

2.29 - Stock access - section 32 evaluation for the Proposed Auckland Unitary Plan

1	OVERVIEW AND PURPOSE	2
1.1	Subject Matter of this Section.....	2
1.2	Resource Management Issue to be Addressed	2
1.3	Significance of this Subject	3
1.4	Auckland Plan	3
1.5	Current Objectives, Policies, Rules and Methods	4
1.6	Information and Analysis	4
1.7	Consultation Undertaken.....	5
1.8	Decision-Making.....	5
1.9	Proposed Provisions	6
1.10	Reference to other evaluations.....	6
2	OBJECTIVES, POLICIES AND RULES	6
2.1	Objectives.....	6
3	ALTERNATIVES	11
4	CONCLUSION	15
5	RECORD OF DEVELOPMENT OF PROVISIONS	15
5.1	Information and Analysis	15
5.2	Consultation Undertaken.....	15
5.3	Decision-Making.....	17

1 Overview and Purpose

It has been documented both in New Zealand (MfE, 1997), and overseas, that streams draining catchments in areas of pastoral agriculture generally have poor water quality. There is evidence that a large proportion of the contamination of rural streams by sediment, nutrients and faecal matter is derived from livestock access to the riparian zone and the stream channel itself (ARC, 2001). Unrestricted livestock access to streams and riparian zones appears to be widespread throughout the rural areas of New Zealand (MfE, 1997) and the Auckland region. The same can also be said of coastal marine areas which suffer damaged plants, increased water turbidity and decreased water quality due to stock access.

In response to this issue, an extensive literature review followed by internal and external consultation was carried out in an effort to identify a number of policy options for the exclusion of livestock from freshwater bodies, and then to determine a recommended policy option for the Proposed Auckland Unitary Plan (the Unitary Plan). This recommended option was further supported by the Unitary Plan Political Working Party (PWP) in July 2012 and then again via an Auckland Plan Committee (APC) workshop in July 2013.

Further to this, the March draft of the Unitary Plan permitted stock access to the CMA, with the exception of legacy coastal protection one areas from the Regional Plan: Coastal. Subsequent research and analysis of March draft feedback has since resulted in a change to this approach (detailed below in section 1.9). The proposed Unitary Plan now prohibits stock from the CMA. This approach was accepted by the Auckland Plan Committee 5th July 2013.

1.1 Subject Matter of this Section

Water quality in many parts of Auckland is declining across a number of indicators and is a key concern. The degradation of water quality is particularly concerning in lowland rivers, streams, lakes, and groundwater and in the marine receiving environments of degraded catchments. Declining water quality has costs for our economic growth and social well-being such as intangible recreational values like fishing and swimming.

1.2 Resource Management Issue to be Addressed

The exclusion of livestock from various freshwater bodies and the CMA will have a beneficial effect on water quality. Sections 6, 7 and 8 of the RMA establish issues or values that are required to be given a degree of priority in decision-making and in the application of the RMA's purpose. Priorities of particular relevance to freshwater are:

- The preservation of the natural character of wetlands, rivers and lakes and their protection from inappropriate subdivision use and development (s6(a));
- The protection of significant habitats of indigenous fauna (s6(c));
- The maintenance and enhancement of public access to and along lakes and rivers (s6(d));
- The relation of Māori and their culture and traditions with their ancestral water (s6(e));
- The protection of recognised customary activities (s6(g));
- The protection of the habitat of trout and salmon (s7(h));
- The principles of the Treaty of Waitangi (s8).

In addition the NZCPS (2010) has a number of policies relating to freshwater in the coastal environment, these are specifically:

Policy 21 'Enhancement of water quality' sets out methods by which priority is to be given to improving water quality where it has deteriorated such that it is having significant adverse effects on ecosystems, natural habitats, or water based recreational activities, or is restricting existing uses such as aquaculture, shellfish gathering and cultural activities. This includes 21(d):

requiring that stock are excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment, within a prescribed time frame;

Policy 22 'Sedimentation' directs controlling activities in order to reduce sedimentation within the coastal environment.

Policy 23 'Discharge of contaminants' sets out requirements in relation to the management of discharges within the coastal environment. These include general matters to which decision-makers must have particular regard, as well as specific directions in relation to discharges of human sewage and stormwater to the CMA.

1.3 Significance of this Subject

The decline in water quality is closely linked to land use intensification and the increasing level of water use. In particular, the level of discharges to water from diffuse sources has greatly increased in the last 20 years. Levels of nutrients (e.g. nitrogen and phosphorus) have increased in rivers over the past two decades, reflecting the impact of pollution from urban stormwater, animal effluent, and fertiliser runoff.

In Auckland there are around 10,500km of permanent streams and around 2800 km of intermittent streams in rural pastoral land. It is estimated that only 25 per cent of permanent streams have been effectively fenced on both sides to exclude livestock. The Auckland region is also two thirds rural and has around 1600km of coastline.

A livestock exclusion policy response that implements the Auckland Plan directives and moves Auckland beyond the status quo (Clean Streams Accord for dairy farms and voluntary riparian fencing on all other farms) is required so that existing water quality degradation in rural areas and coastal marine areas is addressed. However, the significant costs of livestock fencing, riparian planting and taking farmland out of production for riparian buffer strips requires a balanced response that incorporates a reasonable timeframe for compliance.

