers and lakes.

Advocacy

DW M8 (Method 107) Advocate that city and district councils provide facilities for appropriate disposal of waste from boats, motor caravans and caravans at boat launching sites and other appropriate locations, and an analysis will be carried out in conjunction with city and district councils for each possible site.

Regulatory Methods

Cross-Reference Also refer to LM M18

Matters Relevant to Resource Consent Applications and Processing

DW M9 (Method 108) Require a contingency plan for the management of hazardous substances where a resource consent is required for:

(a) A discharge of contaminants to water,
(b) A discharge of contaminants to land where the contaminant or its by-products may enter water, or
(c) A discharge of contaminants to land,

and the contaminant is a hazardous substance that poses or is likely to pose an immediate or long-term hazard to human health or ecosystems.

DW M10 (Method 109) Consider requiring the monitoring of adverse effects of discharges of contaminants to land where the contaminant may enter water, or groundwater and adjacent surface water, relative to the scale or environmental risk. This will be carried out as a condition of resource consent, in relation to compliance monitoring requirements under section 108 of the Act.

DW M11 (Method 110) Require a hazardous waste disposal mapping system to be used for landfill sites that have been authorised to accept hazardous wastes for disposal. The monitoring system will document where the hazardous wastes have been disposed of within the site.

DW M12 (Method 111) Where appropriate, require landfill consent holders, excluding sawdust and bark dumps and cleanfill sites, to comply with:

(a) 'Landfill Guidelines: Towards Sustainable Waste Management in New Zealand', Centre for Advanced Engineering, April 2000[15], as minimum criteria for construction and operation.
(b) 'A Guide to the Management of Closing and Closed Landfills in New Zealand', Ministry for the Environment, May 2001[16], as minimum criteria for de-commissioning and aftercare.

DW M13 (Method 112) Apply, as appropriate, 'A Guide to Landfill Consent Conditions', Ministry for the Environment, May 2001[17], when setting resource consent conditions for new landfills. The recommendations in the guide will be considered in relation to specific issues of the proposed site.

DW M14 (Method 113) Require the appropriate management of leachate to avoid adverse effects on water quality and soil health, with regard to:

(a) Location.
(b) Site design and management.
(c) Reuse or on-site re-circulation of leachate.
(d) Treatment systems.
(e) Leachate composition.
(f) Sensitivity of the surrounding environment.
(g) Alternative disposal options.

DW M15 (Method 114) Consider requiring a waste minimisation plan or waste management programme to form part of any resource consent application for a discharge from a trade or industrial process to water, or to land where the contaminant or its by-products may enter water, or land, if the discharge:

(a) Contributes a significant volume to the receiving environment. This will be measured against the Q_5 7day low flow (where the discharge is to a stream or river), the reasonable mixing zone of the discharge.

(b) Has the potential to have significant adverse effects on water quality. This will be measured against the water quality classification of the receiving environment.

[15] Centre for Advanced Engineering, April 2000. Landfill Guidelines: Towards Sustainable Waste Management in New Zealand.
[16] Ministry for the Environment, May 2001. A Guide to the Management of Closing and Closed Landfills in New Zealand. Ministry for the Environment.
[17] Ministry for the Environment, May 2001. A Guide to Landfill Consent Conditions. Ministry for the Environment.

(c) Has the potential to have significant adverse effects on the life-supporting capacity of soil, or has potential to cause the long-term contamination of land.

The waste minimisation plan or waste management programme must be of sufficient detail to comply with sections 88(4)(b), 88(4)(c), 88(6)(b), and Fourth Schedule of the Act.

DW M16 (Method 115) Define the length or radius of a reasonable mixing zone in the conditions of a resource consent for the point source discharge of contaminants to a surface water body having regard to the following assessment criteria:

(a) The best practicable option to minimise the length or radius of the reasonable mixing zone.
(b) The water quality classification of the receiving water body (refer to the Water Quality Classification Map), and the relevant water quality classification standard in Schedule 9.
(c) The flow regime of the receiving water.
(d) The ambient concentrations of contaminants in the receiving water.
(e) Effluent discharge flow rate and contaminant concentrations.
(f) Existing discharge and abstraction consents.
(g) Fish migration and aquatic ecosystems requirements.
(h) The values and existing uses of the water body.
(i) Maori cultural values (refer to DW P5).
(j) Proximity to bathing sites, especially those listed in Schedule 10.
(k) Adverse environmental effects of the discharge, including cumulative effects in relation to (a) to (j).
(l) The location of the discharge and position of the outfall.
(m) Outfall diffuser design criteria.
(n) Information provided by the applicant.
(o) Any other information relevant to the nature of the discharge and the site characteristics.

Cross-Reference Also refer to KT M17, KT M18, LM M15, IM M10, LM M22.

Monitoring and Investigation of the Environment

DW M17 (Method 116) Use state of the environment and impact monitoring information to identify areas where the cumulative effects of discharges of contaminants to land or water are having adverse environmental effects.

DW M18 (Method 117) Investigate the effects of discharges of water from land drainage schemes on the water quality of the receiving environment, where adverse environmental effects are evident and such investigations are necessary.

Cross-Reference Also refer to Method IM M15, IM M16, IM M20, IM M23.

Rules

Advisory Note

1 The air-borne component of any discharge (including, but not limited to, odour, dust, particulates and the burning of waste) must comply with the Operative Bay of Plenty Regional Air Plan.

2 The rules in this regional plan do not authorise the modification or disturbance of any archaeological, or registered waahi tapu sites within the area of the activity. Written authority from Heritage New Zealand Pouhere Taonga is required prior to any destruction, damage or modification of an archaeological or registered waahi tapu site or an area where there is reasonable cause to suspect there is an archaeological site. Should any artefacts, bones or any other sites of archaeological or cultural significance be discovered within the area affected by the activity, written authorisation should

be obtained from Heritage New Zealand Pouhere Taonga before any damage, modification or destruction is undertaken.

3 Abrasive blasting is addressed by the provisions of the Operative Bay of Plenty Regional Air Plan, which requires the material from the activity to be collected. A resource consent is needed under this regional plan if there is a discharge of contaminants to water, or a discharge of contaminants to land where the contaminant may enter water, resulting from the activity.

4 For the avoidance of doubt, the Riparian Management Zone or Riparian Area in DW R12 does not apply to areas of land adjacent to ephemeral flowpaths and artificial watercourses.

5 DW R20, DW R21, DW R22 and DW R23 regulate the point source discharge of stormwater to water or land.

DW R1 (Rule 16) Permitted – Discharge of Aquatic Herbicide Over Water for Weed Control

The discharge of aquatic herbicide over water for the purpose of spraying emergent aquatic weeds, where the discharge is incidental to the activity,

is a permitted activity subject to the following conditions:

(a) The application of aquatic herbicide shall only be for the purpose of controlling:
  (i) Plant pest species listed in the 'Plant Pest Management Strategy for the Bay of Plenty Region', or the National Plant Pest Accord in rivers, streams, lakes and wetlands.
  (ii) Any vegetation necessary for the maintenance of artificial watercourses, farm drains, roadside drains, and Land Drainage Canals.

(b) Only aquatic herbicides that have been approved for use over water shall be used. Herbicides are approved under Section 21 of the Pesticides Act 1979, or when repealed, by the Hazardous Substances and New Organisms Act 1996 when enabled and operational.

(c) The aquatic herbicide shall be discharged in a manner that is consistent with the manufacturer's instructions.

(d) The discharge shall not result in any fish kills.

(e) The discharge shall not contaminate any authorised water take.

(f) The discharge shall not result in any harmful concentration of aquatic herbicide beyond the target area.

(g) There shall be no discharge of aquatic herbicide in the tidal reach of any surface water body between 1 March and 31 May.

(h) The discharge of aquatic herbicide shall comply with the requirements of the Operative Bay of Plenty Regional Air Plan.

Advisory Note

1 In relation to condition (b), the Pesticides Board currently retains this responsibility. However, the responsibility will be transferred to the Environmental Risk Management Authority in the near future.

2 Resource users must also comply with Appendix M of the NZS 8409:2004 Management of Agrichemicals, and relevant regulations of the Hazardous Substances and New Organisms Act 1996. Resource users are advised to contact the Regional Council for more information.

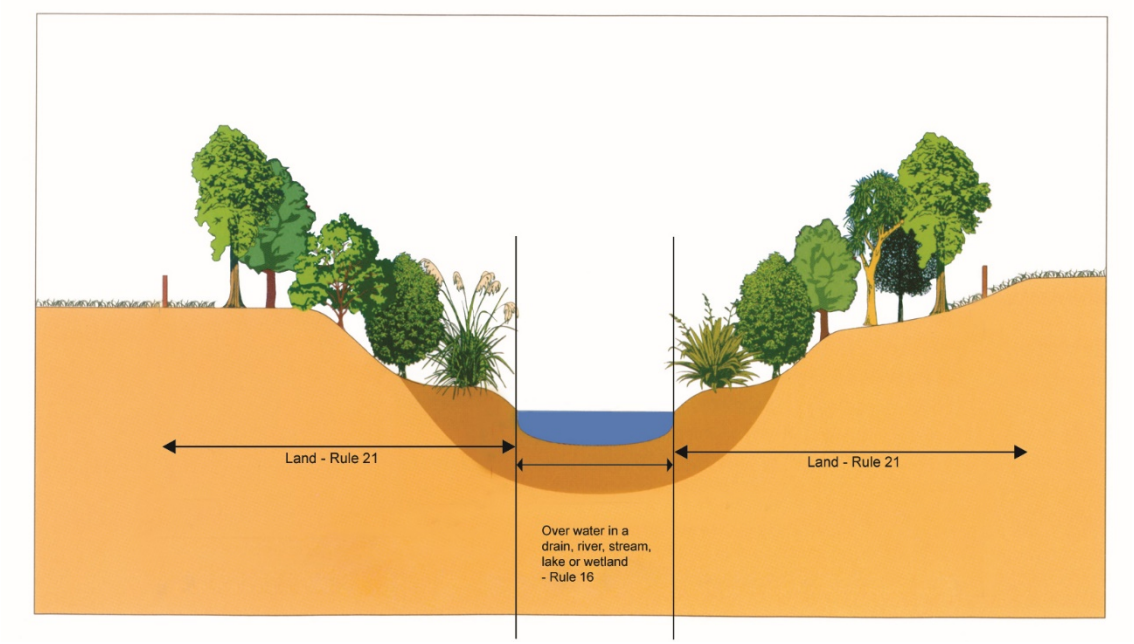
3 Compliance with conditions (b) and (c) is expected to achieve compliance with (d). Resource users should also manage the extent of the vegetation targeted by the activity so that the amount of dead and rotting vegetation in a water body does not decrease oxygen levels in the water to a level that causes fish kills.

4 For other agrichemical applications (other than discharges over water), refer to DW R12 (permitted – application of agrichemicals to land), and the Operative Bay of Plenty Regional Air Plan.

Explanation/Intent of Rule

To permit spraying of emergent weeds on the surface of water bodies. This activity should have less than minor adverse effects on the environment, including areas beyond the activity site, if carried out in compliance with the conditions. It would not be efficient to require resource consents for some plant pest or weed control activities. This rule allows the motorised and non-motorised application of agrichemicals. Condition (g) is to protect spawning areas in tidal reaches of rivers and streams. Refer to Figure DW 1 to explain where DW R1 and DW R12 apply.

Figure DW 1 Coverage of DW R1 and DW R12



Adapted from Taranaki Regional Council, 2001.

DW R2 (Rule 18) Permitted - Discharge of Dye or Gas Tracers

The discharge of dye or gas tracer material, excluding radioisotope tracers, to water for monitoring or research purposes is a permitted activity subject to the following conditions:

(a) Details of the proposed discharge shall be publicly notified at least one week prior to the discharge being made by a public notice in the local newspaper and/or other recommended methods including letter drops stating:
  (i) The area where the discharge will be made.
  (ii) The type of discharge.
  (iii) The reason for the discharge.
  (iv) The duration of the discharge.

(b) The discharge shall not contaminate any authorised water takes.

(c) The dye or gas shall be inert, and shall be non-toxic in the concentration at which it is to be used.

