

7 Beds of Lakes and Rivers and Diversion of Surface Water

7.1 Introduction And Principal Reasons

7.1.1 Statutory Framework

This chapter contains provisions relating to the ARC's management of the beds of *lakes*, rivers and streams in the Auckland Region in terms of Section 13 of the RMA, and the diversion of the *surface water* from these waterbodies under Section 14.

13. Restriction on certain uses of beds of lakes and rivers –

- (1) No person may, in relation to the bed of any lake or river, –
 - (a) Use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed; or
 - (b) Excavate, drill, tunnel, or otherwise disturb the bed; or
 - (c) Introduce or plant any plant or any part of any plant (whether exotic or indigenous) in, on, or under the bed; or
 - (d) Deposit any substance in, on, or under the bed; or
 - (e) Reclaim or drain the bed –

unless expressly allowed by a rule in a regional plan and in any relevant proposed regional plan or a resource consent.

- (2) No person may –
 - (a) Enter or pass across the bed of any river or lake; or
 - (b) Disturb, remove, damage, or destroy 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 lake or river –

in a manner that contravenes a rule in a regional plan or proposed regional plan unless that activity is –

- (c) Expressly allowed by a resource consent granted by the regional council responsible for the plan; or
- (d) Allowed by section 20 (certain existing lawful uses allowed).

(3) This section does not apply to any use of land in the coastal marine area.

(4) Nothing in this section limits section 9.

14. Restrictions relating to water –

- (1) No person may take, use, dam, or divert any –
 - (a) Water (other than open coastal water); or
 - (b) Heat or energy from water (other than open coastal water); or
 - (c) Heat or energy from the material surrounding any geothermal water –

unless the taking, use, damming, or diversion is allowed by subsection (3)

(3) A person is not prohibited by subsection (1) from taking, using, damming, or diverting any water, heat, or energy if –

- (a) The taking, use, damming, or diversion is expressly allowed by a rule in a regional plan [and in any relevant proposed regional plan] or a resource consent; or ...

7.1.2 Scope of Chapter

This chapter deals with the matters relating to the beds of *lakes*, rivers and streams which are subject to Sections 13(1) and 13(2) and the diversion of *surface water* under 14(1) of the RMA, where this affects the bed of a *lake* or river. Chapter 6: Water Allocation contains the main provisions relating to the taking, use and *damming* of *surface water* and the taking, use and diversion of groundwater.

This chapter does not apply to activities within the Coastal Marine Area, as those activities are managed by the Auckland Regional Plan: Coastal. That Plan maps the boundaries between rivers and the Coastal Marine Area.

The primary activities addressed in this chapter are:

Structures and the Diversion of Surface Water;
Disturbance;
Introduction or Planting of Plants;
Deposition of Substances;
Reclamation and Drainage.

7.1.2.1 Definition of Bed of a Lake or River

This chapter applies to the beds of *lakes*, rivers and streams. The RMA defines rivers to mean 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*).

This chapter refers to two categories of river and stream, each of which is a subset of the RMA definition of river. Rivers and streams in the Auckland Region are defined as being either *Permanent rivers or streams*, or *Intermittent streams*. Both of these terms are defined in Chapter 12: Definitions. The objectives, policies and rules refer as appropriate to either *Permanent rivers or streams*, or *Intermittent streams*.

Permanent rivers or streams include unmodified and modified *watercourses*. They do 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* and roadside drain and water table except where the roadside drain or water table is a modified element of a natural drainage system.

Intermittent streams are important for the maintenance of water quality and quantity. The ARC has completed initial scientific investigations on the values of *Intermittent streams* and their contribution to the hydrology and aquatic ecosystems of the wider catchment. However a comprehensive policy response to the findings and their implications for the management of activities in the beds of *Intermittent streams* both inside and outside *Urban Areas* is yet to be developed. Any further rules controlling activities in the beds of *Intermittent streams* will be introduced by a change to the Plan.

In the meantime, the provisions of this chapter permit activities such as structures and disturbance including the disturbance of exotic and indigenous vegetation and plant and animal habitats, the introduction or planting of plants, deposition and reclamation within *Intermittent streams*, subject to controls on how the work is undertaken to address sedimentation and flooding effects.

This chapter acknowledges that responsibility for the management of *Permanent rivers and streams* and *Intermittent streams* lies jointly with the ARC and territorial authorities. Section 7.1.2.2 contains further explanation of the responsibilities of the ARC and territorial authorities in relation to the management of activities in lake, river or stream beds.

Therefore unless otherwise noted, the provisions of this chapter apply to:

- (i) *Permanent rivers or streams* including modified *watercourses* that meet the definition of *Permanent river or stream*, (refer Chapter 12: Definitions);
- (ii) *Intermittent streams* (note however that activities in *Intermittent streams* are permitted activities) – refer to Rules 7.5.1, 7.5.13, 7.5.16, 7.5.25, 7.5.29 and 7.5.35;
- (iii) Wetlands – where these are associated with the bed of a *lake* or *Permanent river or stream*.

The provisions of this chapter do not apply to any:

- (i) all wetlands that are separate from the bed of a *lake*, river or stream, such as those found in areas where the groundwater table is close to the land surface;
- (ii) *artificial watercourses* (including an irrigation canal, water supply race, canal for the supply of water for electricity power generation and *farm drainage canal* and roadside drain and water table, except where the roadside drain or water table is a modified element of a natural drainage system).

7.1.2.2 Regional and Territorial Authority Responsibilities

Responsibility for the control of activities in *lakes*, rivers or streams is a shared responsibility between the ARC and TAs. However the focus of their control is different, reflecting their different responsibilities under the RMA.

Territorial authorities are responsible for the control of any actual or potential effects of the use, development or *protection* of land. Land is defined to include the beds of a *lake* or river, the water column above it and the airspace above the surface of the water. The RMA also gives control of the effects of activities on the surface of water in rivers and *lakes* to *territorial authorities*. This means that *TAs* are primarily concerned about “land use” issues when considering development on the beds of *lakes*, rivers or streams.

Through this plan, the ARC controls activities if they affect the bed of a *lake* or river or stream, the water column and the airspace above the *lake*, river or stream. The main focus of this plan is the effects of activities in terms of water quality, water quantity, soil conservation and the avoidance or mitigation of natural hazards.

As many activities in *lakes*, rivers and streams affect areas of concern to both the ARC and *TAs*, they may be subject to the provisions of both this plan and *TA* district plans. Hence separate consent applications may need to be made to both the ARC and the relevant *TA*.

Chapter 5 of this Plan encourages stormwater network utility operators to develop and use Integrated Catchment Management Plans and stormwater or wastewater network resource consents for the management of stormwater discharges at a catchment or network scale. The management of land use activities in or adjacent to *Intermittent streams* can also occur through territorial authority processes, such as structure plans and district plans. These plans can also manage the effects of land use activities on *Permanent rivers and streams* and their margins. When combined with controls through this plan, such processes will enable the integrated management of the effects of land use and development on natural and physical resources, along the continuum from the land through to the aquatic environment.

Section 33 of the RMA enables a local authority to transfer any one or more of its functions, powers and duties to another public authority where such a transfer is agreed and considered desirable for reasons including efficiency and integrated management, where the transfer represents the appropriate community of interest relating to the transfer and where the relevant *TA* has capability (institutional capacity and appropriately qualified and experienced personnel) to effectively implement a transfer of powers. This provides the opportunity for one agency to have the

administrative responsibility for dealing with both regional and district responsibilities for the beds of *lakes*, rivers and streams.

The ARC has transferred its responsibilities to Rodney District Council to process and decide on a limited range of resource consents under Sections 13(1)(a) and 13(1)(b). The transfer does not apply to applications for the construction of *culverts*, road bridges or structures for the diversion of water and any proposal involving the taking, *damming* or diversion of water. The ARC retains its consent granting function under Section 13 for these activities. Rodney District Council also has a transfer of powers from the ARC to manage certain activities in the Coastal Marine Area. This means that the District Council is able to deal with similar activities each side of the Coastal Marine Area boundary. This is particularly relevant in larger rivers such as the Kaipara, Hotoe and Mahurangi.

Activities listed as permitted activities in this plan (that is, not requiring a consent from the ARC) may nevertheless therefore require consents from the relevant *TA*. Anyone wishing to undertake activities in *lakes*, rivers and streams in the Auckland Region should therefore contact the ARC and their relevant *TA* to ascertain whether both regional and district consents are required.

7.1.3 Management Approach

7.1.3.1 General

The relatively small nature of Auckland's *lakes*, rivers and streams means that they are vulnerable to significant individual and cumulative adverse effects from activities in, on, under or over their beds. Developments such as structures, *reclamations*, the *deposition of waste* material and *other substances*, or the disturbance from activities such as *dredging*, the extraction of gravel or the removal of unwanted vegetation or sediment can adversely affect the *natural character* of the Region's *lakes*, rivers and streams. Adverse effects include the loss of instream habitats and riparian vegetation, with subsequent reduction in the range and diversity of aquatic flora, the reduction in water quality from increased sediment transport or the discharge of other contaminants, and changes in the amount, duration and frequency of natural stream flows. This is particularly significant in rivers and streams, where changes to the bed profile or the course of a river or stream through the straightening of natural meanders or the artificial lining of the bed increases the potential for downstream erosion or flooding.

Rivers and streams are most commonly diverted from their natural channel through *culverts* and pipes, although tunnels and lined and unlined channels may also be used. This diversion may be temporary or permanent and may affect all of the stream, as through a *culvert* or pipe, or only part of the flow, as into a flood channel. Diversion of *surface water* affects the morphology (channel form) of a river or stream, the flow characteristics of the stream and its habitat values. Water users may also be affected by changes in hydrology, particularly if they are situated between the upstream and downstream ends of a diversion.

Nevertheless activities in, on, under or over the beds of *lakes*, rivers and streams are necessary to promote the social, economic and cultural wellbeing of both the urban and rural parts of the Auckland Region. Streams within *Urban Areas* form part of an existing *stormwater network* and may already be modified to cope with increased discharges from this system. Rivers and streams may also be crossed by infrastructure and utility services such as bridges, roads, pipelines and cables, or require *maintenance* of their carrying capacity by removing built up sediment or debris. Temporary diversions of *surface water* are usually required to construct something in the bed of a river or stream or to install *sediment control* or *stormwater* detention measures. The development of land for urban purposes may also require the permanent piping, channelling or diversion of streams.

The management approach in this chapter recognises that the degree of adverse environmental effect from activities in, on, over or under the beds of *lakes*, rivers and streams is related to the type of activity, its size, location, how it is undertaken and whether adverse effects are short or long term. Activities in the beds of *lakes*, rivers and streams are managed on the basis of the size of the structure or disturbance, whether it is located in a particularly valuable or sensitive area (Type 2 Urban Stream, Urban Lake, Natural Lake, Natural Streams and Wetland Management Areas), how it is undertaken and whether effects are likely to be significant, long term or uncertain. The level of consent is based on the type of environmental effect. It is recognised that in *Urban Areas* some modification of natural streams is likely to occur as a result of the development of urban land and regionally significant infrastructure. Addressing the use, development or *protection* of streams in *Urban Areas* is encouraged to take place at the catchment level, rather than being addressed on an individual stream basis, to enable adverse effects to be avoided where practicable, or measures taken to remedy or mitigate these effects. The chapter also recognises that regionally significant infrastructure may be located in both urban and rural areas and may affect a range of lakes, wetlands, rivers and streams, but that this infrastructure is necessary for the functioning of the Auckland Region.