1.4 Auckland Plan

A livestock exclusion policy response that implements the Auckland Plan directives and moves Auckland beyond the status quo (Clean Streams Accord for dairy farms and voluntary riparian fencing on all other farms) is required so that existing water quality degradation in rural areas and coastal marine area waters is addressed. However, the significant costs of livestock fencing, riparian planting and taking farmland out of production for riparian buffer strips requires a balanced response that incorporates a reasonable timeframe for compliance.

The Auckland Plan has four directives closely aligned with the management of water quality.

Directive 5.4 Protect ecological areas, ecosystems and areas of significant indigenous biodiversity from inappropriate use and development, and continue to restore and improve ecosystems and indigenous biodiversity.

Directive 5.7 Set appropriate limits on pollutants to achieve water quality improvements.

Directive 5.9 protect nationally and regionally significant freshwater from land based development and enhance less significant and degraded areas.

Directive 5.11 Protect coastal areas, particularly those with high values, special natural character or significant marine habitats and recreational importance, from the impacts of land based development.

1.5 Current Objectives, Policies, Rules and Methods

The Proposed Regional Plan: Air, Land and Water (“PRP: ALW”) does not include any rules in relation to the exclusion of livestock access to water bodies. However, it should be noted that there is a stated intention in the PRP: ALW (Policy 5.4.49) to notify a Plan Variation/Change to the stock access part of Chapter 5 within two years of the notification of the ARC Hearing Committee decisions. These Hearings were concluded in 2004. This intention is stated in the associated explanation to Policy 5.4.49, and goes further by saying that “... an appropriate combination of advocacy (including financial assistance for voluntary initiatives), education (including demonstration facilities) and regulation (including rules)...” is anticipated. Policy 5.4.50 acknowledges that adverse effects from stock crossing points and grazing adjacent to any lake or permanent river or stream should be avoided.

Stock access is acknowledged as an issue that “...can cause a range of significant adverse effects on water quality and instream and riparian habitat values.” (Issues 5.2.30 and 5.2.31). These issues have two associated objectives (Objectives 5.3.17 and 5.3.18). Objective 5.3.17 notes that – in relation to stock access – “To maintain the instream and riparian habitat values and water quality of lakes, and permanent rivers and streams by a) protecting existing areas of high value, and b) enhancing degraded areas”. Objective 5.3.18 relates to avoiding, remedying or mitigating the adverse effects of stock access to stream beds and margins. Associated methods related to stock access (Methods 5.6.31, 5.6.32, 5.6.33 and 5.6.34) state the use of education, advocacy, financial incentives and the establishment and operation of demonstration sites to prove the effectiveness of a variety of practices/techniques to protect or enhance vulnerable areas. Reference is also made to the use of District Plan provisions to protect riparian zones etc via the subdivision approval process.

There is a rule prohibiting grazing stock in CPA 1 areas within the Auckland Regional Plan: Coastal. There were some ad-hoc legacy district plan requirements for stream fencing (e.g. Waitakere District Plan).

As mentioned previously, the majority of stream fencing and riparian planting was largely voluntary and run under the Clean Streams Accord.

1.6 Information and Analysis

There is extensive national and international literature relating to the subject of the impacts of livestock on water bodies. More specifically, Technical Publication 270 – “A survey of sediment sources on streams in the Mahurangi catchment” (ARC, 2004), concludes that a third of the sediment sources are entirely natural, an eighth are created by human modification to channel beds or banks, and over half are induced or exacerbated by farm livestock.

In addition, many water quality results from the former Auckland Regional Council consistently emphasise the importance of land cover type in the surrounding catchment on both water quality and ecological quality of the river. The findings indicate that the life supporting capacity of urban and rural rivers is impaired. Also Technical Report 2009/002 “Survey of the riparian characteristics of the Auckland region” (ARC, 2009) indicates that an absence of an effective fence was the most common situation identified by this survey, with 46.9% of stream length, or 51% of bank length unfenced.

Additional literature reviews on the impacts of sediment of both the freshwater and marine environments have also been completed by staff from the Research, investigation and monitoring unit (RIMU) of the Auckland Council. A review of what other regional councils have done in relation to livestock exclusions via their RMA plans was also carried out.

A recently completed map of degraded water areas in Auckland also outlines the extent of the stock access issue for coastal areas. This map shows that large areas of harbours and estuaries across the region which adjoin rural land have degraded water quality based on benthic health, sediment chemistry and water quality information. This degradation is partly attributed to stock access to the CMA in these areas.

Please see appendices for full literature review.

1.7 Consultation Undertaken

Extensive internal and external consultation over a two year period was undertaken to determine the options and then to develop a recommended option. Internal consultation consisted of a number of workshops with Auckland Council staff and then with staff from three other regional councils. External consultation involved work-shopping various policy options with members from the Rural Advisory Panel (RAP), various farmers themselves and then consulting altogether with RAP members and members from various Non-Governmental Organisations (NGO) groups. Policy direction was also attained from Auckland Council politicians.

35 pieces of feedback relating to livestock access were received on the March Draft of the Unitary Plan, this is approximately 0.17% of the total feedback received. Further to the above, subsequent research and analysis of feedback from the March draft of the Unitary Plan lead to the development of a prohibited activity status for stock access in the CMA. The March draft allowed stock access to the CMA as a permitted activity. This is seen as an oversight and following from feedback by key stakeholders such as the Department of Conservation and Forest and Bird, the proposed provisions were drafted. These are in line with those of the Northland Regional Council and were accepted by the Auckland Plan Committee on the 5th July 2013.

Please see Section 5.2 for full consultation details.

