APPENDIX 19 – OBJECTIVES AND POLICIES ASSESSMENT TABLE

The following Table provides a framework for identification and assessment of the objectives and policies of the Auckland Unitary Plan (AUP). The content focusses on the RPS provisions and other key objectives and policies rather that every single provision.

Plan Provision	Comment
B2.2.1. Objectives	A high quality connected urban environment is proposed that seeks
(1) A quality compact urban form that enables all of the following:	to utilise the natural assets of the location, respond to future
(a) a higher-quality urban environment;	transport connections and potential park n ride.
(b) greater productivity and economic growth;	
 (c) better use of existing infrastructure and efficient provision of new infrastructure; 	A Precinct is proposed to identify key indicative roading connections, future local road connections, and to provide a framework to guide development of the Neighbourhood Centre to
(d) improved and more effective public transport;	achieve high quality urban outcomes.
(e) greater social and cultural vitality;	
(f) better maintenance of rural character and rural productivity; and	The land is located within the RUB, in a location identified to be
(g) reduced adverse environmental effects.	'development ready' from 2022 in the FULSS 2017. Practical indications are that the area may be 'development ready' towards
(2) Urban growth is primarily accommodated within the urban area 2016 (as identified in Appendix 1A).	the end of 2021 to align with the opening of the motorway extension north to Warkworth.
(3) Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth and social facilities to support growth.	The Plan Change is entirely in keeping with these objectives.
(4) Urbanisation is contained within the Rural Urban Boundary, towns, and rural and coastal towns and villages.	
(5) The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.	

B2.2.2. Policies

Development capacity and supply of land for urban development

- (1) Include sufficient land within the Rural Urban Boundary that is appropriately zoned to accommodate at any one time a minimum of seven years' projected growth in terms of residential, commercial and industrial demand and corresponding requirements for social facilities, after allowing for any constraints on subdivision, use and development of land.
- (2) Ensure the location or any relocation of the Rural Urban Boundary identifies land suitable for urbanisation in locations that:
 - (a) promote the achievement of a quality compact urban form
 - (b) enable the efficient supply of land for residential, commercial and industrial activities and social facilities;
 - (c) integrate land use and transport supporting a range of transport modes;
 - (d) support the efficient provision of infrastructure;
 - (e) provide choices that meet the needs of people and communities for a range of housing types and working environments; and
 - (f) follow the structure plan guidelines as set out in Appendix 1;

while:

- (g) protecting natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character;
- (h) protecting the Waitākere Ranges Heritage Area and its heritage features;
- (i) ensuring that significant adverse effects from urban development on receiving waters in relation to natural resource and Mana Whenua values are avoided, remedied or mitigated;

The plan change land adjoins the existing urban area of Warkworth. The land is within the RUB and the proposed zoning seeks to efficiently utilise the land to the greatest extent possible whilst avoiding or mitigating adverse environmental effects.

To ensure that Warkworth North can accommodate the identified development capacity, as detailed in the FULSS 2017, the land needs to be utilised efficiently. There is a reasonable loss of land associated with the protection of watercourses and bush areas, provision of open space areas and roads. Therefore, the remaining land has to be identified for zoning that maximises efficiency in order to achieve the development outcomes forecast in the FULSS 2017 i.e. approximately 2,300 dwellings in Warkworth North, plus the approximately 64 hectares of business land that is already live zoned.

The proposed zoning pattern seeks to integrate land use and transport by enabling intensification in a location supported by access to public transport, a park n ride and the northern motorway extension. It also proposes a range of residential zones that will provide opportunity for a range of living types and environments corresponding to location and topographical constraints.

A Precinct is proposed to secure key road connections, providing an indicative route for the Western Link road and also future local road connections to adjacent land.

There are no scheduled natural or physical resources in the Unitary plan, in any event the proposed plan change seeks to protect bush areas by identifying these areas with the Significant Ecological Area overlay. In addition, all primary watercourses are located in indicative open space areas to ensure ongoing protection as well as potentially use and enjoyment by the public.

- (j) avoiding elite soils and avoiding where practicable prime soils which are significant for their ability to sustain food production;
- (k) avoiding mineral resources that are commercially viable;
- (I) avoiding areas with significant natural hazard risks and where practicable avoiding areas prone to natural hazards including coastal hazards and flooding; and
- (m) aligning the Rural Urban Boundary with:
 - (i) strong natural boundaries such as the coastal edge, rivers, natural catchments or watersheds, and prominent ridgelines; or
 - (ii) where strong natural boundaries are not present, then other natural elements such as streams, wetlands, identified outstanding natural landscapes or features or significant ecological areas, or human elements such as property boundaries, open space, road or rail boundaries, electricity transmission corridors or airport flight paths.
- (3) Enable rezoning of future urban zoned land for urbanisation following structure planning and plan change processes in accordance with Appendix 1 Structure plan guidelines.
- (7) Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that do all of the following:
 - (a) support a quality compact urban form;
 - (b) provide for a range of housing types and employment choices for the area;
 - (c) integrate with the provision of infrastructure; and
 - (d) follow the structure plan guidelines as set out in Appendix 1.

