

Natural Resources

Overview

The Waikato District contains a number of regionally and nationally significant mineral resources including various coalfields, iron sand deposits, limestone, and hard rock aggregate, sand and gravel and high quality soil resources. These resources are considered to be important to the district's economy and identity and therefore continued access should be maintained to help provide for the economic wellbeing of the district.

This report assesses the extent to which the provisions of the district plan allow for the use, preservation and/or protection of natural resources within the district in a way that meets the objectives and anticipated environmental outcomes of the Waikato District Plan.

The objectives and anticipated environmental outcomes relating to natural resources within Chapter 4 of the Waikato District Plan are as follows:

WAIKATO SECTION	
ITEM	OBJECTIVE
4.2.1	Physical, chemical and biological properties necessary for maintaining the life supporting capacity and productive use of the soil, especially high quality soil, are retained.
4.4.1	Versatility and productive capability of rural land, especially that containing high quality soil and open space, is retained.
4.5A.1	Minerals are available for extraction.
4.6.1	Coastlines, wetlands, lakes and rivers are protected from the adverse effects of subdivision and land disturbance.
4.8.1	Future urban development potential of Hamilton and other urban areas is not impeded.
ISSUES	ANTICIPATED ENVIRONMENTAL RESULTS
4.12.1 - Soil removal and damage	(a) Retention of the life supporting capacity and the potential and versatility of soil, especially high quality soil, for productive purposes for current and future generations.
4.12.2 - Land fragmentation	(a) Sustainable management of the natural resources of the district. (b) Effective and efficient use of natural resources. (c) Maintenance of access to areas for future mineral extraction. (d) Limited loss of productive rural land.
4.12.3 - Land disturbance near water	(a) Establishment of setback buffers between developments and the margins of the coast or water bodies. (b) Avoidance of contamination of water bodies from development.
4.12.4 - Urban expansion	(a) Limited subdivision and non-rural activities in the urban fringe. (b) Retain potential for urban density development.
FRANKLIN SECTION	
ISSUES	
16.3.1 - Accessibility to land, soil and water resources	
16.3.1.1 - Maintenance of the rural production system	

16.3.1.2 - Versatile soils and fragmentation
16.3.2 - Degraded water quality and riparian habitat
16.3.3 - Accessibility of mineral resources

The Franklin Section of the Waikato District Plan has a significantly different format to the Waikato Section and as such the objective and policy framework will not be summarised in this report. However, the issues are similar in both sections and as such, the objective and policy framework in relation to natural resources in both sections aims to achieve similar anticipated environmental outcomes.

Executive Summary

The Waikato District contains various mineral reserves that are both nationally and regionally significant. The District's coalfields collectively contain in the vicinity of 1.5 billion tonnes of coal representing one of the country's most strategically important energy resources. The coal resources are also potential reservoirs for much of the country's coal seam gas resource. On-shore beach and dune titanomagnetite iron sand deposits along the western coastline contain over 50 million tonnes of concentrate. Other resources include limestone, and hard rock aggregate, sand and gravel required for construction and infrastructure development and high quality soil resources that are highly valued for primary productivity.

The Waikato basin and lowlands contain high quality soil resources that are considered to be the most versatile for productive purposes. These soils fall into Land Use Capability (LUC) classes I, II or IIIe. High quality soils constitute 14% of New Zealand's land mass and 35% of the Waikato District and are considered to be important to the District's identity and economy. It is important that access to this resource is maintained for rural productive purposes.

Much of the land containing high quality soils, particularly around Hamilton City, is under substantial pressure to be subdivided and developed for rural residential living. This type of development compromises the access to the soils for rural production. The ongoing access to, and utilisation of these resources needs to be managed in a way that enables existing and future communities to provide for their social and economic wellbeing.

District Plan provisions are considered to be the best mechanism in which to protect and preserve these nationally and regionally significant resources to ensure that they are carefully managed and that protection of and access to resources is maintained.

Background

The promotion of the sustainable management and efficient use of natural and physical resources is imbedded in the purpose (Part 2) of the Resource Management Act 1991 (the Act). Territorial authorities have a duty under Section 31 of the Act to give effect to the Act by managing the effects of the use, development, or protection of land and to impose controls on subdivision.

