Definition of Terms

Terms in *italics* text are defined by the Act unless otherwise stated. The Act italicised definitions are included in this regional plan for information only, and are correct at the date of public notification their inclusion in of this regional plan.

Abstraction – the act of taking water from a water body.

Abutment – a construction that anchors and supports the end of a bridge.

Access track – a road that crosses a waterway with a contributing catchment of less than 100 hectares and accesses a property that does not have dwellings.

Activity site – A separate area of land on which the activity is undertaken. The activity site may be either a single continuous area or comprise several adjoining blocks, sections, paddocks or compartments that together make up a single continuous area.

AEP, Annual Exceedance Probability – a statistical measurement of the annual changes of a flow of a specified size being equal or exceeded.

Agrichemical – any substance, whether organic or inorganic, manufactured or naturally occurring, modified or in its original state, that is used for any agricultural, pastoral, horticultural or related activity, to eradicate, modify or control undesirable flora and fauna. For the purposes of this regional plan, it this definition includes agricultural compounds and but excludes fertiliser, vertebrate pest control products and oral nutrition compounds.

Alternative nutrient budgeting file means the output of an authorised alternative nutrient budgeting model for modelling land uses for which a consent is held under LR R11.

Artificial water course – A watercourse which meets the following criteria:

- (a) Is not a natural or modified watercourse, and
- (b) Is a completely human-made channel along which water would not naturally flow.Includes irrigation canals, water supply race, canals for the supply of water for electricity power

generation, farm drains and other drains (e.g. roadside drains). Excludes Land Drainage Canals. **Aquifer** – A body of permeable rock, for example, unconsolidated gravel or sand stratum, that is capable

Aquiter – A body of permeable rock, for example, unconsolidated gravel or sand stratum, that is capable of storing significant quantities of water, is underlain by impermeable material, and through which groundwater moves. An unconfined aquifer is one in which the water table defines the upper water limited. A confined aquifer is sealed above and below by impermeable material. A perched aquifer is an unconfined groundwater body supported by a small impermeable or slowly permeable unit (Allaby and Allaby, 1990⁵²).

Aquifer test – the abstraction of groundwater from a bore or well for the purposes of assessing hydraulic properties of an aquifer or groundwater resource.

Backflow prevention – the prevention of backflow (a reversal of the normal direction of flow in a pipe) of unwanted and undesirable flow of non-potable water or other toxic substances.

Beach – in relation to any river, stream or lake, refers to the zone of unconsolidated material that extends landward from the waterline to where there is a marked change in material or physiographic form, or to the line of permanent vegetation.

Bed of a lake or river - means -

- (a) In relation to any river—
 - (i) For the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the river cover at its annual fullest flow without overtopping its banks:
 - (ii) In all other cases, the space of land which the waters of the river cover at its fullest flow without overtopping its banks; and

⁵² Allaby, M., and A. Allaby (editors), 1990. The Concise Oxford Dictionary of Earth Sciences. Oxford University Press, Great Britain.

- (b) In relation to any lake, except a lake controlled by artificial means,—
 - (i) For the purposes of esplanade reserves, esplanade strips, and subdivision, the space of land which the waters of the lake cover at its annual highest level without exceeding its margin:
 - (ii) In all other cases, the space of land which the waters of the lake cover at its highest level without exceeding its margin; and
- (c) In relation to any lake controlled by artificial means, the space of land which the waters of the lake cover at its maximum permitted operating level; and
- (d) In relation to the sea, the submarine areas covered by the internal waters and the territorial sea.

Berm – the land area between the bed of a river and the crest of a stopbank. Refer to Figure DT 1 – River with Stopbanks.

Best Practicable Option – In relation to a discharge of a contaminant or an emission of noise, means the best method for preventing or minimising the adverse effects on the environment having regard, among other things. to -

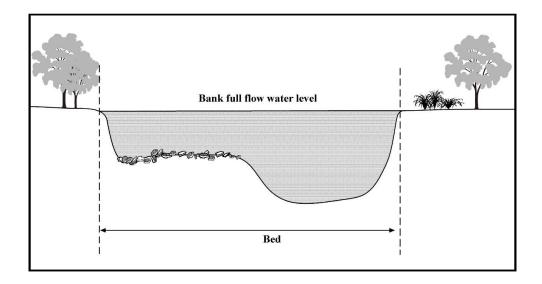
- (a) The nature of the discharge or emission and the sensitivity of the receiving environment to adverse effects; and
- (b) The financial implications, and the effects on the environment, of that option when compared with other options; and
- (c) The current state of technical knowledge and the likelihood that the option can be successfully applied:

Biological Diversity – means the variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.

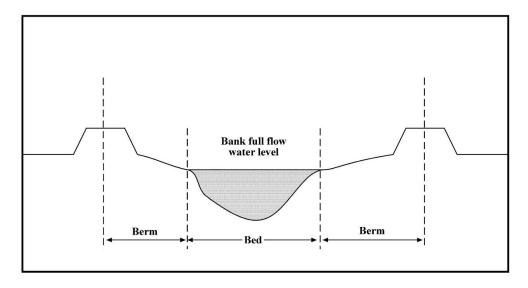
Black Disc Range – the range in water at which the image of a black disc, viewed horizontally, is judged to be extinguished. Also refer to secchi disc depth.

Block (in relation to Lake Rotorua nutrient management provisions) means an area of land within a property/farming enterprise that has common physical and management attributes. Overseer categorises blocks into types e.g. pastoral, fodder crop, trees and scrub, house. There may be multiple blocks of the same type within a property/farming enterprise reflecting the different physical or management characteristics of each of the blocks.

A River or Stream



B River with Stopbanks



Note: These diagrams are indicative only, and are intended to provide general guidance.

Figure DT 1 Bed of a River

BOD – Biochemical Oxygen Demand. Sometimes expressed as BOD5, meaning the total oxygen demand of a sample measured over five consecutive days.

Bore – any structure or hole in the ground, which is drilled or constructed for the purpose of accessing, taking or using groundwater, or which results in groundwater being taken or used. For the purposes of this regional plan, a bore and a well have the same definition.

Bore pump test – the abstraction of groundwater from a bore or well for the purposes of assessing bore water flow capacity or yield.

Buffer Zone – an area established around an activity to separate the environment beyond from the adverse effects of that activity.

Bush/scrub (in relation to Lake Rotorua nutrient management provisions) means areas of native forest, bush, scrub, wetlands and exotic non-productive woody species (including gorse) which are not grazed by stock.

By-product – a contaminant that emanates as a result of natural process from another contaminant.

Catchment – the area from which a surface watercourse or a groundwater system derives its water. Catchments are separated by divides. A surface catchment area may overlie an aquifer system, but may be unconnected with the aquifer rock itself if there are intervening impermeable aquicludes.

Channel – the portion of a river down which water flows during times of normal to low flows.

Cleaner Production – means:

- (a) using energy and resources efficiently,
- (b) avoiding or reducing the amount of waste produced,
- (c) producing environmentally sound products and services,
- (d) achieving less waste, fewer costs and higher profits.

The goal is to reduce the adverse impact of production and service activities on the environment.

Cleanfill – natural materials such as clay, soil, rock and such other materials as concrete, brick or demolition products that are free of:

- (a) combustible or putrescible components (including green waste) apart from up to 10% by volume untreated timber in each load:
- (b) hazardous substances or materials (such as municipal waste) likely to create leachate by means of biological or chemical breakdown;
- (c) any products or materials derived from hazardous waste treatment, stabilisation or disposal processes.

Clearance of Vegetation by Burning – The disturbance or removal of vegetation or slash, either in situ, heaps or windrows, by using fire.

Coast Care – A community action programme co-ordinated by the Regional Council in partnership with Tauranga City Council, Western Bay of Plenty District Council, Whakatane District Council, Ōpōtiki District Council, and the Department of Conservation for the purpose of restoring and protecting dune systems in the Bay of Plenty.