Performance standards are imposed through permitted activity conditions, or standards and terms on those activities requiring a resource consent. These conditions focus on managing the key effects in terms of the *protection* of instream values and water quality, minimising changes to bed morphology and flow regimes and avoiding, remedying or mitigating hazards such as flooding or erosion, as well as recognising the wider requirements of Sections 6, 7 and 8 of the RMA. In some instances, such as disturbance associated with stock access in the beds of *lakes* and rivers, the ARC has not included rules in the Plan at the present time. It has however identified the effects of stock access to be a significant environmental issue in Chapter 5 (Issues 5.2.30, 5.2.31) and has included policies to address unrestricted stock access to *lakes*, rivers and streams (Policies 5.4.49 and 5.4.50).

The key management approaches associated with the various activities are summarised below.

7.1.3.2 Structures

- Recognising the presence of existing structures;
- Providing for new structures based on size, whether they are located in, on, under or over the bed of a waterbody and how any work associated with them is undertaken;
- Recognising the significance of certain structures for *stormwater* and *wastewater* management, for *regionally significant infrastructure* and land development within *Urban Areas* and the modified instream environment within these *Urban Areas*;
- Recognising the location specific and operational requirements for structures for essential infrastructure in both urban and rural areas;
- Ensuring that *fish passage* is provided for on new structures in or on beds of rivers and streams and maintained where it exists on existing structures;
- Discouraging the infilling of streams of high value by pipes and *culverts* during urban land development;
- Protecting Natural Streams and Wetland Management Areas by discouraging structures in or on the beds of lakes, rivers and streams.

7.1.3.3 Diversion of Surface Water

- Providing for the diversion of *surface water* as part of any provision relating to structures;

- Discouraging the permanent diversion of *surface water* by the realignment of river or stream beds, particularly outside of Urban Areas;
- Providing for the diversion of surface water in Urban Areas where this is consistent with the Urban River and Stream Management Framework;
- Protecting other uses of *surface water* when diverting any river or stream.

7.1.3.4 Disturbance

- Recognising the different types of bed disturbance and the relative impacts of each in terms of the level of consents required;
- Providing for the disturbance of beds for certain “*maintenance*” activities within urban and rural areas based on limitations on size of disturbance and the methods used;
- Larger scale types of disturbance such as *dredging* or extraction or disturbance of the bed beyond a certain size are subject to a progressive consenting regime;

7.1.3.5 Deposition of substances

- Recognising that the *deposition of substances* in, on or under the beds of Auckland’s *lakes*, rivers and streams may have significant adverse environmental effects, both directly from the deposition itself and indirectly from potential leaching of any contaminants from the substance. Substances deposited may range from the disposal of dredged material to the “dumping” of *waste* material.
- Encouraging alternatives to the *deposition of substances*;
- Acknowledging that there may be some circumstances where the *deposition of substances* has positive environmental benefits e.g. habitat enhancement;
- Requiring all forms of deposition to be assessed through the resource consent process, due to the uncertainty of environmental effects.
- Note that deposition of sediment arising from earthwork activities is managed by the Regional Plan: Sediment Control and deposition of silt conveyed or captured by *stormwater* systems is managed by the *stormwater* rules in Chapter 5 of this Plan. Deposition of material associated with the construction and use of structures is addressed in the structures rules.

7.1.3.6 Introduction and Planting of Indigenous and Exotic Plants

- Enabling habitat *protection* and enhancement (e.g. wetlands), stabilising eroding *lake* and *Permanent river or stream* banks, or the enhancement of *natural character* or *amenity* values by providing for the planting of appropriate species of plants in appropriate locations;
- Preventing the introduction or planting of plant species which are, or which have the potential to become plant pests;
- Recognising the role of the Auckland Regional Plant Pest Management Strategy as the main management tool for dealing with plant pests;
- Recognising the importance of public education and the provision of information to facilitate the planting of appropriate species.

7.1.3.7 Reclamation and Drainage

- Recognising that the *reclamation* and *drainage* of the beds of *lakes and Permanent rivers or streams* usually results in the permanent and irreversible change from a waterbody to dry land;
- Discouraging future *reclamation* and *drainage* of *lakes, Permanent rivers, streams* and wetlands;

- Requiring consideration of alternative methods or routes which avoid the need to reclaim or drain waterbodies;
- Nevertheless acknowledging that there may be significant economic and social benefits to the region from the development of land for urban purposes and regional infrastructure where *reclamation* may be an option.

7.2 Issues

- 7.2.1** Some structures in, on, under or over the beds of *lakes*, rivers and streams in the Auckland Region can have adverse effects on the natural characteristics of these waterbodies. The extent to which a structure affects a *lake*, river or stream bed is dependent on its size and design and whether it is located in, on, under or over the bed. Adverse effects on the natural characteristics of *lake*, river and stream beds arise from both individual structures and from the cumulative effects of a number of structures.
- 7.2.2** Many structures in, on, under or over the beds of *lakes*, rivers and streams in the Auckland Region and particularly in *Urban Areas* may be part of *regionally significant infrastructure* such as roads, telecommunication, power and water supply, *wastewater* and *stormwater* management services. This *regionally significant infrastructure* enables people and communities to provide for their economic, social and cultural wellbeing. However it can adversely affect the beds of *lakes* and *Permanent rivers or streams* by modifying their natural characteristics. In the most extreme cases, *lake*, river or stream beds may be infilled or rivers and streams piped to enable *regionally significant infrastructure* to operate. This infrastructure can also protect the environment (for example for functions such as flood protection or the containment of contaminants such as *sewage* and *stormwater* in a pipe system). The issue is how to provide for *regionally significant infrastructure* while still protecting *lakes* and valuable *Permanent rivers or streams*.
- 7.2.3** The Auckland Regional Policy Statement and the Auckland Regional Growth Strategy promote the intensification of urban development with *Urban Areas*. This may involve redevelopment and intensification of land use within existing developed *Urban Areas*, as well as the transformation of rural land into urban uses in *Greenfield Areas*. These different forms of development require structures in, on, under or over the beds of Urban Streams to facilitate the safe and efficient development of land, and to provide for *regionally significant infrastructure*. However these activities can result in significant modification or loss of existing urban streams, by *culverting* or piping or by diverting the stream from its original course. Urban development can also provide opportunities to enhance degraded urban streams.
- The management of *Permanent rivers and streams* in *Urban Areas* is outlined in more detail in the Urban River and Stream Management Framework in section 3.6 of Chapter 3: Management Areas. This establishes a framework for the management of urban streams recognising their existing modification and the use and development pressures placed on them. This framework is relevant to the application of the objectives, policies and rules relating to all activities in the beds of *Permanent rivers and streams* in *Urban Areas* including those associated with the maintenance and development of *regionally significant infrastructure* and urban land development and redevelopment.
- 7.2.4** Diverting rivers and streams can have adverse effects on freshwater fish and biota through the loss of instream habitat or *fish passage* and on those taking water downstream of the diversion through changes in flow. Diversions of *surface water* can also give rise to erosion and flooding. Diversions of Auckland's small streams at times

of fish migration need to be appropriately managed. These effects can be exacerbated because of the predominance of small streams in the Auckland Region.

7.2.5 Disturbance of the bed impacts on the natural characteristics of the *lake*, river or stream. Disturbance includes *dredging* of bed material to increase water depths, the extraction of sand, shingle and gravel and clearance activities for various purposes including maintaining natural flow regimes, land *drainage* systems, removing plant pests and debris, or restoring degraded ecosystems. The *diversion of a river or stream* either permanently or temporarily also results in disturbance of the bed. The environmental effects of bed disturbance vary depending on the scale of the disturbance and how it is undertaken. Some bed disturbance may be short-term, while other types result in significant long term loss or reduction of habitat values, changes to bed morphology and water flow regimes.

7.2.6 The uncontrolled introduction or planting of *exotic plants* may have significant adverse environmental effects on the ecology of and natural processes operating in the Auckland Region's *lakes*, and *Permanent rivers or streams*. Many *exotic plants* have the potential to become plant pests. The control and eradication of plant pests may require disturbance of the beds of *lakes* and *Permanent rivers and streams*.

7.2.7 The *deposition of substances* in, on, or under the bed of a *lake*, river or stream can adversely affect the natural characteristics of these waterbodies by infilling them, resulting in changes to water depth and flow regimes and associated impacts on instream values. The type and amount of substances deposited in the waterbody and its degree of contamination are important in determining the level of environmental effect. However the small size and the sensitivity of Auckland's *lakes*, rivers and streams means there is little capacity for these water bodies to assimilate significant amounts of deposited substances in, on or under their beds.

7.2.8 *Reclamation* and *drainage* of the beds of *lakes* and *Permanent rivers or streams* has significant and usually permanent adverse effects, transforming areas of water into land. *Reclamation* and *drainage* usually occurs progressively around the margins of *lakes* and *Permanent rivers or streams*, with direct physical effects on the immediate area as well as cumulative effects on the overall *natural character* of *lakes*, rivers and streams and their margins. Given the region's relatively small urban and rural *lakes*, and *Permanent rivers or streams*, *reclamation* and *drainage* of parts of them is particularly significant.

7.3 Objectives

7.3.1 To maintain and enhance where practicable the natural characteristics of *lakes* and *Permanent rivers or streams* in the Auckland Region and to avoid, remedy or mitigate the effects of their modification by activities such as structures, disturbance, deposition, planting or *reclamation* and *drainage* and the diversion of *surface water*.

(This Objective relates to Issues 7.2.1 to 7.2.8)

7.3.2 To recognise and provide for structures in, on, under or over the beds of *lakes* and *Permanent rivers or streams* for *regionally significant infrastructure* where this comprises the best practicable option and is important for providing for the *protection* of the environment and for enabling people and communities to provide for their health and safety and their economic, social and cultural wellbeing.

(This Objective relates to Issue 7.2.2)

7.3.3 To recognise and provide for activities in, on, under or over the beds of Urban Streams within *Urban Areas* while avoiding, remedying or mitigating adverse effects.

(This Objective relates to Issues 7.2.3)

- 7.3.4** To recognise and provide for *municipal water supply* activities in, on, under or over the beds of *Permanent rivers and streams* in Water Supply Management Areas, consistent with the different stream types in these areas, while avoiding, remedying or *(This objective relates to Issue 7.2.2)*

7.4 Policies

Note: reference to the "Urban River and Stream Management Framework" means the provisions of the Urban River and Stream Management Areas set out in section 3.6 of Chapter 3: Management Areas.

See also Section 3.5 relating to Water Supply Management Areas

General

- 7.4.1** To have regard to the objectives and policies of Chapter 2.1, 2.2 and 2.3, and to the Urban River and Stream Management Framework, and to the objectives and policies of Water Supply Management Areas in Chapter 3.5.3 and 3.5.4 where relevant, in assessing any resource consent for activities in, on, under or over the beds of *lakes* and *Permanent rivers or streams*.

(This Policy relates to Objectives 7.3.1 to 7.3.3)

- 7.4.2** An integrated approach should be taken to the management of the effects of activities in, on, under or over the beds of any *lake* or *Permanent river or stream* by:

- (a) The assessment of options for the use, development and *protection* of *lakes* and *Permanent rivers or streams* through the preparation of *structure plans, ICMPs*, stormwater or wastewater network resource consents, flood management plans or having regard in *Urban Areas* to the Urban River and Streams Management Framework;
- (b) Ensuring the use, development and *protection* of *lakes* and *Permanent rivers or streams* is not inconsistent with the provisions of district plans, in particular those relating to the management of *lakes*, rivers and streams and adjacent riparian margins.