The Waikato District contains both nationally and regionally significant natural resources including highly versatile soils and significant mineral reserves. Waikato District Council approaches the sustainable management of these resources by addressing issues of continued access to resources in the Rural and Coastal Zones through restrictive district plan provisions for subdivision and additional household units. The Waikato District Plan also provides for the protection of existing extractive industries through specified policy areas including the aggregate extraction and aggregate resource policy areas in the Waikato Section and an aggregate extraction and mining zones within the Franklin Section of the Plan.

Waikato District has an important economic role at both a regional and national level, having long provided a significant contribution to the national economy through agriculture and energy production, and the contribution of major transport and energy utilities. Long-term community prosperity requires productive rural activities to be the primary function of the Rural and Coastal Zones. These zones are

generally the only place where rural productive and extractive activities can take place and as such these activities are anticipated in these zones.

While the district plan allows agricultural activities to be carried out as a permitted activity in the Rural, Coastal and Country Living/Rural Residential Zones, the more intense horticultural activities and extractive industries, while anticipated in the Rural and Coastal Zones, do require resource consent. Through the consent process the adverse effects of the activity can be identified and the consent holder will be legally bound, through conditions of consent, to ensure adverse effects are avoided, remedied and/or mitigated on an ongoing basis. This process can also allow for conditions of consent to be reviewed at the end of a specified time period.

The District Plan also imposes strict controls on subdivision in the Rural and Coast Zones in an attempt to reduce the fragmentation of productive land. The Waikato District Plan currently includes two district plan changes relating to rural subdivision. Plan Change 2 imposes more restrictive provisions for rural and coastal subdivision in the Waikato section of the Waikato District Plan while Plan Change 14 provides more restrictive provisions for rural subdivision in the Franklin Section of the Waikato District Plan. These plan changes are discussed in more detail below.

Future Proof - Sub-Regional Growth Strategy

Future Proof is a sub-regional growth strategy for the Hamilton, Waipa and Waikato sub-region and has been jointly developed by five councils (Hamilton, Waipa, Waikato and Matamata-Piako District Councils, and Waikato Regional Council) in conjunction with the New Zealand Transport Agency (NZTA) and Iwi.

The Future Proof strategy recognises the growth pressures being experienced in the Waikato-Hamilton-Waipā sub-region; identifies a number of management issues and adverse effects arising from current growth patterns; and presents a strategy that accommodates an approximate doubling of the sub-region's population over the next 50 years.

Future Proof sets out a settlement pattern for the sub-region. As part of moving towards this settlement pattern, Future Proof specifies a review of rural subdivision as a priority action. Amongst other things, Future Proof specifies that ongoing rural residential subdivision should be directed to identified areas where it:

- will not detract from rural or natural character;
- protects versatile and high quality soils for primary production;
- maintains the rural character of the countryside and protection of rural areas from urban development; and
- minimises the loss of highly productive land.

In addition, Waikato District Council has, in consultation with the community, developed the Waikato District Growth Strategy to specify growth patterns within the district in more detail.

As a result of some of the issues identified in the Future Proof sub-regional growth strategy and the Waikato District Growth Strategy, Waikato District Council agreed to address district wide growth and rural and coastal subdivision through amendments to the Waikato District Plan. This resulted in Plan Change 2 which was considered necessary to implement the key aspects of the Future Proof Strategy, primarily in relation to subdivision and development in Rural and Coastal Zoned areas.

Plan Change 2 – Rural and Coastal Landuse and Subdivision

Plan Change 2 was notified in October 2010. The plan change proposed amendments to the provisions in the Waikato District Plan in relation to Rural and Coastal Zone landuse and subdivision. The intention of the amended provisions within the plan change is to reduce the number of household units in the Rural and Coastal Zones through a reduction in subdivision and additional dwellings/dependant person's dwellings.

This plan change seeks to achieve the purpose of the Resource Management Act 1991, which is to promote the sustainable management of natural and physical resources. It implements the policy directions of the Proposed Waikato Regional Policy Statement, which became publicly available in September 2010 and which was publicly notified in November 2010. Section 6 of the Regional Policy Statement requires the Council to take a strategic approach to managing growth and to implement the Future Proof Growth Strategy 2009.