Coastal Margin – for the purposes of rules in the Land Management section of this regional plan, the Coastal Margin is the land on the edge of an estuary, harbour, or the open rocky coast, excluding Sand Dune Country, as measured horizontally from the Coastal Marine Area to 40 metres landward of the Coastal Marine Area.

Coastal Marine Area – Means the foreshore, seabed, and coastal water, and the air space above the water -

- (a) Of which the seaward boundary is the outer limits of the territorial sea:
- (b) Of which the landward boundary is the line of mean high water springs, except that where that line crosses a river, the landward boundary at that point shall be whichever is the lesser of—
 - (i) One kilometre upstream from the mouth of the river; or
 - (ii) The point upstream that is calculated by multiplying the width of the river mouth by 5:

In the Bay of Plenty region the river mouths have been defined by agreement between the Minister of Conservation, the Regional Council, and the appropriate city and district councils, in accordance with section 2(1) of the Act. Grid references of the river mouths have been scheduled in the Regional Coastal Environment Plan. In addition, the Regional Council has detailed maps and descriptions of the agreed river

mouths and consequent landward edge of the Coastal Marine Area within the rivers of the region. These maps and descriptions can be viewed at the Whakatane office of Environment Bay of Plenty.

Coastal Water - Means seawater within the outer limits of the territorial sea and includes -

- (a) Seawater with a substantial fresh water component; and
- (b) Seawater in estuaries, fiords, inlets, harbours, or embayments

Code of Practice – operational procedures and practices agreed to by industry groups and designed to achieve defined goals and be consistent with the principles of sustainable management of natural and physical resources as required by the Resource Management Act and other relevant legislation.

Commercial cropping (in relation to Lake Rotorua nutrient management provisions) means the cultivation of forage crops, fodder crops or maize for the intent of sale or movement offsite for profit. This does not include alternative pasture species.

Commercial dairying (in relation to Lake Rotorua nutrient management provisions) means a dairy farming system characterised by high inputs of capital, labour and technology relative to land area and supported by milking shed infrastructure.

Commercial horticulture (in relation to Lake Rotorua nutrient management provisions) means the cultivation of land for the production of vegetable or fruit crops on greater than 1000 m² effective area or the production of perennial woody fruit or nut crops on greater than 3000 m² (uncultivated) for the intent of profit. Commercial horticulture does not include any areas of plantings that form an integral part of a household or community garden.

Community garden means an area of plantings used with the intent of directly supplying a community with food or other materials. Monetary gain from any sales of food or materials is incidental and is not the main intent of the activity.

Contaminant – Includes any substance (including gases, odorous compounds liquids, solids, and microorganisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat -

- (a) When discharged into water, changes or is likely to change the physical, chemical, or biological condition of water: or
- (b) When discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged:

Contaminated Land – A location at which hazardous substances in soil, groundwater or surface water occur at concentrations above the background levels of those substances in the surrounding environment and where assessment indicates that those substances pose, or are likely to pose, an immediate or long-term hazard to human health or the environment.

Contaminated Land Remediation – Active or passive management of contaminated land to reduce its adverse effects on the environment or render it suitable for use.

Contractor – means an independent person retained by the Regional Council to provide professional or other advice.

Controlled Stock Crossing – The discrete site used to move mobs of stock over the bed of a surface water body where the activity is controlled by fences, or by a person.

Cropping (in relation to Lake Rotorua nutrient management provisions) includes a property/farming enterprise's effective area used for forage crops, fodder crops, maize and cultivation but does not include alternative pasture species.

Cultivation – the mechanised disturbance of land and soil for the purpose of growing crops, weed control or pasture renewal. This excludes normal gardening practices, trimming and mowing, direct seed drilling (including the drilling of seed for pasture renovation), no-tillage practices, routine turf weed control, and undersowing of existing areas. Forestry line ranking and windrowing are not forms of cultivation.

Culvert – a pipe in the bed of a stream, river or modified watercourse that conveys water beneath a stream crossing which supports a path, road or track. Excludes the piping of a stream for the purpose of stormwater management, or the development or reclamation of land.

Dairy (in relation to Lake Rotorua nutrient management provisions) means the effective area on which milking cows are grazed during the milking season and includes the animal effluent disposal area and fodder crop areas but excludes land used as dairy support, plantation forestry and bush/scrub.

Dairy support (in relation to Lake Rotorua nutrient management provisions) means land used for heifer grazing or the wintering off of cows. Note: Dairy support's nitrogen loss allowance is included within the drystock allocation range.

Decommission – to permanently abandon a hole, bore, well or infiltration gallery or take a hole, bore, well or infiltration gallery out of service.

Deposition of substances – the placement or dumping of cleanfill, rubble, wood, debris, tree trimmings or any inert material into or onto the bed of a surface water body or onto land.

Diffuse Discharge – discharge of contaminants that does not occur at a specific discharge point.

Direct control – means that the person is responsible and accountable for the activity.

Discharge structure – a structure in, on, under or over the bed of a stream, river, lake or modified watercourse for the purpose of discharging a contaminant or water into the water body.

Diversion – The diversion of water within the same stream or river. The transfer of water into another catchment of a watercourse is deemed to be a take and discharge of water.

Dominant Slope – The slope range that represents at least 75% of the activity site, as measured to an accuracy no less than that achieved by a slope measuring device, including hand held clinometer or abney level. Slope is defined as the steepness of land measured in degrees or as a gradient.

Downhole Heat-Exchange System – a device installed down a geothermal bore to remove heat from a geothermal field without removing geothermal fluid, using fresh water circulated through a heat exchanger at depth.

Drain – an artificial watercourse used for land drainage purposes, excluding Land Drainage Canals. Also refer to the definitions of Farm drain and Roadside drain.

Drainage – the activity of lowering the water table. This generally involves the diversion of water from the site.

Drawdown – is the difference between the static water level and the pumped water level.

Drift deck – a structure in the bed of stream or river, where the structure is frequently overtopped by water, and comprises a series of inverted "u" shaped concrete components that sit on or in the bed, which bear a concrete slab that provides a running surface for access across a stream or river.

Drystock (in relation to Lake Rotorua nutrient management provisions) means the effective area used for non-dairy activity, including grazing of sheep, beef cattle, goats, horses, deer, cropping, short rotation carbon cropping and dairy support but excluding plantation forestry and bush/scrub.

Earthworks – Any activity that exposes, disturbs, places or deposits land and soil. Such activities include, but are not limited to, tracking, roading, cleanfill sites, cut and fill operations, quarrying, mining, and recontouring. Excludes area-wide treatment (pavement overlay and strengthening) and road resealing (pavement rehabilitation) of existing roading, normal domestic gardening practices, maintenance of roads and tracks (including railway tracks), the formation of walking tracks, cultivation (except where re-contouring

is involved), maintenance of linear network utility support structures, and maintenance (including minor realignment) of existing foot tracks within public reserves and the conservation estate.

Ecosystem – a dynamic system made up of a group of living organisms (plants, animals and microorganisms) and its physical environment, and the relationship between them. A pond, a lake, a forest, or an ocean may be an ecosystem. An ecosystem includes such factors as food supply, weather and natural enemies.

Eco-sourced – plants that have genetic provenance in the location.

Effect - The term "effect" ... includes -

- (a) Any positive or adverse effect; and
- (b) Any temporary or permanent effect; and
- (c) Any past, present, or future effect; and
- (d) Any cumulative effect which arises over time or in combination with other effects -

regardless of the scale, intensity, duration, or frequency of the effect, and also includes -

- (e) Any potential effect of high probability; and
- (f) Any potential effect of low probability which has a high potential impact.

Effective area (in relation to Lake Rotorua nutrient management provisions) means the part of the property/farming enterprise that is used for grazing, cultivation, cropping, short rotation carbon cropping, horticulture, effluent disposal and includes areas of grazed trees.

Effluent - liquid discharged as waste.

EMS – means Environmental Management System.