(d) The Regional Council and the relevant city or district council shall be notified in writing of the proposed discharge, no less than five working days before the discharge. Such notification shall include:
  (i) Persons responsible for the discharge including contact details,
  (ii) Purpose of the tracer programme,
  (iii) Description of the tracer programme,
  (iv) Nature of the tracer (i.e. type, colour, product name/description),
  (v) Discharge location and estimated timing; and
  (vi) Estimated duration of discharge.

Explanation/Intent of Rule

DW R2 is intended to allow the use of inert dye and tracers for water research, where the activity is expected to have less than minor adverse effects on the environment.

DW R3 (Rule 22) Permitted – Take, Diversion and Discharge of Water from Existing Farm Drains and Pumped Drainage Areas

The:

1 Take or diversion of water for land drainage purposes resulting from farm drains and land drainage canals that existed as of 19 February 2002; and
2 Discharge of water to a surface water body, where the discharge is from:
   (a) A pumped drainage area; or
   (b) A farm drain that existed as of 19 February 2002, where the drain is for land drainage purposes and excludes drains that are part of stormwater systems for urban areas or roading,

Is a permitted activity subject to the following conditions:

(a) The discharge shall not cause the effects listed in (i) to (v), as measured at a downstream distance of three (3) times the width of the stream or river at the point of discharge:
   (i) The production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials.
   (ii) Any conspicuous change in the colour or visual clarity, except where the discharge is from peat soils.
   (iii) Any emission of objectionable odour.
   (iv) The rendering of fresh water unsuitable for consumption by farm animals.
   (v) Any more than minor adverse effects on aquatic life.
(b) The discharge shall not cause or induce erosion to the bed or banks of any surface water body, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes:
   (i) Instability of land or the banks of the surface water body.
   (ii) Scour to the bed of the surface water body.

Advisory Note

1 Landowners are advised to check with the administrator of the land drainage scheme to which they connect for matters relating to compliance with (a). Land drainage canals may not be able to accept water from drains during flood events.
2 For any new discharges of water to water from one drain to another drain within a land drainage scheme, the approval of the administrator of that land drainage scheme must also be gained with regard to the administrator's functions under the Land Drainage Act 1908.
3 Modification of a wetland, including drainage, is a discretionary activity under WL R9.
4 DW R3 applies to discharges from the cleaning of farm drains. Any discharges of sediment from the activity shall comply with (a).
5 For the avoidance of doubt, the conditions in DW R3 apply to discharges of water from existing farm drains and pumped drainage areas at the point at which the discharge enters a stream, Land Drainage Canal (refer to Definition of Terms), or Modified Watercourse.

Explanation/Intent of Rule

To allow the ongoing operation of existing drains and land drainage schemes, including the discharge from both pumped and gravity fed drains. The rule does not permit the discharge of contaminants to water. It is recognised that discharges of

water from drains will contain diffuse source contaminants from land use activities, and discolouration from peat soils. KT M23 will be implemented to investigate if discharges permitted under this rule compromise the water quality classification of the receiving waters. The rule covers artificial drainage and diversion activities, and excludes the flow of water within natural flow-paths. The discharge of water from any new land drainage activity to a surface water body is a discretionary activity.

DW R4 (Rule 23) Permitted – Discharge of Water to Water between Artificial Watercourses

The discharge of water to water where the discharge is from an artificial watercourse to water in another artificial watercourse, is a permitted activity subject to the following conditions:

(a) The discharge shall not cause or induce erosion to land, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes instability of land.
(b) The activity shall not cause flooding or ponding on any land or property owned or occupied by another person, where that land would not naturally carry water during storm or flood events.

Advisory Note

1 Where the activity is within a Land Drainage Scheme identified in Schedule 5, landowners are advised to check with the administrator of the land drainage scheme for any necessary permissions. For any new discharges of water to water from one drain to another drain within a land drainage scheme, the approval of the administrator of that land drainage scheme must also be gained with regard to the administrator's functions under the Land Drainage Act 1908.
2 For the avoidance of doubt, the conditions in DW R3 apply to discharges of water from existing farm drains and pumped drainage areas at the point at which the discharge enters a stream, river, Land Drainage Canal (refer to Definition of Terms), or modified watercourse.

Explanation/Intent of Rule

To allow for the discharge of water to water where the adverse effects are likely to be no more than minor.

DW R5 (Rule 24) Permitted – Salt Water Flushing of Land Drainage Canals, Artificial Watercourses, and Modified Watercourses

The discharge of salt water to water in a land drainage canal, artificial watercourse or modified watercourse where:

1 The canal or watercourse is otherwise controlled by flood control gates or is a pumped system, and
2 The activity is for the purposes of salt water flushing as part of land drainage scheme maintenance works for weed control,

Is a permitted activity subject to the following conditions:

(a) Where the activity is within a Land Drainage Scheme identified in Schedule 5, the activity shall be carried out by the land drainage scheme administrator or its contractor.
(b) The discharge shall not cause flooding or ponding on any land or property owned or occupied by another person, unless the written approval of the affected person(s) has been obtained.

Explanation/Intent of Rule

To allow the use of a non-mechanical method to control weeds in land drainage canals, artificial watercourses and modified watercourses where the adverse effects are likely to be less than minor, particularly in relation to other mechanical or chemical measures.

DW R6 (Rule 33) Permitted – Discharge of Water to Water

The discharge of water to water where:

1 The discharge is the discharge of water to the same surface water body; and
2 The water quality is the same as the receiving waters;

Is a permitted activity subject to the following conditions:

(a) The discharge shall not cause or induce erosion to the bed or banks of any surface water body, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes:
  (i) Instability of the banks of the surface water body.
  (ii) Scour to the bed of the surface water body.
  (iii) Damage to the margins or banks of the surface water body.
(b) The discharge shall not cause nor contribute to flooding or ponding on any land or property owned or occupied by another person.
(c) The discharge shall not have an adverse effect on the water quality of the receiving water body.
(d) The discharge shall not damage or destroy:
  (i) Significant aquatic indigenous vegetation, or
  (ii) Aquatic habitats of indigenous species, or
  (iii) Spawning sites of indigenous species or trout, or
  (iv) Significant habitats of trout.

  as identified in Schedule 1.

Advisory Note

1 For the avoidance of doubt, DW R6 applies to discharges of water to water, where the water is abstracted from the surface water body, then discharged back into the same surface water body. DW R6 does not apply to the discharge of water from or within existing farm drains and pumped drainage areas, which is addressed by DW R3 and DW R4 DW R4 applies to the discharge of water to water between artificial watercourses.

Explanation/Intent of Rule

To allow for the discharge of water to water where the adverse effects are likely to be no more than minor. The discharge of water to water in another catchment, or to another water body, or where the water quality is different from the receiving waters, is a discretionary activity under DW R8.

DW R7 (Rule 36) Prohibited – Dumping of Untreated Sewage and Household Wastes, and Discharge of Petroleum Hydrocarbons

Any:

1 Discharge of untreated sewage to water in a stream, river or lake, from any source, including a boat.
2 Discharge of petroleum hydrocarbons to water, or onto or into land in circumstances where the contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) may enter water, where the discharge is a dust suppressant. This does not apply to the sealing of roads, or the extension of road sealing.

3 Unauthorised dumping or fly-tipping of:
(a) Car bodies.
(b) Hazardous substances and their containers that pose or are likely to pose an immediate or long term hazard to human health, ecosystems, water quality, or the life-supporting capacity of soil.
(c) Household, municipal, industrial, or agricultural wastes.
(d) Any other substance that results in the creation of a harmful by-product.
into any surface water body (including a stream or river or lake or wetland); or the bed or riparian area of a stream, or river, or lake or wetland; or in the Coastal Margin; where the dumping or fly-tipping leads to a discharge of contaminants to water or to land where the waste or its by-products may enter water,

Is a prohibited activity.

Explanation/Intent of Rule

To discourage and avoid the discharge of untreated sewage, petroleum hydrocarbons, and fly-tipping due to adverse effects on the environment (including cumulative effects) that may be difficult to remedy. Clean-up costs of illegal rubbish dumping usually fall on the community. This activity is not acceptable to the wider community due to the risk of water and soil contamination, and concerns about the effects on human and animal health.

DW R8 (Rule 37) Discretionary - Discharges to Water or Land

Any:

1 Discharge of a contaminant to water.
2 Discharge of water to water.
3 Discharge of a contaminant onto or into land in circumstances which may result in the contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water.
4 Discharge of a contaminant from any industrial or trade premises onto or into land.

That is not:

(a) Permitted by a rule in this regional plan.
(b) Permitted by a rule in any other Bay of Plenty regional plan.
(c) Prohibited by a rule in this regional plan.
(d) Restricted discretionary status by a rule in this regional plan.
(e) Controlled status by a rule in this regional plan.

Is a discretionary activity.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section of this regional plan.

All discharges to surface water that are discretionary under this rule will be assessed against the Water Quality Classification of the receiving water body (refer to Schedule 9 and the Water Classification map).

Resource consent applicants who seek to exceed the relevant Water Quality Classification standards must provide evidence in their application to demonstrate how the adverse effects of the proposed activity will be avoided, remedied or mitigated to be consistent with IM O3.

Advisory Note

1 Cleanfill sites that do not discharge leachate or contaminants to land are included in the definition of 'earthworks' and addressed by rules in the Land Management section of this regional plan.
2 If a resource consent applicant is unable to avoid, remedy or mitigate adverse effects on the environment, and does not meet IM O3, the resource application is likely to be publicly notified and/or consent may be declined.
3 The application of fertiliser is permitted under DW R11 subject to compliance with the conditions of the Rule. If the application does not comply with DW R11, a resource consent is required under DW R8. The Regional Council prefer resource users to comply with DW R11 rather than apply for a resource consent.

Explanation/Intent of Rule

To allow the Regional Council to assess the adverse effects of any discharge of contaminants or water to the environment that is not otherwise addressed by other regional rules. The resource consent process is an appropriate means of assessing such effects. DW R8 applies to, but is not limited to, comprehensive catchment discharge consents for stormwater, discharges from contaminated sites, and large scale discharge of contaminants from trade and industrial premises (including waste disposal discharges).

Assessment Criteria

When assessing resource consent applications under this rule, the Regional Council will have particular regard to, but not be limited to, the following provisions as appropriate to the nature of the discharge:

Objective	*KT O4, KT O5, KT O6, TH O1, RL O3, OH 01, IM O3, IM O4, IM O5, IM O6, LM O4, DW O1, DW O3, DW O7, DW O4, DW O8, DW O9, DW 10, DW O11, DW O12*
Policy	*KT P5, KT P11, KT P14, KT P15, KT P17, KT P18, KT P19, KT P20, IM P1,DW P1, DW P5, DW P13, DW P7, DW P9, DW P10, DW P14, DW P15, DW P17, DW P18, DW P19, DW P20*
Method	*KT M13, KT M17, KT M18, KT M20, KT M21, IM M10, IM M12, IM M23, DW M10, DW M11, DW M12, DW M13, DW M14, DW M15, DW M22, DW M23, DW M24, DW M31, DW M39, DW M42, DW M43, Water Quality Classification Map,*
Schedule	*9*

Discharges of Contaminants to Land

Issues

DW I4 (Issue 14) **Groundwater quality can be adversely affected by some use and development activities.**

Adverse effects on groundwater quality may include the following:

(a) Increased levels of bacteria, nutrients, heavy metals or other contaminants.
(b) Cross-contamination of aquifer systems.

The major causes of this issue in the Bay of Plenty are:

(a) Inappropriate water and land use activities in the recharge areas of aquifer systems. This is of particular concern where groundwater is used for municipal water supply (such in the Rotorua, Kawerau and Opotiki districts), and where groundwater feeds sensitive receiving environments (such as the Rotorua lakes, Tauranga and Ohiwa harbours).

(b) Poor groundwater bore and well construction and maintenance, which allows contaminants to enter groundwater, and provides a pathway for low quality groundwater to contaminate high quality groundwater.