Plan Change 2 was the first step in implementing the Council's strategic planning objectives and ensures that the district plan remains an effective tool in promoting the sustainable management of the district's natural and physical resources. All appeals to Plan Change 2 were resolved in 2013 with all provisions being fully operative from 21 February 2014.

Plan Change 14 (Franklin Section) – Rural Landuse and Subdivision

Plan Change 14 to the Franklin District Plan was notified on 30 September 2002. The plan change proposed a regime of strategies, objectives and rules (for subdivision and land use) that better address resource management issues, especially growth management. It addresses all of the former Franklin District outside of the main townships of Pukekohe, Waiuku and Tuakau, with the exception of very site specific zones (such as the Timber Processing Zone at Pokeno and the Maioro Mining Zone).

The former Franklin District has been subject to strong growth pressures over the last 2-3 decades to accommodate in particular, countryside living at the expense of rural productive land. Auckland's influence on Franklin District's growth has been and remains extremely significant.

The subdivision regime provided for in the Operative Franklin District Plan is relatively limited (conservation lots, existing intensive use lots and general purpose lots). The strategic direction focuses mainly on highly valued land and soil resources and retention of soil versatility. Changes are needed to sustain land versatility, accessibility to land resources and better addresses reverse sensitivity issues.

Plan Change 14, which was made fully operative on 21 October 2013, intends to channel the majority (65%) of Franklin's growth into existing urban areas rather than perpetuate the historic trend where that proportion was locating in rural areas. Much of the philosophy behind Plan Change 14 is consistent with Plan Change 2.

Pressures

Fragmentation of Productive Land and Loss of Access to Natural Resources

Ongoing fragmentation of Rural and Coastal Zoned land through subdivision to create lifestyle lots reduces the viability of rural productive activities. It reduces the area available for productive farming activities and extractive industries and increases conflicts between those who use the land for productive purposes and those wanting a 'quiet rural lifestyle'. Issues that concern lifestyle lot owners include noise, dust, odour, visual amenity and the extended working hours of rural activities.

The proliferation of lifestyle lots in the Rural and Coastal Zones has also had an effect on the traditionally open space character of the zones and increased the likelihood of reverse sensitivity issues arising between rural productive and residential activities. The different expectations of amenity between rural land users can restrict access to mineral resources and the establishment of more intensive agricultural and horticultural activities in the very zones that these activities are anticipated.

The Waikato and Franklin Sections of the District Plan have historically provided lenient Rural and Coastal Zone subdivision provisions which in turn allowed for a proliferation of new lifestyle lots being created, particularly in the Rural Zone. These provisions have become more restrictive under both Plan Change 2 to the Waikato Section and Plan Change 14 to the Franklin Section of the District Plan. The more restrictive provisions under Plan Change 2 and Plan Change 14 will reduce the potential for subdivision in the relevant zones and therefore reduce the pressure on productive land resources.

Designations, Rezoning and Urban expansion

There is an expectation that some land will be removed from productive use to accommodate network infrastructure such as roads and utilities as well as town and city expansion to accommodate population growth. The District Plan contains an urban expansion policy areas adjacent to the Hamilton City Boundary (North and East of the city) to provide for future urban growth. Highly restrictive landuse provisions apply to activities in this policy area that could potentially restrict future urban development.

Urban expansion and network infrastructure are considered necessary and are anticipated. However conflicts can occur where the best quality land for productive purposes is also often the most preferable to develop for residential growth and roading.

Adverse Effects on Riparian Margins and Water Resources

An important role of Territorial Authorities is to place controls on landuse to ensure adverse environmental effects are minimalised.

Access to Minerals

Different expectations of amenity can also be the cause of conflicts between residential lifestyle and farming activities with extractive industries such as aggregate extraction and mining. Although quarrying and mining are anticipated in the Rural and Coastal Zones, conflicts and land management issues can still arise where these activities are in close proximity to each other. Examples of this are where a quarry is established close to a residential area or where underground mining may affect the ground surface or cause subsidence. These affects of activities can be difficult to manage where activities and/or effects are historical.