Environment - includes -

- (a) Ecosystems and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and
- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters:

Environmental Programme or Property Plan – Property management plans encompassing the use of production methods which protect soil and environmental values while achieving sustainable development and management. In the context of this regional plan, an Environmental Programme or Property Plan is one prepared by Land Resource staff of the Regional Council in partnership with landowners. Landowners are advised to contact the Land Resource section for further information. An Environmental Programme can be applied to any privately owned land, regardless of land use.

Ephemeral flowpath – An ephemeral flowpath is where any one of the following criteria are met:

- (a) The flow path is an entrenched dry gully greater than 1 metre deep.
- (b) There is clear evidence of a channel within the valley system where overland flow occurs from time to time.
- (c) There is clear evidence of erosion (such as gullying or headward gully erosion) associated with short term water flow from time to time within the valley system.

An ephemeral flowpath excludes the following:

(a) A valley that does not show any evidence of overland flow channels, or erosion as a result of overland flow.

Refer to the following photographs to assist in the interpretation of Ephemeral Flowpath.



Example 1

The flow path is an entrenched dry gully greater than 1 metre deep. This site would qualify as an ephemeral flowpath.



Example 2

There is clear evidence of a channel within the valley system where overland flow occurs from time to time.

This site would qualify as an ephemeral flowpath.



Example 3

There is clear evidence of erosion (such as gullying or headward gully erosion) associated with short term water flow from time to time within the valley system.

This site would qualify as an ephemeral watercourse.



Example 4

The presence of the actively eroding gully head associated with stormwater flow indicates that this valley would be classified as an ephemeral watercourse. Without the presence of the eroding gully system, the valley would not be considered an ephemeral flowpath.



Example 5

The valley does not show any evidence of overland flow channels, or erosion as a result of overland flow.

This site would not qualify as an ephemeral flowpath.



Erosion – the processes of the wearing away of the land's surface by natural processes and human activities, and the transporting of the resulting sediment.

Erosion Hazard Zone – Land that has very severe to extreme erosion hazards. For the purposes of the rules in this regional plan, the Erosion Hazard Zone is:

- (a) Any Sand Dune Country; excluding sand dune country within urban areas or already developed subdivisions that are on land between 50-150 metres from the Coastal Marine Area.
- (b) Any land in the upper Rangitaiki River catchment above the confluence of the Otangimoana Stream and Rangitaiki River, including the Otamatea River catchment, in the following areas:
 - (i) On the margins of erosion susceptible permanent streams and rivers; or
 - (ii) In the beds and margins of ephemeral flowpaths; or
 - (iii) On steep terrace edges;

as shown in Environment Bay of Plenty Plan Series M10091.

¹ **Note:** The photomap plan series M1009 prepared by the Regional Council at a scale of 1:25,000 shows the location of the beds and margins of the relevant land areas and ephemeral flowpaths that are covered by definition points (b) (i) to (iii). These are the definitive maps used to assess compliance. Copies of these maps are available from or may be viewed at any Regional Council office.

Estuary – a tidal area associated with a river or fresh water seeps where there is a mixing of saline and fresh water.

Exotic – in relation to plant species means plants that are not native to New Zealand. This includes plants that have been introduced by accident or imported for particular use.

Farm Drain – an artificial watercourse on production land that is used for land drainage purposes.

Farm Quality Programme – Any of the following:

- (a) A Regional Council Environmental Programme or Property Plan.
- (b) A Quality Assurance Programme ('QAP') from a relevant agricultural industry group, where the QAP is listed in Schedule 8.
- (c) A specific Environmental Management Plan for an area that is listed in Schedule 8.

Farming activity (in relation to Lake Rotorua nutrient management provisions) means dairy, dairy support and drystock activities, cropping, short rotation carbon cropping and horticulture, but not including plantation forestry or bush/scrub.

Fertiliser – any substance which is described as or held out to be for, or suitable for sustaining or increasing the growth, productivity or quality of plants or animals through the application of the following essential nutrients to plants or soils: nitrogen, phosphorus, potassium, sulphur, magnesium, calcium, chloride, sodium, as major nutrients or manganese, iron, zinc, copper, boron, cobalt, molybdenum, selenium, as minor nutrients or additives, and any other product which is considered to meet identified soil or plant nutrient deficiencies and is applied with this as the principle objective. Products discharged or applied as part of a waste treatment process require resource consents and are not covered by this code. This definition is from The Code of Practices For Fertiliser Use 1998⁵³.

Field Pressure – averaged dynamic pressure of a geothermal field within its geothermal reservoir.

Floodplain – the surface of relatively smooth land built of alluvium, adjacent to a river channel, and covered with water during flooding of the river.

Floodway - Refer to Schedule 6.

Ford – a structure on the bed of a river (that is permanently or frequently overtopped by water) for the purpose of enabling people or vehicles to cross that river bed.

Fresh Water – Means all water except coastal water and geothermal water.

FSC – means Forest Stewardship Certification, an international forest certification system.

Functional need - means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment.

Geothermal Ecosystem/Ecology – a dynamic life-supporting system made up of a group of living organisms (including plants and animals) that has adapted to, and is reliant on, geothermal resources.

Geothermal energy – Means energy derived or derivable from and produced within the earth by natural heat phenomena; and includes all geothermal water.

Geothermal Field – A body of natural geothermal heat, energy or water as defined by the extensive scientific investigation which have been conducted, in particular, detailed resistivity surveys, and by the

⁵³ New Zealand Fertiliser Manufacture's Research Associations Inc, 1998. Code of Practice for Fertiliser Use.

filling and testing of deep drillholes. The energy content and productive potential of the locality have been reasonably assessed.

Geothermal Surface Feature – includes structures formed by deposition from, or the release of, geothermal water (including steam and energy) from geothermal areas and any resulting earthforms, any geothermally activated geysers, fumaroles, sinter structures, tomos, mud pools, hot and cold water pools, springs, steam and gas vents, and also includes inactive structures formed by extinct or intermittent geothermal activity.

Geothermal Water – Means water heated within the earth by natural phenomena to a temperature of 30 degrees Celsius or more; and includes all steam, water, and water vapour, and every mixture of all or any of them that has been heated by natural phenomena.

Any geothermally sourced water which is initially greater than 30° Celsius but falls below 30° Celsius as a result of an activity will continue to be considered as geothermal water under this regional plan.

Good management practices (GMP) (in relation to Lake Rotorua nutrient management provisions) refers to the evolving suite of practicable measures or methods that could be put in place at a land user, sector, community, or industry level to assist in achieving community agreed outcomes (in this case for water quality).

Grade Aa biosolids - A sewage or sewage sludge derived from a sewage treatment plant that has been treated and/or stabilised to the extent that it is able to be safely and beneficially applied to land and does not include products derived from industrial wastewater treatment plants. The material must:

- (a) Meet the process and product requirement for stabilisation Grade "A" and contaminant Grade "a" as specified in the Guidelines for the Safe Application of Biosolids to Land in New Zealand (2003) (note: the microbiological and chemical standards are to be met at the time the biosolids product is prepared for sale); and
- (b) Carry the registered Biosolids Quality Mark BQM accreditation.
- (c) Have labelling supplied with the product at the point of sale or give away, such labelling specifying:
 - (i) Trade name (if applicable).
 - (ii) Name and address of the producer/manufacturer.
 - (iii) Information relating to the product's origin (i.e. that it is biosolids-based) and precautionary handling instructions.
 - (iv) A health warning.
 - (v) Certification that the product has been manufactured in accordance with one of the 'accepted process methodologies' for stabilisation Grade 'A' biosolids recognised in the Guidelines for the Safe Application of Biosolids to Land in New Zealand (2003).
 - (vi) Batch number (if applicable).
 - (vii) Order number (if applicable).
 - (viii) Delivery date (if applicable).
 - (ix) The process the biosolids have been subjected to (e.g. composting, heat drying, pH adjustment).
 - (x) Nutrient (n) content and modifying pH value (if the latter is applicable).
 - (xi) Placement of the material in relation to water bodies.
 - (xii) Requirement to incorporate into soil if applied to agricultural land and to avoid application to grazed land.
 - (xiii) Recommended application rates.