(This Policy relates to Objectives 7.3.3 & 7.3.3)

- 7.4.3** Activities for which resource consent is required in, on, under or over the bed of any *lake* or *Permanent river or stream* shall be considered appropriate where:

- (a) No reasonable or practicable alternative method or location for undertaking the activity exists outside of the *lake* or *Permanent river or stream*; or
- (b) The use of an alternative method or location would have more significant adverse environmental effects than using the bed of the *lake* or *Permanent river or stream*; or
- (c) The purpose for which the activity is undertaken cannot reasonably or practicably be accommodated by existing activities or development in, on, under or over the bed of the *lake* or *Permanent river or stream*;

and

- (d) Efficient use will be made of the bed of the *lake* or *Permanent river or stream* by using the minimum area necessary for the activity; and
- (e) Significant cumulative adverse effects of the activity on the bed of the *lake* or *Permanent river or stream* will be avoided;

or

- (f) Significant cumulative adverse effects of the activity on the beds of *Permanent*

rivers and streams in Urban Areas are avoided, remedied or mitigated consistent with the Urban River and Stream Management Framework.

(This Policy relates to Objectives 7.3.1 to 7.3.3)

7.4.4 In considering the matters listed in Policies 7.4.3, and 7.4.9 to 7.4.11 regard shall be had to whether they have already been addressed in, and are consistent with a **structure plan, ICMP**, flood management plan or approved stormwater or wastewater network resource consent.

7.4.5 In considering the appropriate weight to be given to any structure plan, ICMP, or flood management plan in terms of Policy 7.4.4 above, the ARC will have regard to:

- (a) the status of the structure plan in terms of the statutory process to incorporate it into the district plan;
- (b) in the case of other non statutory plans such as ICMPs or flood management plans, the extent to which they have been subject to a consultative process involving affected parties and the results of that consultation;
- (c) the extent to which they are consistent with the Urban River and Stream Management Framework.

(This Policy relates to Objectives 7.3.2 & 7.3.3)

7.4.6 Where there is no **structure plan, ICMP**, or flood management plan or approved stormwater or wastewater network resource consent for any Urban Stream catchment, activities in, on, under or over the bed of an Urban Stream shall demonstrate how they are consistent with the Urban River and Stream Management Framework.

(This Policy relates to Objectives 7.3.2 & 7.3.3)

7.4.7 The cumulative adverse effects of activities, in, on, under or over the beds of **lakes** and **Permanent rivers or streams** shall be minimised by encouraging activities which are for public and multiple use over activities for private or individual use.

(This Policy relates to Objectives 7.3.1 to 7.3.3)

7.4.8 Activities in, on, under or over the bed of any **lake** or **Permanent river or stream** shall be considered appropriate where they enable the restoration or enhancement of wetlands, or areas of indigenous vegetation or the habitats of indigenous fauna in any **lake**, river or stream.

(This Policy relates to Objective 7.3.1)

7.4.9 Applications for resource consent to undertake activities in, on, under or over the bed of any **lake** or **Permanent river or stream** shall demonstrate to the extent commensurate with the scale and significance of the potential adverse effects, that they will avoid where practicable, remedy or mitigate:

- (a) Significant adverse changes to **lake** or **Permanent river or stream** bed morphology and flow hydraulics;
- (b) Significant changes to natural water level fluctuations in **lakes** and associated wetlands unless this is for habitat establishment, enhancement or restoration, or for a **dam** or other impoundment structures and is consistent with the policies relating to these structures;
- (c) Significant erosion or deposition within the **lake** or **Permanent river or stream bed**, or on adjacent land;
- (d) Flooding of adjacent land or the exacerbation of existing flooding problems upstream or downstream;

(Explanation: this does not preclude appropriate *stormwater* treatment or detention structures);

- (e) Impediments to water flow during flood conditions, except where the purpose of any structure is for flood mitigation;
- (f) Significant adverse effects on aquatic flora and fauna, habitat values and riparian vegetation;
- (g) Permanent loss of any habitat of a rare or endangered species;
- (h) Localised turbidity or disturbance to the surrounding bed and permanent long-term adverse effects on the surrounding environment from the deposition of sediment; and
- (i) Significant adverse effects on the recreational and *amenity* values of the area, or other existing lawful users upstream or downstream of the activity, or be a hazard to navigation or to public health and safety.

Where these effects cannot be avoided applications shall detail the remediation or mitigation measures to be undertaken.

In considering the application of clauses (a) to (i) in Urban Area, regards shall be had to the Urban River and Stream Management Framework *in Urban Areas and to the objectives and policies of the Water Supply Management Areas in Chapter 3: Management Areas where relevant.*

Explanation:

The term "activities" is used to include all the matters covered by Section 13(1) namely structures, all types of disturbance, the introduction or planting of plants, the deposition of substances and reclamation and drainage and activities under Section 13(2) and the diversion of surface water under Section 14(1). With respect to damming activities, reference should also be made to Policies 6.4.41 to 6.4.48.

(This Policy relates to Objectives 7.3.1 to 7.3.3)

Structures and the Diversion of Surface Water

- 7.4.10** The permanent diversion of an existing *Permanent river or stream* shall be considered inappropriate unless there is no practicable alternative method to the diversion, or the diversion will result in an overall net benefit to the environment, or it is consistent with the Urban River and Stream Management Framework.

See also Policy 7.4.4.

(This Policy relates to Objective 7.3.1)

- 7.4.11** Activities that divert an existing *Permanent river or stream* shall demonstrate that they will:
- (a) Not be likely to cause or exacerbate erosion or deposition within the diverted *Permanent river or stream* bed or on adjacent land;
 - (b) Not give rise to flooding of adjacent land or exacerbate existing flooding problems upstream or downstream;
 - (c) Not cause an impediment to water flow during flood conditions, except where the purpose of any structure is for flood mitigation;
 - (d) Avoid, remedy or mitigate adverse effects on aquatic flora and fauna, habitat values and riparian vegetation;
 - (e) Not result in the permanent loss of any habitat of a rare or endangered species;
 - (f) Enable the colonisation of the diverted river or stream by aquatic flora and fauna following the completion of the diversion activities; and

- (g) Not adversely affect existing lawful users of **surface water** upstream and downstream of the point of diversion.

In considering the application of clauses (a) to (g) above in Urban Areas regard shall be had to the Urban River and Stream Management Framework.

(This Policy relates to Objective 7.3.1)

- 7.4.12** Structures and the diversion of **surface water** shall not result in more than minor adverse effects on the values of Natural Lake (excluding those in Water Supply Management Areas), Urban Lake, Natural Stream and Wetland Management Areas. In considering the effects on Natural Stream and Wetland Management Areas in Water Supply Management Areas, regard shall be had to Policies 3.5.4.1 to 3.5.4.2 in Chapter 3: Management Areas.

(This Policy relates to Objective 7.3.1)

- 7.4.13** Within Urban Lake Management Areas structures for the purpose of maintaining or enhancing **public access** shall be considered appropriate.

(This Policy relates to Objective 7.3.1)

- 7.4.14** The modification and loss of significant lengths of **Permanent rivers or streams** through infilling or piping (including the use of instream **culverts**, pipes and channel linings) shall generally be avoided. In applying this policy to **Permanent rivers or streams** within **Urban Areas**, particular regard shall be had to the Urban River and Stream Management Framework.

(This Policy relates to Objectives 7.3.1 to 7.3.3)

- 7.4.15** Structures and the diversion of **surface water** shall not cause more than a minor impediment to the passage of flood flows, and provision shall be made to pass such flows in a manner that protects public health and safety, the functioning of the State highway network and network utility infrastructure and avoids the inundation of habitable floors, in accordance with standards specified in this Plan or the relevant District Plan.

(This Policy relates to Objective 7.3.1)

- 7.4.16** Structures in, on, under or over the beds of **lakes** and **Permanent rivers or streams** shall ensure that the passage of fish and other aquatic organisms both up and down stream is:

- (a) provided for and maintained when new structures are constructed, or
- (b) maintained where that passage currently exists in an existing structure.

Explanation

In assessing the design suitability of any pipe, **culvert** or other similar structure for **fish passage** the ARC will have regard to ARC Technical Publication 131: Fish Passage: Review and Guidelines for the Auckland Region (ARC, June 2000).

(This Policy relates to Objective 7.3.1)

- 7.4.17** Structures in, on or over the beds of **lakes** and **Permanent rivers or streams** shall be encouraged to minimise the amount of bed modification and to avoid, remedy or mitigate adverse effects on the **lake**, river or stream bed.

Explanation:

Where there are options for the type of structure in, on or over the bed of a lake or Permanent river or stream, those structures that minimise the amount of bed modification are preferred. For example, bridges are preferred to structures which replace the bed with some form of artificial lining, or which result in significant changes

in stream velocity, such as box or round culverts.

(This Policy relates to Objective 7.3.1)

7.4.18 New pipelines and cables in, on, under or over the beds of *lakes* and *Permanent rivers or streams* and transmission lines in, on or under the beds of *lakes* and *Permanent rivers or streams* should, wherever practicable, be concentrated in a similar location to existing structures of this type, except where:

- (a) There are strategic or operational reasons for separating these structures and;
- (b) Such a concentration would generate significant cumulative adverse effects on the bed of the *lake* or *Permanent river or stream*.

(This Policy relates to Objective 7.3.1)

Disturbance and Deposition

Explanation

The Plan's policies and rules distinguish between three different types of bed excavation or disturbance. The first involves the extraction of material such as sand, shingle and gravel, where the material is generally used for commercial purposes; dredging of the bed where the principal purpose is to maintain or increase water depths for navigation or to provide access to structures such as wharves, jetties and moorings and general excavation, drilling, tunnelling and other disturbance. The latter covers a variety of situations, the most common being the removal of debris, sediment and associated vegetation from rivers and streams to avoid flooding. Disturbance associated with the construction and operation of structures is generally addressed in the Structures rules.

7.4.19 The extraction of sand, shingle, gravel or naturally occurring materials, *dredging* to increase water depths, significant levels of excavation, *drilling*, tunnelling or other disturbance and the *deposition of any substance* in, on or under the bed in Natural Lake, Urban Lake, Natural Stream and Wetland Management Areas shall generally be avoided unless:

- (a) The activity is necessary for the maintenance, enhancement or restoration of the natural and physical values of the *lake*, wetland, river or stream; and
- (b) The activity will have no more than temporary or minor adverse effects.

(This Policy relates to Objective 7.3.1)

7.4.20 *Dredging of lakes* and *Permanent rivers or streams* other than in Natural Lake, Natural Stream and Wetland Management Areas shall be considered appropriate where it is to maintain or restore access to wharves and jetties or vessel mooring areas, or to maintain navigation and safety in existing channels, or to maintain or restore access for these same purposes in the Coastal Marine Area.

(This Policy relates to Objective 7.3.1)

7.4.21 The excavation, *drilling*, tunnelling or other disturbance (including disturbance associated with vegetation removal) of beds of *lakes* or *Permanent rivers or streams* shall generally be considered inappropriate unless it is for:

- (a) Habitat maintenance, enhancement or restoration;
- (b) Maintenance and enhancement of *public access* to, over and along any *lake* or *Permanent river or stream*;
- (c) The provision or *maintenance of regionally significant infrastructure*, including *stormwater* and *wastewater network* and *municipal water supply* infrastructure, which is necessary for flood protection, the safeguarding of public health and safety, or for the promotion of community wellbeing;

- (d) Improving navigation and safety;
- (e) Avoiding, remedying or mitigating adverse effects caused by flooding, erosion, scour, sediment deposition, and other similar natural processes,

(This Policy relates to Objective 7.3.1)

7.4.22 In assessing the effects of excavation, *drilling*, tunnelling or other disturbance (including disturbance associated with vegetation removal and *dredging*), or the *deposition of any substance* in, on, or under the bed of a *lake* or *Permanent river or stream* regard shall be had to the following matters:

- (a) the volume of material or substance to be excavated, drilled, tunnelled, disturbed, or deposited;
- (b) the degree of contamination of the material or substance;
- (c) the physical characteristics (texture, colour, composition) of the material or substance;
- (d) the effects on ecological values and physical processes within the *lake* or *Permanent river or stream*;
- (e) the potential for the dispersal of any material or substance during the activity or the re-suspension of any material or substance once it has been deposited on the bed;
- (f) the deposition technique, including in the case of dredged material, the water content or solidity of the material at the time of disposal; and
- (g) the effects on the coastal marine area, where any activity is to be undertaken in close proximity to the coastal marine area boundary and there is the potential for the activity to cause significant adverse effects in the coastal marine area.