State

The analysis below illustrates the number of activities that effectively prevents rural land from being used for productive activities in the future. This includes the number of additional lots created by way of subdivision under the provisions of the District Plan, building consents for new dwellings and dependant person's dwellings, resource consents for second dwellings and designations for network infrastructure in the Rural and Coastal Zones. Analysis will be over the period from 2010 – 2012.

Subdivision

During the 2010 - 2012 period 590 additional rural lots were created in the ex-Franklin area, 1053 additional rural lots and 56 additional coastal lots were created in the Waikato district as it was prior to amalgamation.

Landuse Consent - Dwellings

Once a new lot is created through the subdivision process, the expectation is that the land will contain generally one household unit with some provision for a minor household unit (dependant person's dwelling) development.

Landuse –New Dwellings

During the 2010 - 2012 period 98 building consents were issued for dwellings in the Rural Zone in the ex-Franklin area, 354 were issued for dwellings in the Rural Zone and 18 were issued for dwellings in the Coastal Zone of the ex Waikato district.

Designations, Rezoning and Urban expansion

During the 2010 to 2012 period, a number of plan changes and designations occurred that changed the zoning of Rural Zoned land from high productive potential into zones or designations that have less future productive potential. These are changes are listed below:

Activity	Type of Activity	Land Area
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Variation 13 to the Waikato District Plan - Te Kauwhata Structure Plan	Land rezoned from Country Living to Living Zone	
Boundary change with Hamilton City Council	Rural Zoned land transferred from Waikato District to Hamilton City for future urban expansion including industry	
Plan Change 3 to the Waikato District Plan – Tamahere Structure Plan	Country Living Zoned land rezoned as Recreation Zone and Business Zone	
Designation for the Tamahere Link Road	A Country Living Collector road linking Devine Road and Airport Road (SH21)	
Designation for Te Kauwhata Bypass	An arterial route linking Te Kauwhata Road with Waerenga Road primarily to provide an alternative route for heavy traffic	
Designation for the Waikato Expressway	A nationally significant route between Waipa District and Auckland City. A number of new areas of land have been included in the expressway alignment including: Te Rapa Bypass, Hamilton Bypass, Ngaruawahia Bypass, Taupiri Bypass, Huntly Bypass and Rangariri Bypass	
Designation for the Te Rapa Bypass	A nationally significant route connecting Hamilton City at Avalon Drive with State Highway 1 at Horotiu. Note that this section of the Waikato Expressway is currently State Highway 1 but its status will change once the Hamilton Section of the Waikato Expressway between Tamahere and Horotiu are completed.	
Te Kauwhata water reservoir	A water reservoir for public potable water supply on Te Kauwhata Road adjacent to existing reservoir	

Extractive Industries

The following section provides a breakdown of the existing permitted extractive industries such as quarries and coal mining and how the District Plan currently manages and provides for these activities.

During the 2010 – 2012 period Council received and granted thirteen landuse consents for extractive industries. Nine of these applications were assessed under the provisions of Waikato Section of the District Plan while the other four applications were assessed under the provisions of the Franklin Section of the plan. Of these thirteen applications three were in relation to the Solid Energy coal seam gas project in Rotongaro near Huntly, five were in relation to coal extraction and nine were in relation to either hard rock or sand quarry operations.

Response

Subdivision - Waikato Section

A range of provisions have been put in place within the District Plan to address the pressures between activities in the Rural and Coastal Zones. These provisions generally address the issues of reverse sensitivity, access to resources, fragmentation of productive land and effects on rural character. Provisions include limits to the number of dwellings on a single lot; dependant person's dwellings; the bulk and location of dwellings and other buildings; the number of additional lots that can be created from existing lots; further restrictions on subdivision within specified policy areas, i.e. coal mining policy area or aggregate extraction policy area and restrictions on the location of dwellings in relation to productive and extractive industries.

Prior to Plan Change 2 the Waikato Section of the District Plan provided for the subdivision of land in the Rural and Coastal Zones to a maximum of two additional lots from land with a certificate of title that was issued prior to 6th December 1997. The only restrictions on size were that all lots created by the subdivision had a 1.3ha average with additional lots no less than 5000m². Where the certificate of title was issued after the 6th December 1997, subdivision became more restrictive, being either non-complying or prohibited depending on whether the additional lots contained 'high quality soils'. Under the conservation house lot rule, additional subdivision potential could be derived (to a maximum of 4 more additional lots) where an area of significant indigenous vegetation and/or significant habitat of indigenous fauna were protected in perpetuity. Furthermore, up to three dwellings were permitted on a lot over 36ha and dependent person's dwellings were permitted so long as they meet permitted activity criteria.