1.8 Decision-Making

The extensive decision-making process has taken over two years to complete. Various Auckland Council staff workshops began in August 2012, and developed a number of policy options. These options were further developed with the help of Rural Advisory Panel (RAP) members throughout the remainder of 2011. A consensus as to a particular policy direction was gained from a meeting with eight pastoral farmers in April 2012, and this direction (in relation to livestock exclusion and freshwater bodies) received political support via the Political Working Party (PWP) on 26 July 2012, and an Auckland Plan Committee (APC) workshop on 5 July 2013.

Following feedback on the March draft of the Unitary Plan, specifically from stakeholders such as the Department of Conservation and Forest and Bird, provisions to prohibit stock accessing the CMA were introduced into the Unitary Plan. These were accepted by the Auckland Plan Committee on the 5th July 2013.

Please see full details in Section 5.3.

1.9 Proposed Provisions

The topic of livestock exclusion is dealt with in the 'Lakes, rivers, streams and wetland management' and the coastal zone chapters.

Within the 'Lake, rivers, streams and wetland management' chapter, an overarching objective seeks that discharges from rural production activities are managed to protect land and water resources. This relates to stock access to water bodies as a result of farming. A specific policy related to stock access seeks to '*Avoid more than minor adverse effects on water bodies and coastal water from grazing livestock.*'

As a method of improving water quality, rules within the 'Lakes, rivers, streams and wetland management' chapter sets out that on intensively grazed production land, livestock must be excluded from the full extent of any lakes, rivers, streams and wetlands, excluding intermittent streams, by five years post notification of the Unitary Plan. Intermittent streams must exclude stock by ten year post notification of the Unitary Plan. This a permitted activity which if not met turns to a discretionary activity. The exclusion of livestock must be effective and can include fencing, dense vegetation and natural vegetation.

Within the coastal zone rules, provision to prohibit stock from the CMA (across the majority of zones shown in the table below) is included in the proposed Unitary Plan. A mix of between five and seven years from the date of notification of the Unitary Plan is provided for landowners to comply. The exclusion of livestock must be effective and can include a permanent fence of temporary hot-wire, dense vegetation or natural barriers.

1.10 Reference to other evaluations

This section 32 report should be read in conjunction with the following evaluations:

- 2.11 Biodiversity
- 2.19 Landscapes
- 2.25 Freshwater
- 2.32 Mangroves
- 2.35 Rural subdivision

2 Objectives, Policies and Rules

2.1 Objectives

The following objectives are proposed:-

Objective 2 of the RPS – Freshwater and Geothermal Water - The quality of freshwater and the natural and cultural values of freshwater systems are maintained and restored and enhanced where they have been degraded below levels necessary to safeguard life supporting capacity and meet community values.

Objective 1 of the Regional and District objectives and policies - Rural production discharges – Discharges from rural production activities are managed to protect land and water resources.

Appropriateness of the objectives

Relevance

The purpose of the Act, as set out in s. 5, is to 'promote the sustainable management of natural and physical resources...

(b) safeguarding the life-supporting capacity of air, water, soil and ecosystems...'

Water is a natural resource that needs to be sustainably managed to ensure that the social, economic and cultural well-being of communities is maintained/enhanced. The RPS

objective is in line with the purpose of the Act as it seeks to maintain, and where appropriate restore or enhance, the quality of freshwater in Auckland. Objective 3.1.3.13 specifically links stock access to water quality as a secondary effect of rural production activities which needs to be managed.

Section 15 of the Act also outlines a resource management plan's role in the management of discharges of contaminants into the environment, which includes discharges from pastoral farming into water bodies. The above objectives aim to manage these discharges for the purpose of maintaining water quality for natural and cultural values.

Usefulness

The RPS objective will be useful for setting the general direction of maintaining water quality in the Unitary Plan and will help guide objectives, policies and rules in lower parts of the plan to enable water quality increases to occur.

Objective 3.1.3.13 is useful as it provides a specific function through which the overarching RPS objective detailed above can be implemented, that rural production activities i.e. stock access needs to be managed in order to achieve gains in water quality.

Inappropriate farming practices, including the inappropriate discharges of contaminants, negatively impacts on water quality in Auckland. Degraded water quality has economic, social and cultural repercussions for Auckland. Setting an objective that outlines inappropriate farming practices as a reason for poor water quality means that council will have the ability to contain discharges from this source in the future, in conjunction with the associated rules for purposes directly related to the RMA.

Achievability

Section 30 of the RMA sets out the functions of a regional council. Auckland Council must use s. 30 functions to give effect to the act. Section 30 states that:

'(c) the control of the use of land for the purpose of – ...

(ii) the maintenance and enhancement of the quality of water in water bodies and coastal water:

(iii) the maintenance of the quality of water in water bodies and coastal water...

(f) the control of discharges of contaminants into or into land, air, or water and discharges of water into water'

Section 15 of the RMA also sets out the Unitary Plan's role in the management of discharges of contaminants into the environment, which includes discharges from pastoral farming into water bodies.

These sections of the RMA set out council's mandate for ensuring freshwater quality is maintained and provides a basis for including stock access provisions in the Unitary Plan. The achievability of these objectives hinges on the above outlined sections of the RMA as well as the policy approach for stock access in the Unitary Plan. The policy approach for freshwater bodies stipulates that a five-year period from notification is given to land owners to ensure permanent streams are fenced, and a 10-year timeframe to ensure that all intermittent streams are fenced. This approach has already been accepted by the Rural Advisory Panel (RAP) so significant backlash from the community is not expected. Therefore it is expected that these objectives are achievable as community engagement to date has already been policed and the approach is well placed within the purpose of the RMA.