A range of techniques are proposed to ensure that there are no significant adverse effects arising from the proposed urban development on the receiving waters. The Cultural Impact Assessments provided by Ngati Manuhiri and Kawerau a Maki provide guidance on measures they would like to see to manage the adverse effects of urban development on the mauri of water and other taonga.

Structure Planning and detailed site investigations have been undertaken in accordance with Appendix 1 to the Unitary Plan.

The proposed plan change is entirely consistent with all of the B2.2.2 policies.

B2.4. Residential growth	The proposed zone layout supports a quality compact urban form.
B2.4.1. Objectives	The zoning seeks to make the best most efficient utilisation of the
(1) Residential intensification supports a quality compact urban form.	physical land resource, is located within the identified RUB and is directly contiguous with the existing urban area of Warkworth.
(2) Residential areas are attractive, healthy and safe with quality development that is in keeping with the planned built character of the area.	A range of residential zones are proposed to provide a range of living
(3) Land within and adjacent to centres and corridors or in close proximity to public transport and social facilities (including open space) or employment opportunities is the primary focus for residential intensification.	choices. These zones are supported by an identified Neighbourhood Centre zone and an extension to the Business – Light Industry zone.
(4) An increase in housing capacity and the range of housing choice which meets the varied needs and lifestyles of Auckland's diverse and growing population.	The configuration of zones responds to existing and proposed land uses, topography and natural features to provide a framework to create a healthy, safe, high quality urban environment.
(5) Non-residential activities are provided in residential areas to support the needs of people and communities.	create a healthy, sale, high quality urban environment.
B2.4.2. Policies	The proposed residential zonings respond to the character of the
Residential intensification	future Warkworth by seeking to efficiently utilise land as well as
(1) Provide a range of residential zones that enable different housing types and intensity that are appropriate to the residential character of the area.	protecting and enhancing natural features and maintaining a similar topography.
(2) Enable higher residential intensities in areas closest to centres, the public transport network, large social facilities, education facilities, tertiary education facilities, healthcare facilities and existing or proposed open space.	More intensive residential zonings are provided in walking distance of the proposed Neighbourhood Centre and public transport,
(3) Provide for medium residential intensities in area that are within moderate walking distance to centres, public transport, social facilities and open space.	including a likely future Park n Ride (currently a temporary Park n Ride is being investigated for the Atlas site on SH1).
(4) Provide for lower residential intensity in areas:	
(a) that are not close to centres and public transport;	Infrastructure for the proposed development outcomes can be
(b) that are subject to high environmental constraints;	provided as detailed in the Chester report and the zoning layout seeks to respond to and manage future potential reverse sensitivity
(c) where there are natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character; and	impacts in relation to the motorway extension and also the existing Hudson Road Business – Light Industry zone with the acoustic assessment confirming that the separation distance between the motorway carriageway and the proposed development areas meets
(d) where there is a suburban area with an existing neighbourhood character.	the NZTA guidelines and therefore does not require mitigation.

 (6) Ensure development is adequately serviced by existing infrastructure or is provided with infrastructure prior to or at the same time as residential intensification. (7) Manage adverse reverse sensitivity effects from urban intensification on land with existing incompatible activities. 	The plan change is entirely in keeping with these objectives and policies.
 B2.5. Commercial and industrial growth B2.5.1. Objectives (1) Employment and commercial and industrial opportunities meet current and future demands. (2) Commercial growth and activities are primarily focussed within a hierarchy of centres and identified growth corridors that supports a compact urban form. (3) Industrial growth and activities are enabled in a manner that does all of the following: (a) promotes economic development; (b) promotes the efficient use of buildings, land and infrastructure in industrial zones; (c) manages conflicts between incompatible activities; (d) recognises the particular locational requirements of some industries; and (e) enables the development and use of Mana Whenua's resources for their economic well-being. 	The economic analysis provided in support of the plan change addresses these matters. A Neighbourhood Centre is proposed to provide for the residential community that will establish. The proposed Precinct provisions will ensure that the conflicts between incompatible activities are avoided. The proposed Neighbourhood Centre zone is small in scale and of a size that will not enable any degree of conflict with the existing Warkworth Town Centre. Extensions to the existing Business – Light Industry zone are proposed to provide employment opportunities for the future residential population consistent with the outcomes sought by Auckland Council.