(This Policy relates to Objective 7.3.1)

Introduction and Planting of Plants

7.4.23 The introduction or planting of any plant in, on, or under the bed of any *lake*, or *Permanent river or stream* shall be considered appropriate where:

- (a) It is for habitat establishment, restoration or enhancement, the maintenance and enhancement of *amenity* values, flood or erosion protection, storm water runoff control, or for remedying or mitigating adverse effects associated with other activities in the *lake* or *Permanent river or stream*, or on land within the catchment; and
- (b) It is not an invasive species and will not result in the displacement of desirable species and areas of significant indigenous vegetation already present.

(This Policy relates to Objective 7.3.1)

7.4.24 The introduction or planting of indigenous plants from the same *ecological district* is encouraged where this is practicable, having regard to the availability and suitability of eco-sourced plants, and where better environmental outcomes will be achieved than using other indigenous or *exotic plants*.

Explanation:

Information on appropriate plant species, including the use of indigenous plants from the same ecological district can be found in ARC Technical Publication 148: Riparian Zone Management; Strategy for the Auckland Region, June 2001. Further information on plant pests, including invasive species can be found in the ARC Pest Fact Sheets.

(This Policy relates to Objective 7.3.1)

Reclamation and Drainage

- 7.4.25** New *reclamation* and *drainage* of *lakes* or *Permanent river or stream* beds, or the extension of existing *reclamations* or drained areas shall generally be considered inappropriate unless:
- (a) They are for rehabilitation or remedial works; or
 - (b) They are for the safe and efficient operation of transport infrastructure or network utility systems.
 - (c) They are for land development within *Urban Areas* which is consistent with the regional growth provisions of the Auckland Regional Policy Statement; and
 - (i) They avoid the following rivers and streams:
 - Type 1 and 2 Urban Streams
 - Other stream reaches that adjoin Coastal Protection Areas 1, including Ann's Creek upstream of the rivermouth boundary
 - Wetland Management Areas
 - Stream reaches with cultural heritage values or which adjoin Cultural Heritage Places and Areas scheduled in the Auckland Regional Plan Coastal;
 - (ii) For other streams in Urban Areas they are consistent with the Urban River and Stream Management Framework;
 - (iii) In *Greenfield Areas* options are considered for low impact urban design to reduce the amount of permanent stream loss through reclamation and drainage.

See also Chapter 2.1: Natural Values and Policies 2.2.4.16 and 2.2.4.17 (Chapter 2.2) relating to sites, buildings, places or areas identified in the ARC's Cultural Heritage Inventory.

(This Policy relates to Objectives 7.3.1 & 7.3.3)

- 7.4.26** All proposals to construct, reconstruct, alter or extend any *reclamation* or *drainage* in the bed of a *lake*, or *Permanent river or stream* shall demonstrate that:
- (a) The finished appearance of the reclaimed or drained area, including its size, shape and the materials used, is as far as practicable compatible with the environment in which it is located;
 - (b) Materials used in *reclamations* shall not include contaminants which may adversely affect the *lake*, or *Permanent river or stream*;
 - (c) An alternative land based site or construction method is not practicable;
 - (d) Efficient use will be made of the *lake* or *Permanent river or stream* bed by minimising the area necessary for *reclamation* and *drainage*, having regard to the activity proposed to utilise that area, and ;
 - (e) Adverse effects can be remedied or mitigated to an acceptable level, or offset by appropriate enhancement of the *lake* or *Permanent river or stream* and their riparian margins.

In considering the application of clauses (a) to (e) above in Urban Areas regard shall be had to the Urban River and Stream Management Framework.

See also Policies 2.4.9 to 2.4.11 relating to Net Environmental Maintenance (Chapter 2:1 Natural Values).

(This Policy relates to Objective 7.3.1)

- 7.4.27** In assessing the effects of *reclamation* and *drainage* of the beds of *lakes*, or *Permanent rivers or streams* regard shall be had to:
- (a) Maintenance and enhancement of *public access* to, along and within *lakes* and

Permanent rivers or streams including the potential for TAs to set aside esplanade reserves or strips on reclaimed or drained areas for **public access** purposes;

[Refer to Policy 2.2.4.12 relating to the provision of public access]

- (b) The type and source of material for any **reclamation**, recognising that the need to dispose of any dredged material or other **waste** material shall not dictate the need for, or the size of a **reclamation**;
- (c) Adverse effects on water quality, ecosystems, water flow, hydraulic capacity, sediment transport and deposition;
- (d) Cumulative adverse effects arising from incremental **reclamation** or **drainage**;
- (e) The Urban River and Stream Management Framework.

(This Policy relates to Objective 7.3.1)

7.4.28 Demolition or removal of a **reclamation** shall be considered appropriate where the adverse effects arising from its removal, in whole or in part are less than leaving it there.

(This Policy relates to Objective 7.3.1)

7.5 Rules

Structures and the Diversion of Surface Water

Explanation

The rules of this chapter relate to structures and the associated diversion of surface water. Rules relating to the use, erection and placement of any dam, and the reconstruction, alteration or extension of any dam which increases the height or storage capacity of the dam, including dams for stormwater detention or treatment, are included in the rules on the damming of surface water in Chapter 6: Water Allocation. However rules on the maintenance, repair, or alteration which does not increase the height or storage capacity of the dam, or the demolition or removal of dams are included in this chapter, under the provisions relating to the maintenance, repair, alteration, demolition or removal of any structure, refer Rules 7.5.1, 7.5.2 and 7.5.3.

These rules do not apply to any artificial watercourse such as irrigation canals, water supply races, canals for the supply of water for electricity power generation and farm drainage canals and roadside drain and water table except where the roadside drain or water table is a modified element of a natural drainage system.

The excavation, drilling, tunnelling or other disturbance (including disturbance associated with vegetation removal) of the bed of a lake or Permanent river or stream, and any associated discharge of sediment, is covered by Rules 7.5.14 to 7.5.24 of this Plan.

Note: reference to the "Urban River and Stream Management Framework" means the provisions of the Urban River and Stream Management Areas set out in section 3.6 of Chapter 3: Management Areas.

Permitted Activities

7.5.1 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 a **Intermittent stream**, and the repair and **maintenance** of the structure, and any associated bed disturbance or deposition, and any associated diversion of water is a Permitted Activity, if it complies with the following conditions.

- (a) The structure shall not cause the flooding of neighbouring private properties;

- (b) The activity shall not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream.
- (c) Any discharge of sediment directly associated with the activity shall be minimised by the use of best practice erosion and sediment control measures;
- (d) The mixing of construction materials (such as concrete), or the refuelling or maintenance of equipment associated with the activity shall not occur in the wetted cross section bed of the watercourse and shall use best practice methods to avoid the discharge of contaminants into any lake or to the river or stream.

7.5.2 Use of Existing Structures

The use of any structure or part of any structure existing in, on, under or over the bed of a lake or *Permanent river or stream* as at 23 October 2001 and the use of any structure or part thereof authorised under Rule 7.5.3, and any associated bed disturbance or deposition, any associated diversion of water and any incidental temporary damming of water is a Permitted Activity if it complies with the following conditions:

- (a) the passage of fish shall be maintained both up and down stream where it already occurs on existing structures;

(See note at end of Rule 7.5.6)

- (b) the structure shall not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream;
- (c) any bare earth surfaces on that part of the bed that is above the water level or wetted cross section which have arisen from the operation of the structure shall be stabilised against erosion as far as practicable;
- (d) the structure shall be maintained in a structurally sound condition at all times;
- (e) for a structure or part of any structure located solely under the bed of a lake or *Permanent river or stream* the following conditions only apply:
 - (i) conditions (b) and (d) above;
 - (ii) the structure shall be maintained so it is not exposed or moved by river or stream flows unless this is part of the design and purpose of the structure.
- (f) for a structure or part of any structure located solely over the bed of a lake or *Permanent river or stream* the following conditions only apply:
 - (i) conditions (b) and (d) above.

Note this rule does not apply to the use of existing on-stream dams. The use of existing on-stream dams is controlled by Rule 6.5.52 in Chapter 6: Water Allocation.

7.5.3 Maintenance, Repair, Reconstruction, Placement, Alteration, or Extension of Existing Structures

The *maintenance and repair, reconstruction, placement, alteration or extension* of any existing structure or part of any structure in, on, under or over the bed of a lake or *Permanent river or stream* and any associated bed disturbance or deposition, any associated diversion of water and any incidental temporary damming of water is a Permitted Activity if it complies with the General Performance Conditions listed in Rule 7.5.6 and the following conditions:

- (a) Any *extension* of an existing structure shall not cause the length of the structure to exceed 30 metres in total when measured parallel to the direction of water flow. This length excludes any associated erosion or scour protection works permitted by condition (b) below;

- (b) If erosion or scour protection works are required to prevent erosion or scour upstream or downstream of the structure, they shall not exceed 5 metres in length each side of the structure (such works protruding into the bed shall not require a separate consent as they shall be authorised under this rule);
- (c) Other than provided for by Rule 6.5.53, the activity shall not result in any increases in the height or storage capacity of any existing dam;

Note: The rules relating to the damming of surface water are set out in Chapter 6 Rules 6.5.51 to 6.5.70

- (d) The activity shall not result in an increase to existing flood levels on land or structures other than that owned or controlled by the person undertaking the activity;
- (e) The activity shall not cause more than a minor bed erosion, scouring or undercutting immediately upstream or downstream of the structure;
- (f) The activity shall not compromise the structural integrity of the structure;
- (g) Debris or other material removed from upstream or downstream of a structure shall not be re-deposited elsewhere in the bed of the lake or *Permanent river or stream*, or on any adjacent land in a manner or location where it would enter any waterbody;
- (h) Any discharge of sediment directly associated with the activity shall be minimised by the use of best practice erosion and sediment control measures;
- (i) The *alteration* of a dam, weir or similar structure shall not be undertaken until as much impounded sediment as is practicable has been removed from behind the structure and best endeavours shall be used to minimise the discharge of sediment impounded by the structure;
- (j) The *reconstruction, alteration or extension* of an existing swing or pile mooring in any area shall not involve the relocation of the mooring anchor or pile on the *lake*, river or stream bed and/or the extension of the length of the mooring chain by more than 25 percent;
- (k) The General Performance Conditions in Rule 7.5.6.

7.5.4 Removal Or Demolition Of Existing Structures

The removal or demolition of any existing structure or part of any existing structure located in, on, under or over the bed of a lake or *Permanent river or stream* and any associated bed disturbance or deposition, any associated diversion of water and any incidental temporary damming of water is a Permitted Activity if it complies with the following conditions:

- (a) Any removal or demolition shall ensure that as far as practicable the structure is removed from the bed;
- (b) Any part of the structure remaining in the bed shall not be a hazard to public access, navigation, or health and safety;
- (c) The removal or demolition of a dam, weir or similar structure shall not be undertaken until as much impounded sediment as is practicable has been removed from behind the structure and best endeavours shall be used to minimise the discharge of sediment impounded by the structure;
- (d) The General Performance Conditions listed in Rule 7.5.6.

7.5.5 Use, Erection Or Placement Of New Structures

The use, erection or placement of any new structure or part of any new structure listed

in this rule in, on, under or over the bed of a lake or *Permanent river or stream* and any associated bed disturbance or deposition, any associated diversion of water and any incidental temporary damming of water is a Permitted Activity if it complies with the following:

- (a) the Specific Structure Conditions listed in Rule 7.5.5.1 below;
- (b) the General New Structure Conditions listed in Rule 7.5.5.2 below; and
- (c) the General Performance Conditions listed in Rule 7.5.6.

