17 Activities in *Artificial Watercourses**, Beds of Rivers and Lakes, and Damming

17.1 Objectives

Objective 17-1: Regulation of structures[^] and activities in artificial watercourses^{*} and in the beds[^] of rivers[^] and lakes[^], and damming

The regulation of structures and activities in artificial watercourses and in the beds of rivers and lakes, and damming, in a manner that:

- (a) safeguards life supporting capacity, and recognises and provides for the Values and management objectives in Schedule B, and
- (b) has regard to the objectives and policies of Chapter 5 that relate to structures^ and activities in artificial watercourses* and in the beds^ of rivers^ and lakes^, and damming.

17.2 Policies

Policy 17-1: Consent decision-making for activities in, on, under or over the beds[^] of rivers[^] and lakes[^] (including modified watercourses but excluding artificial watercourses^{*})

When making decisions on *resource consent*^ applications, and setting consent *conditions*^, for activities in, on, under or over the *bed*^ of a *river*^ or *lake*^ (including modified watercourses but excluding *artificial watercourses**) the Regional Council must:

- (a) have regard to the extent to which the activity is consistent with best management practices,
- (b) seek to avoid where reasonably practicable any adverse *effects*^ on any other lawful activity in, on, under or over the *bed*^ of the *river*^ or *lake*^, including existing *structures*^,
- (c) have regard to whether the activity is of a temporary nature or is associated with necessary *maintenance** work, and
- (d) have regard to the objectives and policies of Chapters 2, 3, 5, 6, 9 and 12 to the extent that they are relevant to the activity.

Policy 17-2: Consent decision-making for activities in artificial watercourses*

When making decisions on resource consent[^] applications, and setting consent conditions[^], for activities on land[^] in an artificial watercourse^{*} the Regional Council must:

(a) have regard to the purpose for which the *artificial watercourse** was established,



- (b) in circumstances where the *artificial watercourse** joins a *river*^ or *lake*^, have regard to the policies relating to the *beds*^ of *rivers*^ and *lakes*^ in Section 5.4.4,
- (c) seek to avoid, remedy or mitigate adverse effects on any significant ecosystems intrinsic to the artificial watercourse*, and
- (d) manage the activity in accordance with (a), (c) and (d) of Policy 17-1.

Policy 17-3: Gravel extraction

Having regard to Policies 5-22 to 5-25, activities in, on, under or over the *beds*^ of *rivers*^ and *lakes*^ that enable gravel extraction will generally be allowed provided that:

- (a) The long term average annual volume of gravel available for extraction from those *rivers*^ and *river*^ reaches listed in Table 17.1 must be limited to the quantities stated in the table, unless:
 - (i) there is a demonstrable *river*^ management need to increase or decrease this volume, or
 - (ii) the gravel extraction is necessary to decrease the risk of flooding or damage to structures^, or
 - (iii) future information establishes that actual sustainable rates of gravel extraction are higher or lower than those in Table 17.1 taking into account the cumulative volumes being extracted, the natural rates of replenishment and the *effects*^, including cumulative effects, of extraction.
- (b) For any *river*\(^\) reach not specified in Table 17.1, the *effects*\(^\) of the cumulative volume of gravel being extracted on an annual basis in the *river*\(^\) reaches must be considered, including matters in relation to:
 - (i) the natural rates of gravel replenishment,
 - (ii) the effects^, including cumulative effects^, of the gravel extraction,
 - (iii) demonstrable river^ management needs, and
 - (iv) the need to decrease the risk of flooding or damage to *structures*^.
- (c) For the purposes of this policy "annual" is defined as 1 July to 30 June the following year.

Table 17.1 Long term average annual allocable volumes of gravel

River or Reach	Volume (m³)
Kawhatau River	20,000
Makino Stream	3,000
Makuriiti Stream	3,000



River or Reach	Volume (m³)
Manawatu River	
From 1 km upstream of Ngawapurua Bridge to source	20,000
1 km upstream to 2.5 km downstream of Ngawapurua Bridge	No extraction
2.5 km downstream of Ngawapurua Bridge to Ballance Bridge	15,000
Manawatu Gorge to Karere Rd	2,500
Karere Rd to Hamilton's Line	15,000
Hamilton's Line to Oroua confluence [2007 to 2009]	20,000
Hamilton's Line to Oroua confluence [2009 onwards] the 2 km aggrading reach between 39 Miles (NZMS 260 S24:212-832) and Benchmark 643 (NZMS 260 S24:226-830)	17,500
Hamilton's Line to Oroua confluence [2009 onwards] the 2 km aggrading reach between BM 604 (NZMS 260 S24:206-833) and BM 622 (NZMS 260 S24:207-826)	35,000
Mangahao River	15,000
Mangatainoka River	15,000
Ohau River	
Upstream of a point 1 km above SH 1 bridge	5,000
Downstream of a point 1 km above SH 1 bridge	10,000
Oroua River	
Upstream of Menzies Ford	10,000
Downstream of Menzies Ford	55,000
Pohangina River	25,000
Rangitikei River	
Makahikatoa Stream to Mangarere Road bridge	15,000
Mangarere Road bridge to Rewa	25,000
Rewa to 7 km downstream of SH 1 bridge	30,000
7 km downstream of SH 1 bridge to mouth	100,000
South East Ruahine Streams	
Kumeti	3,000
Mangaatua	5,000
Mangapapa	2,000