Grazed trees means areas of trees, scrub or wetlands that were grazed by stock during the 2001-04 nutrient benchmarking period. These areas typically have low nitrogen discharges.

Green waste – waste organic material, including:

- (a) vegetative material, but not tree trunks or limbs larger than 100 mm diameter
- (b) vegetable peelings or trimmings and other organic kitchen wastes
- (c) soil attached to plant roots

Green waste does not include hazardous substances, treated timber, or animal products including manure, feathers, carcasses and the like (other than as an occasional or incidental input).

Groundwater – All the water contained in the void space within rocks. The term is generally taken to include vadose water (water travelling between the surface and the water table). Most groundwater derives from surface sources (meteoric water), the remainder is either introduced by magmatic processes (juvenile water) or is connate water⁵⁴.

Habitat – the place or type of site where an organism or population normally occurs.

Hazardous Substances – unless expressly provided otherwise by regulations, any substance:

- (a) with one or more of the following intrinsic properties:
 - (i) Explosiveness.
 - (ii) Flammability.
 - (iii) A capacity to oxidise.
 - (iv) Corrosiveness.
 - (v) Toxicity (including chronic toxicity).
 - (vi) Ecotoxicity with or without bioaccumulation.
 - (vii) Infectious and pathological wastes.
 - (viii) Radioactivity.

Or

(b) which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any one or more of the properties specified in paragraph (a) of this definition.

Headworks – all materials used at the ground surface to complete the bore. Includes pipework, valves, gauges and access points, concrete pads and/or cellars.

Heritage values – Includes natural character, outstanding natural features and landscapes, indigenous vegetation and habitat of indigenous fauna, Maori cultural values, heritage values and places, and ecosystem, landscape and amenity values.

High Risk Facility - Any of the facilities referenced in Schedule 4 of this regional plan.

Hole - any excavation of the ground created by drilling.

Horticulture (in relation to Lake Rotorua nutrient management provisions) includes a property/farming enterprise's effective area used for nurseries, orchards, vineyards or growing vegetables for human consumption.

House block means the block that includes a house, sheds, septic tank system and the area around a house not grazed by stock including household gardens and driveways.

⁵⁴ Allaby, M., and A. Allaby (editors), 1990. The Concise Oxford Dictionary of Earth Sciences. Oxford University Press, Great Britain.

Household garden means an area containing a high diversity of plants including vegetables, fruits, plantation crops, spices, herbs, ornamental and medicinal plants used by the occupants of a household for recreation, or to obtain food or materials. Household gardens are located within close proximity to the household or within walking distance. Monetary gain from any sales of food or materials is incidental and is not the main intent of the activity.

Hydrology – the scientific study of the distribution and properties of water within the atmosphere and of the earth's surface.

Indigenous – in relation to species means plants and animals found naturally in New Zealand.

Industrial or trade premises - Means -

- (a) Any premises used for any industrial or trade purposes; or
- (b) Any premises used for the storage, transfer, treatment, or disposal of waste materials or for other waste-management purposes, or used for composting organic materials; or
- (c) Any other premises from which a contaminant is discharged in connection with any industrial or trade process -

but does not include any production land.

Industrial or trade process – Includes every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product or waste material, and any intervening storage of the raw material, partly processed matter, or product.

Infrastructure – networks, links and parts of facility systems, as in transport infrastructure (roads, rail, parking, etc.) or water system infrastructure (the pipes, pumps and treatment works, etc.).

Instream Minimum Flow Requirement – the flow of water in a river or stream necessary to sustain aquatic life, water quality, recreational use, outstanding natural features or Maori cultural values.

Intermittent Watercourse – A watercourse that:

- (a) Flows for most of the year or is only dry for short periods of the year, and during such dry periods has stable pools or 'wet patches'; and
- (b) Has a defined water channel and banks; and
- (c) Connects with a permanently flowing surface water body; and
- (d) Provides habitat for aquatic flora and/or fauna species.

Intrinsic Values – In relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including -

- (a) Their biological and genetic diversity; and
- (b) The essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience.

ISO 14001 – means the international standard for an Environmental Management System.

Iwi – tribe or grouping of Maori.

lwi Authority – Means the authority which represents an iwi and which is recognised by that iwi as having authority to do so.

Kaitiakitanga – Means the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Maori in relation to natural and physical resources; and includes the ethic of stewardship.

Lake – Means a body of fresh water which is entirely or nearly surrounded by land.

Lake Rotorua groundwater catchment means all land within the groundwater catchment boundary identified in Map LR 1.

Land – Includes land covered by water and the air space above land.

Land Cover – the type of vegetation or other material that covers an area of land. Examples include indigenous forest, urban, pasture, wetlands, exotic forest, etc. Relates to land use.

Land Drainage Canal – a modified watercourse that is part of a land drainage scheme.

For the purposes of this regional plan the term 'Land Drainage Canal' is limited to the following:

- (a) Rangitaiki Plains Awaiti Canal, Omeheu Canal, Awakaponga Canal and Drain, Waikamihi Stream, Mangaone Stream, Western Drain, Ngakauroa Drain/Stream, Te Rahu Canal, Otarere Drain/Stream, Orini Canal, Reid's Central Canal:
- (b) Kaituna Kopuroa/Kopuaroa Canal, Ohineangaanga Canal, Raparapahoe Canal, Waiari Stream:
- (c) Little Waihi Kaikokopu Canal, Pongakawa Canal, Pukehina Canal, Wharere Canal:
- (d) Waioeka/Otara Kukomoa Creek, Te Karaka Creek:
- (e) Waihi Beach 2 Mile Creek, 3 Mile Creek.
- (f) Waiotahe Waiotahe Main Drain.
- (g) Tauranga City Kulim Ave Bureta Rd/Golf course, Vale St-Bureta Rd; Rosewood Flow Channel; Sherwood St; Castlewood Drive; Kingswood Rd; Humber Cres Amenity Reserve, Road Reserve, Watling St; Bruce R/SH2, Mangatawa-SH2, Railway, Farmlands; Pattersons; Vale St; Maxwells Road; Solomon St; Carmichael Reserve; Russell Pl; Montgomery St; Birch Ave; Seventeenth Ave Golf Range to Clarke St; historic Village/17th Ave, Rear historic to Kopurererua; Brook St; Maleme St East to Oropi Rd and West; Harrisfield Dr; Owen Park; Tara Rd North and South; Harrisons Cut; Beachwaters; Southern Outlet/Te Maunga Farmland and Golf Course; Christie; Airport; Maru St / AgriBalance; Te Marie St; Triton Ave; Pacific Cove periphery; Pacific Cove to Domain Road; Taiaho Pl; Kaitemako Stream between the Welcome Bay Road bridge and Lochinvar Place; Wairakei Stream.

Any other canal or drain that is within a land drainage scheme is included in the term 'Drain'.

Land Management Practice – the way in which a land use activity is carried out.

Land Management Suite – an area of similar soils with similar erosion risk which have the same potential land management issues.

Land Use – the type of activity that an area of land is used for, such as dairying, forestry, urban, or horticulture.

Land and Soil Disturbance – the excavation, drilling, tunnelling, disturbance, placement, exposure, or deposition of land or soil by an activity. Also refer to the definitions of Earthworks, Vegetation Clearance, and Cultivation.

Leachate – A liquid effluent that is generated by the breakdown of organic and inorganic materials, or by the percolation of rainwater through wastes. It is generally a mix of water with any liquids produced from decaying materials, liquid wastes, dissolved or suspended materials, and other contaminants resulting from the type of waste at the site.

Lifestyle farming activities means farming activity over an entire property/farming enterprise which is characterised by the following: property's primary purpose being as a residence; the income from the land not representing a significant proportion of the income for a household or owner; the farming intensity being generally low with low labour inputs; no commercial cropping, dairying or horticulture; the district plan zoning reflecting rural lifestyle land use.

Low intensity farming means farming activities that generate less than 57% of the nitrogen loss rate generated by the drystock reference file as prescribed in Schedule LR Five.