These relatively lenient provisions have allowed for 'lifestyle' type development to proliferate in the Rural and Coastal Zones, often on premium soils. Lifestyle development is most pronounced around the outskirts of Hamilton City where intensive subdivision has occurred on land that had previously been subjected to a 10 – 15 acre lot subdivision regime of the 1970s. The effects of the resultant landuse patterns are illustrated in figure 1 below. Plan Change 2 was undertaken to address these unsustainable landuse pressures.

Plan Change 2 provided for a significant reduction of potential rural lots in the Rural and Coastal Zones from up to 6164 and 194 more additional lots in the Rural and Coastal Zones respectively to 1805 in the Rural Zone and 170 in the Coastal Zone. Amendments to subdivision rules reduced subdivision entitlement from 2 additional lots to a maximum of 1 and increased the parent lot size from a minimum of 2.6ha to 20ha. An increase in the parent lot size to 50ha could further reduce the subdivision entitlement to 817 additional Rural Zoned lots and 41 additional Coastal Zoned lots.

The changes made under Plan Change 2 are now operative. In addition to the reduction from two to one additional lot and an increase in the parent lot from 2.6ha to 20ha or more, the baseline activity status has been increased from a controlled activity to restricted discretionary. This results in a far more restrictive subdivision regime in comparison to the previous regime. In addition Plan Change 2 provisions reduces the maximum number of conservation house lots from 4 to 3; reduces the number of additional dwellings that are permitted; and requires a full discretionary resource consent for a dependant person's dwelling.