 (4) Enable new metropolitan, town and local centres following a structure planning process and plan change process in accordance with Appendix 1 Structure plan guidelines, having regard to all of the following: (a) the proximity of the new centre to existing or planned medium to high intensity residential development; 	In conjunction with these zones Residential - Single House, Residential – Mixed Housing Urban and Mixed Housing Suburban zoned areas are proposed.
 (b) the existing network of centres and whether there will be sufficient population growth to achieve a sustainable distribution of centres; (c) whether the new centre will avoid or minimise adverse effects on the function, role and amenity of the city centre, metropolitan and town centres, beyond those effects ordinarily associated with trade effects on trade competitors; 	As above no natural features are scheduled in the Unitary Plan. The plan change is consistent with these objectives.
(d) the form and role of the proposed centre;(e) any significant adverse effects on existing and planned infrastructure;(f) a safe and efficient transport system which is integrated with the centre; and	
(g) any significant adverse effects on the environment or on natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage or special character.	
 B2.7. Open space and recreation facilities B2.7.1. Objectives (1) Recreational needs of people and communities are met through the provision of a range of quality open spaces and recreation facilities. (2) Public access to and along Auckland's coastline, coastal marine area, lakes, rivers, streams and wetlands is maintained and enhanced. (3) Reverse sensitivity effects between open spaces and recreation facilities and neighbouring land uses are avoided, remedied or mitigated. 	Indicative open space areas are proposed to provide connectivity to other open space zoned areas; protect watercourses and areas of existing native bush. Open space areas include the ability to provide small parks and playground areas for the community as well as riparian and bush area protection, access and wildlife connectivity. The plan change achieves the outcomes sought by these objectives and the related policies.

 (2) Promote the physical connection of open spaces to enable people and wildlife to move around efficiently and safely. (3) Provide a range of open spaces and recreation facilities in locations that are accessible to people and communities. (4) Provide open spaces and recreation facilities in areas where there is an existing or anticipated deficiency. 	
 B3.2. Infrastructure B3.2.1. Objectives (4) The functional and operational needs of infrastructure are recognised. (5) Infrastructure planning and land use planning are integrated to service growth efficiently. (8) The adverse effects of infrastructure are avoided, remedied or mitigated. 	The plan change achieves these outcomes as all necessary reticulated infrastructure will be provided in accordance with the staging, time frames and funding projections of the CCO's. The Plan Change seeks to enable the efficient provision of roading infrastructure in a manner that avoids, or appropriately mitigates adverse environmental effects. To this end a Precinct is proposed to secure an indicative alignment for the Western Link Road if the plan change area is identified by Auckland Transport as the preferred location for this road. Local future road connection points are also identified to ensure future connectivity can be provided to adjacent land as that develops.
 B3.2.2. Policies Provision of infrastructure (1) Enable the efficient development, operation, maintenance and upgrading of infrastructure. (2) Recognise the value of investment in existing infrastructure. (3) Provide for the locational requirements of infrastructure by recognising that it can have a functional or operational need to be located in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character. 	The location of proposed infrastructure seeks manage reverse sensitivity effects; as well as support and enable the provision of future infrastructure. The plan change is in keeping with these relevant objectives and policies.

Reverse sensitivity	
(4) Avoid where practicable, or otherwise remedy or mitigate, adverse effects of subdivision, use and development on infrastructure.	
(5) Ensure subdivision, use and development do not occur in a location or form that constrains the development, operation, maintenance and upgrading of existing and planned infrastructure.	
Managing adverse effects	
(6) Enable the development, operation, maintenance and upgrading of infrastructure in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to natural heritage, Mana Whenua, natural resources, coastal environment, historic heritage and special character while ensuring that the adverse effects on the values of such areas are avoided where practicable or otherwise remedied or mitigated.	
B3.3. Transport	The plan change proposes a Precinct to secure n alignment for the
B3.3.1. Objectives	Western Link road should this be required.
(1) Effective, efficient and safe transport that:	Proposed road connections are also secured by the Precinct to
(a) supports the movement of people, goods and services;	ensure that future connections to adjacent land can be provided.
(b) integrates with and supports a quality compact urban form;	
(c) enables growth;	The proposed transport network will facilitate growth in this
 (d) avoids, remedies or mitigates adverse effects on the quality of the environment and amenity values and the health and safety of people and communities; and 	location and also the timing and location of the plan change area responds to the growth demands that will be associated with the extension of the motorway north to Warkworth and the corresponding construction of the Matakana Link Road.
(e) facilitates transport choices, recognises different trip characteristics and enables accessibility and mobility for all sectors of the community.	Walkway and cycleway connections are enabled in Indicative Open Space areas as well as along road connections.
	The proposed Western Link road cross-section provides for an integrated transport system. If that road is not constructed a lower