Objective	*IM O1, IM O5, IM O6, IM O7*
Policy	*IM P1, LM P1, IM P4, LM P3, IM P5, IM P8*
Method	*IM M2, IM M3, LM M12, IM M6, LM M17, LM M18, IM M11, LM M20, IM M15, LM M23, IM M19, IM M20, IM M27*
Rule	*DW R9, DW R10, DW R11, DW R12, DW R13, DW R14, DW R15, DW R16, DW R17, DW R18*

DW I5 (Issue 20) **The discharge of contaminants to land that is at a rate or volume that exceeds the natural treatment capacity of the soil, can lead to the contamination of soil and water resources, and degradation of soil health and ecosystems.**

Discharges to land utilise natural processes, including nutrient uptake by vegetation, and natural soil treatment processes to assimilate contaminants into the environment. The physical and chemical characteristics of soil and groundwater can be adversely affected where the discharge of contaminants is not managed correctly and overloads natural processes. The long-term contamination of soil may impact the use of that area of land. Surface water in drains, wetlands, rivers and lakes can be degraded due to surface runoff where discharges to land are not appropriately managed.

Contaminants include, but are not limited to, agrichemicals, acids or alkalis, salts, heavy metals, and wastes. Many commonly used substances, such as fertilisers and herbicides, can have adverse effects on the environment if application rates are excessive, or conditions lead to surface runoff.

Adverse effects on the environment from discharges of contaminants to land can include:

(a) Changes to the physical and chemical characteristics of soil and groundwater.
(b) Surface runoff to drains, wetlands, rivers, streams and lakes, with subsequent effects on water quality.
(c) Odour.
(d) Increased levels of bacteria, heavy metals or other contaminants in soil and groundwater.
(e) Increased levels of nutrients in groundwater.
(f) Long-term contamination of soil that may impact future use of that land.

Matters relating to the discharge of contaminants to land that are of particular concern in the Bay of Plenty region are:

1 The discharge of leachate caused by poor site design, inappropriate management practices and inadequate treatment systems. Leachate can degrade water quality and contaminate soil due to toxic components, bacteria, discolouration, abnormal pH levels and high Biochemical Oxygen Demand ('BOD'), due to very high levels of nutrients. Leachate may also be odourous. Activities that produce leachate include, but are not limited to, composting operations, silage pits, rubbish dumps and landfills. There are some existing landfills and rubbish dumps in the region that do not have adequate leachate management systems.
2 The discharge of persistent toxic contaminants that can accumulate in receiving environments including soil and water. The application of petroleum hydrocarbon products (such as oil) as a dust suppressant to roads and construction sites is a past practice that is not longer environmentally acceptable.
3 The incorrect disposal of unwanted agrichemicals may lead to soil and water contamination.

4 The cumulative effects of many, small-scale, point source discharges of contaminants to land, resulting in the degradation of water and soil quality. Offal holes, farm dumps, stock effluent, are examples of what can be relatively small-scale discharges of contaminants that can cumulatively cause significant adverse environmental effects, and are usually difficult to address.

5 Fertiliser applied in a way or rate that exceeds plant uptake has the potential to leach nutrients to water bodies.

6 The discharge of contaminants to land is generally preferred, rather than point source discharges to surface water, as it is usually more culturally and socially acceptable. However, the environmental risk of discharges to land can vary depending on the methodology used, site-specific characteristics of the location (e.g. soil type, depth to groundwater, distance to urban areas), and the treatment capacity of the soil. The adverse effects of discharges to land need to be compared with those of discharges to water, on a case by case basis.

Objective	*DW O3, DW O7, DW O5, DW O6*
Policy	*DW 12, DW P13, DW P7, DW P8, DW P10*
Method	*LM M18, IM M10, IM M20, DW M3, DW M4, DW M19, DW M20, DW M21, DW M9, DW M10, DW M11, DW M12, DW M13, DW M14, DW M15, DW M17*
Rule	*DW R9, DW R10, DW R11, DW R12, DW R13, DW R14, DW R15, DW R17, DW R18, DW R7, DW R8*
Schedule	*6*

Objectives

DW O7 (Objective 26) Discharges of contaminants to land are managed to:

(a) Not exceed the natural treatment capacity of the soil.

(b) Avoid, remedy or mitigate the adverse effects of run off to surface water.

(c) Prevent the long-term contamination of the soil by hazardous substances, and safeguard the life-supporting capacity of soil.

(d) Ensure that any adverse effects on high quality groundwater are no more than minor:

(i) Where there is potable water, including aquifers used for municipal water supply.

(ii) Where natural water quality has not been adversely affected by land use or point source discharges.

(iii) Where there are recharge areas of (i) and (ii)

(iv) In the groundwater catchments of the Rotorua lakes, Ohiwa and Tauranga harbours.

(e) Ensure adverse effects on groundwater not otherwise addressed by (d) are avoided, remedied or mitigated.

(f) Prevent adverse effects on lake water quality in relation to the TLI of the lake, where the discharge is in the catchment of a lake.

Policies

DW P12 (Policy 43) To take appropriate action to avoid, remedy or mitigate the cumulative effects of discharges of contaminants to water or to land where such discharges are having an adverse effect on water quality, the life-supporting capacity of soil, or the coastal environment.

DW P13 (Policy 44) To require the appropriate management of discharges of contaminants to land, and to land where the contaminant may enter water, to ensure that:

(a) The rate and volume of the discharge does not exceed the natural treatment and assimilative capacity of the soil and its vegetative cover.

(b) Surface runoff of contaminants to rivers, streams, lakes, wetlands

and drains is avoided, remedied or mitigated.

(c) The creation of contaminated sites is prevented.

(d) Any adverse effects on high quality groundwater are no more than minor:

(i) Where there is potable water, including aquifers used for municipal water supply.

(ii) Where natural water quality has not been adversely affected by land use or point source discharges.

(iii) Where there are recharge areas of (i) and (ii).

(iv) In the groundwater catchments of the Rotorual lakes, Ōhiwa and Tauranga harbours.

(e) Adverse effects on groundwater not otherwise addressed by (d) are avoided remedied or mitigated.

(f) There is no net increase of nitrogen or phosphorus in lake catchments.

Methods of Implementation

Education, Promotion and Provision of Information

DW M19 (Method 101) Encourage management practices which avoid the production of leachate, including:

(a) Diversion of organic materials from landfills by composting, reuse of organic materials where opportunities are available, and land application of organic materials. This may be carried out in conjunction with city and district councils, or using existing initiatives, such as the Waste Exchange.

(b) Limiting the volume of liquid or sludge wastes disposed to landfills.

(c) Diversion of stormwater from waste disposal sites.

(d) Covering of site to control or minimise rainfall infiltration.

Working with Other Resource Management Agencies and the Community

DW M20 (Method 104) In conjunction with city and district councils, and on completion of a cost-benefit analysis, implement a system for the collection and appropriate reuse, recycling, treatment and disposal of unwanted hazardous substances, including agrichemicals.

DW M21 (Method 106) Take appropriate action within the framework of this regional plan (including future plan changes) to avoid, remedy or mitigate the adverse effects of small, point source discharges of contaminants where proven to be having adverse effects on the environment. This may include, but is not limited to, working directly with people undertaking such discharges to resolve issues, or specific regulatory control.

Rules

DW R9 (Rule 17) **Permitted – Discharge of Contaminants to Land for the Purpose of Emergency Service Fire Training**

The discharge of contaminants to land, or to land in circumstances where the contaminant may enter water, where the contaminant is foam used by the New Zealand Fire Service Commission to undertake fire training activities, is a permitted activity subject to the following circumstances:

(a) There shall be no discharge of foam to a stream, river, lake or wetland.

(b) The person discharging the foam must be either an employee or volunteer of the New Zealand Fire Service Commission who is on duty.

(c) The New Zealand Fire Service Commission shall maintain a regional register with details of location and dates of the discharge of foam to land for fire training activities.

Advisory Note

1 Where the discharge of foam is made to a reticulated stormwater system, permission for the discharge must be obtained from the relevant city or district council.

Explanation/Intent of Rule

To allow the New Zealand Fire Service Commission to undertake statutory obligations by providing for the discharge of foam to land used in emergency service training. This activity should have less than minor adverse effects on the environment if carried out in compliance with the conditions. The discharge of foam resulting from extinguishing a fire (fire investigation activities) is addressed by sections 18, 330 and 341 of the Act, and is not restricted by this regional plan.

DW R10 (Rule 19) Permitted – Application of Compost, Wood Fibre, Animal Manure, Grade Aa Biosolids or Vermiculture Material to Land

The discharge of compost, wood fibre, animal manure, Grade Aa biosolids or vermiculture material to land where the contaminant or its by-products may enter water, is a permitted activity subject to the following conditions:

(a) Except in relation to (b), the material shall be applied so that it acts as a soil conditioner, mulch, or has a beneficial effect on plant growth, and does not adversely affect soil health.
(b) Where the material is from a composting toilet, the material shall be incorporated into the soil.
(c) The compost, wood fibre, animal manure, Grade Aa biosolids or vermiculture material shall not contain any of the following substances:
    (i) Hazardous substances and their containers.
    (ii) Petroleum hydrocarbons (including oils and fuels) and their containers.
(d) There shall be no direct discharge of compost, wood fibre, animal manure, Grade Aa biosolids or vermiculture product to streams, rivers, lakes or wetlands.
(e) All practicable measures shall be taken to avoid the runoff of compost, wood fibre, animal manure, Grade Aa biosolids or vermiculture material to streams, rivers, lakes or wetlands.
(f) The material shall be applied at an appropriate rate and volume that avoids or mitigates leaching of nutrients to groundwater.
(g) The levels of heavy metals in the material shall be within those stated in the Guidelines for the Safe Application of Biosolids to Land in New Zealand, 2003[18].
(h) Where the material is Grade Aa biosolids, the discharge shall also comply with (i) and (ii):
    (i) The accumulation of heavy metals within the soil of the discharge area shall not exceed the soil limits as specified in Table 4.2 of the Guidelines for the Safe Application of Biosolids to Land in New Zealand, 2003.
    (ii) Monitoring results for the verification of Grade Aa status and the results of routine sampling that complies with section 7.5 of the Guidelines for the Safe Application of Biosolids to Land in New Zealand, 2003, shall be available to the Regional Council upon request.

[18] Guidelines for the Safe Application of Biosolids to Land in New Zealand, 2003. New Zealand Water and Wastes Association, Ministry for the Environment, Ministry of Health, Ministry of Agriculture and Forestry

This activity is also subject to the requirements of the rules in the Rotorua Lakes section.

Explanation/Intent of Rule

To allow the application of the end material of compost or vermiculture processes. Such materials include, but are not limited to, compost from composting toilets, and deep litter bedding material from intensive pig farming and poultry litter. The rule also applies to Grade Aa biosolids. The rule does not apply to industrial effluent, biosolids (including sewage sludge) that do not comply with Grade Aa rating, or wastes from trade or industrial premises. The conditions are to protect water and land resources, prevent the accumulation of contaminants on land, and ensure the discharge of high risk contaminants is controlled.

DW R11 (Rule 20) Permitted – Application of Fertiliser to Land

The discharge of fertiliser to land where the contaminant or its by-products may enter water, where the fertiliser is applied using ground-based operations, is a permitted activity subject to the following conditions:

(a) There shall be no direct discharge of fertiliser to groundwater, streams, rivers, lakes or wetlands.
(b) All practicable measures shall be taken to avoid the runoff of fertiliser to streams, rivers, lakes or wetlands.
(c) The fertiliser shall be applied at an appropriate time, rate and volume that avoids leaching of nutrients to groundwater.
(d) Fertiliser must be stored and used in a manner that complies with (a) to (c) above.
(e) Where the discharge of fertiliser is within 10 metres of a lake, river, stream or wetland, all reasonable steps shall be taken to apply the fertiliser accurately, and confine the fertiliser to the application site.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section.

Advisory Note

1 The application of fertiliser by aircraft is addressed by the Operative Bay of Plenty Regional Air Plan[19].
2 The Code of Practice for Fertiliser Use (2002) published by the New Zealand Fertiliser Manufacturers' Research Association Inc, and the Code of Practice for the Placement of Fertiliser in NZ: The Spreadmark Code of Practice (2002) are means of complying with the requirements of DW R11[20].
3 Particular care must be taken when applying fertiliser in the catchments of the Rotorua Lakes, especially those subject to the rules in the Rotorua Lakes section of this regional plan.

Explanation/Intent of Rule

To allow a common activity that should have less than minor adverse effects subject to compliance with the stated conditions. It would also be inefficient to require resource consents for such activities. The conditions aim to avoid discharges of fertiliser to surface water and minimise the leaching of nutrients to groundwater.

