20 Summary of Rules

20.1 Chapter 12 – River and Lake Beds

- 12.2.5(a) For the purposes of this regional plan, any watercourse connecting lakes within the Tarawera River catchment is a tributary stream of the lake into which it flows.
- 12.2.5(b) The use, erection, reconstruction, placement, alteration, extension, removal or demolition of any structure or part of any structure, in, on, under, or over the bed of any river or wetland, within the Tarawera River catchment shall be a <u>Permitted</u> Activity, subject to compliance with all the conditions of Rule 12.2.5(m),

except that:

- (v) an overhead cable or transmission line that, when measured at its lowest point above the bed of the waterbody, is greater than 10 metres above the 50 year flood water level for the site, or
- (vi) a bridge (including a pipe bridge) spanning the main stem of the Tarawera River that, when measured at its lowest point above the bed of the river, is greater than 1 metre above the 100 year flood water level for the site and has no abutments or supporting structures in, on or under the bed of the river, or
- (vii) notwithstanding the requirements of rule 12.2.5(e), a line, cable or pipeline, including any telecommunication line as defined in section 2(1A) of the Telecommunication Act 1987, installed by drilling or tunnelling (including pipe thrusting) under the main stem of the Tarawera River that, when measured at its highest point under the bed of the river is not less than 4 metres below the bed of the river,

shall be a <u>Permitted Activity</u> subject to compliance with conditions (iv), (v), (vii), (viii) and (ix) of Rule 12.2.5(m); and

(viii) The use, erection, reconstruction, placement, alteration, maintenance, extension, removal or demolition of a stream crossing, being any structure supporting a path, road or track over a streambed, including a culvert, single span bridge or ford, located in, on, under or over the bed of any tributary stream of the main stem of the Tarawera River, is exempt from the requirements of this plan.

Advisory Note:

The Operative Bay of Plenty Regional Land Management Plan has requirements relating to the installation and management of stream crossings. Anyone installing a stream crossing of the type described in rule 12.2.5(b)(iv) above would need to comply with the terms and conditions of section 10.5.6 of the Operative Bay of Plenty Regional Land Management Plan.

- 12.2.5(c) The use, erection, reconstruction, placement, alteration, extension, removal or demolition of any structure or part of any structure, in, on, under, or over the bed of any river or wetland within the Tarawera River catchment that does not comply with Rule 12.2.5(b) shall be a <u>Discretionary Activity</u>, and any application for a consent under this Rule shall be considered with regard to the criteria of Rules 12.2.5(m) and 12.2.5(o).
- 12.2.5(d) Notwithstanding Rule 12.2.5(b), the use, erection, reconstruction, placement, alteration, extension, removal or demolition of any structure located in, on, under, or over the bed of any river, lake, or wetland within the Tarawera River catchment

that is to be used for a taking or discharge activity from or into the same waterbody for which a water or discharge permit is required is a <u>Discretionary Activity</u> to be considered by Environment Bay of Plenty:

- (i) at the same time as any application for the water or discharge permit to which it relates:
- (ii) with regard to the requirements of the conditions of the water or discharge permit to which it relates;
- (iii) with regard to the criteria of Rules 12.2.5(m) and 12.2.5(o).
- 12.2.5(e) Subject to Rule 12.2.5(b)(iii), every excavation, drilling, tunnelling, or other disturbance of the bed of any river, lake, or wetland within the Tarawera River catchment is a <u>Discretionary Activity</u>, to be considered by Environment Bay of Plenty with regard to the matters of Rule 12.2.5(o).
- 12.2.5(f) Every reclamation or draining of the bed of any river, lake or wetland is a <u>Discretionary Activity</u>, to be considered by Environment Bay of Plenty with regard to the matters of Rule 12.2.5(o).
- 12.2.5(g) Except as provided by Rule 12.2.5(h), the reasonable ongoing maintenance, of an authorised structure in, on, under or over the bed of any river, lake or wetland is a Permitted Activity, subject to compliance with all the conditions of Rule 12.2.5(m).
- 12.2.5(h) Maintenance of any structure in, on, under or over the bed of any river, lake or wetland that results in the discharge of waste antifouling paint into water is a <u>Discretionary Activity</u>, to be considered by Environment Bay of Plenty with regard to the matters of Rule 12.2.5(o).

In the context of this Rule, waste antifouling paint is any paint or coating substance designed to emit any toxic substance.

- 12.2.5(i) The uncontrolled grazing of stock on the bed of any river, lake or wetland shall be a Prohibited Activity from 1 July 2005. For the purposes of this Rule, stock is uncontrolled if it is not effectively restrained from entering surface water by a fence or fencing device.
- 12.2.5(j) The introduction or planting of plants or parts of plants, whether exotic or indigenous, in, on, or under the bed of any river, lake, or wetland, is a <u>Discretionary Activity</u>, to be considered by Environment Bay of Plenty with regard to the matters of Rule 12.2.5(o), except that:
 - (i) planting for soil erosion and river control purposes, excluding the planting of pampas.
 - (ii) planting of native or indigenous plants as part of the preservation or restoration of the natural values of an environment;

are <u>Permitted Activities</u>, subject to compliance with conditions (i), (ii), (iii), (iv) and (v) of Rule 12.2.5(m); and

- (iii) the planting of plants within that part of the area of the Rangitaiki-Tarawera Flood Control Scheme floodway that is within the Tarawera River catchment is a <u>Prohibited Activity</u>, **except that**:
 - (a) planting in the floodway to enhance habitat values is a <u>Discretionary Activity</u> to be considered by Environment Bay of Plenty with regard to the matters of Rule 12.2.5(o);

(b) planting of pastoral grasses in the floodway is a <u>Permitted Activity</u> subject to compliance with conditions (i), (ii), (iii), (iv) and (v) of Rule 12.2.5(m).