	tier road would be constructed that will still provide for integration of pedestrian and cycleway connections. The proposed plan change supports these objectives and the related policies.
 B3.3.1 Policies Managing transport infrastructure 1) Enable the effective, efficient and safe development, operation, maintenance and upgrading of all modes of an integrated transport system. (2) Enable the movement of people, goods and services and ensure accessibility to sites. (3) Identify and protect existing and future areas and routes for developing Auckland's transport infrastructure. (4) Ensure that transport infrastructure is designed, located and managed to: (a) integrate with adjacent land uses, taking into account their current and planned use, intensity, scale, character and amenity; and (b) provide effective pedestrian and cycle connections. 	 As set out above the plan change achieves these policies. Transport infrastructure associated with the plan change can and will be provided at development stage. Connections to existing roading infrastructure can and will be provided. The preferred option for the Western Link Road is not yet known however this road can be provided through the plan change area if this location is determined as the preferred option and this option is secured by the proposed Precinct The proposed transport network integrates with the proposed zonings, including open space areas, footpaths and cycleways. The timing for development of the plan change area will coincide with the opening of the motorway extension north to Warkworth and the Matakana Link Road (MLR). Upgrades are also proposed to the Hill Street intersection and for a western link road to provide an east west connection to the Mansel Drive extension with the MLR. The preferred options for these works are currently being investigated. The proposed Business – Neighbourhood Centre and Business – Light Industry zoned areas will assist in achieving trip reduction from this location by providing local employment and neighbourhood

Integration of subdivision, use and development with transport

(5) Improve the integration of land use and transport by:

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- (a) ensuring transport infrastructure is planned, funded and staged to integrate with urban growth;
- (b) encouraging land use development and patterns that reduce the rate of growth in demand for private vehicle trips, especially during peak periods;
- (c) locating high trip-generating activities so that they can be efficiently served by key public transport services and routes and complement surrounding activities by supporting accessibility to a range of transport modes;
- (d) requiring proposals for high trip-generating activities which are not located in centres or on corridors or at public transport nodes to avoid, remedy or mitigate adverse effects on the transport network;
- (e) enabling the supply of parking and associated activities to reflect the demand while taking into account any adverse effects on the transport system; and
- (f) requiring activities adjacent to transport infrastructure to avoid, remedy or mitigate effects which may compromise the efficient and safe operation of such infrastructure.

Managing effects related to transport infrastructure

- (6) Require activities sensitive to adverse effects from the operation of transport infrastructure to be located or designed to avoid, remedy or mitigate those potential adverse effects.
- (7) Avoid, remedy or mitigate the adverse effects associated with the construction or operation of transport infrastructure on the environment and on community health and safety.

connectivity, and the likely future location of a park n ride facility, in close proximity to the northern end of the motorway will also assist in this regard.

More frequent and accessible public transport routes to and from Warkworth commenced at the end of September 2018.

Location and construction of the transport networks have been designed to avoid adverse effects wherever possible and where avoidance is not possible the approach has been to adopt best practise methodology to minimise adverse effects to the greatest extent possible.

For these reasons the plan change is determined to be in keeping with the outcomes sought by these policies.

B7.2. Indigenous biodiversity	The biodiversity values of watercourses and native bush within the
B7.2.1. Objectives	plan change area have been identified and it is understood that
(1) Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision use and development.	there is consistency in terms of the values identified and the methodology for identification with what has been identified as part of the Council Structure Plan process.
 (2) Indigenous biodiversity is maintained through protection, restoration and enhancement in areas where ecological values are degraded, or where development is occurring. Policies - (5) Avoid adverse effects on areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and Schedule 4 Significant Ecological Areas – Marine Schedule. 	Indigenous biodiversity in the bush areas is proposed to be protected and enhanced through identification of core areas as SEA and full inclusion of these areas as Indicative Open Space areas. Indicative Open space areas also incorporate primary watercourses, wetland areas and intermittent watercourses to the greatest extent possible.
	Existing Significant Ecological Areas (SEA) identified in the plan change area are located on 223 Falls Road and small portions, outside the identified Open Space zoned areas on 215 Falls Road and a portion of SEA on 32 View Road. The proposed application of the SEA overlay to the bush areas on 220 Falls Road land will secure positive ecological outcomes by ensuring the long-term protection of these areas and provide additional ecological stepping stones in this location.
B7.3. Freshwater systems	The plan change seeks to minimise the loss of freshwater systems
B7.3.1. Objectives	and to mitigate the effects of changes in land use from rural land use to urban land use to ensure that overall such effects are not
(1) Degraded freshwater systems are enhanced.	adverse.
(2) Loss of freshwater systems is minimised.	
(3) The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.	Wherever practicable ecological best practise and engineering methods are proposed to enhance watercourses and riparian planting will be provided to the greatest extent practicable to enhance freshwater systems and ensure that adverse effects are mitigated to an acceptable level.