Feedback from stakeholders such as the Department of Conservation and Forest and Bird also submitted that stock should be prohibited from the CMA. This has been incorporated into the Unitary Plan and is seen to be achievable as this approach has already been taken by other Council's around the country without significant hassle e.g. Northland Regional

Council. The proposed approach also gives a five to seven year grace period for landowners to comply.

Reasonableness

These objectives are reasonable as set out above, council is mandated by the RMA to ensure that freshwater quality is maintained, or restored and enhanced where appropriate, in Auckland. The quality of water, fresh and coastal, is an important natural resource for Auckland and its protection and maintenance is an expectation of Aucklanders for economic, social and cultural well beings. The effects of stock access on freshwater quality have also been known for a long time so this method of maintaining and improving water quality is not likely to cause concern amongst landowners.

2.1.1 Policies

Policy 11 of the Regional and District objectives and policies – Lakes, rivers, streams and wetland management section – Avoid more than minor adverse effects on water bodies and coastal water from grazing livestock.

This policy gives effect to the objectives detailed above as it sets the parameters for how water quality can be protected through excluding stock from waterways.

This policy is seen to be reasonable as key stakeholder engagement conducted with the RAP confirmed prior to the release of the Unitary Plan that the approach was acceptable. The approach combines a mix of education, advocacy and regulation between council, landowners and stakeholders such as RAP and Fonterra.

The rules within the Unitary Plan, as set out in the preferred approach below, are based largely on the already widely accepted Clean Streams Accord by Fonterra. This means the approach is already being undertaken by landowners across the region. The rule within the Unitary Plan does, however, go further than what is stipulated in the Clean Streams Accord but ample time is given to undertake this work (up to 10 years).

Council also has good data on water quality so monitoring will be able to occur to see the impacts on this policy approach.

2.1.2 Rules and other methods

The proposed provisions are summarised in 1.9 above.

Excerpt from Lakes, rivers, streams and wetland management rules.

<i>Livestock grazing adjacent to lakes, rivers, streams and wetlands on intensively grazed production land</i>	
<i>Livestock grazing adjacent to lakes, rivers, streams and wetlands on intensively grazed production land</i>	<i>P</i>
<i>Livestock grazing adjacent to lakes, rivers, streams and wetlands on intensively grazed production land that does not meet Permitted Activity Controls in 4.2.3.13.2.1</i>	<i>D</i>

Permitted activity controls

2.1.7 Livestock access to lakes, rivers, streams and wetlands

1. On intensively grazed production land, livestock must be excluded from:

- a. the full extent of any lakes, rivers, streams and wetlands excluding any intermittent stream reaches by (date five years' post-notification)
- b. the full extent of any river or stream by (date 10 years' post-notification).

2. Livestock exclusion must be effective and exclusion methods can include fencing, dense vegetation and natural barriers.

Note

Rules and controls relating to livestock access to the CMA is located in the Coastal Zone Rules, section 4.3.6.1.

This rule is seen to be achievable as key stakeholder engagement conducted with the RAP confirmed prior to the release of the Unitary Plan that the approach was acceptable. The approach combines a mix of education, advocacy and regulation between council, landowners and stakeholders such as RAP and Fonterra. This is efficient and effective as it builds on the already well-accepted Clean Streams Accord through a regulatory approach that is on a manageable time scale for landowners.

The rules within the Unitary Plan, as set out in the preferred approach below, are based largely on the already widely accepted Clean Streams Accord by Fonterra. This means the approach is already being undertaken by landowners across the region. The rule within the Unitary Plan does, however, go further than what is stipulated in the Clean Streams Accord but ample time is given to undertake this work (up to 10 years)

Enacting a more regulatory approach in the Unitary Plan is however important and required because despite the significant uptake of advocacy and voluntary practises so far across Auckland, Council will be in the position to enforce the rules if needed. This means the minority of landowners who do not comply with the Unitary Plan, and ultimately the purpose of the Act, can be held accountable. It also means that water quality can improve quickly over a relatively short period of time.

Excerpt from Coastal zone rules.

1.4 Disturbance and extraction (s. 12(1) and 12(2(b)) RMA)

<i>Activity table – General Coastal Marine zone, SEA-M, ONC, HNC, ONL, ONF and SHHP overlays</i>						
	<i>General Coastal Marine Zone</i>	<i>Sea-M1, ONC</i>	<i>SEA-M2, HNC, ONL</i>	<i>ONF – Type A1 and A</i>	<i>ONF – Type V1, V2, B, C, D, E, F</i>	<i>SHHP</i>
<i>Livestock access to the CMA not otherwise provided for</i>	<i>P</i>	<i>Pr</i>	<i>P</i>	<i>P</i>	<i>Pr</i>	<i>Pr</i>
<i>Livestock access to the CMA (other than for droving and horse riding) after (date seven years post notification for the General Coastal Marine zone and five years post-notification for SEA-M2 and ONF-A1 and A)</i>	<i>Pr</i>	<i>Pr</i>	<i>Pr</i>	<i>Pr</i>	<i>Pr</i>	<i>Pr</i>

2.8 Livestock access to the CMA

1. Any visible disturbance to the substrate of the CMA must be remedied or restored within 48 hours of the completion of the works in ONC, ONF and SEA-M1 overlay areas and within seven days in other areas of the CMA.