In the context of this Rule, pastoral grasses are grasses used predominantly for the feeding of stock.

- 12.2.5(k) Except as provided by Rule 12.2.5(l), every disturbance, removal, damage, or destruction of any plant, or part of any plant (whether exotic or indigenous) or the habitats of any such plants or of animals, in, on, or under the bed of any river, lake or wetland, is a <u>Discretionary Activity</u>, to be considered by Environment Bay of Plenty with regard to the matters of Rule 12.2.5(o).
- 12.2.5(l) The following activities are <u>Permitted Activities</u>, subject to compliance with conditions (i), (ii), (iii), (iv) and (v) of Rule 12.2.5(m):
 - (i) the removal of plants by tangata whenua for their traditional medicinal or cultural purposes;
 - (ii) the collection of plant samples for identified scientific purposes;
 - (iii) the maintenance (including cutting back) of plants planted for soil conservation purposes along river, lake, and wetland margins;
 - (iv) the removal of plants or part of plants identified as requiring removal in the Bay of Plenty Regional Council Noxious Plants Authority Regional Programme for the Control of Noxious Plants: 7 May 1992 or equivalent document;
 - (v) the removal of plants or parts of plants that constitute a hazard to a waterway, or any authorised structure in a waterway, or any water surface recreational activity.

12.2.5(m) <u>Permitted Activity</u> Conditions:

The activity or structure shall:

- (i) not cause erosion to the bank or the bed of the waterbody.
- (ii) not destroy fish habitat or cause the loss of, aquatic plant or animal species beyond the site.
- (iii) not damage or destroy any fish-spawning area, nor impede the free passage of migrating fish.
- (iv) not stop or impede authorised public access to or along the waterbody.
- (v) not be constructed, installed or sited in contravention of any legislation protecting archaeological or historic sites (see advisory notes below).
- (vi) if located in, on, under or over the bed of the Tarawera River,
 - (a) not obstruct or divert any flood flow and be of a streamlined shape designed to shed flood flow and debris, and avoid scour.
 - (b) not extend over more than 10% of the horizontal component of the wetted bed of the river under mean flow conditions.

(viii) not:

- (e) damage or destroy any other structure.
- (f) interfere with any activity.

- (g) restrict the drainage of land without the consent of the landowners.
- (h) be a hazard to navigation.
- (viii) be securely connected into the bank or bed of the river to a standard that will withstand a one in 100 year flood flow event.
- (ix) be maintained in a structurally sound condition for the purpose for which it was constructed.
- (xi) not be painted with any antifouling coating designed to emit any toxic substance.

For the purpose of this rule, "activity" shall be taken to include the use, erection, reconstruction, placement, alteration, extension, removal or demolition of any structure or part of any structure, and where an activity is to install a structure at a site, the "site" is deemed to be the whole extend of the bed area covered by the structure.

Advisory notes:

- Environment Bay of Plenty can provide information on flood and mean water flows and levels and hydrological and hydraulic guidelines, phone 0800 368 267 to enquire. To avoid hazard, any structure within a floodway or bed of a river or stream should be designed and constructed with regard to the publication: "Environment Bay of Plenty Hydrological and Hydraulic Guidelines". Copies of these guidelines are available on request from any Environment Bay of Plenty office.
- This <u>Permitted Activity</u> rule does not authorise the modification, disturbance or destruction of any archaeological or historic site within the area of an activity or structure. Users of the rule should note that under Sections 98 and 99 of the of the Historic Places Act 1993 offence provisions apply whether or not a site is a recorded archaeological site.

Further advice on the requirements of the Historic Places Act 1993 can be sought from the local office of the Historic Places Trust in Tauranga, phone (07) 578 1219 or the national office of the New Zealand Historic Places Trust in Wellington, phone (04) 472 4341.

- 12.2.5(n) Every use of wheeled or tracked vehicles in any riparian area, river, lake or wetland, or its margin or bed, is a <u>Permitted Activity</u>, subject to the conditions that the vehicle use shall:
 - (i) not result in adverse effects from erosion or land instability.
 - (ii) not damage areas of significant indigenous vegetation.
 - (iii) not damage habitats of indigenous fauna or trout spawning areas.
 - (iv) not adversely affect the natural character of wetlands, lakes and rivers, and their margins and beds.
 - (v) not adversely affect amenity values, being those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.
- 12.2.5(o) When considering a resource consent application pursuant to Rules 12.2.5(c), 12.2.5(d), 12.2.5(e), 12.2.5(f), 12.2.5(h), 12.2.5(j), 12.2.5(k) and 12.2.5(p), Environment Bay of Plenty will have particular regard to, but not be limited to, the following matters:

- effects causing erosion or land instability;
- (ii) effects on the hydraulic characteristics of any river, stream or wetland;
- (iii) effects on the habitat of fish, biota, aquatic plants and wildlife;
- (iv) hazards caused to navigation;
- (v) effects caused by the occupation of public space;
- (vi) effects on the spawning, free passage or migration of fish;
- (vii) effects caused to public access to rivers and lakes and along their margins;
- (viii) effects on any waahi tapu, urupa, or cultural or heritage place or value;
- (ix) effects on natural character and amenity values, including recreation;
- (x) effects on any other lawfully-existing structure, or activity;
- (xi) effects caused by the use of any antifouling coating designed to emit any toxic substance;
- (xii) maintenance requirements;
- (xiii) monitoring requirements, including but not limited to the display of weatherproof identification numbers for compliance monitoring purposes;
- (xiv) the requirements of Part II of the Resource Management Act 1991;
- (xv) the requirements of sections 104 and 108 of the Resource Management Act 1991.
- 12.2.5(p) Every use, erection, reconstruction, placement, alteration, extension, removal or demolition of any structure on the bed of any lake within the Tarawera River catchment is a <u>Discretionary Activity</u>, to be considered by Environment Bay of Plenty with regard to:
 - (a) the matters of Rule 12.2.5(o); and
 - (b) the following matters, assessed with regard to effects on natural character and amenity values, and public and private security and safety:
 - (i) whether a structure that occupies public space and is used as a jetty should be required to remain open for public use at reasonable times without fee, charge or hindrance;
 - (ii) whether a structure that occupies public space and is used as a jetty should be required to be placed or sited so as to facilitate its shared use between neighbours;
 - (iii) whether the length or the structure, measured from the mean annual highest lake level shore line into the lake, should be limited to not exceed 12 metres;
 - (iv) whether the size of the structure, measured as the lake water surface area covered, should be limited to not exceed 15m².
 - (v) whether the structure, in conjunction with adjacent structures, has an adverse effect on the natural character of the lake margin.

In the context of this Rule, a jetty is any structure that is fixed to land on or in the bed or shore of a lake, used principally to moor or service vessels, and includes any raft.

20.2 Chapter 14 – Surface Water Quantity

14.4.5(a) The taking, diverting or damming of surface water, or the discharging of water into surface water for the purpose of maintaining the levels of those wetlands indicated below, or for the express purpose of facilitating fish passage in and out of wetlands, or for controlling plant pest in wetlands, is a Permitted Activity, subject to compliance with the following minimum and maximum levels:

Wetland	Minimum Level (Metres Moturiki Datum)	Maximum Level (Metres Moturiki Datum)
Tarawera Cut Wildlife Mgmt Res	00.50 metres	00.90 metres
Bregman's Wildlife Mgmt Res	00.20 metres	00.60 metres
Awaiti Wildlife Management Res	-0.20 metres	-0.06 metres
Lake Tamurenui	11.93 metres	12.43 metres
Tumurau Lagoon	06.50 metres	06.80 metres
Matata Lagoon	00.55 metres	00.80 metres

subject to the water being taken, diverted, dammed or discharged in the same manner as it was when this regional plan was publicly notified.

Note: The above rule relates to the taking, diverting, damming and discharge of water. Rules relating to the placement and maintenance of control structures are contained in Chapter 12 – River and Lake Beds.

- 14.4.5(b) Except as provided by Rule 14.4.5(a), the taking, diverting, damming, or discharging of surface water into or out of any wetland is a <u>Discretionary Activity</u> restricted to the following activities:
 - (i) For the purpose of achieving and maintaining the water levels of wetlands specified in Appendix 6 of this regional plan; or
 - (ii) For the express purposes of facilitating fish migration; or
 - (iii) For controlling noxious plants in any wetland.
- 14.4.5(c) Except as provided by Rules 14.4.5(a) and 14.4.5(b), the discharge of water into, or taking of water, from surface water in those wetlands specified in Appendix 12 of this regional plan, is a <u>Discretionary Activity</u>.
- 14.4.5(d) Except as restricted by Rules 14.4.5(a), 14.4.5(b) and 14.4.5(c), the taking of surface water at a volume equal to or less than 15 cubic metres per day for any purpose is a <u>Permitted Activity</u>, subject to the following condition:
 - (i) The abstraction rate shall not exceed 5% of flow above the abstraction point or 10 litres per second whichever is the lesser, and the taking does not, or is not likely to, have an adverse effect on the ecology or habitat values of the water body.

Environment Bay of Plenty may determine that an adverse effect on the ecology or habitat values of a water body is occurring if the sum of abstraction rates on a water body exceeds 10% of the 5 year low flow at any point.

The 5 year low flow is defined as a flow equivalent to the lowest seven day mean flow statistically probable once in every five years.

14.4.5(e)

Except as provided by Rule 14.4.5(f), the consumptive taking of water from the Upper Reach of the Tarawera River, the tributary streams of the Upper Reach of the Tarawera River, and the reach of the river from Kawerau Road Bridge across the Tarawera River to the Tasman Pulp and Paper Company Limited effluent outfall pipe at Grid Reference NZMS V15 365438 at a volume exceeding 5,000 cubic metres per day is a Prohibited Activity, and the cumulative total of all abstraction within this reach shall not exceed 200,000 cubic metres per day. The non-consumptive taking of water (where the full volume of water taken is returned to the river) shall be a Discretionary Activity that shall be assessed with particular regard to the protection of the assimilative capacity of the Lower Reach of the Tarawera River.