List of Structures:

- (i) a *culvert* or pipe subject to Specific Structure Conditions (b), (d), (e), (h), (i), (j) and (n);
- (ii) a channel subject to Specific Structure Conditions (c), (d), (e), and (g);
- (iii) a bridge subject to Specific Structure Conditions (a), (c), (d), (e), (f), (g), (j) and (r);
- (iv) a pipe bridge subject to Specific Structure Conditions (a), (c), (e), (f) and (g);
- (v) a ford subject to Specific Structure Conditions (a), (c), (d), (e), (g) and (j);
- (vi) a flow measuring apparatus or instrument including a weir for the purpose of controlling water levels for the measurement of river or stream flow subject to Specific Structure Conditions (a), (c), (d) and (g) and the provisions of Rule 6.5.53;
- (vii) a maimai that is tagged or claimed under the Wildlife Act 1953 subject to Specific Structure Conditions (a), (c), (g), (k) and (l);
- (viii) *signs, navigation aids*, ski lane markers, or buoys subject to Specific Structure Conditions (a), (c), (f) and (g);
- (ix) swing and pile moorings, subject to Specific Structure Conditions (a), (c), (f), (g) and (q);
- (x) an *erosion control* structure or retaining wall subject to Specific Structure Conditions (a), (c), (d) (e) and (g);
- (xi) a *stormwater* or *wastewater outfall* subject to Specific Structure Conditions (a), (c), (e), (f) and (g);
- (xii) a *surface water intake structure* subject to Specific Structure Conditions (a), (c), (d), (e), (f), (g) and (p);
- (xiii) a stock access barrier (including a stock floodgate) suspended below a fence subject to Specific Structure Condition (c);
- (xiv) cables, ducts, lines or pipelines on existing structures, subject to Specific Structure Condition (o);
- (xv) any structure located solely under the bed, that is not covered by clauses i to xiv, subject to Specific Structure Conditions (m) and (n);
- (xvi) any structure located solely over the bed, that is not covered by clauses i to xiv, subject to Specific Structure Conditions (a), (c), (d), (f), (g) and (r);
- (xvii) any other structure (not covered by i – xvi above) subject to Specific Structure Conditions (a), (c), (d), (e), (f), (g), (m) and (n);

7.5.5.1 Specific Structure Conditions Applying to the Use, Erection or Placement of New Structures

The use, erection or placement of any new structure or part of any new structure in, on, under or over the bed of a lake or *Permanent river or stream* and any associated bed disturbance or deposition, any associated diversion of water and any incidental

temporary damming of water permitted by Rule 7.5.5 above must comply with the following conditions (as they are specified for each type of structure in Rule 7.5.5):

- (a) The structure shall not cause a more than minor impediment to the passage of flood flows up to and including the 100 year ARI flood;
- (b) The 100 year ARI flood shall be accommodated by the structure and/or by an overland flow path;
- (c) The structure shall not cause more than a temporary impediment to the passage of flood debris and it shall be maintained free of flood debris;
- (d) The structure shall not cause flood levels in events up to and including the 100 year ARI flood to rise within 0.5 m of the habitable floor levels of dwellings or increase flooding of a State highway, unless the relevant District Plan establishes an alternative freeboard requirement in which case the District Plan freeboard requirement shall prevail.
- (e) Other than provided for by clauses (s) and (t), the structure shall not be located in a Natural Lake, Natural Stream or Wetland Management Area as described in sections 3.3, 3.4 and 3.2 of Chapter 3: Management Areas;
- (f) Structures in navigable watercourses shall not prevent navigation of vessels;
- (g) The structure shall not prevent public access along the lake, river or stream;
- (h) For any culverting or piping of a river or stream in Urban Areas the nominal internal culvert diameter shall not exceed 900 mm, the actual internal diameter shall not exceed 920 mm and the cross-sectional area of any box culvert shall not exceed 0.67m² and multiple culverts shall not be erected or placed across the bed;
- (i) Other than restricted by clause (t) any culverting or piping of a river or stream outside Urban Areas, the nominal internal culvert diameter shall not exceed 1200 mm, the actual internal diameter shall not exceed 1225 mm and the cross-sectional area of any box culvert shall not exceed 1.18m² and multiple culverts shall not be erected or placed across the bed;
- (j) If erosion or scour protection works are required to prevent erosion or scour upstream or downstream of the structure, they shall not exceed 5 metres in length each side of the structure (such works protruding into the bed shall not require a separate consent as they shall be authorised under this rule). All works shall comply with Rule 7.5.6(a) in relation to fish passage. Erosion and scour protection works required under this clause shall not be included in any assessment of structure length under Rule 7.5.5.2(a);
- (k) The floor area of any structure shall not exceed 10m²;
- (l) The structure shall be founded on piles that protrude above the normal water level;
- (m) The structure shall not be exposed or moved by river or stream flows unless this is part of the design and purpose of the structure;
- (n) Structures such as pipes or cables that are to be located completely under the bed of the lake or river shall be installed using trenchless means;
- (o) Any cables, ducts, lines or pipelines on existing bridges shall be located above or equal to the soffit or attached to piles or abutments or other suitable parts of the bridge so that they do not intrude beyond the existing form of the bridge in a way that forms a hazard or further impedes the passage of 100 year ARI flood flows;
- (p) Water intake structures shall also meet the conditions of Rules 6.5.8 or 6.5.9;
- (q) A new swing or pile mooring shall not be located in a Natural Lake, Natural Stream or Wetland Management Area as described in sections 3.3, 3.4 and 3.2 of Chapter

3: Management Areas;

- (r) No piles either permanent or temporary shall be located in, on or under the bed.
- (s) In a Natural Stream Management Area in a Water Supply Management Area, the length of any new structure shall not exceed 10 metres in total when measured parallel to the direction of water flow, and no structure shall be erected or placed in individual lengths of 10 metres or less where this would progressively encase or otherwise modify the bed of the Natural Stream Management Area;

Note: this clause relates to culvers, pipes, channels and associated erosion protection works that generally sit in, on or under the bed. It is not intended to apply to pipe bridges or other linear structures that may cross the bed at an angle to the direction of water flow.

- (t) In a Natural Stream Management Area in a Water Supply Management Area the provisions of clause (h) relating to 900mm culvert and pipe diameter and the restriction on multiple culverts shall apply; in the rest of the Water Supply Management Area the provisions of clause (ii) relating to 1200mm culvert and pipe diameter and the restriction on multiple culverts shall apply.

7.5.5.2 General New Structure Conditions applying to the Use, Erection or Placement of New Structures

Any new structure permitted by Rule 7.5.5 above shall comply with the following General New Structure Conditions:

- (a) The length of any new structure shall not exceed 30 metres in total when measured parallel to the direction of water flow, and no new structure shall be erected or placed in individual lengths of 30 metres or less where this would progressively encase or otherwise modify the bed of a *Permanent river or stream*;
- (b) Other than provided for by Rule 6.5.52, the activity shall not involve the use, erection or placement of any dam that increases the height or storage capacity of the dam;

Note: The rules relating to the damming of surface water are set out in Chapter 6 Rules 6.5.51 to 6.5.70.

- (c) The activity shall not result in an increase to existing flood levels on land or structures other than that owned or controlled by the person undertaking the activity;
- (d) The activity shall not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream;
- (e) The activity shall not compromise the structural integrity of the structure;
- (f) Any discharge of sediment directly associated with the activity shall be minimised by the use of best practice erosion and sediment control measures.
- (g) The General Performance Conditions in Rule 7.5.6.

7.5.6 General Performance Conditions Applying To Rules 7.5.3, 7.5.4 and 7.5.5

The following conditions apply to all activities in the bed of a lake or *Permanent river or stream* that are undertaken as part of the following rules:

- Permitted Activity Rule 7.5.3: Maintenance, Repair, Reconstruction, Placement, Alteration or Extension of Existing Structures:
- Permitted Activity Rule 7.5.4: Removal or Demolition of Existing Structures:

- Permitted Activity Rule 7.5.5: Erection or Placement of New Structures:
 - (a) The passage of fish both up and down stream shall be maintained, where it already occurs on existing structures and provision shall be made for fish passage on new structures. Where structures are removed or demolished the bed shall be restored to a profile that enables the passage of fish where this is relevant and practicable;
 - (b) Condition (a) does not prevent temporary restrictions on fish passage to enable work to be carried out in accordance with the other conditions of Rules 7.5.2 to 7.5.6. However temporary restrictions shall not be in place for a length of time that causes significant adverse effects on the ability of fish to migrate up and down the stream during the period September to February;

[See explanation note relating to the provision of fish passage at end of rule]

 - (c) Provision if necessary and where practicable shall be made for the temporary diversion of the *Permanent river or stream* flow around the extent of the works while the activity is undertaken. Where temporary diversions are constructed they shall be able to cater for typical flows for the river or stream at the time of the year that the work is carried out and the adverse effects of the flow exceeding the diversion shall be minimised;
 - (d) Following completion of the activity maintenance and construction material or maintenance or construction ancillary structures shall be removed from the bed as far as practicable;
 - (e) There shall be no use of explosives in the bed of the lake or *Permanent river or stream* when undertaking the activity;
 - (f) The activity shall not involve the placement of any *waste material*, including but not limited to vehicle bodies, tyres, demolition rubble or clean fill;
 - (g) Any bed disturbance or deposition associated with the activity shall comply with the following conditions:
 - (i) The length of bed disturbance upstream or downstream of the structure shall not exceed 10 metres each side. This disturbance length excludes the structure itself;
 - (ii) Any bare earth surfaces on that part of the bed that is above the water level or wetted cross section of the lake or *Permanent river or stream* shall be stabilised against erosion as soon as practicable after completion of the activity;
 - (iii) The mixing of construction materials (such as concrete), or the refuelling or maintenance of equipment associated with the activity shall use best practice methods to avoid the discharge of contaminants into the lake, river or stream;
 - (iv) The activity shall not remove, damage or destroy any other existing structure and where any vegetation used for flood protection or erosion control purposes is removed, damaged or destroyed, it shall be replaced;
 - (v) Machinery shall not sit directly on the wetted cross section of the bed at the time of the work;
 - (vi) Conditions (g) i and iv do not apply to the necessary trimming or removal of vegetation around structures owned by operators of *regionally significant infrastructure* to ensure public health and safety and the operational integrity of the structures or network;
 - (h) Debris or other material cleared or removed from upstream or downstream of a structure shall not be re deposited elsewhere in the bed of the lake or *Permanent river or stream*, or on any adjacent land in a manner or at a location, where it will

enter any waterbody;

- (i) The activity shall not disturb any *wāhi tapu* or other *archaeological site* including those identified in any regional or district plan, in the Archaeological Association's Site Recording Scheme or by the Historic Places Trust, except where the Historic Places Trust approval as been obtained;
- (j) In the event that an *archaeological site* or *wāhi tapu* is discovered while undertaking the activity, the activity shall cease immediately and the ARC shall be notified as soon as possible. The activity shall not be re-commenced without the approval of the ARC.

Explanation

General activities in Intermittent streams unable to comply with one or more of the conditions in Rule 7.5.1 are assessed under Controlled Activity Rule 7.5.7.

General activities in Permanent rivers or streams unable to comply with one or more of the conditions of Rules 7.5.2 to 7.5.6 are assessed under Restricted Discretionary Activity Rule 7.5.9.

Activities required by a condition of a consent for a diversion of stormwater or discharge of stormwater or wastewater authorised under Rules 5.5.10, 5.5.11 and 5.5.12 of Chapter 5, that are unable to comply with one or more of the conditions of Rule 7.5.2 to 7.5.6 are assessed under Controlled Activity Rule 7.5.8.