B7.3.2. Policies

Integrated management of land use and freshwater systems

- (1) Integrate the management of subdivision, use and development and freshwater systems by undertaking all of the following:
 - (a) ensuring water supply, stormwater and wastewater infrastructure is adequately provided for in areas of new growth or intensification;
 - (b) ensuring catchment management plans form part of the structure planning process;
 - (c) controlling the use of land and discharges to minimise the adverse effects of runoff on freshwater systems and progressively reduce existing adverse effects where those systems or water are degraded; and
- (d) avoiding development where it will significantly increase adverse effects on freshwater systems, unless these adverse effects can be adequately mitigated.

The loss of freshwater systems has been minimised to the greatest extent practicable and all of the higher quality streams will be protected. The conclusions of the ecological assessment that any adverse effects of freshwater systems are able to be fully mitigated on site.

Catchment management planning has been undertaken. The development within the plan change area in terms of the proposed zonings and the future land uses that the zones will enable, have been planned in an integrated manner by ensuring that all necessary wastewater, stormwater and water supply infrastructure will be able to be provided at the same time, or before the land is developed for urban land uses.

It is proposed to apply the SMAF – Flow 1 Warkworth Control to the plan change area as a mechanism to ensure that land uses and the related discharges are adequately managed. It needs to be acknowledged that all existing rules in the Unitary Plan set out in Chapters E4 – Other discharges of contaminants, E7 - Taking, using, damming and diversion of water and drilling, E8 - Stormwater discharge and diversion, E9 – Stormwater quality high contaminant generating car parks and high use roads and E10 – stormwater management area Flow 1 and Flow 2; as well as the land disturbance rules in Chapters E11 and E12 will apply to the plan change area. The provisions in these chapters are considered appropriate and sufficient to manage the effects of development on freshwater systems. Additional measures are not warranted as the best outcomes can be achieved through application of the existing provisions in the Unitary Plan and this is consistent with the planning approach provided in the Unitary Plan. There are no sufficiently unique or significant effects that require management through application of additional measures.

Management of freshwater systems

- (2) Identify degraded freshwater systems.
- (3) Promote the enhancement of freshwater systems identified as being degraded to progressively reduce adverse effects.
- (4) Avoid the permanent loss and significant modification or diversion of lakes, rivers, streams (excluding ephemeral streams), and wetlands and their margins, unless all of the following apply:
 - (a) it is necessary to provide for:
 - (i) the health and safety of communities; or
 - (ii) the enhancement and restoration of freshwater systems and values; or
 - (iii) the sustainable use of land and resources to provide for growth and development; or
 - (iv) infrastructure;
 - (b) no practicable alternative exists;
 - (c) mitigation measures are implemented to address the adverse effects arising from the loss in freshwater system functions and values; and
 - (d) where adverse effects cannot be adequately mitigated, environmental benefits including on-site or off-site works are provided.

The land has been identified for urban development and therefore there is a need to utilise the land efficiently for urban purposes to ensure that the Rural Urban Boundary and the effects it is designed to manage are not significantly adverse.

As stated above the values of freshwater systems have been identified and the categorisation of the types of freshwater systems have been checked with the Council. The adverse effects on freshwater ecological values have been identified as minor and able to be fully mitigated through a range of offsetting measures to be employed on the development site. Precinct provisions are proposed to guide these outcomes.

The Precinct identifies streams that are to be modified and enhanced. Additional stormwater management plans are provided in the Precinct along with objectives, policies and rules to guide the outcomes at development stage.

Avoidance was the starting point for the plan change and related development area, however total avoidance is not possible if the land is to be reasonably and efficiently used for urban development. The loss of some intermittent streams is necessary for the sustainable use of the Future Urban land resource, to provide for the necessary infrastructure and there are no practicable alternatives, or the alternatives would in fact result in greater adverse effects, and potential loss of permanent or higher value watercourses than the loss indicated in the Precinct. Stream loss has been avoided and minimised to the greatest extent possible and overall the effects are able to be fully mitigated onsite.