14.4.5(f)

The taking of water from the Upper Reach of the Tarawera River, the tributary streams of the Upper Reach of the Tarawera River, and the reach of the river from the Kawerau Road Bridge across the Tarawera River to the Tasman Pulp and Paper Company Limited outfall pipe at Grid Reference NZMS V15 365438 for which a water permit was held on the date of the public notification of this regional plan may continue as a <u>Discretionary Activity</u>, and on expiry may be replaced as a <u>Discretionary Activity</u>, provided that the original volume allocated shall not be increased.

14.4.5(g)

Except as provided by Rules 14.4.5(a) and 14.4.5(b) and restricted Rules 14.4.5(c) and 14.4.5(e), the taking of surface water within the Tarawera River catchment at a volume exceeding 15 cubic metres per day is a <u>Discretionary Activity</u>.

14.4.5(h)

The damming of water in any river or stream shall be a <u>Discretionary Activity</u>, **except** that while the damming of water in any river or stream complies with the following conditions, it is a <u>Permitted Activity</u>:

(a) the dam was constructed between 1 October 1990 and 1 October 1991 and was notified to Environment Bay of Plenty under General Authorisation No 7;

or

(b) the dam was constructed after 1 October 1991 and was notified to Environment Bay of Plenty under the provisions of the Bay of Plenty Transitional Regional Plan:

<u>or</u>

- (c) the dam complies with all of the following conditions:
- (i) the damming does not adversely affect an existing wetland, Rules 14.4.5(a) and 14.4.5(b) have precedence.
- (ii) Environment Bay of Plenty is notified of the location and dimensions of the dam before construction commences.
- (iii) the mean annual flow of the river or stream dammed does not exceed 300 litres per second.
- (iv) the dam does not impound more than 5,000 cubic metres water and the lowest point in the dam crest does not exceed 1.8 metres vertical height relative to the natural bed of the river or stream in which the dam is sited.
 - the dam does not impound more than 10,000 cubic metres water and the lowest point in the dam crest does not exceed 1.5 metres vertical height relative to the natural bed of the river or stream in which the dam is sited.
- (v) the dam is designed, constructed and maintained to ensure that its structural integrity is not compromised, and incorporates spillway and erosion protection

devices to safely return surplus water to the natural bed of the river or stream in which the dam is sited.

- (vi) the dam does not adversely affect fisheries, fish passage, wildlife and aquatic life
- (vii) the dam does not adversely affect the use or supply of water downstream.
- (viii) the impoundment of water upstream of the dam does not affect land owned or occupied by another person.

Note: Environment Bay of Plenty Engineering staff are available to advise on the design and installation of small dams.

- 14.4.5(i) When considering a resource consent application to take, discharge, dam or divert water within the Tarawera River catchment, Environment Bay of Plenty shall have particular regard to, but not be limited to, the following matters:
 - (i) The requirements of Part II of the Resource Management Act 1991; and
 - (ii) The requirements of sections 104 and 108 of the Resource Management Act 1991; and
 - (iii) Any effects the proposal may have on riparian, shoreline or bed erosion; and
 - (iv) The conservation and efficient use of water; and
 - The capacity of the water body to assimilate contaminants and any resulting or accentuated cumulative effects.
- Any existing activity authorised by a resource consent, which, due to this regional plan becoming operational contradicts rules relating to maximum or minimum levels or flows or rates of use of water, or minimum standards of water quality ranges of temperature, may, after a period of six months after this regional plan becomes operational, be reviewed by Environment Bay of Plenty, pursuant to section 128(1)(b) of the Resource Management Act 1991, in any case where in the regional council's opinion it is appropriate to review the conditions of the permit in order to enable the levels, flows, rates, or standards set by a rule to be met.

Section 20(2) of the Resource Management Act 1991 shall apply where, as a result of a rule in this regional plan becoming operative, an activity that formerly was a <u>Permitted Activity</u> or which otherwise could have been lawfully carried out without a resource consent requires a resource consent.

20.3 Chapter 15 – Surface Water Quality

- All water within Lakes Tarawera, Rotomahana, Okataina, Okareka, Tikitapu, and Rotokakahi in the Tarawera Lakes catchment, excluding Lake Okaro, is classified to be managed in its Natural State (NS), and any discharge permit granted for the discharge of contaminants into these waters shall be subject to conditions ensuring compliance with the classification standard in Rule 15.8.4(b) and the requirements of Rules 15.8.4(l) and 15.8.4(m).
- 15.8.4(b) The standards for **Class NS**, that apply after reasonable mixing of any contaminant or water with the receiving surface water and disregard the effect of any natural perturbation that may affect the water body, are:
 - The concentration of dissolved oxygen shall exceed 80% of saturation concentration.

- (ii) No increase in colour as assessed by measurement on the Munsell Hue scale, and no decrease in visual clarity as assessed by black disc measurement 116.
- (iii) No detectable increase in acute and chronic toxicity between a reference water sample and a sample of the discharge diluted with that water at the specified mixing ratio.
- (iv) No increase in temperature.
- (v) No change in pH.
- (vi) No production of conspicuous oils and grease films, scums or foams, or floatable or suspended materials.
- (vii) No conspicuous increase in biological growths.
- (viii) Aquatic food resources shall not be rendered unsuitable for human consumption, nor water rendered unsuitable for stock watering.
- (ix) No increase in the emission of objectionable odour.
- (x) No increase in nitrogen and phosphorus levels relative to the total nitrogen and total phosphorus levels measured in the lake in 1994.