Maintenance – regular activities which retain a structure, asset or a location to its original authorised standard and purpose, and where the character, intensity and scale of the structure, asset or site remains the same or similar. Excludes alteration, extension or reconstruction of structures or assets, or change in location.

Major road – a road that is either a state highway or carries more than 750 vehicles per day.

Managed reduction (in relation to Lake Rotorua nutrient management provisions) means the planned progressive reduction of nitrogen losses from a property/farming enterprise over time to reach a Nitrogen Discharge Allocation.

Managed Reduction Offset (in relation to Lake Rotorua nutrient management provisions) means nitrogen loss capacity that is transferred from a source property/farming enterprise for addition to the managed reduction pathway of a destination property/farming enterprise to meet a Managed Reduction Target.

Managed Reduction Target (in relation to Lake Rotorua nutrient management provisions) Managed Reduction Targets describe the nitrogen reductions required in each five-year timeframe which in total equal the difference between the Start Point and Nitrogen Discharge Allocation. They are the maximum amounts of nitrogen loss allowed to occur from a property/farming enterprise at a target date (1 July 2022 and 1 July 2027). They are calculated as a percentage of the total reduction required and will be expressed as a percentage of the relevant reference files.

Margin of a stream, river or lake – the ecological or physical boundary of a stream, river or lake. In a lake, up to the 2.33 metre AEP level.

Mauri – Refer to the Kaitiakitanga section for explanation.

Mean Annual Low Flow (MALF) – Mean annual low flow is the arithmetic mean of the 7 day low flows calculated for each year of the period of record analysed.

Mean High Water Springs (MHWS) – the average line of spring high tides. Spring tides occur at or near each new and full moon

Modified watercourse – a watercourse that meets any of following criteria:

- (a) Is a river or stream that has been channelled or diverted.
- (b) Is a Land Drainage Canal (as defined in this regional plan) constructed through a wetland or swamp, that generally follows the path of a historic natural watercourse or reasonably defined natural drainage channel.
- (c) Is a watercourse that has a natural headwater of either a channel or spring, and generally follows the path of a historic natural watercourse or reasonably defined natural drainage channel.
- (d) Is the oxbow of a diverted river.

Moturiki Datum – is a survey datum on Moturiki Island, Mt Maunganui. This datum is equal to mean sea level.

Mouth – For the purpose of defining the landward boundary of the Coastal Marine Area, means the mouth of the river either—

- (a) As agreed and set between the Minister of Conservation, the regional council, and the appropriate territorial authority in the period between consultation on, and notification of, the proposed regional coastal plan; or
- (b) As declared by the [Environment Court] under section 310 upon application made by the Minister of Conservation, the regional council, or the territorial authority prior to the plan becoming operative, -
- (c) and once so agreed and set or declared shall not be changed in accordance with the First Schedule or otherwise varied, altered, questioned, or reviewed in any way until the next review of the regional coastal plan, unless the Minister of Conservation, the regional council, and the appropriate territorial authority agree.

Natural and Physical Resources – *Includes land, water, air, soil, minerals, and energy, all forms of plants and animals (whether native to New Zealand or introduced), and all structures.*

Natural Character – the qualities of the environment that give recognisable character to an area. There are varying degrees of natural character. Natural character relates to:

- (a) Natural systems landscapes, physical processes and ecological systems.
- (b) Landform.
- (c) Landcover.
- (d) Waterscapes seascapes, harbours, estuaries, wetlands, lakes and rivers.
- (e) Natural habitats of fauna.

Advisory Note – Also refer to the Bay of Plenty Regional Policy Statement for further explanation.

Natural Hazard – Means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Natural Perturbation – a small change in a water body caused by natural processes, including heating by the sun.

NERMN – Regional Council's Natural Environment Regional Monitoring Network.

Nga Tangata Pukenga – Tangata whenua persons acknowledged by their iwi and hapu as having the appropriate knowledge, expertise and genealogical linkages to allow them to assist kaitiaki to determine and express the groups' relationships and their culture and traditions with their ancestral lands, waters, waahi tapu, special sites and other taonga.

Nitrogen (in relation to Lake Rotorua nutrient management provisions) refers to elemental nitrogen as measured as Nitrogen Discharge Allocations (kgN/ha/yr) or as annual lake loads (tonnes N/yr). It is noted that the predominant form of leached nitrogen is the nitrate ion NO₃-).

Nitrogen Discharge Allocation (NDA) (in relation to Lake Rotorua nutrient management provisions) means the maximum annual amount of nitrogen loss that is allowed to occur from a property/farming enterprise post 1 July 2032. A property/farming enterprise's Nitrogen Discharge Allocation equals the sum of the allowable nitrogen losses, for all of the blocks within the property/farming enterprise (drystock, dairy, bush/scrub, plantation forestry and house blocks). They are expressed as a percentage of the relevant reference files.

Non-consumptive use of water – For the purposes of this regional plan, the term 'non-consumptive use of water' refers to activities where:

(a) Water is used (including damming and diversion) within the bed of the stream, river or lake; or within an aquifer.

And

(b) Where water is abstracted from the water body, it is returned to the water body in the same or similar quantity and quality as it is abstracted, and at the same general location.

Nutrient Management Plan (in relation to Lake Rotorua nutrient management provisions) means a plan prepared for a property or farming enterprise that identifies sources of nutrients associated with land uses and that records mitigation actions to reduce nitrogen losses to meet Managed Reduction Targets and the Nitrogen Discharge Allocation and to manage phosphorus loss. The requirements of a Nutrient Management Plan are specified in Schedule LR Six.

Occupier - Means -

- (a) The inhabitant occupier of any property; and
- (b) In relation to any rateable property within the meaning of the Rating Powers Act 1988, includes any occupier of the property within the meaning of that Act; and
- (c) For the purposes of section 16, in relation to any land (including any premises and any Coastal Marine Area), includes any agent, employee, or other person acting or apparently acting in the general management or control of the land, or any plant or machinery on that land.

Orphan Contaminated Land – Contaminated land for which either no party or parties can be fixed with legal liability, or the liable party or parties are unable to fund the measures necessary to remedy or mitigate adverse effects associated with the site.

Overseer (in relation to Lake Rotorua nutrient management provisions) means the OVERSEER® Nutrient Budgets model (commonly referred to as Overseer or OverseerFM) and is a software application that generates information about the flow of nutrients on and off a farm. Overseer calculations are based on a 01 July to 30 June period.

Overseer file (in relation to Lake Rotorua nutrient management provisions) represents the record of farm system data which is used to execute the OVERSEER® Nutrient Budgets model for a single analysis of the farm and its management system. This provides an estimate of the total nitrogen balance for a particular property/farming enterprise using Overseer, taking into account nitrogen inputs and outputs.

Owner -

- (a) In relation to any land, means the person who is for the time being entitled to the rack rent of the land or who would be so entitled if the land were let to a tenant at a rack rent; and includes -
 - (i) The owner of the fee simple of the land; and
 - (ii) Any person who has agreed in writing, whether conditionally or unconditionally, to purchase the land or any leasehold estate or interest in the land, or to take a lease of the land, while the agreement remains in force; and
- (b) In relation to any ship or offshore installation or oil transfer site, has the same meaning as in section 222(2) of the Maritime Transport Act 1994.

Permanently retired means the permanent removal of plantation forestry and/or agricultural production to enable a natural reversion back to native forest cover (or a land use with the same nitrogen loss rate as bush/scrub) that is legally secured.

Permitted Activity – Means an activity described in section 77B(1) of the Act.

Section 77B(1) states: If an activity is described in this Act, regulations or a plan or proposed plans as a permitted activity, a resource consent is not required for the activity if it complies with the standards, terms, or conditions, if any, specified in the plan or proposed plan.

Persistent toxic contaminants – a contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) of long duration that is capable of causing ill-health, injury or damage to living organisms. Includes eco-toxic contaminants.

Phosphorus (in relation to Lake Rotorua nutrient management provisions) refers to elemental phosphorus in dissolved, particulate and organic forms.