River or Reach	Volume (m³)
Mangatera	500
Mangatewaiiti	2,000
Mangatewainui	4,000
Oruakeretaki	5,000
Otamaraho	2,000
Otamarahu	1,000
Rokaiwhana	10,000
Raparapawai	3,000
Tamaki	20,000
Turakina River	3,000
Whangaehu River	8,000
Whanganui River	7,000

17.3 General Conditions for Permitted Activities and Controlled Activities involving the Beds of Rivers and Lakes

The table below sets out general conditions for activities involving the beds of rivers and lakes. These general conditions are referred to in a number of the permitted activity and controlled activity rules in this chapter. The table sets out general conditions for all rivers and lakes under the Value of Life-supporting Capacity (this Value applies to all rivers and lakes as shown in Schedule B). It then sets out additional conditions for other Values that apply to specific reaches of rivers, as listed in Schedule B. Schedule B must be referred to in order to identify the locations of the *Water Management Sub-zones** to which these other Values apply, and whether they are therefore relevant to a particular activity.



Table 17.2 General conditions^ for permitted activities^ and controlled activities^ involving the beds^ of rivers^ and lakes^

Value	Condition
Life-supporting Capacity conditions^ which apply to	(a) The activity must not adversely reduce the ability of the <i>water body</i> [^] or its <i>bed</i> [^] to convey flood flows, floating debris or sediment, except for a period of not more than 12 consecutive hours during construction.
all water bodies^ and their beds^	(b) There must be no <i>discharge</i> ^ of <i>contaminants</i> ^, other than sediment and other <i>contaminants</i> ^ inherent to the <i>water</i> ^ or <i>bed</i> ^, into the <i>river</i> ^ or <i>lake</i> ^ except where the <i>discharge</i> ^ is explicitly allowed by the activity description of a <i>rule</i> ^ in this chapter.
	(c) Any <i>discharge</i> [^] of sediment into <i>water</i> [^] directly caused by the activity, that causes the visual clarity standards in Schedule E to breached, must not be undertaken for more than 24 hours in total across 5 consecutive days. There must be no more than one activity per <i>river</i> [^] per <i>property*</i> in any 12 month period.
	(d) Any discharge [^] of sediment into water [^] under (c) must not, after reasonable mixing [*] , cause any conspicuous change in the colour of water [^] in the receiving water [^] or any change in horizontal visibility greater than the target set in the visual clarity % change column of Schedule E, more than 12 hours after completion of the activity.
	(e) Any materials used must be necessary for the activity and must not be toxic to aquatic ecosystems.
	(f) Any materials no longer required as part of the activity, including any temporary <i>structures</i> ^, must not be stored in or on the <i>bed</i> ^ of any <i>river</i> ^ or <i>lake</i> ^ and must be removed after completion of the activity.
	(g) Refuelling of machinery must not take place in any area where spills may enter surface water^.
	(h) The activity must be undertaken in a manner that provides for the safe passage of fish both upstream and downstream, including past any structure^.
	(i) Any diversion of <i>water</i> ^ required for works ancillary to a <i>structure</i> ^ must be temporary, must be within the <i>bed</i> ^ of the <i>river</i> ^, must not exceed 100 m in length, must not be between catchments, must not involve a <i>lake</i> ^, and the diversion channel must have sufficient capacity to carry the same flow as the original channel.
	(j) Upon completion of any channel bank works, the banks must be reinstated to a natural contour and revegetated.
	(k) Any straightening or channelling of a <i>river</i> ^ must not exceed a length equal to two times the <i>bed</i> ^ width of the <i>river</i> ^ in any 2 km length of <i>river</i> ^ in any 12 month period.
	(I) There must be no removal of instream woody debris less than 2 m³ in size unless this is required to reduce the risk of flooding or erosion.
Riparian	(m) For the purpose of minimising disturbance to nesting dotterels 1August to 31 December (inclusive), gravel extraction and bed^ disturbance on gravel beaches must
(applies to all reaches in	only take place:
water bodies^ and their	(i) within 7 days following a flood of the area of beach that is the subject of the activity, or
beds^ with a Schedule B Value of Sites of Significance - Riparian)	(ii) where the extraction or disturbance commenced at the same location prior to 1 August and has not been interrupted for more than 7 days.
Inanga Spawning	(n) The use of mobile machinery in or on the bed^ of a river^ or lake^ in a manner that disturbs the bed^ must not take place 1 February to 1 May (inclusive).
(applies to all reaches in water bodies^ and their beds^ with a Schedule B	



Value	Condition
Value of Inanga Spawning)	
Whitebait* Migration	(o) The use of mobile machinery in or on the bed^ of a river^ or lake^ in a manner that disturbs the bed^ of the active flowing channel must not take place
(applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Whitebait* Migration)	15 August to 30 November (inclusive).
Trout Spawning	(p) The use of mobile machinery in or on the bed^ of a river^ or lake^ in a manner that disturbs the bed^ of the active flowing channel must not take place 1 May to
(applies to all surface water management zones and their <i>beds</i> ^ with a Schedule B reach Value of Trout Spawning for this provision)	30 September (inclusive).
Trout Fishery	(q) Activities must not result in suspended sediment that causes the visual clarity standards in Schedule E to breached during Saturdays, Sundays and public holidays
(applies to all reaches in water bodies^ and their beds^ with a Schedule B Value of Trout Fishery)	1 December to 28 February (inclusive).
Contact Recreation	(r) Existing public access to or along a <i>river</i> ^ or <i>lake</i> ^ must not be rendered unsafe by the activity.
(applies to all reaches in water bodies^ and their	(s) Existing public access to or along a <i>river</i> ^ or <i>lake</i> ^ may be rendered unavailable where this is necessary for public safety or for the purpose of undertaking the activity, provided the public access is re-opened as soon as practicable.
beds^ with a Schedule B Value of Contact Recreation)	(t) Activities must not result in suspended sediment that causes the visual clarity standards in Schedule E to breached at reaches with a Schedule B Value of Contact Recreation, during Saturdays, Sundays and public holidays 1 December to 28 February (inclusive).
Existing Infrastructure [^]	(u) Excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ must not take place within 500 m upstream or downstream of any flow-recording site.1
	(v) Excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ of a <i>river</i> ^ must not take place within 20 m upstream or downstream of a high pressure gas transmission pipeline identified by a <i>district plan</i> ^ or <i>regional plan</i> ^ or by a marker² on the bank of the <i>river</i> ^.