Class NZ Tarawera River Catchment Lakes – 1994 Nutrient Quality					
Lake	Total Phosphorus mg/m³	Total Nitrogen mg/m ³	Trophic Lake Index		
Tarawera	6.6	119	2.6		
Okataina	5.7	113	2.6		
Tikitapu	3.1	185	2.7		
Okareka	5.1	221	3.0		
Rotokakahi	6.4	217	3.1		
Rotomahana	41.1	247	3.9		

- 15.8.4(c) All surface water within Lake Okaro is classified to be managed for Contact Recreation (CR), and any discharge permit granted for the discharge of contaminants into the water of Lake Okaro shall be subject to conditions ensuring compliance with the classification standards in Rule 15.8.4(d) and the requirements of Rules 15.8.4(l) and 15.8.4(m).
- 15.8.4(d) The standards for **Class CR**, that apply after reasonable mixing of any contaminant or water with the receiving surface water and disregard the effect of any natural perturbation that may affect the water body, are:
 - No decrease in visual clarity below 1.6 metres as measured by the black disc technique.
 - (ii) No detectable increase in acute and chronic toxicity between a reference water sample and a sample of the discharge diluted with that water at the specified mixing ratio.
 - (iii) No increase in temperature of more than 3°C , and maximum no to exceed 25°C .
 - (iv) pH shall remain within the range of 6.0 to 9.0.

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Includes Lakes Tarawera, Rotomahana, Okataina, Okareka, Tikitapu, and Rotokakahi. Does not include Lake Okaro.

- (v) No production of conspicuous oils or grease films, scums or foams, or floatable or suspended materials.
- (vi) No conspicuous increase in biological growths.
- (vii) The median concentration of enterococci of at least 5 samples taken throughout the bathing season 117 shall not exceed 33 enterococci per 100 millilitre, nor shall any single sample exceed 107 enterococci per 100 millilitre. 118
- (viii) No increase in the emission of objectionable odour.
- All surface water within the Upper Reach of the Tarawera River, including the reach from the Lake Tarawera River Outlet to the Kawerau Road Bridge across the Tarawera River, and also including all tributaries of the Tarawera River (other than the drains and canals on the Rangitaiki Plans) and tributaries of the Tarawera Lakes are classified to be managed for Fish Spawning Purposes Upper Tarawera River (Class FSUT), and any discharge permit granted for the discharge of contaminants into these waters shall be subject to conditions ensuring compliance with the classification standards in Rule 15.8.4(f) and the requirements of Rules 15.8.4(l) and 15.8.4(m).
- 15.8.4(f) The standards for **Class FSUT**, that apply after reasonable mixing of any contaminant or water with the receiving water and disregard the effect of any natural perturbation that may affect the water body, are:
 - The concentration of dissolved oxygen shall exceed 80% of saturation concentration.
 - (ii) No increase in colour as assessed by Munsell Hue colour units measurement, and no decrease in visual clarity as assessed by black disc measurement¹¹⁹.
 - (iii) No detectable increase in acute and chronic toxicity between a reference water sample and a sample of the discharge diluted with that water at the specified mixing ratio.
 - (iv) No increase in temperature of more than 3°C, and maximum not to exceed 25°C.
 - (v) pH shall remain within the range 6.5 to 8.5.
 - (vi) No production of conspicuous oils or grease films, scums or foams, or floatable or suspended materials.
 - (vii) The seasonal maximum cover of stream and river beds by periphyton as filamentous growths or mats (<ca.3 millimetres thick) shall not exceed 40 percent, and/or biomass shall not exceed 100 milligram chlorophyll-a per square metre or 40 gram AFDW per square metre of exposed surface area, and any change in bacterial and/or fungal slime growths shall not be conspicuous.
 - (viii) Aquatic food resources shall not be rendered unsuitable for human consumption.
 - (ix) No increase in the emission of objectionable odour.

The bathing season is defined as the period from 1 November to Easter inclusive.

McIntosh, J J 1993, <u>Bay of Plenty Regional Council Regional Monitoring Network Bathing Suitability Survey 1993</u>, Environment Bay of Plenty Environmental Report 93/1, 76pp.

Utilising protocol laid down in Smith, D G et al, 1989.

All water within the main stem of the Lower Reach of the Tarawera River, that being the reach from the Kawerau Road Bridge across the Tarawera River and the Thornton Road Bridge across the Tarawera River (excluding the tributaries of the Lower Reach of the Tarawera River and the drains and canals on the Rangitaiki Plains), is classified to be managed for Fish Purposes Lower Tarawera (FPLT),

Plains), is classified to be managed for Fish Purposes Lower Tarawera (FPLT), and any discharge permit granted for the discharge of contaminants into these waters shall be subject to conditions ensuring compliance with the classification standards in Rule 15.8.4(h) and the requirements of Rules 15.8.4(l) and 15.8.4(m).

15.8.4(h) The standards for **Class FPLT**, which apply after allowing for the reasonable mixing of any discharge of contaminants or water to surface water, and disregard the effect of any natural perturbation that may affect the water body, are:

(i) The concentration of dissolved oxygen shall not at any time fall below:

Until 31 December 2002:

- 5.0 grams per cubic metre for the mean of any consecutive 30 days;
- 4.0 grams per cubic metre for the mean minimum of any consecutive 7 days;
- 3.5 grams per cubic metre as an absolute minimum.