2. Any livestock access to the CMA for droving of stock or horse riding must ensure:

a. the droving does not occur in estuarine areas or areas of salt marsh or mangroves and no grazing of intertidal vegetation shall be allowed to occur

- b. the stock must be moved along at all times and not left unattended*
- c. horses must be kept under control at all times*
- d. horses must not graze on intertidal vegetation*
- e. horses must not be ridden or taken into bird breeding areas.*

3. Any livestock exclusion measures must be effective and can include a permanent fence or temporary hot-wire, dense vegetation or natural barriers that prevent stock gaining access to the CMA.

Note: Controls on livestock access to lakes, rivers, streams and wetlands are also provided in 4.2.3.13.16 Rural production activities.

This rule is achievable as it is largely already an accepted method of improving water quality and is likely to be an expected policy approach by communities across Auckland. The permitted activity standard within the March draft of the Unitary Plan was contested by key stakeholders such as Forest and Bird and as such, the above prohibited activity status has been included. The five to seven year grace period for compliance is also seen to be achievable and reasonable as anecdotal evidence from Northland Regional Council suggest that the five year compliance period used for their equivalent stock access rules was well used and only a small amount of landowners were resistant to the rules.

Enacting a more regulatory approach in the Unitary Plan is important to enable water quality to improve in the region. The rules also mean that if necessary, Council can take enforcement action against those who do not comply with the rules. This will ensure the rules are applied fairly across the region and that environmental improvements by landowners who make an effort to comply are not tarnished by those who don't.

2.1.3 Costs and Benefits of Proposed Policies and Rules

The above objectives, policies and rules regarding stock access will help to maintain, restore and enhance the quality of water in Auckland. Certain costs of the proposed provisions can be monetised in terms of how much it would cost a landowner to fence off or plant the riparian margins of a stream but it is difficult to calculate the costs and benefits of the proposed provisions on intangible aspects such as water quality and cultural values. The costs and benefits have been outlined below and where possible, a monetary value has been calculated.

Benefits of the above provisions could include:

- Increased water quality in Auckland (freshwater and coastal). Removing stock from waterways is an effective way to reduce sediment and other contaminant loads
- Social and cultural benefits maintained and enhanced such as recreational values including use of waterways for swimming, fishing etc
- Landowners are given a 10 year time period to comply with rules. The 10 year time period will also enable landowners to factor the costs of stock exclusion in (or spread them overtime)
- Additional fencing required across the region should not be substantial as in many cases voluntary fencing has already been undertaken – the approach builds on the outcomes of the Clean Streams Accord
- A number of economic benefits to farmer can be achieved when water bodies are fenced and planted. This includes savings from not losing stock etc.

Costs of the above provisions could include:

- Costs to landowners likely to be reasonable as little land is taken out of production when fencing is undertaken
- Pastoral farming is typically a low income, high wealth business type meaning future costs can be anticipated to reduce serious financial impacts

- Cost of undertaking fencing. See below example as well as others included in appendices:

Intensive dry stock example

Total fencing required – 24,086m

Fencing Costs – 8 wire post and batten

\$20/m inclusive of materials, labour, transport and earthworks

24,086m @ \$20/m = \$481,720

Plus 10% contingencies = \$529,892 plus GST

Maintenance = \$17,663/year plus GST

Fencing Costs – 3 wire electric

\$14/m inclusive of materials, labour, transport and earthworks

24,086m @ \$14/m = \$337,204

Plus 10% contingencies = \$370,924 plus GST

2.1.4 Adequacy of Information and Risk of Not Acting

It is considered that there sufficient information on which to base the proposed policies and methods. See the literature review appendix for more information.

3 Alternatives

The proposed preferred alternative is discussed in 2.0 above. The status quo alternative is outlined in 1.5 above.

Alternatives are:

1. Status quo - Rollover of existing provisions (stock excluded from CPA 1s and some subdivision provisions that require fencing)
2. Preferred - Codifying Industry best practice (Clean Streams Accord) “plus”. Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams, wetlands. Stock prohibited from the CMA. Five years would be given to comply and then the exclusion from intermittent streams by the 10th year.
3. Using financial incentives only – no regulation.
4. Codifying industry best practice (Clean Streams Accord). Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams. Five years to comply.
5. Comprehensive stock exclusion rule – Auckland-wide permitted activity rule applied to ‘problematic stock’ regardless of density. Fencing for permanent and intermittent streams, wetlands and CMA. Setback of 3m, native riparian species required by 5th year.

The table below discusses each alternative compared to the Proposed Alternative.