Further information on the location of flow-recording sites can be obtained by either visiting the Regional Council's website (www.horizons.govt.nz) or by contacting the Regional Council's Hydrology Department.

High pressure transmission gas pipelines are normally indicated by white triangle marker posts or yellow pipeline warning signs. If you are unsure about a pipeline being present, please contact your Territorial Authority.



17.4 Rules - Special Rivers and Lakes

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-1 Damming of protected <i>rivers</i> ^	The erection or placement of a dam structure [^] pursuant to s13(1) RMA in or on the bed [^] of the following rivers [^] , and any ancillary damming of water [^] pursuant to s14(2) RMA:	Prohibited		
	(a) the Manganui o te Ao River and its tributaries, the Makatote River, the Mangaturuturu River, the Waimarino Stream and the Orautoha Stream			
	(b) the Rangitikei River itself and all its tributaries above the confluence of the Makahikatoa Stream, the Rangitikei River itself from the confluence of the Makahikatoa Stream to the Mangarere Bridge, the Whakaurekau River and all its tributaries and the Kawhatau River and all its tributaries, namely the Pouranaki River and the Mangakokeke Stream			
	 (c) the Hautapu River above its confluence with the Oraukura Stream and its tributaries, the Irirangi Stream and the Waiouru Stream (d) the main stem of the Makuri River and the 			
	(e) the Mangatainoka River and its tributaries, the Makakahi River (and its Bruce Stream tributary), the Mangaroa, Mangamaire, Makotukutuku and Mangaraupiu Streams, and an unnamed tributary entering the Mangatainoka River at map reference NZMS 260 T25:368-654			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(f) the main stem of the Whanganui River from its source at map reference NZMS 260 T19:383-286 to the boundary of the coastal marine area, and the main stem of the Whakapapa River and the main stems of its tributaries the Whakapapaiti and Whakapapanui Streams			
	(g) the main stem of the Manawatu River through the Manawatu Gorge from the Ballance Bridge to the confluence of the Pohangina and Manawatu Rivers			
	(h) the main stem of the Pohangina River from its source to its confluence with the Manawatu River near the Manawatu Gorge			
	(i) the main stem of the Oroua River from its source to its confluence with the Mangoira Stream at map reference NZMS 260 T22:578-378.			
17-2 Reclamation and drainage of regionally significant lakes^	Any reclamation or drainage of the <i>bed</i> ^ of the following <i>lakes</i> ^ pursuant to s13(1) RMA, excluding any existing (as at 31 May 2007) reclamations and drainage: (a) Lake Horowhenua	Non- complying		
lanco	(b) Lake Papaitonga			
	(c) Pukepuke Lagoon			
	and any ancillary:			
	(i) excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ pursuant to s13(1) RMA			
	(ii) damming or diversion of water^ pursuant to s14(2) RMA			
	(iii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	ss15(1) or 15(2A) RMA (iv) deposition of substances in or on the bed^n pursuant to s13(1).			
17-3 Structures^ and disturbances involving a reach of	Except as prohibited by Rule 17-1, any of the following activities pursuant to s13(1) RMA within: (a) a reach of river^ or its bed^ with a Schedule B Value of Natural State	Discretionary		
river* or its bed* with Schedule B Values of Natural State, Sites of Significance - Aquatic and Sites of Significance - Cultural	 (i) The erection, placement or extension of any structure[^] in, on, under or over the bed[^] except for lines, cables and ropeways that are suspended above the water[^] and do not require a support structure[^] in, on, over or under the bed[^] of the river[^] (ii) Any excavation, drilling, tunnelling or other disturbance of the bed[^] including gravel extraction 			
	and any ancillary:			
	(i) damming or diversion of water ^A pursuant to s14(2) RMA			
	(ii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(iii) deposition of substances in or on the bed^ pursuant to s13(1).			
	(b) Sites of Significance - Aquatic and Sites of Significance - Cultural			
	(i) The erection, placement or extension of any structure^ in, on, under or over the bed^, except for lines, cables and ropeways that are suspended above the water^ and do not require a support structure^ in, on, over or under the bed^			



Rule	Activity		Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
		and except for those activities regulated by Rule 17-14			
	(ii)	Any excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^, except for those activities regulated by Rules 17-5 and 17-14			
	and any	ancillary:			
	(i)	damming or diversion of water ^A pursuant to s14(2) RMA			
	(ii)	discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(iii)	deposition of substances in or on the bed^ pursuant to s13(1).			