DW R12 (Rule 21) Permitted – Application of Agrichemicals to Land

The discharge of agrichemicals to land where the contaminant or its by-products may enter water, is a permitted activity subject to the following conditions:

[19] The Regional Council, 2003. Operative Bay of Plenty Regional Air Plan.
[20] New Zealand Fertiliser Manufacturer's Research Association Inc, 1998. Code of Practice for Fertiliser Use.

(a) There shall be no direct discharge of agrichemical to streams, rivers, lakes or wetlands.
(b) The discharge of agrichemical shall comply with the requirements of the Operative Bay of Plenty Regional Air Plan[21].
(c) The discharge shall not result in any harmful concentration of agrichemical beyond the target area.
(d) The agrichemical shall be applied in a manner that is consistent with the manufacturer's instructions.
(e) Where an agrichemical is discharged near, or adjacent to a surface water body:
    (i) Only agrichemicals that have been approved for use or near-water shall be used. Agrichemicals are approved under Section 21 of the Pesticides Act 1979, or when repealed, by the Hazardous Substances and New Organisms Act 1996 when enabled and operational.
    (ii) The discharge shall not result in any fish kills.
    (iii) The discharge shall not contaminate any authorised water take.
    (iv) There shall be no discharge of agrichemical in the tidal reach of any surface water body between 1 March and 31 May.
(f) The discharge of agrichemicals within the Riparian Management Zone specified in Table DW 2 shall only be from a method that accurately applies the agrichemical to the target species or area of land. This applies to hand held and mechanical application methods.

Table DW 2 Agrichemical Application in Riparian Areas

	General Area	Location	Land Slope	Distance from surface water body as measured from the edge of the surface water body
(a)	Riparian Management Zone – Rotorua Lakes	Rotorua Lakes (refer to Definition of Terms)	0 to 7º	Between 0-5 metres from the edge of the lake
			>7 to 25º	Between 0-10 metres from the edge of the lake
			>25 to 35º	Between 0-40 metres from the edge of the lake
			>35º	Between 0-40 metres from the edge of the lake
(b)	Riparian Management Zone – excluding (a)	All streams, rivers, wetlands, and lakes not specified in (a)	0 to 7º	Between 0-2 metres from the edge of the water body
			>7 to 15º	Between 0-5 metres from the edge of the water body
			>15 to 25º	Between 0-10 metres from the edge of the water body
			>25 to 35º	Between 0-25 metres from the edge of the water body
			>35º	Between 0-40 metres from the edge of the water body
Note: The Riparian Management Zone in Table DW 2 does not apply to artificial watercourses (including farm drains and roadside drains).				

Advisory Note

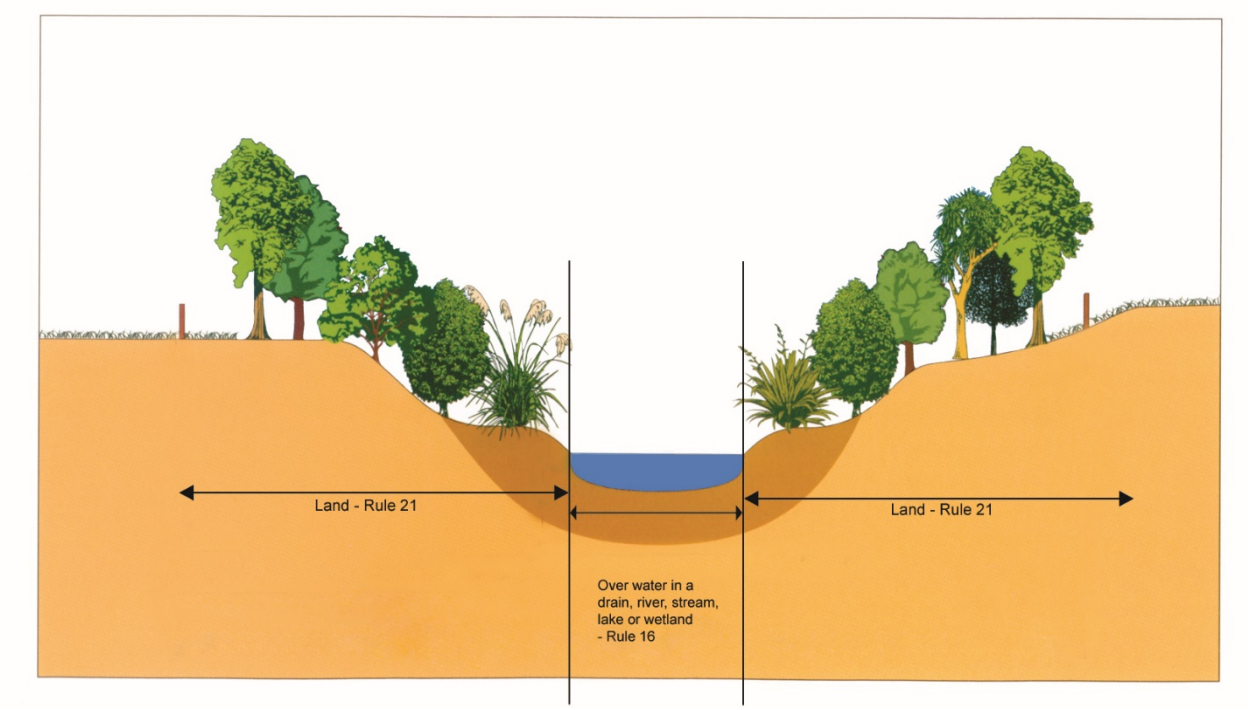
1 In relation to the approval of agrichemicals near water, the Environmental Risk Management Authority currently maintains a list of approved agrichemicals.
2 The application of agrichemicals by aircraft is addressed by the Operative Bay of Plenty Regional Air Plan.

[21] The Regional Council, 2003. Operative Bay of Plenty Regional Air Plan.

Explanation/Intent of Rule

This rule permits a relatively common activity that should have less than minor adverse effects subject to compliance with the stated conditions. It would also be inefficient to require resource consents for such activities. The conditions aim to avoid discharges to surface water, require safe handling and use procedures to be used, and avoid effects beyond the target area. Refer to Figure DW 2 to explain where DW R12 applies.

Figure DW 2 Coverage of DW R12



Adapted from Taranaki Regional Council, 2001.

DW R13 (Rule 25) Permitted – Farm Dumps

The discharge of contaminants, including leachate, to land in circumstances where the contaminant or its by-products may enter water, as part of the operation of an on-farm rubbish dump, is a permitted activity subject to the following conditions:

(a) Discharge to an on-farm rubbish dump is limited to material produced by normal farm operations or household waste from dwellings on the farm and sourced exclusively from the farm property on which the dump is sited, but excludes the discharge of substances and materials specified in (b).

(b) The following substances and materials shall not be discharged to an on-farm rubbish dump:
  (i) hazardous substances,
  (ii) petroleum hydrocarbons (including oils and fuels) and their containers,
  (iii) human sewage,
  (iv) stock effluent,
  (v) offal, dead stock or animals.

(c) Where the containers of hazardous substances are disposed of in a farm dump, the disposal shall comply with Appendix Z of NZS8409:1999 Code of Practice for the Management of Agrichemicals[22].

(d) No part of the dump site shall be located within:
  (i) 50 horizontal metres of any groundwater bore, stream, river, lake or wetland.
  (ii) 50 horizontal metres of a geothermal surface feature.

[22] NZS8409:1999. Code of Practice for the Management of Agrichemicals. Standards New Zealand, Wellington.

(iii) 50 horizontal metres of the Coastal Marine Area.
(iv) An area that is flooded during storm events. This includes land that is:
(a) an ephemeral flowpath, or
(b) the berm of a river scheme identified in Schedule 5, or
(c) a floodway identified in Schedule 6.
(v) An area where the highest groundwater level is less than one (1) metre below the base of the dump site.

(e) There shall be no surface ponding of leachate at the dump site, or overland flow of leachate from the dump site.
(f) Stormwater shall be diverted from entering the dump site.
(g) When no longer in use the waste in the dump site shall be covered with a minimum of 300 mm of soil material substrate.

Advisory Note

1 As a courtesy to neighbours, operators of farm dumps should consider the proximity of the dump site to property boundaries and dwellings; control of nuisance effects such as windblown litter, flies and rats; and the visibility of the dump site.
2 With regards to land use restrictions, the site must comply with the provisions of a district plan.

Explanation/Intent of Rule

To allow for on-farm waste disposal sites, particularly in areas where there are no other waste disposal opportunities. This rule does not apply to dump sites where waste is accepted from other properties. The conditions are preventative measures to minimise the potential adverse environmental effects (including cumulative effects) of farm dumps in the region.

DW R14 (Rule 26) Permitted – Offal Holes

The discharge of contaminants, including leachate, to land in circumstances where it may enter water, as a result of the operation of an offal hole, is a permitted activity subject to the following conditions:

(a) Discharge into an offal hole is limited to animal and vegetable material resulting from normal farm operations sourced exclusively from the farm property on which the offal hole is sited, but excludes the discharge of substances and materials specified in (b).
(b) The following substances and materials shall not be discharged to an offal hole:
(i) hazardous substances and their containers,
(ii) petroleum hydrocarbons (including oils and fuels) and their containers,
(iii) human sewage,
(iv) stock effluent.
(c) The offal hole shall not be located within:
(i) 50 horizontal metres of any groundwater bore, stream, river, lake or wetland.
(ii) 50 horizontal metres of a geothermal surface feature.
(iii) 50 horizontal metres of the Coastal Marine Area.
(iv) An area that is flooded during storm events. This includes land that is:
(a) an ephemeral flowpath, or
(b) the berm of a river scheme identified in Schedule 5, or
(c) a floodway identified in Schedule 6.
(v) An area where the highest groundwater level is less than two (2) metres below the base of the offal hole.
(d) There shall be no surface ponding of leachate or wastes at the offal hole site or overland flow of leachate or wastes from the offal hole site.
(e) The offal hole shall be securely covered to prevent stormwater from entering the hole.
(f) When no longer in use the waste in the dump site shall be covered with a minimum of 300 mm of soil material substrate.

Advisory Note

1 As a courtesy to neighbours, operators of offal holes should consider the proximity of the dump site to property boundaries and dwellings; control of nuisance effects such as flies and rats; and the visibility of the offal hole.
2 With regards to land use restrictions, the site must comply with the provisions of the District Plan.
3 Care should be taken when developing offal holes to ensure hole sizes are not too large, or there are not too many holes in one location, to ensure the breakdown of materials and to minimise scavenging.
4 The disposal of animal carcasses that contain infectious diseases are subject to other provisions, and require notification to the Ministry of Primary Industries. Incineration is the preferred method of disposal in those circumstances.

Explanation/Intent of Rule

To allow for on-farm disposal of biodegradable wastes generated on the property. This rule does not apply to sites where waste is accepted from other properties. The conditions are preventative measures to minimise the potential adverse environmental effects (including cumulative effects) of offal holes in the region, while recognising that these activities are part of normal farming practices.

DW R15 (Rule 27) Permitted – Ensilage (Silage) Pits and Stacks

The discharge of leachate from ensilage (silage) pits and stacks to land in circumstances where the leachate or its by-products may enter water is a permitted activity, subject to the following conditions:

(a) There shall be no discharge of leachate to a surface water body.
(b) There shall be no surface ponding of leachate at the silage pit site or overland flow of leachate from the silage pit or stack site.
(c) All practicable steps shall be taken to divert stormwater away from the silage pit or stack.
(d) The silage pit or stack shall not be located within:
    (i) 50 horizontal metres of any groundwater bore, stream, river, lake, wetland, or Land Drainage Canal.
    (ii) 50 horizontal metres of a geothermal surface feature.
    (iii) 50 horizontal metres of the Coastal Marine Area.
    (iv) A gully or depression, or an area that is flooded during storm events.
    (v) An area where the highest groundwater level is less than one (1) metre below the base of the silage pit or stack.

Advisory Note

1 This rule does not apply to wrapped silage bales, which are not addressed by this regional plan.
2 Where an ensilage (silage) pit or stack is sealed with an impermeable base and leachate is collected and discharged to an effluent treatment pond, the pit or stack is not subject to DW R15. Any other pits and stacks are subject to DW R15, including any sealed pit or stack that does not have a leachate collection system.
3 In relation to DW R15, it is recommended that ensilage (silage) pits and stacks are covered to prevent rainwater entering the silage, and that silage is made in a manner that minimises the amount of excess moisture in the pit or stack.
4 In areas with high groundwater tables where the silage pit can not comply with DW R15(d)(v), silage pits should be constructed on a sealed base, and leachate collected and discharged to an effluent treatment system.