	Alternative 1 - Status Quo	Alternative 2 - Preferred	Alternative 3 – Financial incentives	Alternative 4 - Regulatory approach for permanent streams only	Alternative 5 - Comprehensive regulatory approach
		Codifying Industry best practice (Clean Streams Accord) “plus”. Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams, wetlands. Stock prohibited from the CMA. Five years would be given to comply and then the exclusion from intermittent streams by the 10th year.		Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams. Five years to comply.	Auckland-wide permitted activity rule applied to ‘problematic stock’ regardless of density. Fencing for permanent and intermittent streams, wetlands and CMA. Setback of 3m, native riparian species required by 5 th year.
Appropriateness	The approach is not seen to be appropriate as it is likely that water quality in Auckland will continue to degrade.	This approach is appropriate as it builds on current industry standards (the Clean Streams Accord) which mean it is more likely to be well received by property owners along with being able to achieve water quality gains in rural areas and receiving coastal environments. This approach has also been agreed to by the RAP.	Auckland’s freshwater quality has seen consistent declines since the introduction of pastoral farming. Despite some recent gains, especially through Fonterra’s Clean Streams Accord, it is appropriate to introduce regulatory controls in the Unitary Plan to progress freshwater quality gains quicker and more consistently. This will help to ensure the social, economic and environmental well-beings provided by water are maintained into the future.	This approach would be appropriate to a certain point (permanent streams) but as much of the Auckland region has intermittent streams, it is likely this approach would not provide the water quality gains needed to maintain social, economic and environmental values.	This approach is not seen as appropriate as it likely that property owners would challenge it as being too heavy handed. This would most likely prolong the process of the Unitary Plan, during which water quality would likely continue to decline.
Effectiveness	Continuing the status quo into the Unitary Plan would not be an effective way to ensure freshwater quality is maintained in Auckland. Currently, water quality is declining in Auckland and 13,500km of stream banks remain unfenced.	This option would be an effective policy approach as it likely that Auckland’s freshwater quality would improve relatively quickly if streams are fenced from stock. The approach builds on the Clean Streams Accord to include permanent and intermittent streams, both of which are important natural features. This approach also sets a time limit of five years for permanent streams and 10 years for intermittent streams.	Providing financial incentives could prove to be an effective method of ensuring good uptake of stream fencing. However, this approach is not mandatory and no time limit is set, meaning that even with financial incentives for landowners, stream fencing may not occur at a rate high enough to see improvements in water quality. This approach would also mean that the few landowners who continually refuse to fence streams banks will continue to degrade water quality which may negatively impact on those around them who are fencing streams.	This approach would be effective to a certain point in that within five years of notification, permanent streams need to be fenced off from stock. Intermittent streams, wetlands and the CMA, however, play a significant role in water quality and under this approach they are not required to be fenced. From an uptake and time perspective, this approach would be effective as landowners could achieve this within the next five years, meaning it is unlikely to be challenged.	This approach would be an effective way to maintain and possibly enhance Auckland’s water quality as it takes a comprehensive regulatory approach to fencing streams and stock access. However, the approach is very regulatory and it is likely there would be significant community opposition and challenges. This makes the approach less effective as it would take more time to become operative, meaning the current status quo approach would still be in place and water quality would continue to decline. This approach is dependent on landowners complying with the rule. If compliance is not met, the approach is then dependent on council’s ability to monitor and enforce.
Efficiency	This approach relies on a lot of advocacy and education, but as the approach is not effective at maintaining freshwater quality it can also be deemed inefficient.	The time limits for fencing permanent and intermittent streams make the approach efficient.	There is no timeframe on this approach so its efficiency at maintaining water quality cannot be quantified.	Given the five-year timeframe, this approach would be relatively efficient from a temporal point of view. From an environmental perspective however, this approach would not be efficient in maintaining Auckland’s water quality as only permanent streams would be required to be fenced, not intermittent streams. Intermittent streams form an important part of the environment.	This approach takes an efficient approach to stock access and stream fencing in that strict time limits are in place, which if adhered to would most likely result in improvements in water quality. The money and time costs of monitoring mean this policy approach would most likely not be very efficient however and it is likely that it would significantly challenged by the public. This would make the approach even more inefficient.