17.5 Rules - Use, *Maintenance**, *Upgrade**, Removal and Demolition of Structures

Rule	Activity	Classification	Conditions /Standards/Terms	Control/Discretion Non-Notification
17-4 Use of structures^				
17-5 Maintenance* and upgrade* of structures^, and ancillary removal of bed^ material and plants	s14(2) RMA). (a) Structures^ - The maintenance* or upgrade* of a structure^ located in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA, and any ancillary: (i) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA (ii) damming or diversion of water^ pursuant to s14(2) RMA (iii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to	Permitted	 (a) The activity must comply with the general <i>conditions</i>^ listed in Section 17.3. (b) Any <i>discharge</i>^ of removed <i>bed</i>^ material or plants onto or into <i>land</i>^ must comply with the <i>conditions</i>^ of Rule 14-27, except for condition 14-27(c)(ii) and condition 14-27(b) with regard to <i>cleanfill material</i>*. 	



Rule	Activity	Classification	Conditions /Standards/Terms	Control/Discretion Non-Notification
	ss15(1) or 15(2A) RMA			
	(iv) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).			
	(b) Ancillary removal of bed^ material and plants - The removal or other disturbance of bed^ material pursuant to \$13(1) or the disturbance, removal, damage, or destruction of plants pursuant to \$13(2) RMA for the purpose of maintaining the functional integrity of a structure^ located in, on, under or over the bed^ of a river^ or lake^, including flushing accumulated bed^ material, and any ancillary: (i) damming or diversion of water^ pursuant to \$14(2) RMA			
	(ii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(iii) deposition of removed <i>bed</i> [^] material or plants in or on the <i>bed</i> [^] pursuant to s13(1) RMA			
	(iv) discharge^ of removed bed^ material or plants into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(v) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).			



Rule	Activity	Classification	Conditions /Standards/Terms	Control/Discretion Non-Notification
17-6 Removal and demolition of structures^	Except as regulated by Rule 17-15, the removal or demolition of a structure^ located in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA, and any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA (b) damming or diversion of water^ pursuant to s14(2) RMA (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	 (a) The activity must comply with the general conditions^ listed in Section 17.3. (b) The Regional Council must be informed in writing of the removal or demolition of any of the following structures^, at least 10 working days^ prior to the commencement of the removal or demolition: (i) access structures^ in or on the bed^ of a river^ or lake^, including bridges (other than temporary bridges for military training purposes), culverts and fords, where the catchment above the structure^ is greater than 50 ha (ii) structures^ occupying more than 5 m² of the bed^ of a river^ or lake^ (iii) any device for the purpose of monitoring or recording river^ levels or quality. (c) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. 	

Use, maintenance* and upgrade* - The rules above permit the ongoing use, maintenance* and upgrade* of structures once they are established (subject to conditions in the case of maintenance* and upgrade* activities). For structures requiring a consent to be established, this means that consents can be granted for a short duration. The rules are intended to avoid the need for resource users to hold long-term consents enabling the use or upkeep of structures once they are established.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.



17.6 Rules - Dams and Damming

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-7 New and existing small dams	All of the following activities, to the extent that they are relevant, for new and existing dam structures^ and associated damming within rivers^, within artificial watercourses* and on land^: (a) the erection, placement or extension of a dam in, on, under or over the bed^ of a river^ or within an artificial watercourse* or on land^ pursuant to ss9(2) or 13(1) RMA (b) the damming of water^ and any ancillary take, diversion or discharge^ of water^ that is part of the normal operation* of a dam, pursuant to ss14(2) and 15(1) RMA (c) any ancillary excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ pursuant to s13(1) RMA (d) any ancillary discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (e) any deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1). Advice Note: For the avoidance of doubt, any proposal to take water^ that is impounded behind a dam structure^ for any use other than that provided for in (b) must comply with the rules^ set out in Chapter 16 of this Plan.	Permitted	 (a) Any new dam must not be located in a <i>river</i>^ prohibited by Rule 17-1 or regulated under Rule 17-3. (b) For a dam in a <i>river</i>^, the catchment area above the dam must be no greater than 50 ha. (c) The maximum <i>water</i>^ depth must be less than 3 m (measured from the natural ground level at the upstream toe of the dam <i>structure</i>^). (d) A spillway must be constructed to enable the passage of a 200 year flood without the dam being overtopped. (e) <i>Water</i>^ impounded by the dam must not encroach onto adjoining <i>properties</i>*. (f) Dams in permanently flowing <i>rivers</i>^ and <i>artificial watercourses</i>* must maintain a residual flow out of the dam at all times including during filling of the dam. (g) For a dam located in a <i>river</i>^, the activity must comply with the general <i>conditions</i>^ listed in Section 17.3. (h) For a dam located in an <i>artificial watercourse</i>*, the activity must comply with general conditions (a) to (k) in Section 17.3 as if these <i>conditions</i>^ applied to an <i>artificial watercourse</i>*. (i) The activity must not take place in any <i>rare habitat</i>*, <i>threatened habitat</i>* or at-risk habitat*. 	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-8 Replacement consents for existing damming of water^	Any lawfully established damming of water^ within a river^, within an artificial watercourse* or on land^ for which replacement consents are sought and any ancillary: (a) take, diversion or discharge^ of water^ that is associated with the existence of the dam structure, pursuant to s14(2) or s15(1) or 15(2A) RMA, except as permitted by Rule 17-7 (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (c) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1). Advice Note: For the avoidance of doubt, any proposal to take water^ that is impounded behind a dam structure^ must comply with the rules^ set out in Chapter 16.	Controlled		Non-Notification Control is reserved over: (a) fish passage (b) water^ levels, flow regimes and minimum flows (c) measures to manage land^ stability and erosion (d) measures to assist with maintaining or achieving the Schedule E water^ quality targets for the Water Management Subzones* (e) measures to avoid, remedy, or mitigate any adverse effects^ on the Values of the water body^ at and below the point of discharge dam (f) measures to avoid, remedy or mitigate any adverse effects on the instream geomorphological components of natural character of the water body^ (g) management of dam failure (h) effects^ on rare habitats*, threatened habitats* and at-risk habitats* and Sites of Significance - Aquatic (i) measures to avoid, remedy, or mitigate adverse effects^ on tangata whenua^ values (j) duration of consent conditions^
				(k) review of consent <i>conditions</i> ^ (l) compliance monitoring