Refer also to Rules 6.5.54 of Chapter 6: Water Allocation relating to the temporary damming of water associated with activities in the bed of a Permanent river or stream.

In determining whether any culvert complies with General Condition (a) above relating to fish passage, reference should be made to ARC Technical Publication 131: Fish Passage - Review and Guidelines for the Auckland Region (ARC, June 2000).

Controlled Activities

7.5.7 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 an *Intermittent stream*, and the repair and maintenance of the structure, and any associated bed disturbance or deposition, and any associated diversion of water that does not comply with permitted activity conditions in Rule 7.5.1 is a Controlled Activity.

7.5.7.1 The ARC will exercise its control over the following matters when assessing applications under Rule 7.5.7:

- (a) the methods used to avoid, remedy or mitigate the actual and potential effects (including any cumulative effects) arising from the matters in the conditions of Rule 7.5.1 that the activity is unable to comply with, together with the following additional matters:
- (b) the duration of the consent;
- (c) the monitoring of the consent.

7.5.8 Other than as provided for by Rules 7.5.2 to 7.5.6 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 a *lake* or *Permanent river or stream*, and the repair and *maintenance* of the structure, and any associated bed disturbance or deposition, and any associated diversion of water, is a Controlled Activity, subject to the following standards and terms:

- (a) The activity (other than for a *dam* structure on the bed of a *Permanent river or stream* as that activity is regulated by Rules 6.5.56 and 6.5.62 of Chapter 6) is required by a condition of a consent for a *diversion of stormwater* or discharge

of *stormwater* or *wastewater* authorised under Rules 5.5.10, 5.5.11 and 5.5.12 of Chapter 5 and it is unable to comply with one or more of the conditions of Rules 7.5.2 to 7.5.6;

- (b) The structure is not located in a Natural Stream or Wetland Management Area.

7.5.8.1 The ARC will exercise its control over the following matters when assessing applications under Rule 7.5.8:

- (a) The actual and potential adverse effects (including any cumulative effects) arising from the matters in the conditions of Rules 7.5.2 to 7.5.6 that the activity is unable to comply with, together with the following additional matters:
- (b) The method of diversion and discharge (inlet works, *overland flow path*, outlet works and *erosion control* works) and the effects arising from the method chosen;
- (c) Effects on *archaeological sites*, *wāhi tapu* and the matters listed in Policy 2.3.4.4;
- (d) The duration of the consent;
- (e) The monitoring of the consent;
- (f) The timing and nature of reviews of consent conditions; and
- (g) The requirement for and conditions of a bond or financial contribution.

Non notification

Applications for controlled activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Sections 95A(3) and 95B(2) of the RMA, unless in the opinion of the ARC there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.

Restricted Discretionary Activities

7.5.9 Other than as provided for by Rules 7.5.2 to 7.5.6 and 7.5.8, 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 a *lake* or *Permanent river or stream*, and the repair and *maintenance* of those structures, and any associated bed disturbance or deposition, and any associated diversion of water is a Restricted Discretionary Activity, subject to the following standards and terms:

- (a) The structure is not located in a Natural Stream or Wetland Management Area; and
- (b) Inside Urban Areas any culvert, pipe or channel or other linear structure is greater than 30 metres in length when measured parallel to the direction of water flow and has a diameter greater than that provided by Rule 7.5.5.1 (h); or
- (c) Outside *Urban Areas* other than in Water Supply Management Areas any culvert, pipe, channel or other linear structure outside Urban Areas is less than or equal to 30 metres in length when measured parallel to the direction of water flow, but has a diameter greater than that provided by Rule 7.5.5.1 (i);

7.5.10 The ARC will restrict the exercise of its discretion under Rule 7.5.9 to the following matters:

- (a) The actual and potential adverse effects (including any cumulative effects) arising from any matters in the conditions of Rules 7.5.2 to 7.5.6 that the activity is unable to comply with, together with the following additional matters:
- (b) The method of diversion and discharge (inlet works, *overland flow path*, outlet works and *erosion control* works) and the effects arising from the method chosen;

- (c) The cumulative effects of culverts, pipes, channels and tunnels and other linear structures on the natural character of any *Permanent river or stream*, including effects on riparian vegetation having regard to the Urban River and Stream Management Framework where relevant;
- (d) The degree to which the activity meets the outcomes of any structure plan, *Integrated Catchment Management Plan*, flood management plan or approved stormwater or wastewater network resource consent which has assessed whether the *Permanent river or stream* should be used, developed or protected;
- (e) Inside *Urban Areas* whether the pre structure flow rate of the *Permanent river or stream* is sufficient to sustain natural aquatic habitat values;
- (f) Effects on *archaeological sites*, *wāhi tapu* and the matters listed in Policy 2.3.4.4;
- (g) The duration of the consent;
- (h) The monitoring of the consent;
- (i) The timing and nature of reviews of consent conditions; and
- (j) The requirement for and conditions of a bond or financial contribution.

7.5.11 The erection, *reconstruction*, placement, alteration, extension, removal or demolition of any structure or part of any structure in, on, under or over the bed of a *Lake* or *Permanent river or stream*, and the repair and *maintenance* of those structures, and any associated bed disturbance or deposition, and any associated diversion of water is a Restricted Discretionary Activity, subject to the following standards and terms:

- (a) In Natural Lake, Natural Stream and Wetland Management Areas the structure is for the purpose of environmental enhancement and restoration activities; or
- (b) In Natural Lake and Natural Stream Management Areas the structure is a new swing or pile mooring; or
- (c) In Water Supply Management Areas:
 - (i) the structure is for *municipal water supply* purposes and includes access roads;
 - (ii) the structure is not located in a Wetland Management Area; and
 - (iii) any culvert, pipe, channel or other linear structure is greater than 10 metres in length when measures parallel to the direction of water flow and has a diameter greater than that provided by Rule 7.5.5.1 (h) or (i); or
- (d) Other than provided for by Rule 7.5.8, the structure implements an approved resource consent.

7.5.11.1 The ARC will restrict the exercise of its discretion under Rule 7.5.11 to the following matters (where they are relevant to the management area):

- (a) The actual and potential adverse effects (including any cumulative effects) arising from the relevant matters in the conditions of Rules 7.5.2 to 7.5.6 that the activity is unable to comply with, together with the following additional matters:
- (b) The method of diversion and discharge (inlet works, *overland flow path*, outlet works and *erosion control* works) and the effects arising from the method chosen;
- (c) The cumulative effects of *culverts*, pipes, channels and tunnels on the *natural character* of any *Permanent river or stream* having regard to the Urban River and Stream Management Framework where this is relevant for structures that implement and approved resource consent in terms of standard and term (c) above;

- (d) In Natural Stream Management Areas in a Water Supply Management Area the effects of structures for *municipal water supply on the natural character, ecological, heritage, amenity and recreational values of the river or stream, including methods to avoid, remedy or mitigate adverse effects;*
- (e) Effects on *archaeological sites, wāhi tapu* and the matters listed in Policy 2.3.4.4;
- (f) The location, method, timing and duration of the activity;
- (g) The duration of the consent;
- (h) The monitoring of the consent;
- (i) The timing and nature of reviews of consent conditions; and
- (j) The requirement for and conditions of a bond or financial contribution.

Non notification

Applications for restricted discretionary activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Sections 95A(3) and 95B(2) of the RMA, unless in the opinion of the ARC there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.

Discretionary Activities

7.5.12 Other than as provided for by Rules 7.5.2 to 7.5.6 and 7.5.8 to 7.5.11, 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 a *lake* or *Permanent river or stream*, and the repair and *maintenance* of those structures, and any associated bed disturbance or deposition, and any associated diversion of water is a Discretionary Activity, subject to the following standard and term:

- (a) In Water Supply Management Areas, other than Hays Creek Water Supply Management Area, the structure is not located in a Wetland Management Area.
- (b) Outside Water Supply Management Areas, the structure is not located in a Natural Stream or Wetland Management Area.

(For Rule 7.5.12 see also Policies 7.4.1 to 7.4.18)

Non-Complying Activities

7.5.13 Other than as provided for by Rules 7.5.2 to 7.5.6 and 7.5.8 to 7.5.12, 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 a *lake* or *Permanent river or stream*, and the repair and *maintenance* of those structures, and any associated bed disturbance or deposition and any associated diversion of water is a Non-Complying Activity.

Disturbance

Permitted Activities

Explanation

These rules do not apply to artificial watercourses such as irrigation canals, water supply races, canals for the supply of water for electricity power generation and farm drainage canals and roadside drain and water table except where the roadside drain or water table is a modified element of a natural drainage system.

Rules 6.5.20 to 6.5.28 regulate the drilling of a bore, and bed disturbance activities related to the drilling of a bore will also need to comply with these Chapter 6 provisions.

Note that District Plans may contain rules that apply to vegetation and tree removal and nothing in this chapter authorises any activity that is controlled by another Plan

prepared under the RMA and pursuant to which a resource consent is required.

- 7.5.14** Any disturbance, removal, damage or destruction of any exotic or indigenous plant, or part of any plant, or the habitats of any such plants, or of animals, or any excavation, *drilling* or tunnelling or other disturbance in, on, or under the bed of a ***Intermittent stream*** is a Permitted Activity, if it complies with the following conditions:
- The activity shall not result in an increase to existing flood levels on land or structures other than that owned or controlled by the person undertaking the activity;
 - The activity shall not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream of the works;
 - Any discharge of sediment directly associated with the activity shall be minimised by the use of best practice erosion and sediment control measures;
 - The mixing of construction materials (such as concrete), or the refuelling or maintenance of equipment associated with the activity shall not occur in the wetted cross section bed of the watercourse and shall use best practice methods to avoid the discharge of contaminants into the river or stream;

Note: Rules 7.5.15 to 7.5.19 which manage vegetation disturbance do not apply to Intermittent streams.

- 7.5.15** Any disturbance, removal, damage or destruction of any exotic or indigenous plant, or part of any plant, or the habitats of any such plants, or of animals, or any excavation (other than *dredging*), *drilling*, tunnelling, or other disturbance in, on or under the bed of a ***lake*** or ***Permanent river or stream***, and any associated discharge of sediment, is a Permitted Activity, subject to the following conditions:

General Conditions Applying to all Types of Bed Disturbance

- The activity does not divert any part of the ***lake*** or ***Permanent river or stream*** to a new course and does not result in the infilling of the existing bed;
- The continuous length of any bed disturbance shall not exceed 100 metres;
- A period in excess of 2 months shall elapse before an area is disturbed within 100 metres of a previously disturbed area in the same ***lake*** or ***Permanent river or stream***;
- Conditions (b) and (c) shall not apply to a Type 5 or 6 Urban River or Stream;
- The activity shall not occur in a Natural Lake, Natural Stream or Wetland Management Area, unless it is a normal and reasonable incident of recreational use, or some similar activity such as walking, tramping or swimming;
- Machinery shall not sit directly on the wetted cross section of the bed at the time of the work;
- Any materials used shall not be toxic to aquatic organisms;
- Public access*** shall not be restricted to an extent or for a period greater than necessary to complete the activity;
- All reasonable steps shall be taken to minimise the release of sediment into the water during the activity;
- Any bare earth surfaces on that part of the bed that is above the water level or wetted cross section of the river or stream shall be stabilised against erosion as soon as practicable after completion of the bed disturbance;
- Any discharge of contaminants shall comply with the provisions of the Other Discharges of Contaminants section in Chapter 5: Discharges to Land or Water

and Land Management;

- (l) The refueling or maintenance of equipment associated with the activity shall use best practice methods to avoid the discharge of contaminants to the *lake*, river or stream;
- (m) Debris or other material cleared shall not be re-deposited elsewhere in the bed of the lake or Permanent river or stream bed, or on any adjacent land in a manner or location where it would enter any waterbody;
- (n) The *lake* or *Permanent river or stream* bed shall be restored to a profile that does not inhibit water flow or the safe passage of fish and other aquatic organisms both upstream and downstream;
- (o) The disturbance shall avoid the removal, damage or destruction of any lawful structure, or any plant used for flood protection or *erosion control* purposes and where this is not practicable, the structure or plant shall be reinstated at the completion of the activity;
- (p) There shall be no use of explosives in the bed of the *lake* or *Permanent river or stream when undertaking the activity*;
- (q) The activity shall not disturb any *wāhi tapu* or other *archaeological site* including those identified in any regional or district plan, in the NZ Archaeological Association's Site Recording Scheme, or by the Historic Places Trust, except where the Historic Places Trust approval has been obtained;
- (r) In the event that an *archaeological site* or *wāhi tapu* is discovered while undertaking the activity, the activity shall cease immediately and the ARC shall be notified as soon as possible. The activity shall not be recommenced without the approval of the ARC;
- (s) Conditions (b), (c), (e), and (o) do not apply to the necessary trimming or removal of vegetation around structures owned by operators of *regionally significant infrastructure* to maintain the operational integrity of the structure or network and to ensure public health and safety.