Given the avoidance of effects on freshwater systems to the greatest extent possible, plus the proposed mitigation and

	enhancement it is considered that the plan change achieves these objectives and the outcomes sought by the policies.
	Because the adverse effects are able to be adequately mitigated onsite there is no need for offsetting to be provided.
 E1.2. Objectives [rp/rcp/dp] (1) Freshwater and sediment quality is maintained where it is excellent or good and progressively improved over time in degraded areas. (2) The mauri of freshwater is maintained or progressively improved over time to enable traditional and cultural use of this resource by Mana Whenua. 	Given the existing rural land use activities present and enabled on the land it is considered that the proposed freshwater systems in the plan change area will in fact be improved over time as the land is developed for urban land uses, riparian areas are protected and enhanced and stormwater better managed than it is associated with current land uses.
 (3) Stormwater and wastewater networks are managed to protect public health and safety and to prevent or minimise adverse effects of contaminants on freshwater and coastal water quality. (2) Manage discharges, subdivision, use, and development that affect freshwater systems to: 	With the related improvements in stormwater management, the provision of reticulated wastewater networks; riparian protection and enhancement it is considered that the mauri of water will potentially be better protected than it is at the present time.
 (a) maintain or enhance water quality, flows, stream channels and their margins and other freshwater values, where the current condition is above National Policy Statement for Freshwater Management National Bottom Lines and the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below; or (b) enhance water quality, flows, stream channels and their margins and other freshwater values where the current condition is below national bottom lines or the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below. 	As above, plus the application of the SMAF Flow 1 Warkworth controls will ensure stormwater discharges are appropriately managed and that water quality is at least maintained, although there will be enhancement associated with the mitigation measures proposed. The mitigation measures should also ensure protection and potentially enhancement of the Macroinvertebrate Community Index – both Rural and Urban that relate to the land.
	The development of the land will be subject to the Unitary Plan rules and standards in the Chapters referred to above. Resource consents will be required for bulk earthworks, subdivision and much of the related development. The type of consents and the provisions that consents will be assessed against enable resource consent conditions to be applied that will ensure these outcomes are

(8) Avoid as far as practicable, or otherwise minimise or mitigate, adverse effects of stormwater runoff from greenfield development on freshwater systems, As described in the ecological and engineering reports, as well as freshwater and coastal water by: summarised above, an integrated approach to stormwater has been (a) taking an integrated stormwater management approach (refer to Policy adopted and will be applied through the Precinct provisions as well E1.3.10); as existing standards and rules in the Unitary Plan. (b) minimising the generation and discharge of contaminants, particularly from high contaminant generating car parks and high use roads and into Any adverse effects on hydrology are considered to be less than sensitive receiving environments; minor, as are effects relating to effects on stream health and values in the long term, stream base flows and groundwater recharge. (c) minimising or mitigating changes in hydrology, including loss of infiltration, to: The proposed stormwater management techniques required to be implemented by standards and rules in Chapter E8; as well as minimise erosion and associated effects on stream health and values; riparian protection and planting will minimise and mitigate effects on freshwater systems arising from changes in water temperature. (ii) maintain stream baseflows; and As above effects arising from stormwater discharges will be (iii) support groundwater recharge; effectively managed through the resource consent processes that (d) where practicable, minimising or mitigating the effects on freshwater will follow rezoning in order to enable physical development of the systems arising from changes in water temperature caused by stormwater land for urban purposes. discharges; and (e) providing for the management of gross stormwater pollutants, such as litter, in areas where the generation of these may be an issue. (9) Minimise or mitigate new adverse effects of stormwater runoff, and where practicable progressively reduce existing adverse effects of stormwater runoff, on freshwater systems, freshwater and coastal waters during intensification and redevelopment of existing urban areas by all of the following: As detailed in technical reports an integrated approach to stormwater management has been adopted and has and will be (10) In taking an integrated stormwater management approach have regard to all of further implemented. the following: (a) the nature and scale of the development and practical and cost The layout, location and type of zonings proposed seek to achieve

Stormwater management

considerations, recognising:

achieved - for example the relevant standards and rules in Chapter

E8, E11 and E12 relating to earthworks and stormwater discharges.

integration of future development, including the type and location

 (i) greenfield and comprehensive brownfield development generally offer greater opportunity than intensification and small-scale redevelopment of existing areas; 	of infrastructure, such as roads to protect site features such as permanent watercourses and areas of native bush to minimise effects on hydrology and receiving environments.
 (ii) intensive land uses such as high-intensity residential, business, industrial and roads generally have greater constraints; and (iii) site operational and use requirements may preclude the use of an integrated stormwater management approach. (b) the location, design, capacity, intensity and integration of sites/development and infrastructure, including roads and reserves, to protect significant site features and hydrology and minimise adverse effects on receiving environments; (c) the nature and sensitivity of receiving environments to the adverse effects of development, including fragmentation and loss of connectivity of rivers and streams, hydrological effects and contaminant discharges and how these can be minimised and mitigated, including opportunities to enhance degraded environments; (d) reducing stormwater flows and contaminants at source prior to the consideration of mitigation measures and the optimisation of on-site and larger communal devices where these are required; and (e) the use and enhancement of natural hydrological features and green infrastructure for stormwater management where practicable. 	Connectivity of watercourses has been retained and protected to the greatest extent possible. Connectivity of all permanent streams is protected and enhanced. As discussed above, plan provisions that will be triggered at subsequent resource consent stages will ensure that effects on the receiving environment are acceptable and as anticipated in the urban areas to be developed. Given the above the plan change is considered to be in keeping with these objectives and policies.
E3. Lakes, rivers, streams and wetlands E3.1. Introduction	 The plan change achieves a positive balance by providing for an efficient use of the future urban land resource, with an appropriate range of urban land uses that will achieve the outcomes sought by the Regional Policy Statement and also the Future Urban Land Supply Strategy 2017. To the greatest extent possible impacts on streams has been avoided and opportunities for enhancement of existing streams that will be retained or modified have been set out on the Precinct plan 2.