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
				Resource consent applications under this rule will be notified to those parties who are adversely affected in relation to the matters over which control is reserved. This clause does not preclude full public notification of the Regional Council's discretion in accordance with the RMA.

All new and existing small dams are authorised if they comply with the conditions of Rule 17-7. The erection or placement of new large dams requires consent under Rule 17-23. These large dams also require a building consent from the Regional Council under the Building Act 2004. The damming of water by existing large dams requires ongoing authorisation under s14(2) RMA. Rule 17-8 regulates the replacement of existing consents for the damming of water when those consents expire. The use, *maintenance** and *upgrade** of all dam structures, once they are established, are permitted by rules 17-4 (use) and 17-5 (*maintenance** and *upgrade**). The authorised use (Rule17-4) specifically excludes damming regulated under s14(2) RMA as that is covered by Rules 17-7 and 17-8. This means that the Regional Council has decided to accept the presence of existing dam structures (and has declined to give itself the discretion as to whether an existing dam structure should remain). However, for replacement consents for large dams, the Regional Council does retain control over the effects of damming water on fish passage, residual flow etc. in relation to the continued operation of the dam under Rule 14-29 (discharges) and Rules 16-5 and 16-6 (takes), and in relation to the existence of the dam itself as listed in Rule 17-8 (damming). These are the effects of concern to the Council.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.

The erection and placement of new dams and the damming of water within rare habitats*, threatened habitats* or at-risk habitats* is regulated under Rules 13-8 and 13-9.



17.7 Rules - Other Structures

Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
17-9 Lines, cables, pipelines and ropeways	The erection, placement, or extension of a line, cable, pipeline or ropeway in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA, and any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ or lake^ pursuant to s13(1) RMA (b) damming or diversion of water^ pursuant to s14(2) RMA (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	 (a) The activity and any ancillary support structures^ must either: (i) be wholly located over or under the bed^, or (ii) occupy no more than 20 m² of the bed^. (b) The activity must not take place in, on, under or over a reach of a river^ with a Schedule B Value of Natural State except for lines, cables and ropeways that are suspended over the water^ and do not require a support structure^ in, on, over or under the bed^ of the river^. (c) The activity must comply with the general conditions^ listed in Section 17.3. (d) The activity must not take place in any rare habitat* or threatened habitat*.
17-10 Culverts	The erection, placement, or extension of a culvert in, on, under or over the bed^ of a river^ or lake^ pursuant to s13(1) RMA and any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA (b) damming or diversion of water^ pursuant to s14(2) RMA (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	 (a) A new culvert must not be erected or placed in: (i) a river^ or lake^ regulated under Rule 17-3 (ii) a reach of a river^ with a Schedule B Value of Flood Control and Drainage, unless the work is undertaken by or on behalf of the Regional Council. (b) Where multiple culverts are placed side by side, the total cross-sectional area of the multiple culverts must not be less than that of a single culvert which complies with this rule^. (c) The culvert, associated fill and culvert placement must comply with the following dimensions: (i) a maximum culvert length of 20 m (ii) for circular culverts a culvert diameter of 0.3 m to 1.2 m (inclusive) (iii) for non-circular culverts a width and height of 0.3 m to



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
			1.2 m each (inclusive)
			(iv) a maximum fill height of 2 m above the top of the culvert unless a spillway is constructed to enable the passage of a 200 year flood without the fill being overtopped
			(v) a minimum culvert installation depth below the <i>bed</i> ^ of 20% of the width of the culvert.
			(d) The culvert must be positioned so that its alignment and gradient are the same as the <i>river</i> ^.
			(e) The culvert must be constructed to allow:
			(i) the flow from a 5% annual exceedance probability (20 year return period) flood event without overtopping, unless the overtopping flows to a specifically designed spillway
			(ii) the flow from a 2 year return period flood event without any flow impediment.
			(f) The culvert inlet and outlet must be protected against erosion.
			(g) All practicable steps must be used to minimise the release of sediment during construction.
			(h) The culvert must be constructed and maintained to avoid any aggradation or erosion of the bed^.
			(i) The culvert must be kept clear of accumulated debris.
			(j) The activity must comply with the general <i>conditions</i> ^ listed in Section 17.3.
			(k) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.
17-11	The erection, placement, or extension of any	Permitted	(a) A new structure^ must not be erected or placed in:
Other structures^	structure [^] that is not regulated by any other rule [^] in this chapter in, on, under or over the bed [^] of a		(i) a <i>river</i> ^ or <i>lake</i> ^ regulated under Rule 17-3
including bridges, fords and other access structures^	river^ or lake^ pursuant to s13(1) RMA and any ancillary:		(ii) a reach of a <i>river</i> ^ with a Schedule B Value of Flood Control and Drainage, unless the work is undertaken by or on behalf of the Regional Council.