Plantation Forest or Plantation Forestry means a forest deliberately established for commercial purposes, being-

- (a) at least 1ha of continuous forest cover of forest species that has been planted and has or will be harvested or replanted; and
- (b) includes all associated forestry infrastructure; but
- (c) does not include-

- (i) a shelter belt of forest species, where the tree crown cover has, or is likely to have, an average width of less that 30 m; or
- (ii) forest species in urban areas; or
- (iii) nurseries and seed orchards; or
- (iv) trees grown for fruit nuts; or
- (v) long-term ecological restoration plantation of forest species; or
- (vi) willows and poplars space planted for soil conservation purposes

Plant Pest – any plant, tree, shrub, herb, flower, nursery stock, culture, vegetable or other vegetation specified in the Pest Management Strategy for the Bay of Plenty 2003-2008.

Plantation forestry (in relation to Lake Rotorua nutrient management provisions, for the purpose of defining areas of plantation forestry used to calculate nitrogen discharge allocations) means areas of planting, earthworks, forestry tracks, skid sites, the maintenance and/or harvesting of tree species for commercial purposes, and non-planted areas directly related to forestry operations which are not grazed by stock.

Point Source Discharges – a discharge of contaminants from a specific and identifiable outlet onto or into land, air, or water.

Potentially contaminated Land – any location for which there are reasonable grounds to suspect that contamination by hazardous substances may have occurred, based on information about past land uses at that location, or on evidence from or near the land itself.

Precautionary approach – refer to Section 2.5 of the Bay of Plenty Regional Policy Statement.

Production land -

- (a) Means any land and auxiliary buildings used for the production (but not processing) of primary products (including agricultural, pastoral, horticultural, and forestry products):
- (b) Does not include land or auxiliary buildings used or associated with prospecting, exploration, or mining for minerals, ... -

and production" has a corresponding meaning.

Property — the land described in a particular cert

- the land described in a particular certificate of title, or a group of contiguous certificates of title owned or leased by the same owner or lease holder, or land which is designated as a road or reserve, or is Maori land.
- for the purposes of AREA2 R1 and AREA2 R2 means, as applicable to the context, a
 parcel of land described in Table NH3 and shown with a yellow border on Figure NH1.

Property/farming enterprise means a single operating unit regardless of its ownership structure, size, arrangement and number of parcels and legal tenure. Property/farming enterprise only relates to rural land within the Lake Rotorua groundwater catchment.

Property Plan – refer to Environmental Programme.

 $Q_5 T_d$ – the mean 7 day low flow that has a 20% (one in five) probability of occurring in any one year.

Raft – Means any moored floating platform which is not self-propelled; and includes platforms that provide buoyancy support for the surfaces on which fish or marine vegetation are cultivated or for any cage or other device used to contain or restrain fish or marine vegetation; but does not include booms situated on lakes subject to artificial control which have been installed to ensure the safe operation of electricity generating facilities.

Reference files - mean Overseer files that have been created for plantation forestry, bush/scrub, house blocks and hypothetical dairy and drystock properties that are used to manage changes in nitrogen loss rates arising from Overseer version updates.

Reinjection – The return of geothermal water (including condensates and gases) into the geothermal field reservoir from which it was taken.

Remote road – a public or private road accessing a property that does not have dwellings and which crosses a waterway with a contributing catchment of less than 50 km².

Reserves Management Plan – a strategic management document for a reserve area administered by either a district council, city council, Department of Conservation, Fish and Game NZ, or the Regional Council and which has been formally adopted by the relevant administrating agency.

Residential activity – for the purposes of AREA2-R1 and AREA2-R2 means the use of land or buildings by people for living accommodation whether permanent or temporary and includes, but is not limited to, any dwellings, apartments, boarding houses, hotels, hostels, motels, camping grounds, mobile homes, caravans, tents, and accommodation for seasonal workers.

Riparian Management Zone – the area of land that covers a specified horizontal distance from any wetland, or from the bed of any permanently or intermittently flowing river, stream or a lake. Areas of land adjacent to ephemeral flowpaths are excluded from the Riparian Management Zone. Land on the margins of estuaries, harbours and the open rocky coast is covered by the definition of "Coastal Margin". Land on the margins of coastal dune systems is covered by the definition of "Sand Dune Country". The horizontal width of a Riparian Management Zone, as measured from the edge of the surface water body to the width stated, is as follows:

1 For land adjacent to Rotorua Lakes:

| Land Slope | Land Disturbance Activity | | | |
|------------|---------------------------|------------|--|-------------|
| | Vegetation Clearance | Earthworks | Clearance of Vegetation by Burning | Cultivation |
| 0 to 7° | 10 metres | 20 metres | 20 metres | 5 metres |
| >7 to 15° | | | | 10 metres |
| >15 to 25° | 20 metres | 25 metres | 25 metres | 10 metres |
| >25 to 35° | 25 metres | 40 metres | 40 metres | 40 metres |
| >35° | 40 metres | 40 metres | 40 metres | 40 metres |

For land adjacent to any other lake not specified in 1, or wetland or the bed of any river or stream, excluding land adjacent to streams and rivers with Water Supply water quality classification in relation to earthworks and vegetation clearance:

| | Land Disturbance Activity | | | | |
|------------|---------------------------|------------|--|-------------|--|
| Land Slope | Vegetation Clearance | Earthworks | Clearance of Vegetation by Burning | Cultivation | |
| 0 to 7° | 5 metres | 5 metres | 5 metres | 2 metres | |
| >7 to 15° | 5 metres | 10 metres | 10 metres | 5 metres | |
| >15 to 25° | 20 metres | 20 metres | 20 metres | 10 metres | |
| >25 to 35° | 25 metres | 25 metres | 25 metres | 25 metres | |
| >35° | 40 metres | 40 metres | 40 metres | 40 metres | |

For land adjacent to streams and rivers with Water Supply water quality classification in relation to earthworks and vegetation clearance:

| Land Clans | Land Disturbance Activity | | |
|-------------|---------------------------|------------|--|
| Land Slope | Vegetation Clearance | Earthworks | |
| 0 to 7° | 10 metres | 20 metres | |
| > 7 to 15° | | | |
| > 15 to 25° | 20 metres | 25 metres | |
| > 25 to 35° | 25 metres | 40 metres | |
| > 35° | 40 metres | 40 metres | |

Riparian area or riparian margin – A strip of land of varying width adjacent to the bed of a stream, river, lake or wetland, which contributes or may contribute to the maintenance and enhancement of the natural functioning, quality and character of the stream, river, lake or wetland; and the natural character of the margins of streams, rivers, lakes and wetlands. For the purposes of this regional plan, the definition does not include land adjacent to artificial watercourses and ephemeral flowpaths.

River – Means a continually or intermittently flowing body of fresh water; and includes a stream and modified watercourse; but does not include any artificial watercourse (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation, and farm drainage canal). Note: 'River' includes intermittent watercourses, but excludes ephemeral flowpaths. Refer to the definitions of Intermittent Watercourse and Ephemeral Flowpath.

Roading Authority – any authority or agency who own, operate or maintain public access roads, including but not limited to, District and City Council roading authorities, NZTA, Department of Conservation, hospitals, and large government organisations.

Roadside drain – an artificial watercourse that runs alongside a public road.

Rotorua Lakes – for the purposes of this regional plan the term refers to the collective group of Lakes Rotorua, Rotoiti, Rotoehu, Rotoma, Okataina, Okareka, Tikitapu, Rotokakahi, Tarawera, Okaro, Rotomahana, Rerewhakaaitu.

Rule Implementation Plan means a non-statutory document that provides advice on how the Lake Rotorua nutrient management rules are intended to be implemented and enforced. Such documents are usually developed where a regulatory plan has technical components and background information that is not able to be included within a regulatory document.

Rural (in relation to land and properties/farming enterprises within the Lake Rotorua groundwater catchment) means rural land identified on Map LR 1.

Rural road – a road that is not a major road, remote road or access track.