Specific Disturbance Conditions

- (i) The removal of mangroves is for the purposes of:
 - (a) gaining access to a lawful structure;
 - (b) maintaining an existing boat access or existing boat launching site;
 - (c) providing for public safety;
 - (d) maintaining drainage away from a stream mouth, stormwater outfall or other drainage structure; or
 - (e) use by iwi for traditional harvesting purposes;

and

 - (f) the total area cleared shall not at any time exceed 200 m².
- (ii) Any extraction of sand, shingle or gravel from the bed of any *Permanent river or stream*:
 - (a) shall not exceed 50 cubic metres per twelve month period;
 - (b) shall not take place in any Natural Stream or Wetland Management Area;
 - (c) shall only be used on the property immediately adjoining the site of the extraction; and

- (d) shall not lead to instability of the bank in the immediate vicinity.
- (iii) Where the activity is for the maintenance or restoration of a legal vehicular access along or across a river bed and the bed substrate is unconsolidated sand, general conditions (b) and (f) shall not apply;
- (iv) Where the activity is to implement an approved Pest Management Strategy prepared in accordance with the Biosecurity Act 1993:
 - (a) The eradication or removal of the plant shall comply with the provisions of the approved Pest Management Strategy, including any supporting documents relating to the means of removal;
 - (b) The ARC is advised of the commencement and completion date of any approved works;
 - (c) Where monitoring is required as part of an approved Pest Management Strategy, the ARC is provided with a copy of the information collected; and
 - (d) General Conditions (b), (c) and (d) of Rule 7.5.11 shall not apply.
- (v) The activity may be undertaken for emergency purposes to clear trees, debris, sediment or other material deposited during storm and/or flood events from the bed of a **Permanent river or stream** where this material is causing or is likely to cause an immediate hazard to people or property, subject to the following conditions:
 - (a) The activity shall not take place in a Wetland Management Area;
 - (b) For the avoidance of doubt only General Conditions (a), (g) to (j) and (l) to (r) shall apply;
 - (c) All practicable steps shall be taken to minimise the use of machinery in the bed and the area of bed disturbed shall be limited to the immediate area of the hazard.

Explanation:

Other than as provided for by Rule 7.5.16, activities unable to meet one or more of General Conditions (a) to (q) and Specific Disturbance Conditions i to v of Rule 7.5.15 are considered under Rule 7.5.20.

- 7.5.16** Any disturbance, removal, damage or destruction of any exotic or indigenous plant or part of any plant, or the habitats of any such plants, or of animals, in, on or under the bed of any **lake**, or **Permanent river or stream** and any associated bed disturbance and deposition and any associated discharge of sediment is a Permitted Activity, where:
- (a) the activity is undertaken by handheld methods which only give rise to minor and temporary bed disturbance; or
 - (b) the use of chemicals complies with the Application of Agrichemicals rules in Chapter 4A; or
 - (c) where the plant is in a Natural Lake, Natural Stream or Wetland Management Area, removal is only for plant pest control, or to gain access to a lawful structure, or is for the maintenance, restoration and enhancement of the natural values of the Management Area and the disturbance, removal, damage or destruction complies with conditions (a) and (b) above
 - (d) General Conditions (g) to (r) of Rule 7.5.15 shall apply in all circumstances.

Controlled Activities

- 7.5.17** Any disturbance, removal, damage or destruction of any exotic or indigenous plant, or part of any plant, or the habitats of any such plants, or of animals, or any excavation, **drilling** or tunneling or other disturbance in, on, or under the bed of an **Intermittent**

stream that does not comply with the permitted activity conditions in Rule 7.5.14 is a Controlled Activity.

7.5.17.1 The ARC will exercise its control over the following matters when assessing applications under Rule 7.5.17:

- (a) the actual and potential effects (including any cumulative effects) arising from the matters in the conditions of Rule 7.5.14 that the activity is unable to comply with, together with the following additional matters:
- (b) the duration of the consent;
- (c) the monitoring of the consent;

7.5.18 Other than provided for under Rules 7.5.15 and 7.5.16 any disturbance, removal, damage or destruction of any exotic or indigenous plant or part of any plant, or the habitats of any such plants, or of animals, or any excavation (other than *dredging*), *drilling*, tunnelling or other disturbance in, on or under the bed of a *lake* or *Permanent river or stream* and any associated discharge of sediment which is for *stormwater* or *wastewater* management purposes is a Controlled Activity subject to the following standards and terms:

- (a) The activity is required either
 - (i) by a condition of a consent for a *diversion of stormwater* or discharge of *stormwater* or *wastewater* authorised under Rules 5.5.10, 5.5.11 or 5.5.12 and it is unable to comply with one or more of the conditions of Rules 7.5.15 or 7.5.16; or
 - (ii) for the purpose of maintaining a lawful on-stream *stormwater* management pond or other impoundment structure and is unable to comply with one or more of the conditions of Rule 7.5.15;

and

- (b) The activity does not divert any part of the *Permanent river or stream* to a new course and does not result in the infilling of the existing bed.

7.5.18.1 The ARC will exercise its control over the following matters under Rule 7.5.18:

- (a) Any actual or potential adverse effects (including cumulative effects) arising from the matters in the General Conditions of Rule 7.5.15 that the activity is unable to comply with, together with the following matters:
- (b) The content and implementation of an Erosion and Sediment Control Management Plan;
- (c) Effects on *archaeological sites*, *wāhi tapu* and the matters listed in Policy 2.3.4.4;_
- (d) The duration of the consent;
- (e) The monitoring of the consent;
- (f) The timing and nature of reviews of consent conditions; and
- (g) The requirement for and conditions of a bond or financial contribution.

Non notification

Applications for controlled activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Sections 95A(3) and 95B(2) of the RMA, unless in the opinion of the ARC there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.

Restricted Discretionary Activities

7.5.19 Other than provided for by Rule 7.5.18, any disturbance, removal, damage or destruction of an exotic or indigenous plant or part of any plant, or the habitats of any such plants, or of animals, or any excavation, *drilling*, tunneling, or other disturbance in, on or under the bed of a *lake* or *Permanent river or stream* and any associated discharge of sediment, which does not meet the conditions of Permitted Activity Rules 7.5.15 or 7.5.16 is a Restricted Discretionary Activity, subject to the following standards and terms:

- (a) The activity does not divert any part of the *Permanent river or stream* to a new course and does not result in the infilling of the existing bed; and
- (b) The activity does not involve the *commercial extraction* of sand, gravel, shingle or other natural material, or dredging in, on or under the bed of any *lake* or *Permanent river or stream*; and
- (c) In Natural Lake, Natural Stream or Wetland Management Areas disturbance, removal, damage or destruction of plants is limited to:
 - (i) the harvesting of exotic or introduced species that were planted for production purposes prior to 23 October 2001; or
 - (ii) the maintenance, restoration or enhancement of the natural ecological values of the *lake*, *Permanent river or stream*, or wetland;

or

- (d) in Natural Lake, Natural Stream and Wetland Management Areas the activity is undertaken by handheld methods but the other conditions of Permitted Activity Rule 7.5.16 are unable to be complied with.

or

- (e) In Natural Stream Management Areas in Water Supply Management Areas, the activity is to ensure the maintenance and operation of *municipal water supply* infrastructure.

or

- (f) in the Hunua Road Wetland Management Area in the Hays Creek Water Supply Management Area, the activity is to ensure the maintenance and operation of *municipal water supply* infrastructure.

7.5.19.1 The ARC will restrict the exercise of its discretion under Rule 7.5.19 to the following matters:

- (a) The degree to which the activity meets the outcomes of any structure plan, ICMP, flood management plan or approved stormwater or wastewater network resource consent which has assessed whether the *Permanent river or stream* should be used, developed or protected;
- (b) The extent to which the activity is consistent with the Urban River and Stream Management Framework;
- (c) In Natural Stream Management Areas in a Water Supply Management Area the effects of structures for *municipal water supply* on the natural character, ecological, heritage, amenity and recreational values of the river or stream, including methods to avoid, remedy or mitigate adverse effects;
- (d) In the Hays Creek Water Supply Management Area the effects on the Hunua Road Wetland Management Area and options to avoid, remedy or mitigate disturbance or loss of the wetland area;

- (e) The amount of any bed disturbance;
- (f) The method, timing and duration of the disturbance;
- (g) The proposed control measures to minimise the discharge of sediment from the bed disturbance activity;
- (h) The discharge of any other contaminants, except where provided for as a permitted activity in Chapter 5: Discharges to Land and Water and Land Management;
- (i) The disposal of material removed from the bed;
- (j) Any significant adverse effects on the habitat of flora and fauna, including riparian margins;
- (k) Any temporary or permanent effects from the activity on *public access* along the bed of the *lake* or *Permanent river or stream*;
- (l) Any temporary or permanent effects from the activity on other users of the *lake*, or *Permanent river or stream*, including *surface water* takes;
- (m) Measures to stabilise earthwork surfaces and to rehabilitate any riparian margins affected by the work;
- (n) Measures to ensure that the bed profile enables safe passage of fish upon completion of the disturbance;
- (o) Effects on *archaeological sites*, *wāhi tapu* and the matters listed in Policy 2.3.4.4;
- (p) The duration of the consent;
- (q) The monitoring of the consent;
- (r) The timing and nature of reviews of consent conditions; and
- (s) The requirement for and conditions of a bond or financial contribution.

Non notification

Applications for restricted discretionary activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Sections 95A(3) and 95B(2) of the RMA, unless in the opinion of the ARC there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.

Discretionary Activities

7.5.20 The *commercial extraction* of sand, gravel and shingle or other natural material, or *dredging* in, on or under the bed of any *Permanent river or stream*, except in any Natural Stream or Wetland Management Area is a Discretionary Activity.

(For Rule 7.5.21 see also Policies 7.4.1, 7.4.3, 7.4.9, 7.4.19, 7.4.20 and 7.4.22)

7.5.21 Any disturbance, removal, damage or destruction of an exotic or indigenous plant or part of any plant, or the habitats of any such plants, or of animals, or any excavation, *drilling*, tunneling, or other disturbance in, on or under the bed of a *Permanent river or stream* and any associated discharge of sediment, for the purpose of diverting the *Permanent river or stream* to a new course and the associated infilling of the existing bed, and the diversion of water is a Discretionary Activity, subject to the following standards and terms:

- (a) Other than the Hays Creek Water Supply Management Area, the bed disturbance and diversion of water is not in a Wetland Management area;

- (b) Outside Water supply Management Areas, the structure is not located in a Natural Stream or Wetland Management Area.