Rule	Activity	Classification	Conditions/Standards/Terms Control/Discretion Non-Notification
	 (a) excavation, drilling, tunnelling or other disturbance of the <i>river</i>^ or <i>lake</i>^ bed pursuant to s13(1) RMA (b) damming or diversion of <i>water</i>^ pursuant to s14(2) RMA (c) <i>discharge</i>^ of <i>water</i>^ or sediment into <i>water</i>^ or onto or into <i>land</i>^ pursuant to ss15(1) or 15(2A) RMA (d) deposition of substances in or on the <i>bed</i>^ of the <i>river</i>^ or <i>lake</i>^ pursuant to s13(1). Advice Note: For the avoidance of doubt, this <i>rule</i>^ excludes the erection, reconstruction, placement, alteration, or extension of any dam in, on, under or over the <i>bed</i>^ of any <i>river</i>^ or <i>lake</i>^, within an <i>artificial watercourse</i>* or on <i>land</i>^. Dams are regulated by Rules 17-1, 17-3, 17-4, 17-5, 17-7 and 17-23. 		 (b) For bridges and other access structures^, except fords and temporary bridges for military training purposes that are removed within 2 weeks of their erection, located in, on, under or over the bed^ of a river^ or lake^, the catchment area above the structure^ must be no greater than 200 ha. (c) For all structures^ located in, on, under or over the bed^ of a river^ or lake^, the structure^ must occupy a bed^ area no greater than 20 m² except for: (i) whitebait* and maimai structures^ which must not exceed 5 m² (ii) fords which must occupy a bed^ area no greater than 40 m² (iii) temporary bridges for military training purposes that are removed within 2 weeks of their erection. (d) The structure^ must be constructed and maintained to avoid any aggradation or scouring of the bed^ that may inhibit fish passage. (e) The activity must comply with the general conditions^ listed in Section 17.3. (f) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.
17-12 Recording sites*	The erection, placement or extension of a device for the purposes of monitoring or recording <i>river</i> ^\ levels or quality in, on, under or over the <i>bed</i> ^\ of a <i>river</i> ^\ or <i>lake</i> ^\ pursuant to s13(1) RMA and any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the <i>river</i> ^\ or <i>lake</i> ^\ bed^\ pursuant to s13(1) RMA (b) damming or diversion of <i>water</i> ^\ pursuant to s14(2) RMA (c) <i>discharge</i> ^\ of <i>water</i> ^\ or sediment into <i>water</i> ^\	Permitted	 (a) The device must occupy a bed^h area no greater than 20 m². (b) The device must be constructed and maintained* to avoid any aggradation or scouring of the bed^h that may inhibit fish passage. (c) The device may divert up to 30 m³ of water^h per day for the purpose of measuring water^h quality or quantity, provided the water^h is returned to the water body^h within 50 m of the diversion point. (d) The activity must comply with the general conditions^h listed in Section 17.3. (e) The Regional Council must be informed in writing at least
	or onto or into land^ pursuant to ss15(1) or		(e) The Regional Council must be informed in writing at least 10 working days^ prior to the commencement of the activity



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
47.42	15(2A) RMA (d) deposition of substances in or on the <i>bed</i> ^ of the <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1).	Controlled	taking place. (f) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.	Control in recorded over
17-13 Bridges and culverts constructed to comply with Rules 14-1 to 14-4	The erection, placement or extension of a culvert or bridge in, on, under or over the bed^ of a river^ or lake^ pursuant to s13 RMA in order to comply with Rules 14-1 to 14-4 and any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the river^ or lake^ bed^ pursuant to s13(1) RMA (b) damming or diversion of water^ pursuant to s14(2) RMA (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Controlled	 (a) The proposed activity is required in order to comply with Rules 14-1 to 14-4 but is unable to meet one or more of the conditions[^] of Rules 17-5, 17-10 or 17-11. (b) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. 	Control is reserved over: (a) measures to avoid, remedy or mitigate the effects^ of any non-compliance with the conditions^ of Rules 17-5, 17-10 or 17-11 (b) duration of consent (c) review of consent conditions^ (d) compliance monitoring.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14. Activities within *rare habitats**, *threatened habitats** or *at-risk habitats** are regulated by Rules 13-8 and 13-9.