Sand Dune Country – coastal dune systems with sand soils, which are characterised by low amounts of organic matter and low cohesiveness. Includes areas with Land Use Capability of VIIe and VIIIe, and Land Management Suite of LMS 3 or LMS 4. For the purposes of the rules in the Land Management section of this regional plan, it is coastal land measured horizontally from the Coastal Marine Area to either:

- (i) 150 metres landward of the Coastal Marine Area; or
- (ii) the point where land changes from sand dune country to another soil type; whichever is the lesser distance.

Secchi Disc Depth – the range in water at which the image of a secchi disc, viewed horizontally, is judged to be extinguished. Also refer to Black Disc Range.

Sediment – for the purposes of this regional plan, is soil or earth particles suspended in water.

Sedimentation – the settling out of particles (sediment) that have been transported by water.

Service crossing – a structure crossing over the bed of a surface water body that conveys material, liquids, energy or communications. Includes pipes conveying water, sewage, wastewater or gas; lines conveying electricity; fibre optic cables; communications lines; signal lines; telecommunications lines; and transmission lines.

Settlement land means rural land within the Lake Rotorua groundwater catchment returned in accordance with the Ngāti Rangiwewehi Claims Settlement Act 2014 or identified as CNI Forests Lands in the Central North Island Forests Land Collective Settlement Act 2008 on or before 31 December 2019.

Short rotation carbon cropping (in relation to Lake Rotorua nutrient management provisions) means the planting, maintenance and/or harvesting of tree species for purposes other than the production of timber, timber products, pulp and paper and which are not grazed by farmed livestock.

Significant farm system change (in relation to Lake Rotorua nutrient management provisions) means a change in farm system that alters the inputs, methods or areas being used in the management of the property/farming enterprise where the scale of change means that the Nutrient Management Plan is no longer a realistic representation of the farm system or the predicted discharge exceeds that in the Nutrient Management Plan.

Silent Files – files that are not available to the general public due to the sensitive nature of the information they contain (e.g. information about heritage places known only to hapu/iwi).

Simplified Nutrient Management Plan (in relation to Lake Rotorua nutrient management provisions) means a plan prepared for a lifestyle farming activity that identifies a planned approach to meet any required nitrogen loss reductions and to manage nutrient losses. The Simplified Nutrient Management Plan will only contain key elements of the matters specified in Schedule LR Six and will focus on stocking rates, fertiliser and feed imports.

Slope – The steepness of the land measured in degrees or as a gradient. Also refer to Dominant Slope.

Soil – the top most layer of weathered rock, ash, sand and organic matter, which usually contains air, moisture and nutrients, and can therefore support life.

Soil Conservation – Means avoiding, remedying, or mitigating soil erosion and maintaining the physical, chemical, and biological qualities of soil.

Start Points (in relation to Lake Rotorua nutrient management provisions) means the nitrogen loss benchmark or derived benchmark for a property/farming enterprise as a sum of all block nitrogen loss benchmarks/derived benchmarks developed in accordance with Schedule LR One.

Stopbank – barrier or embankment constructed near or alongside a river, and designed to contain flood flows and prevent high river flows flooding onto adjacent land.

Stormwater - short-term runoff associated with rainfall events.

Stream Reach – a length of stream (or river) of uniform flow and habitat characteristics and is often bounded by inflowing tributaries.

Structure – Means any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft.

Suitably qualified and experienced person (in relation to Lake Rotorua nutrient management provisions) means a person who:

- implements Overseer input best practice and uses standard protocols recognised and approved by the Bay of Plenty Regional Council including those specific to the Lake Rotorua groundwater catchment: and
- has completed both the "Intermediate" and the "Advanced" courses in "Sustainable Nutrient
 Management in New Zealand Agriculture" conducted by Massey University and has at least five
 years' work experience in a land use/farm advisory role; or
- is approved in writing by the Chief Executive (or delegate thereof) of the Bay of Plenty Regional Council.

Surface Water body – means freshwater in a river, lake, stream, pond, or wetland, that is not located within the Coastal Marine Area.

Sustainable management – Means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while -

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Tangata Whenua – In relation to a particular area, means the iwi, or hapu, that holds mana whenua over that area.

Taonga – Treasure or property. Taonga are prized and protected as sacred possessions of the tribe. The term carries a deep spiritual meaning and taonga may be things that cannot be seen or touched. Taonga include waahi tapu, waterways, fishing grounds and mountains.

Tikanga Maori – Means Maori customary values and practices.

Tino Rangatiratanga – chiefly authority, chieftainship, full tribal authority to tribal self-management. In the context of resource management this means the right of iwi and hapu to manage and control their resources in accord with their customary preferences.

Tributary – a stream that drains into a larger stream or river, or into a lake or wetland, thereby contributing water to it.

Trophic Level Index (TLI) – a numeric system for the monitoring of lake quality adopted by the Ministry for the Environment. TLI is determined using measurements of chlorophyll (Chla mg m-3), Secchi depth, Total Phosphorus (TP) and Total Nitrogen (TN). The TLI value integrates measures of key nutrients and algal production over a year, giving an indication of the overall quality of the lake. The TLI number increases as water quality decreases.

Untreated sewage – sewage that has not been treated to either primary, secondary or tertiary levels.

Urban area or settlement – an area which contains an aggregation of more than 50 lots or sites of an average size of no more than 1000 m2.

Vegetation Clearance – The disturbance of land and soil resulting from the disturbance of vegetation by removal, clearance, destruction, and crushing of all forms of scrub, tree, and ground cover vegetation. This excludes:

- (a) normal gardening practices,
- (b) routine maintenance of existing private and public roads, railways lines or tracks,
- (c) maintenance of public reserves and the conservation estate,
- (d) trimming and mowing,
- (e) pruning,
- (f) thinning to waste,
- (g) harvesting of plants for scientific, cultural, or traditional medicinal purposes,
- (h) the formation and maintenance of tracks constructed by hand, to a width no greater than 1.5 metres,
- (i) the harvesting of crops (excluding forestry),
- (j) the removal or disturbance of plant pest species,
- (k) weed control,
- (I) clearance around network utilities, and
- (m) cultivation.

Waahi tapu – a place sacred to Maori in the traditional, spiritual, religious, ritual or mythological sense.

Water -

- (a) Means water in all its physical forms whether flowing or not and whether over or under the ground:
- (b) Includes fresh water, coastal water, and geothermal water:
- (c) Does not include water in any form while in any pipe, tank, or cistern.

Water Body – Means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the Coastal Marine Area.

Water Infiltration Gallery – the excavated and constructed hole within the water table or unconfined aquifer to intercept groundwater for water supply purposes.

Water harvesting – taking surface water to be stored for future use.

Water intake structure – a structure in, on, or over the bed of a stream, river, lake or modified watercourse for the purposes of abstracting surface water for use.

Water quality – the physical, chemical and biological attributes of water that affect its ability to sustain environmental values or uses.

Water table – the level at which land becomes saturated with groundwater.

Well - refer to the definition of a bore.

Wetlands – Includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

For the avoidance of doubt, the term' wetland' applies to water bodies, and intermittently wet areas. The term does not apply to dry land that does not support a natural ecosystem of plants and animals that are adapted to wet conditions, and that occurs within an area commonly referred to in its entirety as a wetland.

For the purposes of this regional plan, 'wetland' excludes:

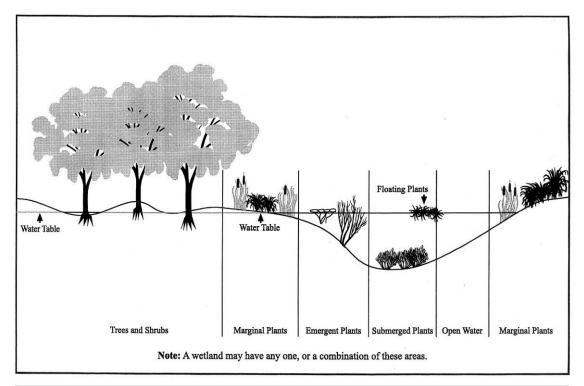
- (a) Wetted pasture and pasture with patches of rushes.
- (b) Oxidation ponds.
- (c) Artificial water bodies used for wastewater or stormwater treatment. This includes wetlands that have been developed primarily for effluent or stormwater treatment or disposal, but are managed to appear 'natural'.
- (d) Artificial Farm dams and detention dams.
- (e) Land drainage canals and drains.
- (f) Artificial Reservoirs for firefighting, domestic or municipal water supply.
- (g) Temporary ponded rainfall over areas that would not otherwise be considered a wetland.
- (h) Artificial water bodies that are not in the bed of a stream, river or lake; and are not degraded natural wetlands that have been modified. This includes artificial water bodies that are managed to appear 'natural'

The edge of a wetland (i.e. where a wetland becomes land) should be determined by a person with appropriate expertise.