	Alternative 1 - Status Quo	Alternative 2 - Preferred	Alternative 3 – Financial incentives	Alternative 4 - Regulatory approach for permanent streams only	Alternative 5 - Comprehensive regulatory approach
		Codifying Industry best practice (Clean Streams Accord) “plus”. Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams, wetlands. Stock prohibited from the CMA. Five years would be given to comply and then the exclusion from intermittent streams by the 10th year.		Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams. Five years to comply.	Auckland-wide permitted activity rule applied to ‘problematic stock’ regardless of density. Fencing for permanent and intermittent streams, wetlands and CMA. Setback of 3m, native riparian species required by 5 th year.
Costs	<ul style="list-style-type: none"> The status quo is quite permissive and takes an advocacy role which has had limited effect in introduction the new fencing of streams. There is currently 13,500km of stream bank still unfenced in the region. This approach would not be an effective way of improving water quality and restoring biodiversity values in rural areas. There are no incentives to plant riparian vegetation. 	<ul style="list-style-type: none"> The costs of this option to any affected landowners would be reasonable since only small amounts of land would be taken out of production to enable fencing, and no riparian planting is required. This understanding has also been confirmed by discussions with various rural stakeholders. Pastoral farming is typically a low income, higher wealth business type, therefore any future costs need to be anticipated over a period of time to reduce any serious financial impacts. The reasonable nature of any costs that may result from this option is because affected landowners are given a 10-year period to factor in these costs and can spread them over this time. The amount of any additional fencing should not be substantial in many cases because this option builds on the back on the outcomes of the Clean Streams Accord. Many intensive-type farmers have already fenced portions of their land. Where this option goes further than the accord, ample time is given to be able to plan for these costs. Example of costs: 8 wire post and batten \$20/m inclusive of materials, labour, transport and earthworks 3 wire electric \$14/m inclusive of materials, labour, transport and earthworks 	<ul style="list-style-type: none"> There are public costs. For example, if a total of \$500,000/year were allocated to incentivise seven-wire post and batten fencing at a subsidy rate of 30 per cent of the capital cost, then a total of 110km (55km of stream length) fencing per year would be fenced. This length would increase to 420km (210km of stream length) per year if four-wire electric fencing was installed. There is a risk that the uptake of a fencing incentive could be poor, resulting in little behaviour change and only a limited improvement of water quality and ecosystem health. It requires administration, and the introduction/maintenance of monitoring and evaluation programmes by the council. Council would have to justify why ratepayers' money is being transferred to pastoral farms. Priority catchments have not been identified. 	<ul style="list-style-type: none"> The costs of this option would be minimal to any affected farmers because any required fencing would be minimal as this option is the same as the outcomes aimed at by the Clean Streams Accord, and much of this fencing has been, or is nearly, completed. This option would result in only a very little environmental gain because this option would leave wetlands, the CMA and the intermittent portions of streams without any form of exclusion Example of costs: 8 wire post and batten \$20/m inclusive of materials, labour, transport and earthworks 3 wire electric \$14/m inclusive of materials, labour, transport and earthworks 	<ul style="list-style-type: none"> High risk of stakeholder kickback if a controlled activity status requirement was introduced. This would represent a relatively large change in regulatory approach to the issue of livestock exclusion for the region. This policy approach would in effect make farming a consentable activity in the priority catchments. This would be perceived as the start of a slippery slope towards greater regulatory approach by many landowners and would be strongly resisted. There would be a lengthy and costly appeal process due to strong resistance. There would be loss of potentially productive land to a riparian buffer. Priority catchments are not identified. Example of costs: 8 wire post and batten \$20/m inclusive of materials, labour, transport and earthworks 3 wire electric \$14/m inclusive of materials, labour, transport and earthworks
Benefits	<ul style="list-style-type: none"> The benefit of retaining this approach is that it would be a low cost and relatively easy option to undertake. There is a low risk of challenge from landowners. There would be no loss of land for landowners. 	<ul style="list-style-type: none"> This option would bring quite quick and long-term environmental (and likely economic) benefits because removing livestock from waterways effectively reduces sediment and other contaminant loads. This environmental benefit would also 	<ul style="list-style-type: none"> Financial incentives are generally a popular and politically attractive mechanism for encouraging behaviour change. There would probably be some improvement in water quality due to uptake of fencing incentives. 	<ul style="list-style-type: none"> Very little fencing-associated costs for affected landowners would be associated with this option, therefore it may be agreeable to many landowners. Very little proportion of land would be removed from production. 	<ul style="list-style-type: none"> It would enable council to have greater control over livestock access than using a permitted land use activity approach. This approach would be most effective at inducing an improvement in freshwater water quality (and hence

	Alternative 1 - Status Quo	Alternative 2 - Preferred	Alternative 3 – Financial incentives	Alternative 4 - Regulatory approach for permanent streams only	Alternative 5 - Comprehensive regulatory approach
		<p>Codifying Industry best practice (Clean Streams Accord) “plus”. Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams, wetlands. Stock prohibited from the CMA. Five years would be given to comply and then the exclusion from intermittent streams by the 10th year.</p> <p>bring social and cultural benefits.</p> <ul style="list-style-type: none"> • A number of economic benefits to farmer can be achieved when water bodies are fenced and planted. This includes savings from not losing stock etc. 		<p>Permitted activity land use rules for intensive pastoral farming (18 stock units or greater) would require the exclusion of livestock from permanent streams. Five years to comply.</p> <ul style="list-style-type: none"> • A number of economic benefits to farmer can be achieved when water bodies are fenced and planted. This includes savings from not losing stock etc. 	<p>Auckland-wide permitted activity rule applied to ‘problematic stock’ regardless of density. Fencing for permanent and intermittent streams, wetlands and CMA. Setback of 3m, native riparian species required by 5th year.</p> <p>improving coastal receiving environments) within prioritised catchments.</p> <ul style="list-style-type: none"> • This approach would also be effective at helping to restore riparian ecosystems within priority catchments. • NZCPS sets a policy direction (Policy 21) to exclude livestock and this option would satisfy this requirement. • The Proposed Auckland Plan Unitary Plan highlights the importance of Auckland’s coastal, freshwater and biodiversity values. • State of the environment monitoring data indicates loss of freshwater quality is associated with the activity of rural land use, so this policy approach would help reverse this situation. • State of environment shows loss of CMA ecological values associated with land derived sediment discharges, mainly from diffuse sources. This policy approach would help reverse this situation. • There is good international evidence that demonstrates the effectiveness that excluding livestock has on improving water quality. • Financial incentives are generally a popular and politically attractive mechanism for encouraging behaviour change. • A number of economic benefits to farmer can be achieved when water bodies are fenced and planted. This includes savings from not losing stock etc.
Risks	<p>Risks associated with this approach include:</p> <ul style="list-style-type: none"> • Auckland’s freshwater quality becomes further degraded • Council falls behind industry standards (Fonterra’s Clean Streams Accord) 	<p>The approach is seen to be low risk as it has already been discussed with key stakeholders such as the RAP. The approach also builds on the current Clean Streams Accord meaning it is already recognised as an accepted industry standard.</p>	<p>A risk in this approach is that uptake of the incentive may not be high enough to see improvements in water quality.</p>	<p>A major risk with this approach is that water quality will be not maintained to appropriate levels as required by the RMA. Not requiring fencing for the CMA would also mean that Auckland is not meeting the requirements of the NZCPS.</p>	<p>There is a significant risk that the public would not agree with this approach and challenges would follow. It is also likely that monitoring costs would put council at significant risk of increased costs.</p>

4 Conclusion

Based on the above discussion, the following conclusions are drawn.