From 1 January 2003:

- 6.0 grams per cubic metre for the mean of any consecutive 30 days;
- 5.0 grams per cubic metre for the mean minimum of any consecutive 7 days;
- 4.5 grams per cubic metre as an absolute minimum.
- (ii) Above the Tasman Pulp and Paper Company Limited effluent outfall pipe at Grid Reference NZMS V15 365438, no decrease in visual clarity of more than 20% of the ambient black disc measurement measured at the Kawerau Bridge site.

Below the Tasman Pulp and Paper Company Limited effluent outfall pipe at Grid Reference NZMS V15 365438, colour, as measured by the absorption coefficient of a 0.45 micron filtered sample at 440nm on a spectrophotometer, shall not exceed:

(a) To 31 December 2000:

The 6 month mean shall not exceed 3.8 (equivalent to 50 platinum-cobalt units).

(b) From 1 January 2001:

The 6 month mean shall not exceed 2.3 (equivalent to 30 platinum-cobalt units).

(c) From 30 December 2005:

The 6 month mean shall not exceed 0.8 (equivalent to 10 platinum-cobalt units).

- (iii) No detectable increase in acute and chronic toxicity between a reference river water sample taken from the Kawerau Bridge site and a sample of the discharge diluted with that water at the specified mixing ratio.
- (iv) No increase in temperature of more than 3°C, and maximum not to exceed 25°C.
- (v) The pH shall remain within a range of 6.5 to 8.5.

- (vi) No production of conspicuous oils and grease films, scums or foams, or floatable or suspended materials.
- (vii) From 1 July 2000, the seasonal maximum cover of stream and river beds by periphyton as filamentous growths or mats (>ca.3 millimetres thick) shall not exceed 40 percent, and/or biomass shall not exceed 100 milligram chlorophyll-a per square metre or 40 gram AFDW per square metre of exposed surface area, and any change in bacterial and/or fungal slime growths shall not be conspicuous.
- (viii) Aquatic food resources shall not be rendered unsuitable for human consumption, nor water rendered unsuitable for stock watering.
- (ix) No increase in the emission of objectionable odour.
- 15.8.4(i) Relative to the acute and chronic toxicity standards for NS, CR, FSUT and FPLT classifications as detailed in Rules 15.8.4(b)(iii), 15.8.4(d)(ii), 15.8.4(f)(iii) and 15.8.4(h)(iii), the toxicity of effluent shall be tested over a standard geometric dilution series factor of 0.5 which encompasses the mixing ratio. Four different species of freshwater organisms will be tested as per the following protocols:
 - (i) For Acute Testing: Environment Canada (1990). Biological test method. Reference method for determining acute lethality of effluents to rainbow trout. Conservation and Protection, Ottawa, Ontario. EPS 1/RM/13.
 - (ii) For Chronic Testing: OECD (1981). Chronic reproduction test using a cladoceran (*Daphnia magna*). Test Method 211 (adopted 21 September 1998), or the most up to date equivalent of Test Method 211, In: "OECD Guidelines for the testing of chemicals", Organisation for Economic Cooperation and Development, Paris.

Environment Canada (1992). Biological test method. Toxicity test using luminescent bacteria (*Photobacterium phosphoreum*). Conservation and Protection, Ottawa, Ontario. Report EPS 1/RM/24.

Environment Canada (1992). Biological test method. Growth inhibition test using the freshwater alga *Selenastrum capricornutum*. Conservation and Protection, Ottawa, Ontario. Report EPS 1/RM/25.

To comply with the classification standards, chronic tests shall show no detectable toxicity at the specified mixing ratio.

- 15.8.4(j)

 Relative to the acute and chronic toxicity standards for NS, CR, FSUT and FPLT classifications as detailed in Rules 15.8.4(b)(iii), 15.8.4(d)(ii), 15.8.4(f)(iii) and 15.8.4(h)(iii), the specified mixing ratio shall be determined for each discharge permit on a case by case basis by dividing(÷) the maximum permitted effluent flow by the mean annual 7 day low flow statistic recorded nearest to the discharge point.
 - e.g. A permitted discharge with a maximum flow of 2 cubic metre per second occurs at Pipe Bridge.

The mean annual 7 day low flow at Pipe Bridge is 16.6 cubic metre per second.

 \therefore The mixing ratio = 2 : 16.6 = 0.12

15.8.4(k) Relative to the acute and chronic toxicity standards for NS, CR and FSUT classifications as detailed in Rules 15.8.4(b)(iii), 15.8.4(d)(ii) and 15.8.4(f)(iii), the site of reference water collection shall be determined on a case by case basis.

Reference (or diluent) water will be collected directly upstream of the discharge or, in the case of a lake, from a site not influenced by the discharge.

15.8.4(I) Any discharge to water that contravenes or causes contravention of any Rule, standard or term of this regional plan, in particular any classification standard of Rules 15.8.4(b), 15.8.4(f) or 15.8.4(h), shall be a Non-Complying Activity.

15.8.4(m) Any discharge to water that:

- (a) is within a water classification area defined in this regional plan, and does not contravene or cause contravention of any classification standard for that water classification area, and any other Rule, standard or term in this regional plan; or
- (b) is outside a water classification area defined in this regional plan, and does not contravene or cause contravention of any Rule, standard or term in this regional plan;

shall be a <u>Discretionary Activity</u> unless otherwise specifically provided for in a Rule in this regional plan.