(See Figure DT 2 and photos to assist in interpretation)

Wetland Management Agreement – a management agreement document that has been prepared by the Regional Council in conjunction with a landowner, for the enhancement of a wetland.

Wilding Willow – Self seeded willows growing in the bed of a river, stream or lake that have not been planted as part of a river scheme or bank erosion planting.



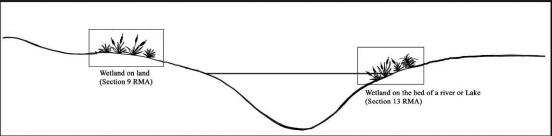


Figure DT 2 Types of Wetlands

Photos Showing Examples of wetlands

Wetlands that are subject to Rules in WL chapter

All coastal and estuarine wetlands above the mean high water springs



Photo 1 – Wetland on Coastal Margin with good vegetation and habitat values.

All wetlands that are in the bed of a river or lake



Photo 2 – Emergent wetland vegetation on the margins of a lake or pond.



Photo 3 – Wetland part of the bed and riparian area of a river or stream.

Wetlands on land that have important water quality, water quantity, soil conservation or biodiversity values. Includes wetlands with indigenous vegetation, and those with exotic wetland vegetation that provides habitat for indigenous fauna.



Photo 4 – Wetland with good vegetation, with aquatic plant growth over open water areas.



Photo 5 – Good quality freshwater wetland with degraded or modified margins.



Photo 6 – Wetland with range of habitat values and vegetation, including open water and areas of indigenous and some exotic wetland species.

Wetlands that are not subject to Rules in WL chapter

It is appropriate to enhance such areas to improve water quality filtering, soil conservation or biodiversity values.



Photo 7 – Temporary ponding under poplars.



Photo 8 – Land depression dominated by pasture and other exotic species.



Photo 9 – Low lying land with patches of rushes.

If you are unsure if an area is a wetland and is subject to WL R2, WL R3 contact the Regional Council for a site assessment.

Bibliography 14 September 2017

Bibliography

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

- Burns, N., 2000. Protocol for Monitoring New Zealand Lakes and Reservoirs. Ministry for the Environment.
- Burns, N., 2001. Trophic Level Index Baselines and Trends for 12 Rotorua District Lakes, 1990 to 2000.

 Report by Lakes Consultancy prepared for Environment Bay of Plenty.
- Centre for Advanced Engineering, April 2000. Landfill Guidelines: Towards Sustainable Waste Management in New Zealand.
- Crabbe, B., and Ngapo, N., 2001. Environmental Code of Practice for Rivers and Drainage Maintenance Activities. Environment Bay of Plenty Operations Report 2001/01.
- Environment Bay of Plenty, 1999. Operative Rotorua Geothermal Regional Plan.
- Environment Bay of Plenty, 1999. Environmental Education Strategy for Environment Bay of Plenty 1999-2005 Learning for a Sustainable Environment.
- Environment Bay of Plenty, 2000. Erosion and Sediment Control Guidelines for Forestry Operations. Guideline No. 2000/01.
- Environment Bay of Plenty, 2001. Erosion and Sediment Control Guidelines for Land Disturbing Activities. Guideline No. 2001/03.
- Environment Bay of Plenty, Opotiki District Council, Western Bay of Plenty District Council, Rotorua District Council, Tauranga District Council, Whakatane District Council, Kawerau District Council, 2003. Bay of Plenty's Draft Regional Waste Strategy.
- Environment Bay of Plenty, 2003. Bay of Plenty Regional Pest Management Strategy 2003-2008. Environment Bay of Plenty, New Zealand.
- Environment Bay of Plenty, 2003. Operative Regional Air Plan.
- Environment Bay of Plenty, 2003. Operative Regional Coastal Environment Plan.
- Environment Bay of Plenty, 2004. Operative Regional Plan for the Tarawera River Catchment.
- Everitt, S., 2001. Hydrological and Hydraulic Guidelines. Environment Bay of Plenty Operations Report 2000/04.
- 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.
- Love, Morris Te Whiti, Tikitu Tutua-Nathan, Mike Barns, Tamati Kruger, 1993. Ngaa Tikanga Tiaki I Te Taiao: Maori Environmental Management in the Bay of Plenty. Report for Bay of Plenty Regional Council.
- Ministry for the Environment, June 1994. Water Quality Guidelines Number 2. Wellington, New Zealand.
- Ministry for the Environment, June 1997. Health and Environment Guidelines for selected Timber Treatment Chemicals. Wellington, New Zealand.
- Ministry for the Environment, August 1997. Guidelines for Assessing and Managing Contaminated Gasworks sites in New Zealand. Wellington, New Zealand.

14 September 2017 Bibliography

Ministry for the Environment, May 1998. Flow Guidelines for Instream Values. Wellington, New Zealand.

- Ministry for the Environment, June 1999. Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated sites in New Zealand. Wellington, New Zealand.
- Ministry of Health/Ministry for the Environment, November 1999. Recreational Water Quality Guidelines, New Zealand.
- Ministry for the Environment, May 2001. A Guide to Landfill Consent Conditions. Ministry for the Environment.
- Ministry for the Environment May 2001. A Guide to the Management of Closing and Closed Landfills in New Zealand. Ministry for the Environment.
- Ministry for the Environment, May 2001. A Guide to Landfill Consent Conditions. Ministry for the Environment.
- Ministry for the Environment, May 2001. A Guide to the Management of Closing and Closed Landfills in New Zealand. Ministry for the Environment.
- Ministry for the Environment, June 2001. Guidelines for reporting on Contaminated Sites. Wellington, New Zealand.
- Ministry for the Environment, 2001. Guide to the Management of Cleanfills. Wellington, New Zealand.
- Molloy, J., and Davies, A., as upgraded by Tisdall C., 1994. Setting Priorities for the Conservation of New Zealand's Threatened Plants and Animals. 2nd edition. Department of Conservation.
- New Zealand Fertiliser Manufacturer's Research Association Inc, 1998. Code of Practice for Fertiliser Use.
- NZS 4411:2001 Environmental Standard for Drilling of Soil and Rock. Standards New Zealand, Wellington.
- NZS 8409:1999. Code of Practice for the Management of Agrichemicals. Standards New Zealand, Wellington.
- Sigma Consultants, NIWA, Bioresearches Ltd, and NZFRI, June 1993. Report on Rural Land Use Practices in the Rotorua District. Report prepared for Rotorua District Council.
- Taranaki Regional Council, 2001. Investing in our Banks, The Benefits of Riparian Management.
- Te Arawa Maori Trust Board, Environment Bay of Plenty, Rotorua District Council, August 2000. Strategy for the Lakes of the Rotorua District.
- Waitangi Tribunal, 1999. The Whanganui River Report (Wai 167). GP Publications, Wellington.
- Wilding, T.K., 1999. Instream Flow requirements and Water Takes in the Bay of Plenty A Discussion Document. Environmental Report 99/22. Environment Bay of Plenty.
- Wilding, T.K., 2000. Minimum Flow report for the Waitahanui Stream. Environmental Report 2000/25. Environment Bay of Plenty.
- Wilson, A., and Ngapo, N., 1993. Bay of Plenty Regional Soil Conservation Assessment. Bay of Plenty Regional Council unpublished report.