Explanation/Intent of Rule

To allow an activity that is part of normal farming practices subject to conditions that protect water quality. It is important to note that silage leachate is on average 200 times stronger than raw sewage and can have significant adverse effects on water quality if ensilage pits or stacks are not located or managed appropriately. Any ensilage pit or stack that does not meet all the conditions of DW R15 is a discretionary activity.

DW R16 (Rule 28) Permitted – Composting Operations

The discharge of leachate from composting operations to land in circumstances where leachate may enter water is a permitted activity, subject to the following conditions:

(a) No hazardous substances, human sewage, petroleum hydrocarbons (including oil), fats (including grease trap wastes and animal fats), offal or animal carcasses shall be composted.
(b) There shall be no discharge of leachate to a surface water body.
(c) There shall be no surface ponding of leachate at the composting site or overland flow of leachate from the composting site.
(d) All practicable steps shall be taken to divert stormwater away from the pile.
(e) The composting site shall not be located within:
    (i) 50 horizontal metres of any groundwater bore, stream, river, lake or wetland.
    (ii) 50 horizontal metres of a geothermal surface feature.
    (iii) 50 horizontal metres of the Coastal Marine Area.
    (iv) An area that is flooded during storm events. This includes land that is:
        (a) An ephemeral flowpath, or
        (b) The berm of a river scheme identified in Schedule 5, or
        (c) A floodway identified in Schedule 6.
    (vi) An area where the highest groundwater level is less than two (2) metres below the base of the composting site.

Advisory Note

1 Where a composting operation is an enclosed system, or the composting is carried out on a concrete pad where the leachate is recirculated into the pile, a resource consent is not required under this regional plan.
2 Composting operations must also comply with the requirements of the Operative Bay of Plenty Regional Air Plan.
3 Compliance with the provisions of this regional plan does not remove the need to also comply with district plan provisions on composting sites.

Explanation/Intent of Rule

To allow composting of greenwaste, plant and vegetable wastes, and other biodegradable materials not excluded by condition (a). Urban household compost bins are not considered to be of concern and are not controlled by this regional plan. Composting recycles biodegradable wastes into a soil conditioner product, and can significantly reduce the volume of waste disposed to landfills in the region.

DW R17 (Rule 28A) **Controlled – Composting of Offal and Animal Carcasses**

The discharge of leachate from the composting of offal and animal carcasses to land, or to land in circumstances where the leachate may enter water, where the activity meets the following conditions is a controlled activity:

(a) Only offal or animal carcasses sourced exclusively from the farm property on which the activity is sited shall be composted.
(b) No hazardous substances, human sewage, petroleum hydrocarbons (including oil), or grease trap wastes shall be composted.
(c) Leachate shall be collected and managed to comply with conditions (d), and
(d) There shall be no discharge of leachate to a surface water body.
(e) There shall be no surface ponding of leachate at the composting site or overland flow of leachate from the composting site.
(f) All practicable steps shall be taken to divert stormwater away from the composting site.
(g) Offal or animal carcasses containing notifiable animal diseases, as defined in the Biosecurity Act 1993, shall not be composted. Such material should be disposed of in accordance with Ministry of Primary Industries procedures.

The Regional Council reserves its control over the following matters:

(a) Measures to avoid, remedy or mitigate the adverse effects of the discharge of leachate to the environment.
(b) Location of the composting site in relation to surface water bodies (including coastal waters), groundwater bores, areas that convey water during storm events, and depth to groundwater.
(c) The composting method, and management of the composting operation to avoid, remedy or mitigate adverse effects on the environment.
(d) Compliance with relevant industry codes of practice that addresses the composting of offal or animal carcasses.
(e) The administrative charges under section 36 of the Act.
(f) Monitoring requirements.

Notification

Applications for the discharge of leachate to land, or land in circumstances where the leachate may enter water, under this Rule do not require the written approval of affected persons, and shall not be publicly notified, except where The Regional Council considers special circumstances exist in accordance with Section 94C of the Act.

Advisory Note

1 Where a composting operation is an enclosed system, or the composting is carried out on a concrete pad where the leachate is recirculated into the pile, a resource consent is not required under this regional plan.
2 The activity must also comply with the requirements of the Operative Bay of Plenty Regional Air Plan.

Explanation/Intent of Rule

To provide for discharges of leachate from composting operations where the adverse effects are more appropriately assessed and controlled through resource consent conditions. It is recognised that composting is preferable to offal pits or burial. Matters of which the Regional Council retains control are those relevant to effects on water quality, and administrative issues. The composting of offal or animal carcasses that does not meet the conditions of DW R17 is a discretionary activity under DW R8.

DW R18 (Rule 29) Permitted – Discharge of Bark and Wood Waste to Land (Large Disposal Sites)

The:

1 Discharge of bark and wood waste, to land, and
2 Discharge of leachate to land or to land in circumstances where the leachate or its by-products may enter water from bark and wood waste disposal sites,

Is a permitted activity, subject to the following conditions:

(a) Only wood fibre, wood chips, sawdust, small wood off-cuts, and bark shall be disposed of at the site.
(b) No chemically treated wood or wood waste shall be disposed of at the site.
(c) The material shall be placed in layers, where each layer does not exceed three (3) metres in depth.
(d) Each layer of material shall be covered with a minimum of 250mm of soil material substrate.
(e) The disposal site shall not be located within:
    (i) One (1) kilometre horizontal distance from any groundwater bore or stream, river, lake or wetland.
    (ii) 300 metres horizontal distance from any geothermal surface feature.
    (iii) 300 metres horizontal distance from the Coastal Marine Area.
    (iv) An area that is flooded during storm events, including ephemeral flowpaths.
    (v) An area where the highest groundwater level is less than 20 metres below the base of the disposal site.
(f) All practicable steps shall be taken to divert stormwater away from the disposal site.
(g) There shall be no direct discharge of leachate to surface water.
(h) The discharge of leachate shall not cause or contribute to the discolouration of water in streams, rivers, lakes or wetlands downstream of the disposal site.
(i) There shall be no overland flow of leachate or contaminated stormwater from the disposal site.

Explanation/Intent of Rule

To allow bark and wood waste disposal sites for the disposal of wood wastes from wood and forestry processing operations. The rule provides for the spreading of wood or bark wastes, which is unlikely to have more than minor adverse environmental effects. DW R18 does not apply to harvesting material around landings and skid sites, but does apply to waste brought to a site from a processing operation.

DW R19 (Rule 32) Controlled – Discharges of Dairy Shed or Piggery Effluent to Land

The discharge of dairy shed or piggery effluent to land where the contaminant may enter water where:

1 The discharge is spray irrigation; or
2 The discharge is soil injection; or
3 The discharge is to land soakage and is not within the catchment of the Rotorua Lakes;

Is a controlled activity.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section.

The Regional Council reserves its control over the following matters:

(a) Nitrogen application rate.
(b) Discharge rate and volume.
(c) Location of discharge in relation to the proximity to a surface water body or groundwater bores.
(d) Discharge site in relation to soil type, slope, and area.
(e) Measures to avoid, remedy or mitigate adverse effects on surface water and groundwater.
(f) The duration of the consent.
(g) Monitoring requirements.
(h) The administration charges under section 36 of the Act.

Notification

Applications for the discharge of dairy shed or piggery effluent to land under this Rule do not require the written approval of affected persons, and shall not be publicly notified, except where the Regional Council considers special circumstances exist in accordance with section 94C of the Act.

Explanation/Intent of Rule

To encourage the discharge of dairy shed or piggery effluent to land by spray irrigation, and to land soakage in appropriate areas. Land soakage may not be appropriate in the lake catchments specified, as there may not be sufficient treatment of the effluent before it reaches groundwater in these sensitive receiving environments. Matters of which the Regional Council retains control are those relevant to effects on water quality, and administrative issues.

Discharge of Stormwater

Refer to the definition of 'stormwater' in the Definition of Terms for clarification of the coverage of this section of the regional plan.

Issues

DW I6 (Issue 22) **The lack of integrated and comprehensive management of stormwater may increase adverse effects on the environment.**

The lack of an integrated and comprehensive stormwater catchment management approach to stormwater in our region can result in a variety of problems including:

(a) Contamination of stormwater. City and district councils may lack full documentation of stormwater systems. The illegal discharge of industrial contaminants to stormwater systems is a particular problem.
(b) Flooding. Fragmented management of stormwater catchments may result in inadequate structure placement and pipe sizes. As land use changes occur, the existing stormwater infrastructural requirements may pose conveyance limitations. Dwellings may have been built in natural flowpaths or ephemeral flowpaths.
(c) Damage or destruction of heritage values - refer to DW I10 for explanation.

Integrated and comprehensive management of stormwater should lead to better environmental outcomes in relation to improved water quality, reduced flooding and the maintenance of heritage values.

Objective	*DW O8*
Policy	*DW P14, DW P16*
Method	*IM M3, LM M9, DW M33, DW M36, DW M39, DW M40, DW M41, DW M42*
Rules	*DW R20, DW R21, DW R22, DW R23, DW R8*

DW I7 (Issue 23) **There is the potential for stormwater to transport contaminants, which adversely affect receiving environments.**

The source of stormwater influences the types of contaminants that may be present in the discharge:

1 Residential/commercial/industrial areas. Stormwater from these land use areas generally contain sediment, metals, nutrients, and Total Petroleum Hydrocarbons. Litter and various other contaminants may also be present. In some cases contaminants are being illegally discharged to stormwater systems and are degrading water quality due a lack of community awareness about the difference between stormwater and sewerage management systems, and a perception that stormwater systems can be used for waste disposal. Sewage overflows, geothermal water, swimming pool water, industrial wastes, and wash down water, can contaminate stormwater where discharged to stormwater systems.

2 Roading. Stormwater from roading may contain heavy metals and Total Petroleum Hydrocarbons with levels that can relate to traffic volumes and the type of vehicles. Rural roads with low traffic volume present a low environmental risk. Stormwater from high traffic areas, including urban areas and heavily used sections of state highways, have a greater potential to contain significant levels of contaminants.

3 Land Disturbance Activities (e.g. earthworks, vegetation disturbance, and quarries). Sediment is the major contaminant present in discharges from land disturbance activities, which can degrade water quality and aquatic habitats, change instream characteristics, and increase sedimentation in receiving environments such as lakes, harbours and estuaries. Sediment from earthworks is a particular concern in the Tauranga Harbour catchment. Earthworks and quarries present different risks to the environment, earthworks are generally short-term activities carried out during the development stage of a project, whereas quarries are of a longer duration.

4 Rural areas. Stormwater discharges from rural areas are largely diffuse discharges, but have the potential for increased adverse effects when diverted and channelled into point source discharges. Faecal material from stock, nutrients and sediment are the main contaminants present.

All stormwater is contaminated to a greater or lesser degree by inputs from natural or human sources. There is limited knowledge about stormwater quality in the region, what treatment methods are appropriate, or where treatment is necessary. There is a need for continued stormwater monitoring to gain a better understanding of the geographic differences in stormwater quality to ensure effective and efficient management. There is a lack of information on the effect of changing land use (e.g. from residential to industrial) on stormwater quality, and the sources of stormwater pollution. Current levels of contaminants in stormwater will change over time, for example as land use intensifies and traffic volumes increase. This is expected to be evident with regards to the western Bay of Plenty area. The retention zones of harbours (e.g. Tauranga Harbour, Ohiwa Harbour), estuaries and lakes (e.g. Lake Rotorua) are particularly sensitive to increased contaminant levels.

Objective	*DW O1, DW O9, DW O13, DW O14*
Policy	*DW P1, DW P14, DW P15, DW P16, DW P17, DW P20*
Method	*LM M1, IM M1, LM M2, IM M3, IM M8, DW M22, DW M23, DW M25, DW M28, DW M29, DW M30, DW M31, DW M32, DW M33, DW M34, DW M35, DW M37, DW M38*
Rule	*DW R20, DW R21, DW R22, DW R23, DW R8, rules in the Rotorua Lakes section of this regional plan*
Schedule	*4*

DW I8 (Issue 24) **Excessive rates and volumes of stormwater discharged from point sources can lead to erosion and scour**.