- 15.8.4(n) Subject to the provisions of Rule 15.8.4(t), the classification standards set in Rules 15.8.4(b), 15.8.4(d), 15.8.4(f), and 15.8.4(h), shall apply to all existing and new consents.
- 15.8.4(o) The discharge of aerated and/or oxygenated water or oxygen into the Tarawera River for the purpose of increasing the dissolved oxygen content of the river water shall be a Discretionary Activity.

In considering an application for a discharge consent pursuant to this Rule, Environment Bay of Plenty shall have particular regard to:

- (a) Whether the applicant is taking action to reduce the total mass of biochemical oxygen demand (BOD₅) in the discharge that is causing the need for oxygen injection into the river water.
- (b) Whether the applicant is installing capital works to achieve compliance with the FPLT classification standard.
- (c) Whether the oxygen injection proposed is a means to remedy the effect of inadequate effluent management or an inadequate primary effluent treatment system.
- (d) Whether the location, design, construction and installation of the structure for the oxygen discharge is adequate to ensure optimal oxygenation with minimum adverse effect on river ecology.
- (e) Whether the proposal to inject oxygen is the more effective method to increase the dissolved oxygen levels in the river water relative to other methods.
- (f) Whether the discharge will have a net adverse effect on the environment.
- (g) Whether the discharge will adversely affect other users of the Tarawera River.
- (h) Whether the time periods during which discharges are to occur are adequately managed and effective.

- The discharge of contaminated stormwater is a Discretionary Activity, and shall be 15.8.4(p) considered with particular regard to:
 - The installation and maintenance of effective traps or other spillage retention devices.
 - (ii) The effective sealing and bunding of contaminant storage and transit areas.
 - (iii) The production and implementation of chemical spillage prevention, retention and disposal protocols (contingency plans).
- 15.8.4(q) The discharge of uncontaminated stormwater into water within the Tarawera River catchment is a Permitted Activity, subject to the following requirements:
 - The maximum discharge shall not exceed the flow from a 300 millimetre pipe on a flat grade or equivalent of 80 litres per second.
 - (ii) The suspended solids concentration of the water discharged does not exceed 150 grams per cubic metre.
 - (iii) The water discharged is substantially free of grease and oil;
 - (iv) The works shall be designed, constructed and maintained in such a manner so as not to cause erosion or flooding or to adversely affect any land or property owned or occupied by another person.

For the purposes of this Rule, uncontaminated stormwater includes stormwater runoff from roofs, sealed and unsealed roads and streets, hard stand areas, yards and grassed areas and the like.

- 15.8.4(r) Except for the provisions of the Operative On-Site Effluent Treatment Regional Plan, and for the provisions for Kawerau township and Edgecumbe township set out in (a) to (d) of this rule, and the provisions of rule 15.8.4(x), all new or existing discharges of human sewage or contaminants derived from human sewage into surface water within the Tarawera River catchment will become a Prohibited Activity on the date on which this regional plan becomes operative.
 - Until 31 December 2002 the discharge of human sewage or contaminants (e) derived from human sewage from Kawerau township into surface water within the Tarawera River catchment shall be a Discretionary Activity, subject to the discharge complying with all rules, standards and terms in this regional plan and meeting or bettering the receiving water classification.
 - (f) From 1 January 2003, the discharges of human sewage or contaminants derived from human sewage from Kawerau township into surface water within the Tarawera River catchment will be limited to the provisions of rule 15.8.4(x), provided that this limitation shall be suspended until 12 months past the date on which an application by Carter Holt Harvey Tissue to discharge AWWTP wastewater and sanitary wastewater from Kawerau township by spray irrigation to land has been decided and any appeals determined.
 - (g) Until 30 June 2005 the discharge of human sewage or contaminants derived from human sewage from Edgecumbe township into unclassified surface water within the Tarawera River catchment shall be a Discretionary Activity subject to compliance with consent conditions.

- (h) From 1 July 2005, the discharge of human sewage or contaminants derived from human sewage from Edgecumbe township shall be a <u>Discretionary</u> <u>Activity</u> limited to discharge that complies with all rules, standards and terms in this regional plan and meets or betters effluent quality standards of:
 - (i) BOD<10 milligrams per litre,
 - (ii) Suspended Solids<15 milligrams per litre,
 - (iii) Total N<25 milligrams per litre,
 - (iv) Faecal Coliform<10⁴/100 millilitre,

measured in the effluent stream prior to discharge, and produced by a treatment and disposal system that has been designed in consultation with affected iwi.

- 15.8.4(s) Except for the discharge of uncontaminated stormwater in compliance with Rule 15.8.4(q), every discharge permit granted to discharge contaminants from a point-source outfall into any water body within the Tarawera River catchment shall have a condition defining a reasonable mixing zone, stated as a classification non-compliance zone defined as a distance or radium measured from the outfall point. Each non-compliance zone shall be the minimum practicable relative to the relevant classification standards and assessment criteria. In establishing a non-compliance zone for a discharge, Environment Bay of Plenty will consider the following assessment criteria.
 - (i) Relevant classification standards;
 - (ii) The flow regime of the receiving water;
 - (iii) The ambient concentrations of contaminants in the receiving water;
 - (iv) Effluent discharge flow rate and contaminant concentrations;
 - (v) Cumulative and other effects;
 - (vi) Existing discharge and abstraction consents;
 - (vii) Fish migration and instream ecosystems requirements;
 - (viii) Maori cultural values;
 - (ix) The location of the discharge and position of the outfall;
 - (x) Outfall diffuser design criteria;
 - (xi) Information provided by the applicant;
 - (xii) Any other relevant information.
- 15.8.4(t) The discharge of a dye or gas into water for scientific or investigation purposes is a <u>Permitted Activity</u> subject to the following conditions:
 - (i) Environment Bay of Plenty is given at least ten working days notice prior to the discharge.
 - (ii) Details of the proposed discharge are publicly notified at least one week prior to the discharge.
 - (iii) Any person or persons likely to be affected by the presence of dye or gas in water used for recreational, consumption or other uses is notified of the proposed discharge at least one week prior to the discharge.
 - (iv) The dye or gas used shall not exceed a concentration that is proven to be inert and non-toxic in effect.