In urban Auckland lakes, rivers, streams and wetlands provide an important component for the assimilation and conveyance of stormwater and form part of the overall stormwater network. Streams have also been piped and filled over to reclaim land for urban land development and have been modified to accommodate infrastructure such as roads, stormwater and wastewater networks and other utility services. Urban streams nevertheless continue to provide important ecosystem services and can provide meaningful ecological and biodiversity values.

There is a balance to be struck between the need to provide for the ongoing growth of urban Auckland, including the requirements of infrastructure, and the protection, maintenance and enhancement of lakes, rivers, streams and wetlands. It is important that development occurs in a sustainable manner which should involve, where practicable, the retention and enhancement of lakes, rivers, streams and wetlands.

The Plan identifies a number of areas where the natural values of lakes, rivers, streams and wetlands are higher than elsewhere. These areas are especially vulnerable to the adverse effects of inappropriate subdivision, use and development and require a greater level of protection. These areas are identified in the following overlays:

- D4 Natural Stream Management Areas Overlay;
- D5 Natural Lake Management Areas Overlay;
- D6 Urban Lake Management Areas Overlay;
- D7 Water Supply Management Areas Overlay
- D8 Wetland Management Areas Overlay; and
- D9 Significant Ecological Areas Overlay.

This Plan requires that permanent loss is minimised and significant modification or diversion of lakes, rivers, streams and wetlands are avoided. Where adverse effects cannot be avoided, remedied or mitigated, it may be appropriate that the residual adverse effects be offset by providing environmental benefits either onsite or offsite. In

some circumstances, the existing natural values of a lake, river, stream or wetland are so high that offsetting will be inappropriate.

An offset is an action to compensate significant residual adverse effects on ecological functioning or biodiversity arising from subdivision, use or development. Offsets would only be contemplated after appropriate avoidance, remediation, prevention and mitigation measures have been taken.

Given the above there are not considered to be any significant residual adverse effects and the onsite mitigation proposed is considered appropriate, and suitable, to mitigate adverse effects arising from the proposed stream loss and modification.

E3.2. Objectives [rp]

- (1) Auckland's lakes, rivers, streams and wetlands with high natural values are protected from degradation and permanent loss.
- (2) Auckland's lakes, rivers, streams and wetlands are restored, maintained or enhanced.
- (3) Significant residual adverse effects on lakes, rivers, streams or wetlands that cannot be avoided, remedied or mitigated are offset where this will promote the purpose of the Resource Management Act 1991.
- (4) Structures in, on, under or over the bed of a lake, river, stream or wetland are provided for where there are functional or operational needs for the structure to be in that location, or traverse that area.
- (5) Activities in, on, under or over the bed of a lake, river, stream and wetland are managed to minimise adverse effects on the lake, river, stream or wetland.
- (6) Reclamation and drainage of the bed of a lake, river, stream and wetland is avoided, unless there is no practicable alternative.

Other than potential, the streams in the plan change area have not been identified as having high natural values, rather the values have been identified as low. This is largely because of the previous and existing rural land uses and general lack of riparian protection.

Streams in the plan change area are proposed to be maintained and enhanced to the greatest extent practicable. As set out above there are not considered to be any significant adverse residual effects and therefore offsetting is not required.

There will be some functional and operational need in relation to the construction of roading infrastructure for installation of structures; however, the engineering design seeks to achieve retention of watercourses in their natural state to the greatest extent possible.

Stream loss through reclamation has been avoided to the greatest extent possible.

As stated the adverse effects are avoided to the greatest extent practicable whilst still enabling efficient and functional development of the land for urban purposes.

Onsite mitigation and protection will be provided through the application of the Precinct provisions and shown on Precinct Plan 3, as well as the zoning layout which applies indicative Open Space areas over the bush areas and permanent watercourses.