17.8 Rules - Activities Within Rivers with a Schedule B Value of Flood Control and Drainage

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
Rule 17-14 Activities undertaken by or on behalf of the Regional Council in rivers^ with a Schedule B Value of Flood Control and Drainage	The following activities within a reach of a <i>river</i> [^] with a Schedule B Value of Flood Control and Drainage, where they are undertaken by or on behalf of the Regional Council: (a) the erection, placement, or extension of any <i>structure</i> [^] in, on, under or over the <i>bed</i> [^] of a <i>river</i> [^] pursuant to 13(1) RMA (b) the excavation, drilling, tunnelling or other disturbance (including gravel extraction) of the <i>bed</i> [^] of a <i>river</i> [^] pursuant to s13(1) RMA (c) any damming or diversion of <i>water</i> [^] pursuant to s14(2) RMA (d) any <i>discharge</i> [^] or deposition of plants, removed <i>bed</i> [^] material, rock, shingle, earth, <i>cleanfill material</i> *, <i>water</i> ^ or sediment into <i>water</i> ^ or onto or into <i>land</i> ^ pursuant to ss13(1), 15(1) or 15(2A) RMA (e) the damage, destruction, disturbance or removal of plants or parts of plants pursuant to s13(2) RMA.	Permitted	 (a) The activity must be undertaken in accordance with the Environmental Code of Practice for River Works (Horizons Regional Council, June 2010). (b) The activity must not involve: (i) an activity prohibited under Rule 17-1 (ii) an activity regulated under Rule 17-3, except to the extent that the activities may be carried out in specified Sites of Significance - Aquatic and Sites of Significance - Cultural in accordance with (a). 	
17-15 Activities affecting Schedule B Value of Flood Control and Drainage	Except as regulated by Rule 17-5, the following activities pursuant to ss 9(2) and 13(1) RMA in, on or under an artificial watercourse* or a reach of a river^ with a Schedule B Value of Flood Control and Drainage or adjacent land^ as defined in (j) to (m): (a) the planting of a tree or shrub (b) the erection, placement or extension of any building or other structure^ (including accessways) (c) the erection, placement or extension of a	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	fence perpendicular to a river^ or artificial watercourse*			
	(d) the erection, placement or extension of a fence greater than 1.2 m high parallel to a river^ or artificial watercourse*			
	(e) the deposition of any rock, shingle, earth, debris or other <i>cleanfill material*</i>			
	(f) any excavation, drilling, tunnelling or other disturbance likely to undermine the functional integrity of a stopbank or river^ control structure^			
	(g) any land disturbance* that impedes access required for maintenance* of a river^ or drainage scheme			
	(h) the upgrade*, reconstruction, alteration, extension, removal or demolition of any structure^ that is maintained by the Regional Council for the purposes of flood control or erosion protection or drainage			
	and any ancillary:			
	 excavation, drilling, tunnelling or other disturbance of the river[^] or lake[^] bed[^] pursuant to s13(1) RMA 			
	(ii) damming or diversion of water ^A pursuant to s14(2) RMA			
	(iii) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA			
	(iv) deposition of substances in or on the bed[^] of the river[^] or lake[^] pursuant to \$13(1)			
	(v) land disturbance* pursuant to s9(2) RMA			
	where the activities listed in (a) to (h) are			



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	undertaken in any of the following areas:			
	(i) within the bed^ of a river^ or within an artificial watercourse*			
	(j) on a stopbank			
	(k) on any strip of land^ between an artificial watercourse* or bed^ of a river^ and 8 m inland of the landward toe of a stopbank			
	(I) for areas without stopbanks, anywhere within 10 m of an <i>artificial watercourse</i> * or the <i>bed</i> ^ of a <i>river</i> ^			
	(I) Only land^ use activities described under (f) and (g) are controlled under this rule^ on land^ described under (j) and (k) on and adjacent to the Manawatu River secondary stopbank located between Ruahine Street at Fitzroy Bend and Ruamahanga Crescent. The other listed land^ use activities are not controlled in that area.			
	This <i>rule</i> [^] does not apply to activities undertaken by or on behalf of the Regional Council.			

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.



17.9 Rules - Gravel Extraction, Bed Disturbances and Plants

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
17-16 Small-scale gravel extraction	The excavation or other disturbance of the bed^ of a river^ or lake^ for the purpose of extracting gravel and other bed^ material, pursuant to s13(1) RMA and any ancillary: (a) damming or diversion of water^ pursuant to s14(2) RMA (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (c) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Permitted	 (a) The activity must not take place in a <i>river</i>[^] or <i>lake</i>[^] regulated under Rule 17-3. (b) The amount of gravel and <i>bed</i>[^] material extracted must not exceed 50 m³ in any 12 month period. (c) The gravel or other material must only be extracted from an area of <i>river</i>[^] <i>bed</i>[^] that is not covered by flowing <i>water</i>[^] at the time of extraction. (d) The activity must comply with the general <i>conditions</i>[^] listed in Section 17.3. (e) The activity must not take place in any <i>rare habitat</i>*, <i>threatened habitat</i>* or <i>at-risk habitat</i>*. 	
17-17 Other gravel extraction	Except as regulated by Rules 17-3 and 17-16, the excavation or other disturbance of the bed^ of a river^ or lake^ for the purpose of extracting gravel and other bed^ material, pursuant to s13(1) RMA and including any ancillary: (a) damming or diversion of water^ pursuant to s14(2) RMA (b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA (c) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1) (d) discharges^ to air pursuant to s15(2A) RMA.	Discretionary	(a) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.	
17-18 Other minor bed^ disturbances	Except as regulated by other <i>rules</i> ^ in this chapter, the excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ of a <i>river</i> ^ pursuant to s13(1) RMA and any ancillary: (a) damming or diversion of <i>water</i> ^ pursuant to s14(2) RMA	Permitted	 (a) The activity must not take place in a <i>river</i>[^] regulated under Rule 17-3. (b) The activity must comply with the general <i>conditions</i>[^] listed in Section 17.3. (c) The activity must not take place in any <i>rare habitat</i>[*], 	