Preventing or minimising erosion and scour from point source discharges of stormwater is necessary to avoid or mitigate the effects of these discharges on the environment.

Objective	*DW O10, DW O13*
Policy	*DW P18, DW P21*
Method	*DW M22, DW M24, DW M42, DW M44*
Rule	*DW R20, DW R22, DW R23, DW R8*

DW I9 (Issue 25) **Increased volumes of stormwater are being diverted, concentrated and discharged to streams, rivers, lakes and coastal waters from developed areas as a result of the creation of impermeable surfaces that reduce the natural infiltration of rainwater, and a lack of reuse of stormwater.**

Stormwater management systems may also concentrate flows, and increase the velocity at which stormwater passes through the catchment. This creates a higher potential to cause downstream flooding, erosion and scour. Stormwater is often diverted away from its natural drainage pattern, causing unacceptable effects on other properties. The increase in compaction and lowered infiltration rates of soil resulting from urban development also increase the volume of stormwater runoff.

A contributing factor to increasing volumes of stormwater discharges is the lack of recognition of the resource value of stormwater and opportunities for the reuse of stormwater. Allowing for infiltration areas, and alternative methods of controlling and conveying stormwater should be encouraged.

Objective	*DW O11, DW O13*
Policy	*DW P19*
Method	*DW M22, DW M24, DW M33, DW M40, DW M42, DW M43, DW M44*
Rules	*DW R20, DW R21, DW R22, DW R23, DW R8*

DW I10 (Issue 26) **The heritage values of streams, rivers (including modified watercourses) and lakes can be degraded where such watercourses are used as treatment and disposal systems for contaminated stormwater, or increased volumes of stormwater are discharged to receiving water bodies from urban areas.**

Streams, particularly those flowing through urban areas, have been channelled, piped, used as primary treatment systems, and are the receiving environments for stormwater discharges. Aquatic habitats, cultural and amenity values can be damaged or destroyed by such actions.

Also refer to Damming and Diversion in the Water Quality section, and Activities in the Beds of Streams, Rivers and Lakes in the Beds of Water Bodies section of this regional plan for relevant other provisions.

Objective	*DW O12, DW O15*
Policy	*DW P14*
Method	*IM M10, DW M33, DW M38, DW M40, DW M42*
Rule	*DW R20, DW R8*

DW I11 (Issue 27) **The piping and diversion of small streams as part of urban development adversely affects the habitats of indigenous fish species, the natural character of those streams, and can lead to increased flooding in lower reaches of the catchment.**

The piping of small streams and modified watercourses as part of urban development and stormwater management has occurred in the past, but is no longer considered acceptable practice. Small streams and modified watercourses provide important habitats for some species of indigenous

fish, including kokopu and eel species. Piping reduces the amount of habitat available to aquatic species and may compromise fish passage within a catchment. It is more appropriate to retain such streams in their natural state, and use Low Impact Design approaches to manage urban stormwater. Piping also concentrates stormwater flows, which can lead to increased flooding in downstream areas where the stormwater is discharged. It is recognised that it may be difficult or impracticable to retrofit existing stormwater systems to restore natural streams and linkages to wetlands. However, the development of greenfield sites can be designed and managed to avoid the piping of streams.

Objective	*DW O15*
Policy	*DW P14, DW P15, DW P16, DW P18, DW P19, DW P21*
Method	*IM M10, DW M26, DW M27, DW M38, DW M40, DW M41, DW M42, DW M43, DW M44*
Rule	*DW R20, DW R8*

Objectives

DW O8 (Objective 30)	Integrated and comprehensive management of stormwater within a catchment or sub-catchment framework, where practicable.
DW O9 (Objective 31)	Improvement, where necessary, to the quality of stormwater discharged to the environment.
DW O10 (Objective 32)	Erosion and scour caused or exacerbated by stormwater discharges is avoided, remedied or mitigated.
DW O11 (Objective 33)	The volume of stormwater from urban areas and other sources that utilise stormwater systems that discharge to streams, rivers and lakes is minimised.
DW O12 (Objective 34)	Streams and rivers are not used as treatment systems for contaminated stormwater.
DW O13 (Objective 35	Stormwater is discharged to land, where appropriate.
DW O14 (Objective 36	No net increase of nitrogen or phosphorus to lake catchments as a result of stormwater discharges, especially from new urban development.
DW O15 (Objective 37)	Stormwater discharges avoid, remedy or mitigate adverse effects on the ecological, natural character, landscape, recreational, and Maori cultural values of streams, rivers and lakes.
Cross-Reference	Also refer to TH O1, RL 03, OH 01, RL O2, DW O1, BW O2.

Policies

DW P14 (Policy 50)

To encourage city and district councils and roading authorities to plan, design, construct and maintain urban stormwater management systems within an integrated and comprehensive framework that:

(a) Avoids or mitigates adverse effects on rivers, streams, wetlands and aquatic ecosystems.

(b) Considers the total stormwater catchment, or sub-catchment as appropriate, including the interaction between different land uses in the catchment, and the effects of the discharge flow rate and volume on the existing hydrological system.

(c) Retains or establishes appropriate vegetation adjacent to natural water bodies, riparian margins and wetlands wherever practicable.

(d) Avoids the use of natural waterways as treatment systems for contaminated stormwater.

(e) Where necessary, improves the quality of stormwater discharged to the environment.

(f) Minimises the quantity of urban stormwater discharged to streams, rivers and lakes.

(g) Avoids, and where practicable and achievable remedies, the adverse effects on aquatic habitats from the piping of small streams

and modified watercourses

DW P15 (Policy 51) To require the appropriate management of stormwater quality, including:

(a) The use of source controls to avoid the contamination of stormwater.
(b) The use of best practicable options.
(c) Treatment of stormwater to prevent the contamination of receiving environments.

DW P16 (Policy 52) To raise community awareness about stormwater management issues, including pollution of stormwater, source control of contaminants, appropriate disposal of wastes, on-site retention and reuse, and the adverse effects of stormwater contamination on the environment. This will be carried out in conjunction with city and district councils.

DW P17 (Policy 53) To require city and district councils to maintain records of stormwater systems and inputs to these systems in areas where there is a high risk of stormwater contamination to assist the identification of the source(s) of stormwater contamination.

DW P18 (Policy 54) To require stormwater discharge rates and volumes, and stormwater discharge outlet structures, to be designed and managed to avoid or mitigate erosion and scour.

DW P19 (Policy 55) To encourage the minimisation of the volume of stormwater runoff discharged to the environment from urban areas.

DW P20 (Policy 56) To encourage the use of appropriate measures to reduce the level of contaminants in rural stormwater, to avoid, remedy or mitigate adverse effects on water quality.

DW P21 (Policy 57) Where appropriate to the environmental limitations of the site, encourage the discharge of stormwater to land.

Cross-Reference Also refer to DW P1.

Methods of Implementation

The Regional Council will:

Methods Specific to Residential/Commercial/Industrial Areas

DW M22 (Method 118) In conjunction with the city council, the city council, district councils and the community, develop practicable options for stormwater management to:

(a) Minimise the quantity of urban stormwater discharged to streams, rivers and lakes; and
(b) Achieve appropriate quality standards for stormwater discharges, and where necessary improve the quality of stormwater discharges.

The best practicable options will assist the community to comply with the requirements of this regional plan.

DW M23 (Method 119) Encourage the city council, district councils and the community to use management measures to minimise the contamination of urban stormwater, including:

(a) At-source management of contaminants.
(b) Use of best practicable options to reduce levels of contaminants entering surface water bodies.
(c) Treatment of stormwater prior to discharge to receiving environments where appropriate.
(d) Prevention of inappropriate discharges of contaminants to stormwater systems, such as appropriate site management, and appropriate disposal of wastes.

DW M24 (Method 120) Encourage measures to reduce the volume of stormwater discharged to the environment from urban areas, including:

(a) The appropriate design of subdivisions and other land use developments to minimise stormwater runoff, such as minimising the increase in the area of impermeable surfaces and retaining natural flood retention areas.
(b) On-site management and disposal of stormwater to soakage, where practicable and appropriate.
(c) Storage and reuse of stormwater, including for irrigation or creation of aquatic habitats, where practicable and appropriate.
(d) Retention or creation of non-structural stormwater controls, where appropriate.

DW M25 (Method 121) Advocate the city council and district councils to manage the discharge of stormwater from industrial or commercial sites, particularly from high risk facilities in Schedule 4, where such discharges are made to a council stormwater system. Contaminants from industrial or commercial tradewaste, or from the storage of hazardous materials and waste products, should not be allowed to discharge to a stormwater system, or to land where the contaminants may enter the stormwater system. Contaminated stormwater from industrial or commercial sites is to be appropriately treated to reduce contaminants to acceptable levels prior to discharge to stormwater systems.

DW M26 (Method 122) Require stormwater management systems in greenfield sites to avoid the piping of small streams.

DW M27 (Method 123) Encourage district and city councils to investigate measures to return piped streams in urban areas to their natural state, where practicable and achievable within existing urban areas.

Cross-Reference Also refer to LM M1, LM M2, IM M3, LM M6, LM M9

Methods Specific to Land Disturbance Activities

DW M28 (Method 124) Encourage land disturbance activities to be managed according to the the Regional Council Erosion and Sediment Control Guidelines[23] (Earthworks, Quarries, or Forestry whichever is appropriate) to control erosion and discharges of sediment to water, and to contain suspended solids in stormwater on-site where appropriate.

DW M29 (Method 125) Work with the city council and district councils to address the effects of discharges of sediment from small earthworks sites (such as house sites), including the development of guidelines for small earthwork site management.

Methods Specific to Roading

DW M30 (Method 126) Encourage roading authorities to consider planning roading networks and urban areas to minimise the contamination of receiving environments caused by stormwater discharges.

DW M31 (Method 127) Encourage roading authorities to provide for appropriate stormwater treatment systems at the development stage of new roading, including state highways, relative to expected traffic levels and potential levels of contaminants.

DW M32 (Method 128) Advocate that central government regulate the types and levels of additives, including heavy metals, in vehicle components to reduce contaminants in stormwater from roading.

[23] Environment Bay of Plenty, 2001. Erosion and Sediment Control Guidelines for Land Disturbing Activities. Guideline No. 2001/03.
Environment Bay of Plenty, 2000. Erosion and Sediment Control Guidelines for Forestry Operations. Guidline No. 2000/01.

Methods Specific to Rural Areas

DW M33 (Method 129) Where the cumulative effects of activities in a rural catchment are degrading water quality in streams, rivers and lakes, the Regional Council will:

(a) Encourage landowners to use measures to reduce the level of contaminants in rural stormwater (refer to LM M1, IM M1, LM M2 and IM M8).

(b) Use appropriate measures within the framework of this regional plan (including future plan changes) to reduce the level of contaminants in rural stormwater (e.g. refer to DW R3, DW R20, DW R8).

Cross-Reference Also refer to Methods LM M1, IM M1, LM M2 and IM M8.

Methods Applicable to All Stormwater

DW M34 (Method 130) Continue investigations to review levels of stormwater contaminants and appropriate discharge standards in relation to land use intensification and changes such as increased traffic densities. Such investigations will include soluble and sediment-bound contaminants and the sources of stormwater contaminants where necessary. This will be carried out by the Regional Council, in conjunction with the city council, district councils and roading authorities, where appropriate.

DW M35 (Method 131) Continue to monitor the effects of stormwater discharges from high risk activities, and the impacts on sensitive receiving environments. This will assist the community to determine appropriate stormwater controls. This will be carried out by the Regional Council as part of compliance and impact monitoring.

DW M36 (Method 132) Continue to operate a Stormwater Liaison Group with the city council, district councils and roading authorities in the region to facilitate co-ordination and co-operation for stormwater management issues. Other relevant parties will be involved in the Stormwater Liaison Group as appropriate, and where agreed by all members of the Group.

DW M37 (Method 133) Work with the city council and district councils to formulate strategies to address existing stormwater discharges that are not performing to the required environmental standards. Off-site mitigation measures, remediation works in other areas, or other appropriate works may be considered where it is not cost-effective or practicable to upgrade existing stormwater systems to meet required environmental standards. This will be assessed on a case by case basis with regard to the sensitivity of the receiving environment.

DW M38 (Method 134) In conjunction with the city council, district councils and roading authorities, identify receiving environments that have been adversely affected by stormwater discharges, or are sensitive receiving environments at risk of contamination from stormwater discharges resulting from future urban or roading developments.