Water is an important natural resource for Aucklanders and its quality must be maintained to ensure a sustainable future based on environmental quality, economic growth and community well-being.

Water quality has continued to degrade in Auckland. Reducing stock access to streams, waterways and the CMA is important for economic, social and cultural reasons as well to restore and enhance water quality.

Limiting stock access has been proven to be an effective method of maintaining and improving water quality worldwide. Limiting stock to waterways is also readily becoming a mainstream method of farming in New Zealand meaning the provisions in the Unitary Plan will be palatable to farmers in Auckland.

Consequently, the following provisions have been developed to ensure Auckland's water quality is maintained and where possible enhanced and restored. The objectives and policies above outline the reasons for maintaining water quality and how this can happen. The approach of compliance over five to ten years from notification means the costs of compliance can be anticipated over time by landowners.

5 Record of Development of Provisions

5.1 Information and Analysis

- Livestock are currently prohibited in CPA 1's in the Auckland Council ALW Plan.
- A full literature review work is contained in a staff report 'Livestock Exclusion Policy Options Report March 2012', Mark Bishop, Team Leader Land Management in ESP, Auckland Council.
- RMA 1991
- NZCPS

Please see appendices for details of full literature review.

Appendix 3.29.1 Option Evaluation Paper for the Natural Resources Workstream 2012

Appendix 3.29.2 Background paper: Livestock Exclusion from water bodies June 2012

Appendix 3.29.3 Livestock Exclusion Policy Options Report

Appendix 3.29.4 Water course fencing: Intensive drystock

Appendix 3.29.5 Map of degraded areas

5.2 Consultation Undertaken

Both internal and external consultation has been carried out in relation to developing a policy position in relation to the exclusion of livestock. Certain elements were taken from this consultation, and used to develop some of the policy options.

- On the 11th August 2011, a workshop was held with various Auckland Council staff (ranging from planning and policy through to operations staff) in an effort to set out the context of the issue of livestock exclusion, and to help identify possible planning options that could be investigated further. This workshop built on the presentations and lessons learnt from Horizons, Environment Waikato and Northland Regional Council on the 30th July 2011. The lessons learned from these regional councils have been used to develop the subsequent policy options (see discussion below).
- In relation to external consultation, four general policy options (ranging from the status quo through to a relatively restrictive rule regime) were presented at the Rural Advisory

rd September 2011. The feedback was generally positive, and a further, but more detailed workshop was requested. This further RAP workshop was planned for the 21st October 2011. However this additional workshop has been postponed until November.

- A further meeting was held with specific RAP members, including Richard Gardner, Bill Cashmore, Wendy Clark and Jim Dollimore on the 23rd September. In this meeting, these members articulated what they considered as reasonable in relation to livestock exclusion. Overall their objective is to improve the water quality of all water bodies, both rural and urban. In relation to fencing, the installation of a 2-wire “hot-wire” fence at a minimum of a 2-meter horizontal setback from permanently flowing water courses on all “intensive farms” is considered reasonable. This approach should not be implemented by controlled activity rule. The fencing of the “shore front” should be prioritised and incentivised. In relation to “extensive farming” best management practices should be encouraged. The installation of livestock crossings should all be a permitted activity. This approach provides that basis to “Policy Approach 3”.
- Presentation to Council staff on 13 December 2011 in an attempt to gain a “consensus” as to which option to promote. No consensus was achieved.
- Presentation to the RAP meeting on 16 December 2011. There was a request to conduct a workshop on the 17 February 2012 in an effort to gain feedback on various possible policy options.
- Farmers attended workshop 13 April 2012 – gained consensus from all eight farmers as to direction forward for livestock exclusion. Independent facilitation was used.
- Collaborative style workshop held 20 July 2012, which included members of RAP and various NGO’s. Option 4 was agreed with.
- Gained political direction at PWP (political working party) workshop in 26 July 2012 for option 4 to go into draft unitary plan.
- Some further political direction was given at an Auckland Plan Committee Workshop on 5 July 2013. At this workshop, the existing recommended approach was agreed with for freshwater bodies (and wetlands), however, in relation to livestock exclusion in the CMA, a different direction was agreed to.

Further to the above, subsequent research and analysis of feedback from the March draft of the Unitary Plan led to the development of a prohibited activity status for stock access in the CMA. The March draft allowed stock access to the CMA as a permitted activity. This is seen as an oversight and following from feedback by key stakeholders such as the Department of Conservation and Forest and Bird, the proposed provisions were drafted. These are in line with those of the Northland Regional Council and were accepted by the Auckland Plan Committee on the 5th July 2013.

5.3 Decision-Making

The extensive decision-making process has taken over two years to complete. Various Auckland Council staff workshops began in August 2012, and developed a number of policy options. These options were further developed with the help of Rural Advisory Panel (RAP) members throughout the remainder of 2011. A consensus as to a particular policy direction was gained from a meeting with eight pastoral farmers in April 2012, and this direction (in relation to livestock exclusion and freshwater bodies) received political support via the Political Working Party (PWP) on 26 July 2012, and an Auckland Plan Committee (APC) workshop on 5 July 2013.

Following feedback on the March draft of the Unitary Plan, specifically from stakeholders such as the Department of Conservation and Forest and Bird, provisions to prohibit stock accessing the CMA were introduced into the Unitary Plan. These were accepted by the Auckland Plan Committee on the 5th July 2013.