- 15.8.4(u) Environment Bay of Plenty will support education programmes as a means of encouraging the development of buffer zones and other methods to prevent land discharge of contaminants from reaching surface water.
- 15.8.4(v) The discharge of dairy shed effluent into unclassified water shall be a <u>Discretionary Activity</u> managed in accordance with guidelines including "Guidelines for Agricultural Discharges in the Tarawera and Rangitaiki Catchments, September 1992".
- 15.8.4(w) Environment Bay of Plenty will provide available water quality test information on request.
- 15.8.4(x) Notwithstanding all other rules in this plan, the discharge of human sewage or contaminants derived from human sewage from Kawerau township into surface water within the Tarawera River catchment in exceptional circumstances and when no other practicable options are available, shall be a non-complying activity. Any application made shall be accompanied by a management plan that identifies the measures considered appropriate for avoiding the discharge of sewage to the river.

20.4 Chapter 16 – Groundwater

- Any discharge of waste onto or into land in a way or at a rate that may result in the percolation or movement of contaminants into groundwater shall be a <u>Discretionary Activity</u> provided:
 - (a) This rule does not apply to the on-site discharge of domestic sewage regulated under the "Operative On-Site Effluent Treatment Regional Plan for the Bay of Plenty", and
 - (b) Any application for the land treatment of effluent originating form dairy sheds shall be subject to conditions made with regard to the "Guidelines for Agricultural Discharges to the Tarawera and Rangitaiki Catchments – September 1992".
- 16.8.5(b) A discharge permit granted pursuant to Rule 16.8.5(a) shall be subject to conditions that limit the land application discharge rate of effluent relative to disposal site constraints, to provide for the protection of groundwater and surface water resources from contamination.
- 16.8.5(c) Except as provided for in Rule 17.4.4(d), the direct point-source injection of contaminants into a groundwater aquifer is a <u>Prohibited Activity</u>.
- 16.8.5(d) A resource consent granted under Rule 16.8.5(a) for a discharge permit authorising an efficient land based treatment system, designed and managed to ensure minimal long-term effects on surface and groundwater quality and quantity, may be granted for a period up to the maximum provided by statute, subject to performance review conditions.
- 16.8.5(e) The taking of underground water at a volume equal to or less than 15 cubic metres per day shall be a <u>Permitted Activity</u>.
- 16.8.5(f) The taking of underground water at a volume exceeding 15 cubic metres per day shall be a Discretionary Activity.

16.8.5(g) A resource consent granted pursuant to Rule 16.8.5(f) for a water permit for which a new bore or well is to be installed shall be subject to the following condition:

Bore Log and Test Information

The consent holder shall, within one month from the day on which their consent is granted, return the following information to Environment Bay of Plenty:

- (a) The name and address of the bore driller, the final location of the bore, its construction method and liner material.
- (b) The dimensions of the bore; diameter and depth.
- (c) A log of the bore installation showing the depth and extent of intercepted strata (lithology), geologic layers, water bearing aquifers and water access screens.
- (d) A copy of bore pump test results, including information on; sustainable bore yield, water level drawdown, static water level and transmissivity data.

20.5 Chapter 17 – Geothermal Resources

- 17.4.4(a) The taking of geothermal mass, water, heat or energy from the Kawerau Geothermal Field shall be a Discretionary Activity.
- 17.4.4(b) The discharge of geothermal water to the Lower Reach of the Tarawera River for which discharge permits were held on the date of public notification of this regional plan and the replacement of any of those consents for equivalent or lesser allocations shall be a <u>Discretionary Activity</u>.
- 17.4.4(c) The discharge of geothermal water to the Lower Reach of the Tarawera River resulting from any new geothermal resource use activity shall be a <u>Discretionary Activity</u>.
- 17.4.4(d) The reinjection of geothermal fluid into the Kawerau Geothermal Field shall be a Discretionary Activity.
- 17.4.4(e) Resource consent applications under Rules 17.4.4(b), 17.4.4(c), and permits authorising the taking, discharge and reinjection of geothermal mass, water, heat or energy from the Kawerau Geothermal Field may be considered together. Consents granted will be subject to conditions to ensure the protection of groundwater and surface water quality from geothermal contamination, and land subsidence and tilt.
- 17.4.4(f)

 Authorised users of geothermal resource from the Kawerau Geothermal Field shall be required to develop and implement a wastewater management strategy for their existing geothermal discharges, with particular regard to:
 - (i) The efficient utilization of the heat and mineral content of the wastewater; and
 - (ii) The classification standards of Rule 15.8.4(h).
- 17.4.4(g) The use of heat from waste geothermal fluid shall be a <u>Permitted Activity</u>, provided that the use activity, or the requirement for heat, shall not limit the sustainable reinjection of geothermal fluid.