DW M39 (Method 135) Require the city council and district councils to apply for comprehensive stormwater catchment or sub-catchment consents (Comprehensive Stormwater Consents) for areas that have been identified as priority catchments by the Regional Council in conjunction with city and district councils (e.g. in the Stormwater Strategy for the Bay of Plenty Region).

DW M40 (Method 136) Advocate the city council and district councils to develop long-term stormwater planning strategies that:

(a) Address the adverse environmental effects of stormwater on water quality, natural hydrological systems, and aquatic habitats.

(b) Integrate urban planning and the provision of stormwater infrastructure for present and future urban growth.

(c) Include catchment based approaches to stormwater management.

(d) Take into account the need to protect identified sensitive ecological

areas.

(e) Address the different management issues for residential, commercial, industrial and roading stormwater.
(f) Address appropriate stormwater management and treatment.
(g) Identify and map existing stormwater systems and areas where there is a high risk of stormwater contamination, and maintain accurate records of inputs of potentially contaminated stormwater into these systems.
(h) Monitoring of discharges to stormwater systems.

DW M41 (Method 137)

In conjunction with the city council and district councils, establish systems and processes to:

(a) Co-ordinate the consenting of discharges of water or contaminants to water in any open watercourse that forms part of a city council or district council stormwater system.
(b) Manage the discharge of sediment contaminated stormwater from earthworks to district council stormwater systems.
(c) Manage stormwater discharges from high risk industrial sites, where the activity may need a resource consent from the Regional Council for the discharge of contaminants.

This may include, but is not limited to, transfer of powers under section 33 of the Act.

DW M42 (Method 138)

Encourage stormwater systems to be designed, constructed and maintained to appropriate design standards that are consistent with the requirements of this regional plan, and the principles of Low Impact Design (as described in DW M23 and DW M24).

DW M43 (Method 139)

Encourage use of innovative methods to manage and treat stormwater to appropriate standards before it is discharged to streams, rivers, lakes and coastal waters. This includes, but is not limited to, swales, infiltration systems, wetlands, and other stormwater management and treatment methods that are appropriate to the site and individual circumstances.

DW M44 (Method 140)

Encourage stormwater to be retained on-site and discharged to land soakage where this is practicable and environmentally sustainable.

Regulatory Methods

Cross-Reference

Also refer to LM M18, DW R8, DW R20.

Rules

DW R20 (Rule 30)

Permitted – Discharge of Stormwater to Surface Water

The discharge of stormwater to surface water, or to land where the discharge enters surface water, is a permitted activity, subject to the following conditions:

(a) The suspended solids concentration of the discharge shall not be greater than 150g/m³, except where a 10 minute duration 10% AEP storm event (10 year return period storm) is exceeded.
(b) The discharge shall not be to a surface water body in an area otherwise covered by a Comprehensive Catchment Discharge Consent.
(c) The discharge shall not cause the production of conspicuous oil or grease films, scums or foams, or floatable materials.
(d) The rate of discharge shall not exceed 125 litres per second for a 10 minute duration 10% AEP storm event (10 year return period storm).

(e) The discharge shall not contain any stormwater from a timber preservation site, timber treatment site, or a site where chemically treated timber is stored.
(f) The discharge shall not cause or induce erosion to the bed or banks of any surface water body, or to land, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes:
  (i) Instability of land or the banks of the surface water body.
  (ii) Scour to the bed of the surface water body.
  (iii) Damage to the margins or banks of the surface water body.
(g) The discharge shall not cause nor contribute to flooding or ponding on any land or property owned or occupied by another person.
(h) The discharge shall not contain hazardous substances, or substances that are toxic to aquatic ecosystems (as measured relative to the ANZECC Guidelines for Fresh and Marine Water Quality, 2000).[24]
(i) The discharge shall not contain any wastes (including, but not limited to, wastewater or condensates) from a trade or industrial process.
(j) The discharge shall not cause a conspicuous change in the colour of the receiving waters.
(k) Where the discharge is to a part of a receiving water body that is classified as Water Supply, the discharge shall not contain any substance that renders the water unsuitable for treatment (equivalent to coagulation, filtration, disinfection or micro-infiltration) for human consumption.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section of this regional plan.

Advisory Note

1 If a resource user wishes to discharge stormwater to water at a greater rate or suspended solid concentration than permitted under DW R20, they must apply for a resource consent and the effects of the discharge will be assessed on a case by case basis. The Regional Council will assess the effects of a proposed higher suspended solids limit providing the results of appropriate investigations are in the Assessment of Environmental Effects for a resource consent application.
2 In relation to the application of condition (d), stormwater management systems for State Highways and other roads may be designed to allow multiple discharges along a length of roadway, providing each individual discharge does not exceed the stated rate.
3 In relation to condition (c), the term ‘conspicuous’ refers to a visually evident effect.

Explanation/Intent of Rule

To allow point source discharges of clean stormwater to surface water, and to land where the discharge flows over land to surface water. The rule applies to discharges of stormwater from roofs, roads outside urban areas, and point source discharges of rural stormwater. Such discharges present a low risk to the environment, and would generally not be covered by a Comprehensive Catchment Discharge Consent. Discharges of sediment contaminated stormwater from land disturbance activities are addressed by rules in the Land Management section of this regional plan. Any discharge of stormwater that does not comply with all conditions of DW R9 requires a resource consent. Where the discharge of stormwater to surface water does not comply with DW R20, and is not a restricted discretionary activity under DW R21, it is a discretionary activity under DW R8. Water passing through a culvert that crosses a stream (i.e. the culvert is a stream crossing structure) is not considered to be a discharge, and is not subject to rules in the Discharges to Water and Land section of this regional plan, including DW R20. If a resource user wishes to discharge stormwater to water at a greater rate or suspended solid concentration than permitted under DW R20, they must

[24] Australian and New Zealand Environment and Conservation Council, 2000. Australian and New Zealand Guidelines for Fresh and Marine Water Quality, New Zealand.

apply for a resource consent and the effects of the discharge will be assessed on a case by case basis. Refer to Flow Diagram DW 1 to assist reading of this rule.

DW R21 (Rule 30A) **Restricted Discretionary – Discharge of Stormwater to Surface Water**

The discharge of stormwater to surface water, or to land where the discharge enters surface water, where the rate of discharge is greater than 125 litres per second for a 10 minute duration 10% AEP storm event (10 year return period storm) is a restricted discretionary activity subject to the following conditions:

(a) The suspended solids concentration of the discharge shall not be greater than 150g/m³, except where a 10 minute duration 10% AEP storm event (10 year return period storm) is exceeded.
(b) The discharge shall be substantially free of grease, oil, scums and foam.
(c) The discharge shall not contain any stormwater from a timber preservation site, timber treatment site, or a site where chemically treated timber is stored.
(d) The discharge shall not cause or induce erosion to the bed or banks of any surface water body, or to land, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes:
    (i) Instability of land or the banks of the surface water body.
    (ii) Scour to the bed of the surface water body.
    (iii) Damage to the margins or banks of the surface water body.
(e) The discharge shall not cause nor contribute to flooding or ponding on any land or property owned or occupied by another person.
(f) The discharge shall not contain hazardous substances, or substances that are toxic to aquatic ecosystems (as measured relative to the ANZECC Guidelines for Fresh and Marine Water Quality, 2000[25]).
(g) The discharge shall not contain any wastes (including, but not limited to, wastewater or condensates) from a trade or industrial process.
(h) The discharge shall not cause a conspicuous change in the colour of the receiving waters.
(i) Where the discharge is to a part of a receiving water body that is classified as Water Supply, the discharge shall not contain any substance that renders the water unsuitable for treatment (equivalent to coagulation, filtration, disinfection and micro-filtration) for human consumption.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section of this regional plan.

The Regional Council restricts its discretion to the following matters:

(a) Management and maintenance of the stormwater system to achieve the rule conditions.
(b) Measures to avoid, remedy or mitigate the adverse effects of the stormwater discharge on:
    (i) Erosion or land instability.
    (ii) Water quality.
    (iii) Flooding of land owned or occupied by another person.
    (iv) Aquatic ecosystems, indigenous flora and fauna, and the migration of fish species.
    (v) Users of the water body, including recreational use.
    (vi) Sites of significance to tangata whenua.

[25] Australian and New Zealand Environment and Conservation Council, 2000. Australian and New Zealand Guidelines for Fresh and Marine Water Quality. New Zealand.

(c) The administrative charges under section 36 of the Act.
(d) Monitoring requirements.

Explanation/Intent of Rule

To provide for discharges of stormwater to water where the volume of discharge is greater than that considered to be minor, as specified in DW R20, but where the adverse effects are known or can be predicted, and can be controlled through appropriate resource consent conditions. Where the discharge of stormwater to surface water does not comply with DW R20, and is not a restricted discretionary activity under DW R21, it is a discretionary activity under DW R8. Refer to Flow Diagram DW 1 to assist reading of this rule.

DW R22 (Rule 31) **Permitted – Discharge of Stormwater to Land Soakage**

The discharge of contaminated stormwater to land soakage is a permitted activity, subject to the following conditions:

(a) The rate of discharge shall not exceed 125 litres per second for a 10 minute duration 10% AEP storm event (10 year return period storm).
(b) The discharge shall not cause the production of conspicuous oil or grease films, scums or foams, or floatable materials.
(c) The discharge shall not contain any wastes (including, but not limited to, wastewater or condensates) from a trade or industrial process.
(d) The discharge shall not contain any stormwater from a timber preservation site, timber treatment site, or a site where chemically treated timber is stored.
(e) The discharge shall not cause or induce erosion to the bed or banks of any surface water body, or to land, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes:
    (i) Instability of land or the banks of the surface water body.
    (ii) Scour to the bed of the surface water body.
    (iii) Damage to the margins or banks of the surface water body.
(f) The discharge shall not cause nor contribute to flooding or ponding on any land or property owned or occupied by another person.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section of this regional plan.

Explanation/Intent of Rule

To allow point source discharges of clean stormwater and encourage the discharge to land soakage, where this is appropriate. Such discharges present a low risk to the environment. DW R22 is consistent with DW O13, DW P21, and DW M44. Refer to Flow Diagram DW 1 to assist reading of this rule.

DW R23 (Rule 31A) **Restricted Discretionary – Discharge of Stormwater to Land Soakage**

The discharge of contaminated stormwater to land soakage, where the rate of discharge is greater than 125 litres per second for a 10 minute duration 10% AEP storm event (10 year return period storm) is a restricted discretionary activity subject to the following conditions:

(a) The discharge shall not contain any hazardous substances.
(b) The discharge shall not contain any wastes (including, but not limited to, wastewater or condensates) from a trade or industrial process.
(c) The discharge shall not contain any stormwater from a timber preservation site, timber treatment site, or a site where chemically treated timber is stored.
(d) The discharge shall not cause or induce land erosion to the bed or banks of any surface water body, or to land, where the erosion is persistent or requires active erosion control measures to bring it under control. Erosion includes:
    (i) Instability of land or the banks of the surface water body.
    (ii) Scour to the bed of the surface water body.
    (iii) Damage to the margins or banks of the surface water body.
(e) The discharge shall not cause nor contribute to flooding or ponding on any land or property owned or occupied by another person.

This activity is also subject to the requirements of the rules in the Rotorua Lakes section of this regional plan.