(For Rule 7.5.21 see also Policies 7.4.1 to 7.4.11, 7.4.14, 7.4.15, 7.4.21 and 7.4.22)

Non Complying Activities

- 7.5.22** The *commercial extraction* of sand, gravel and shingle or other natural material, or *dredging* in, on or under the bed of any Natural Lake, Urban Lake, Natural Stream or Wetland Management Area is a Non-Complying Activity.
- 7.5.23** Any disturbance, removal, damage or destruction of an exotic or indigenous plant or part of any plant, or the habitats of any such plants, or of animals, or any excavation, *drilling* or tunneling or other disturbance in, on, or under the bed of a *Permanent river or stream* and any associated discharge of sediment, for the purpose of diverting a *Permanent river or stream* to a new course, and the associated infilling of the existing bed and the diversion of water in a Natural Stream or Wetland Management Area is a Non-Complying Activity.
- 7.5.24** Other than provided for by Rule 7.5.15 General Conditions (e) and (s), Rule 7.5.16 (c), Rule 7.5.18, and Rule 7.5.19 (c) and (d), any disturbance, removal, damage or destruction of an exotic or indigenous plant or part of any plant, or the habitats of any such plants, or of animals, or any excavation, *drilling*, tunneling, or other disturbance in, on or under the bed of any Natural Lake, Natural Stream or Wetland Management Area and any associated discharge of sediment is a Non-Complying Activity.

Introduction or Planting of Plants

Explanation

Rule 7.5.25 allows the introduction or planting of any indigenous or exotic plant in, on or under the bed of any Intermittent stream as a permitted activity, without reference to any other rules in this chapter.

The introduction or planting of indigenous or exotic plant in, on or under the bed of any lake or Permanent river or stream to remedy or mitigate effects of any, activity which requires a resource consent under other rules in this chapter (for example remedial or restoration works associated with the erection of structures, various forms of bed disturbance or reclamation) is considered as part of the resource consent application for that activity. In assessing proposals for remedial or restoration planting for activities controlled under other rules in the Plan, the ARC will have regard to the objectives and policies of this section.

Rules relating to the removal of vegetation, including plant pest species from the bed of a lake or Permanent river or stream are in the provisions relating to Disturbance.

Permitted Activities

- 7.5.25** The introduction or planting of any indigenous or *exotic plant* in, on, or under the bed of any *Intermittent stream*, provided that the plant is a species which is non-invasive in aquatic conditions is a Permitted Activity.
- 7.5.26** The introduction or planting of any indigenous or *exotic plant* in, on or under the bed of any *lake* or *Permanent river or stream* for the purpose of riparian zone management, or the introduction or planting of any indigenous plant for wetland establishment or restoration in, on or under the bed of any *lake* or *Permanent river or stream* provided that the plant is a species which is non-invasive in aquatic conditions is a Permitted Activity.

Explanation

When undertaking any planting under this rule reference should be made to relevant publications and guidelines, including the ARC Technical Report No 148; Riparian Zone

Management: Strategy for the Auckland Region, June 2001 which contains information on suitable plant species, appropriate locations and planting patterns, invasive plant species and flood hazard mitigation.

Other information is also held by the ARC on appropriate species for soil conservation and wetland establishment and restoration.

Discretionary Activities

- 7.5.27** The introduction or planting of any indigenous or *exotic plant* in, on or under the bed of any *lake* or *Permanent river or stream* that does not meet the conditions of Permitted Activity Rule 7.5.21 is a Discretionary Activity.

(For Rule 7.5.27 see also Policies 7.4.1, 7.4.3, 7.4.8, 7.4.9, 7.4.23 and 7.4.24)

Prohibited Activities

- 7.5.28** The introduction or planting of any plant named as a pest in a pest management strategy prepared under the Biosecurity Act 1993 in, on or under the bed of any *lake*, river or stream, or any plant declared as an unwanted organism by a Chief Technical Officer constituted under the same Act is a Prohibited Activity.

Deposition of Substances

These rules do not relate to the discharge of sediment arising from earthwork activities on land which is controlled by the Regional Plan: Sediment Control, or to the deposition of silt conveyed or captured by stormwater systems which is managed by the stormwater rules in Chapter 5. The deposition of sediment or other material associated with the construction and use of structures is addressed in the structures rules and the deposition of sediment associated with bed disturbance activities is controlled by the disturbance rules in this chapter.

Permitted Activities

- 7.5.29** The *deposition of* soil, rock or other *cleanfill* material in, on or under the bed of an *Intermittent stream* is a Permitted Activity if it complies with the following conditions:
- the activity shall not result in an increase to existing flood levels on land or structures other than that owned or controlled by the person undertaking the activity;
 - the activity shall not cause more than minor bed erosion, scouring or undercutting immediately upstream or downstream of the works;
 - Any discharge of sediment directly associated with the activity shall be minimised by the use of best practice erosion and sediment control measures.

Controlled Activities

- 7.5.30** The *deposition of* soil, rock or other *cleanfill* material in, on, or under the bed of an *Intermittent stream* that does not comply with the permitted activity conditions in Rule 7.5.29 is a Controlled Activity.

- 7.5.30.1** The ARC will exercise its control over the following matter when assessing applications under Rule 7.5.30:

- the actual and potential effects (including any cumulative effects) arising from the matters in the conditions of Rule 7.5.29 that the activity is unable to comply with, together with the following additional matters:
- the duration of the consent;
- the monitoring of the consent;

Non-Notification

Applications for controlled activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Sections 95A(3) and 95B(2) of the RMA, unless in the opinion of the ARC there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.

Discretionary Activities

- 7.5.31** The *deposition of any substance* in, on, or under the bed of any *lake* or *Permanent river or stream* for the purposes of habitat enhancement or scientific research is a Discretionary Activity.

(For Rule 7.5.31 see also Policies 7.4.1, 7.4.3, 7.4.8, 7.4.9, 7.4.19 and 7.4.22)

- 7.5.32** The deposition of dredged material in, on, or under the bed of any *Permanent river or stream* is a Discretionary Activity;
- (a) Except in a Natural Stream Management Area or Wetland Management Area; and
 - (b) The material to be deposited comes from the same *Permanent river* or catchment where it was dredged.

(For Rule 7.5.32 see also Policies 7.4.1, 7.4.3, 7.4.7, 7.4.9 and 7.4.22)

Non-Complying Activities

- 7.5.33** The *deposition of any other substance* in, on, or under the bed of any *lake* or *Permanent river or stream* not covered by another rule in this Plan is a Non-Complying Activity.

Prohibited Activities

- 7.5.34** The deposition of litter, refuse and other *waste* material in, on, or under the bed of any *lake* or *Permanent river or stream* is a Prohibited Activity.

Reclamation and Drainage

Permitted Activities

- 7.5.35** The construction and use of any new *reclamation* or *drainage* of the bed of an *Intermittent stream* or the *reconstruction*, alteration, removal or demolition of an existing *reclamation* or drained area affecting any *Intermittent stream* is a Permitted Activity.

Restricted Discretionary Activities

- 7.5.36** The construction and use of any new *reclamation* or *drainage*, or the *reconstruction*, extension, alteration, removal or demolition of an existing *reclamation* or drained area of the bed of any *lake* or *Permanent river or stream*, and any directly associated activities and structures for *reclamation* or *drainage* in, on, under or over the bed, and any associated diversion of water, where the activity implements an approved resource consent is a Restricted Discretionary Activity.

- 7.5.36.1** The ARC will restrict the exercise of its discretion under Rule 7.5.35 to the following matters:

- (a) Any actual or potential adverse effects (including cumulative effects) on the bed of the *lake* or *Permanent river or stream* arising from the *reclamation* or *drainage* activity;
- (b) The method of construction, *reconstruction*, extension, alteration, removal or demolition of the *reclamation* or *drainage* activity;
- (c) The duration of the consent;
- (d) The monitoring of the consent;

- (e) The timing and nature of reviews of consent conditions; and
- (f) The requirement for and conditions of a bond or financial contribution.

Non notification

Applications for restricted discretionary activities shall be considered without public notification or the need to serve notice of the application on affected persons in accordance with Sections 95A(3) and 95B(2) of the RMA, unless in the opinion of the ARC there are special circumstances justifying public notification in accordance with Section 95A(4) of the RMA.

Discretionary Activities

- 7.5.37** Any *reconstruction*, alteration, removal or demolition of an existing *reclamation* or drained area of the bed of any *lake* or *Permanent river or stream* and any directly associated activities and structures for *reclamation* or *drainage* in, on, under or over the bed and any associated diversion of water is a Discretionary Activity.

(For Rule 7.5.37 see also Policies 7.4.1, 7.4.3, 7.4.7, 7.4.9 and 7.4.25 to 7.4.28)

Non-Complying Activities

- 7.5.38** The construction and use of any new *reclamation* or *drainage*, or the extension of any existing *reclamation* or drained area of the bed of any *lake* or *Permanent river or stream*, any directly associated activities and structures for *reclamation* and *drainage* in, on, under or over the bed of any *lake*, river or stream and any associated diversion of water is a Non-Complying Activity.

7.6 Other Methods

- 7.6.1** The ARC will produce and distribute, in conjunction with other agencies and groups with similar management responsibilities or interests, educational material and information on protecting the natural values of the Auckland Region's *lake*, rivers and streams. This includes the production of posters, explanatory guidelines, fact sheets and general and technical reports.
- Brochures and information sheets relevant to the management of lakes, rivers and streams include technical guidelines on riparian planting, brochures and information sheets on wetland protection, the management of indigenous forests, plant and animal pests (Pestfacts) and in stream dams. These publications are regularly updated, and further information on current publications can be obtained from the Auckland Regional Council.
- 7.6.2** The ARC will work in conjunction with landowners and all other relevant groups to encourage riparian planting of the margins of *lakes*, wetland, rivers and streams and to undertake animal and plant pest control. This partnership takes place through a range of mechanisms including providing technical advice to individuals and communities on issues of concern to them, working with Landcare Groups to implement their identified priorities for local action and providing funding through the Environmental Initiatives Fund. The Waicare programme involves community groups and schools in a community based water quality monitoring, education and action programme.
- 7.6.3** The ARC will work in conjunction with TAs to promote an integrated and consistent management regime for the beds of *lakes*, rivers and streams. Options for this include use of transfer of powers and statutory advocacy to district plans and other *TA* management documents.
- 7.6.4** The ARC will implement a consistent approach to the management of plant pests, as determined by the Auckland Regional Plant Pest Management Strategy (RPPMS) and

the management of environmental effects on the beds of *lakes*, rivers and streams, associated with their control.

7.6.5 The ARC will work with the Ministry of Agriculture and Forestry on control programmes for the management of aquatic plants declared to be unwanted organisms (presently salvinia (*Salvinia molesta*), water hyacinth (*Eichornia crassipes*) and water lettuce (*Pistia stratiotes*)).

7.6.6 The ARC will continue its research to determine the contribution made by *Intermittent streams* to the maintenance of water quality and water quantity in a catchment and the significance of these streams to the habitat values of *Permanent rivers or streams*. The findings of this research will be incorporated into this Plan.

See also Sections 5.6 and 6.6 which identify Other Methods relating to the management of water quality and water quantity in lakes, rivers and streams in the Auckland Region.

7.7 Anticipated Environmental Results

7.7.1 That *lakes*, rivers, streams and wetlands with high ecological values are retained as far as practicable in their natural state.

7.7.2 That the modification of other rivers and streams by activities in their beds is minimised to the greatest extent practicable.

7.7.3 That beds of lakes and rivers within Urban Areas area used in a sustainable manner that enables land development and the operation of *regionally significant infrastructure* while adverse effects are minimized as far as practicable.

7.7.4 That *reclamation* and *drainage* of *lakes*, rivers and streams is generally avoided.

7.7.5 That fish and other migratory aquatic fauna are able to pass up and down *lakes*, rivers and streams and have access to and from the coastal marine area.