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	(b) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A) RMA		threatened habitat* or at-risk habitat*.	
	(c) deposition of substances in or on the <i>bed</i> ^ of the <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1).			
	Advice Note:			
	For the avoidance of doubt, this <i>rule</i> ^ does not include gravel extraction.			
17-19 Plants	Except as regulated by other <i>rules</i> ^ in this chapter, the introduction, planting, removal or destruction of a	Permitted	(a) A pest plant, as listed in the Regional Pest Plant Management Strategy, must not be introduced or planted.	
	plant in or on the <i>bed</i> ^ of a <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1) or s13(2) RMA, and any ancillary:		(b) The activity must not involve the planting of a tree or shrub in a reach of a <i>river</i> ^ with a Schedule B Value of Flood Control	
	(a) excavation, drilling, tunnelling or other disturbance of the bed^ of a river^ or lake^		and Drainage, as regulated by Rule 17-15.	
	pursuant to s13(1) RMA		(c) The activity must not involve the removal or destruction of plants in Lake Papaitonga, Pukepuke Lagoon or Lake	
	(b) damming or diversion of <i>water</i> ^ pursuant to s14(2) RMA		Horowhenua except for a radius of 500 m from the Lake Horowhenua outlet weir (which is permitted by this <i>rule</i> ^).	
	(c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to ss15(1) or 15(2A)		(d) The activity must comply with the general <i>conditions</i> ^ listed in Section 17.3.	
	RMA (d) deposition of substances in or on the <i>bed</i> [^] of the <i>river</i> ^ or <i>lake</i> ^ pursuant to s13(1).		(e) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*.	

Gravel extraction that cannot meet the conditions set out in Rule 17-17 is a discretionary activity under Rule 17-23.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.

Activities undertaken in rare habitats*, threatened habitats* or at-risk habitats* are regulated under Rules 13-8 and 13-9.



17.10 Rules - Activities in *Artificial Watercourses** and Non-natural Lakes



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	artificial watercourse* pursuant to s14(2) RMA. That activity is addressed by the rules^ in Section 17.6.			
17-21 Bed^ disturbance of non-natural lakes^ to maintain their function	Except as permitted by other <i>rules</i> ^ in this chapter, the disturbance or removal of <i>bed</i> ^ material or plants for the purpose of maintaining the functional integrity of a non-natural <i>lake</i> ^, pursuant to ss13(1) or 13(2) RMA and any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the <i>bed</i> ^ pursuant to s13(1) RMA (b) damming or diversion of <i>water</i> ^ pursuant to s14(2) RMA (c) <i>discharge</i> ^ of <i>water</i> ^ or sediment into <i>water</i> ^ or onto or into <i>land</i> ^ pursuant to ss15(1) or 15(2A) RMA (d) deposition of removed <i>bed</i> ^ material or plants in or on the <i>bed</i> ^ pursuant to s13(1) RMA (e) <i>discharge</i> ^ of removed <i>bed</i> ^ material or plants onto or into <i>land</i> ^ or into <i>water</i> ^ pursuant to ss15(1) or 15(2A) RMA.	Controlled	 (a) The activity must comply with the general conditions (a) to (k) and (u), (v) and (q) in Section 17.3. (b) Any discharge^ of removed bed^ material or plants onto or into land^ must comply with the conditions^ of Rule 14-27 except condition 14-27(c)(ii). (c) The activity must not take place in any rare habitat*, threatened habitat* or at-risk habitat*. 	Control is reserved over: (a) effects^ on water^ quality (b) effects^ on inflow rates of sediment (c) effects^ on aquatic habitats (d) the nature, scale, timing and duration of the activity undertaken (e) duration of consent (f) review of consent conditions^ (g) compliance monitoring.

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14. Activities within *rare habitats**, *threatened habitats** or *at-risk habitats** are regulated by Rules 13-8 and 13-9.



17.11 Rules - Activities that do not Comply with Permitted Activity, Controlled Activity or Restricted Discretionary Activity Rules and all other s13(1) RMA Activities Not Covered by this Chapter

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
17-22 Activities that do not comply with permitted activity^ rule^ general conditions^	Any activity that does not comply with Rule 17-5 condition (a), Rule 17-6 condition (a), Rule 17-7 condition (g), Rule 17-9 condition (c), Rule 17-10 condition (j), Rule 17-11 condition (e), Rule 17-12 condition (d), Rule 17-16 condition (d), Rule 17-18 condition (b), Rule 17-19 condition (d), including any ancillary: (a) excavation, drilling tunnelling or other disturbance of the bed^ pursuant to s13(1) RMA (b) damming or diversion of water^ pursuant to s14(2) RMA (c) discharge^ of water^ or sediment into water^ or onto or into land^ pursuant to s15(1) or 15(2A) RMA (d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).	Restricted Discretionary	The activity must comply with all other conditions, standards and terms of the applicable permitted activity^rule^.	Discretion is restricted to: (a) measures to avoid, remedy or mitigate the effects^ of the activity in relation to any non-compliance with the matters listed in Section 17.3 (b) duration of consent (c) review of consent conditions^ (d) compliance monitoring
Activities that do not comply with permitted activity^, controlled activity^ or restricted discretionary activity^ rules^ and all other s13(1) RMA activities not covered by this chapter	Any activity that does not comply with one or more conditions^, standards or terms of a permitted activity^, controlled activity^ or restricted discretionary activity^ rule^ in this chapter, but which is not expressly classified as a discretionary activity^, non-complying activity^ or prohibited activity^ or is a s13(1) RMA activity not covered by this chapter, including any ancillary: (a) excavation, drilling, tunnelling or other disturbance of the bed^ pursuant to s13(1)	Discretionary		



Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion Non-Notification
	RMA			
	(b) damming or diversion of water ^A pursuant to s14(2) RMA			
	(c) discharge[^] of water[^] or sediment into water[^] or onto or into land[^] pursuant to ss15(1) or 15(2A) RMA			
	(d) deposition of substances in or on the bed^ of the river^ or lake^ pursuant to s13(1).			

The discharge of contaminants into water or into or onto land, other than contaminants specifically identified in the rules, is regulated by the rules in Chapter 14.