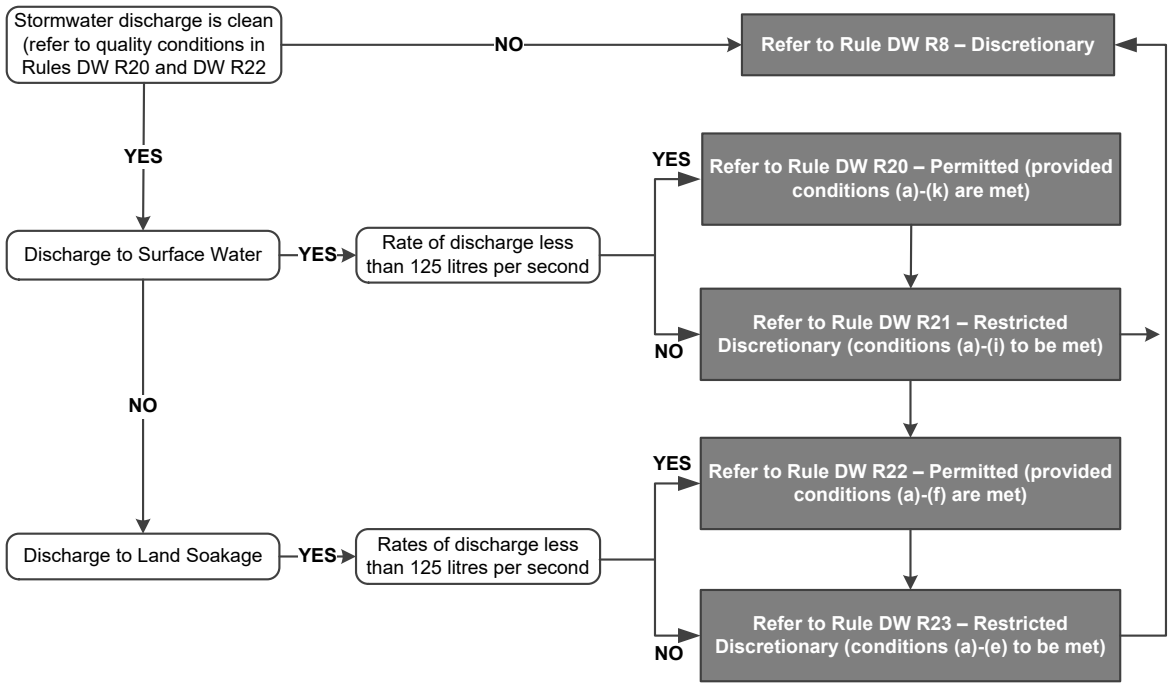
The Regional Council restricts its discretion to the following matters:

(a) Management and maintenance of the stormwater system to achieve the conditions.
(b) Measures to avoid, remedy or mitigate the adverse effects of the stormwater discharge on:
    (i) Erosion or land instability.
    (ii) Flooding of land owned or occupied by another person.
    (iii) Indigenous flora and fauna.
    (iv) Sites of significance to tangata whenua.
(c) The administrative charges under section 36 of the Act.
(d) Monitoring requirements.

Explanation/Intent of Rule

To provide for discharges of stormwater to land where the volume of discharge is greater than that considered to be minor, as specified in DW R23, but where the adverse effects are known or can be predicted, and can be controlled through appropriate resource consent conditions. Where the discharge of stormwater to land does not comply with DW R22, and is not a restricted discretionary activity under DW R23, it is a discretionary activity under DW R8. Refer to Flow Diagram DW 1 to assist reading of this rule.

Flow Diagram DW 1 – Stormwater Discharges



Advisory Note

1 This flow diagram is to assist working out which rules apply but does not constitute a part of the rules. If there is any inconsistency between the flow diagram and the rules in the regional plan it refers to, the criteria in the rules prevail.

Contaminated Land

Issue

DW I12 (Issue 28) **Discharges of contaminants, including hazardous substances, from contaminated land and the remediation of contaminated land, have the potential to cause significant adverse effects on the environment and public health.**

Land can become contaminated by many different uses. Potential high risk land uses may include, but are not limited to, closed landfills, municipal rubbish dumps, timber treatment sites, timber treatment waste dumps, and industrial dump sites. Some of these may produce leachate many years after the site has been closed due to the percolation of rainfall through decomposing waste of contaminated soil.

Discharges of contaminants from contaminated land into surface and groundwater can occur as a result of stormwater runoff, percolation, migration of contaminants through land and discharges resulting from site remediation.

Specific problems with the management of contaminated land occur where:

(a) Information about the locations of contaminated land within the region is incomplete, and where locations are known, the characteristics of the land and their actual or potential adverse effects are not always known in detail.
(b) The respective responsibilities of the Regional Council, the city council, district councils and other parties for identifying, investigating and monitoring contaminated land, and where necessary promoting or requiring remediation, are not clearly defined.
(c) The contaminated land is an orphan site (refer to Definition of Terms).

Objective	*DW O16*
Policy	*DW P22, DW P23, DW P24, DW P25, DW P26, DW P27*
Method	*DW M45, DW M46, DW M47, DW M48, DW M49, DW M50, DW M51, DW M52, DW M53, DW M54, DW M55*
Rule	*DW R24, DW R25*

Objective

DW O16 (Objective 38) The significant adverse effects of existing contaminated land are remedied or mitigated.

Policies

DW P22 (Policy 58) To encourage remediation of contaminated land, where such land poses a significant risk of adverse effects to water, ecosystems, the life-supporting capacity of soil or public health.

DW P23 (Policy 59) To use nationally accepted environmental and health guidelines, standards for soil and water contamination, and standards for discharges from contaminated land, when undertaking contaminated land investigations in order to determine whether a site poses a significant risk of adverse effects.

DW P24 (Policy 60) To use processes under the Act or any other legislation to ensure that any potential adverse effects caused by remediation or disturbance of contaminated land are avoided, remedied or mitigated.

DW P25 (Policy 61) To ensure that information about contaminated land is collected, recorded and maintained consistently across the Bay of Plenty region, and in a manner consistent with national best practice.

DW P26 (Policy 62) To prioritise investigation of land that is or may be contaminated on the basis of the potential environmental and health risks they present.

DW P27 (Policy 63) To manage orphan contaminated land in accordance with national policy.

Methods of Implementation

The Regional Council will:

Education, Promotion and Provision of Information

DW M45 (Method 141) Encourage:

(a) The community, particularly landowners and occupiers, to come forward with information about land they believe to be contaminated.

(b) Owners and occupiers of land registered on the contaminated land database maintained by the Regional Council, the city council and district councils that have not been investigated, to provide information to the Regional Council about whether the land is actually contaminated and any risks associated with the contamination.

Wherever possible, landowners and occupiers should not be penalised for supplying information on contaminated land in order to promote information sharing, investigation and remediation of sites.

Working With Other Resource Management Agencies

DW M46 (Method 142) Continue to maintain a database that records information about land in the region that is or may be contaminated, and manage the database information according to clear and publicly available protocols. This is best achieved in association with the city council and district councils.

DW M47 (Method 143) Work with the city council and district councils and Government to ensure that significant adverse effects arising from orphan contaminated land are avoided, remedied or mitigated.

Regulatory Methods

Cross-Reference Also refer to LM M18, DW R24 and DW R25.

Matters Relevant to Resource Consent Applications and Processing

DW M48 (Method 144) Set remediation standards for discharges on resource consent conditions for contaminated land remediation using nationally accepted environmental and health guidelines, and soil and water acceptance criteria.

DW M49 (Method 145) Require resource consents for discharges from contaminated land which pose a significant risk of adverse effects to the environment or public health, and where no remediation is planned. Consent conditions will establish monitoring and reporting requirements.

DW M50 (Method 146) Provide for the remediation of small scale, low risk areas of contaminated land as permitted activities. (Refer to DW R24)

DW M51 (Method 147) Use the enforcement provisions in the Act if contaminated land is causing significant adverse effects but the owner or occupier is unwilling to undertake remediation.

DW M52 (Method 148) Consult with the relevant city council or district council when processing resource consents for remediation or other disturbance of contaminated land.

Monitoring and Investigation of the Environment

DW M53 (Method 149) Systematically identify, in association with the city council and district councils, land in the region that may be contaminated with hazardous substances, focusing on known high risk land uses that have not already been investigated in accordance with national guidelines. Potential high risk land uses may include, but not be limited to, closed landfills, municipal rubbish dumps, timber treatment sites, timber treatment waste dumps, and industrial dump sites.

DW M54 (Method 150) Work with the city council, district councils and Government to obtain, for orphan contaminated land registered on the database that has not been investigated, information about whether the land is actually contaminated and any risks associated with the contamination.

DW M55 (Method 151) Rank known contaminated land (including those registered on the contaminated land database) by level of risk to human health or the environment, using the Ministry for the Environment's rapid screening assessment procedure, in order to prioritise sites for investigation and/or remediation.

Rules

DW R24 (Rule 34) Permitted – Active Remediation of Contaminated Land

The active remediation of contaminated land where:

1 The only hazardous substances present in soil at the site are motor vehicle or heating fuels or lubricants (e.g. mineral oils, petrol, diesel, kerosene and their constituents and breakdown products) and the total volume of contaminated soil at the site is less than 400 cubic metres,

Or

2 The remediation activity constitutes immediate action to address a spill of hazardous substances at a site where no previous contamination with hazardous substances existed,

Is a permitted activity subject to the following conditions:

(a) In the case of (1) above, the remediation activity shall occur over a period not greater than two (2) consecutive months.

(b) In the case of (2) above, the remediation activity at the site shall cease (whether or not it has been completed) no later than two (2) months after the occurrence of the event that caused the contamination, unless a resource consent to continue the remediation has been granted during that period.

(c) Notification shall be given to the Regional Council, no less than one week prior to the remediation commencing or, in the case of (2) above, as soon as reasonably practical.

(d) The occupiers of adjacent properties and any other persons who may be affected by the remediation activity or the contaminants shall be notified not less than one week prior to the remediation commencing or, in the case of (2) above, as soon as reasonably practical.

(e) All practical measures shall be taken to avoid discharges of hazardous substances to water during and following completion of the remediation activity, and to remedy or mitigate such discharges if they do occur.

(f) Any excavated contaminated soil is disposed of to an appropriately authorised facility or site, and evidence of this provided to the Regional Council.

(g) Within three months of completion of the remediation, a site validation report shall be prepared in accordance with "Guidelines for Reporting on Contaminated Sites", Ministry for the Environment, June 2001[26], and a copy provided to the Regional Council.

Advisory Note

1 This rule authorises only the remediation activity at the site, not the subsequent disposal of contaminated material. Contaminated soil, water and other material extracted or removed from the site must be treated and/or disposed of in accordance with all other relevant legal requirements, including but not limited to regional plan rules, district plan rules, trade waste bylaws and landfill resource consents. Health-related legislation such as the Health and Safety in Employment Act 1992 will also apply.

2 When a spill of hazardous substances occurs, the Regional Council and the New Zealand Fire Service must be advised as soon as practical.

3 Condition (e) does not provide immunity from enforcement action or prosecution if discharges from the site cause significant adverse effects on the environment.

4 For any discharges of contaminants to air, the remediation activity shall also comply with the requirements of the Operative Bay of Plenty Regional Air Plan.

5 Discharges of stormwater from site remediation activities must comply with DW R20, DW R21, DW R22, DW R23, or a resource consent must be obtained under DW R8.

[26] Ministry for the Environment, June 2001. Guidelines for reporting on Contaminated Sites. Wellington, New Zealand.

Explanation/Intent of Rule

To allow the active remediation of contaminated sites where the risk is small, or where it would be more appropriate to remedy the contamination immediately. This is an efficient and effective means of managing remediation where either the risk of adverse environmental effects is low, or the activity is necessary to prevent adverse effects from occurring or becoming significant.

DW R25 (Rule 35) Restricted Discretionary - Remediation or Disturbance of Contaminated Land

The:

1 Discharge of contaminants to water, or to land, or to land in circumstances which may result in the contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water, resulting from the remediation or other disturbance of a contaminated site;

Or

2 Disturbance of a contaminated site;

that is not permitted by DW R24 is a restricted discretionary activity.

The Regional Council restricts its discretion to the following matters:

(a) The remediation processes to be employed.
(b) Degree and extent of off-site discharges.
(c) Reporting, information and monitoring requirements.
(d) The duration of the consent.
(e) The administration charges under section 36 of the Act.
(f) Matters to achieve DW O16, DW P22 and DW P23, and DW M48 and DW M52.

Advisory Note

1 Remediation and disturbance include any active modification of the site, including but not limited to earthworks, in-situ remediation and injection of liquids or gases.
2 Discharges to air from contaminated sites are subject to the Operative Bay of Plenty Regional Air Plan. Provisions in district plans, the Health Act 1956 and the Health and Safety in Employment Act 1992 may also apply in cases where a contaminated site affects or may affect human health.

Explanation/Intent of Rule

To allow the Regional Council to assess the effects of any discharges of contaminants to the environment resulting from active remediation and other disturbances of contaminants on a case by case basis. Some forms of active remediation or disturbance may lead to significant adverse effects.

OSET On-Site Effluent Treatment

On-site Effluent Treatment discharges are currently managed by the Operative On-Site Effluent Treatment Regional Plan.