(2) Manage the effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands outside the overlays identified in Policy E3.3(1) by:	
 (a) avoiding where practicable or otherwise remedying or mitigating any adverse effects on lakes, rivers, streams or wetlands; and 	
(b) where appropriate, restoring and enhancing the lake, river, stream or wetland.	
(3) Enable the enhancement, maintenance and restoration of lakes, rivers, streams or wetlands.	
(4) Restoration and enhancement actions, which may form part of an offsetting proposal, for a specific activity should:	
(a) be located as close as possible to the subject site;	
(b) be 'like-for-like' in terms of the type of freshwater system affected;	
(c) preferably achieve no net loss or a net gain in the natural values including ecological function of lakes, rivers, streams or wetlands; and	
(d) consider the use of biodiversity offsetting as outlined in Appendix 8 Biodiversity offsetting.	
(5) Avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams or wetlands on:	
(a) the mauri of the freshwater environment; and	
(b) Mana Whenua values in relation to the freshwater environment.	
(6) Manage the adverse effects on Mana Whenua cultural heritage that is identified prior to, or discovered during, subdivision, use and development by:	

- (a) complying with the protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin;
- (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and
- (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.

Riparian margins

- (15) Protect the riparian margins of lakes, rivers, streams, and wetlands from inappropriate use and development and promote their enhancement to through all of the following:
 - (a) safeguard habitats for fish, plant and other aquatic species, particularly in rivers and streams with high ecological values;
 - (b) safeguard their aesthetic, landscape and natural character values;
 - (c) safeguard the contribution of natural freshwater systems to the biodiversity, resilience and integrity of ecosystems; and
 - (d) avoid or mitigate the effects of flooding, surface erosion, stormwater contamination, bank erosion and increased surface water temperature.
- (16) Protect land alongside streams for public access through the use of esplanade reserves and esplanade strips, marginal strips, drainage reserves, easements or covenants where appropriate and for water quality, ecological and landscape protection purposes.

The proposed ecological enhancement measures, as well as the measures proposed in the engineering assessment will be able to be secured by way of conditions at resource consent stage through the Precinct provisions and also application of existing standards, rules and assessment provisions in the Unitary Plan. This will ensure that riparian margins are protected and enhanced. Ecological habitats and systems will be safeguarded through these same measures.

The plan change promotes the protection of riparian areas for the above outcomes as well as for public access by proposing the majority of riparian areas within the plan change area as open space.

E10.2. Objective [rp]

(1) High value rivers, streams and aquatic biodiversity in identified urbanised catchments are protected from further adverse effects of stormwater runoff associated with urban development and where possible enhanced.

E10.3. Policies [rp]

- (1) Manage stormwater runoff from impervious areas in Stormwater management area – Flow 1 and Flow 2 areas to minimise the adverse effects of stormwater runoff on rivers and streams to retain, and where possible enhance, stream naturalness, biodiversity, bank stability and other values.
- (2) Require stormwater hydrology mitigation in Stormwater management area control
 Flow 1 and Flow 2 areas where there are:

(a) new impervious areas;

(b) redeveloped impervious areas; or

- (c) entire sites where the area of development or redevelopment comprises more than 50 per cent of the site area.
- (3) Recognise that there may be limitations to the hydrology mitigation that can practicably be achieved in some circumstances, particularly in association with redevelopment, including:

(a) space limitations;

(b) requirements to provide for other utility services; and

(c) the function of roads as overland flow paths conveying stormwater runoff from surrounding land uses which the road controlling authority has limited ability to control. The plan change, and related land use outcomes, will not generate further adverse effects on streams or aquatic biodiversity arising from stormwater discharges. The proposed mitigation measures i.e. riparian protection and planting, open space areas and engineering techniques proposed will ensure adverse effects are avoided and enhancement provided to the greatest extent practicable.

The stormwater Flow 1 Control is proposed to be applied to the plan change area as this has been demonstrated to achieve the best outcomes and there was no demonstrated need to promote additional or further measures to achieve the best practicable options for stormwater management

The plan change achieves the outcomes sought by these objectives and policies.

D3. High-use Stream Management Areas Overlay	The measures proposed and discussed above achieve these
D3.1. Background	outcomes. The plan change is consistent with these provisions.
A number of streams in Auckland are under pressure from demands to take water or use water. The high use of these streams creates conflicts between the amount of water being abstracted, the amount of water needed for assimilating the adverse effects of discharges, and the amount of water required to maintain ecological values and base flows. Management of high-use streams can be particularly difficult during summer months when stream flows are generally at their lowest.	
The rules relating to the High-use Stream Management Areas Overlay are located in E7 Taking, using, damming and diversion of water and drilling.	
D3.2. Objectives [rp]	
(1) Water continues to be available from high-use streams within limits while safeguarding the life-supporting capacity and amenity values of the stream.	
(3) Avoid as far as practicable and otherwise remedy or mitigate adverse effects on other uses of the stream and, in particular, avoid reducing the stream's assimilative capacity as far as practicable from proposals to discharge contaminants into high-use streams (or into or onto land where the contaminants may percolate into high-use streams).	