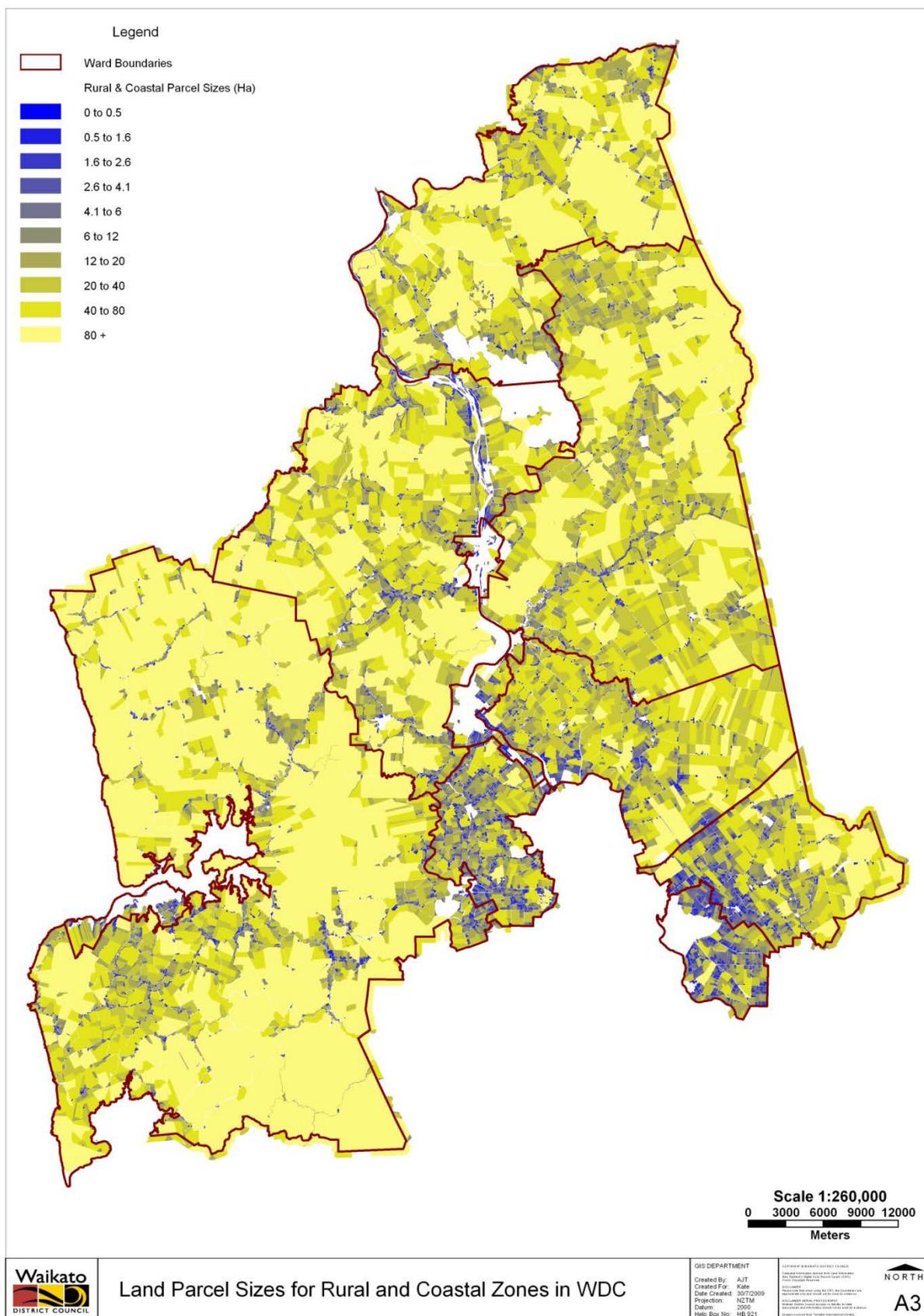


Figure 1: This map of the Rural and Coastal Zones of the Waikato District Plan (prior to amalgamation with Franklin District), produced as part of Plan Change 2 analysis in 2009. The dark blue shaded areas indicate lots under 5000m² and progresses through to the yellow shaded lots over 80ha. This illustrates the subdivision pattern across the district with a significant concentration of small ‘lifestyle’ subdivision occurring around the periphery of Hamilton City and main transport routes.

Subdivision - Franklin Section

The Franklin District Council initiated a rural plan change called Plan Change 14 (PC14) in?. The provisions of PC14 are now operative. The new provisions were carefully designed to ensure that greater opportunities for district growth remain within towns and villages. Outside of urban areas, the opportunities for growth are much more constrained. Waikato District has inherited a small portion of what is known as the 'Environmental Enhancement Overlay Area' (EEOA) from the former Franklin District. Subdivision opportunities within the EEOA are to result in 'limited' growth. Environmental lots can be created in exchange for significant environmental benefits, i.e. the protection, enhancement and/or restoration of qualifying ecological features that include native vegetation and riparian margins. Outside of the EEOA, growth opportunities are 'further limited', but significant environmental benefits remain a prerequisite for subdivision.

The different limitations on growth inside and outside of the EEOA are a consequence of rules that set minimum sizes for a property in order to be eligible for subdivision as well as maximum lot yields. The only exception to this is if an environmental lot subdivision relies upon an Identified Significant Natural Feature (defined in the Operative Waikato District Plan (Franklin Section)) in which case the existing title is not subject to any minimum size requirement. For environmental subdivisions based on Qualifying Natural Features (which are also defined) or the mapped ecological corridors, the existing 'parent' titles for inside and outside the EEOA must be a minimum area of 15 hectares and 20 hectares respectively. Lot yields for inside and outside the EEOA depend upon the size of the feature being protected but are a maximum of 8 lots and 2 lots respectively.

Transferable rural development right subdivisions are also provided for under PC14. The overall objective of this type of subdivision is to redistribute latent and consented lots to result in a more rational title pattern that protects the versatile soil resource and to also shift consented development sites to receiver locations that are less sensitive than at donor locations.

Extractive Industries

Both the Waikato and Franklin sections of the Waikato District Plan provide for the protection of existing extractive industries either through special zones or policy overlays with specific rules applying to these areas. In addition to existing activities, new operators can apply for resource consent to undertake an extractive industry. Through the consent process actual and potential environmental effects will be managed by way of consent conditions that must be complied with on an ongoing basis.

The Waikato Section of the district plan uses a number of mechanisms to identify and retain access to mineral resources. These mechanisms include objectives, policies, rules, explanations and reasons, definitions and policy area overlays and special zones identified on the planning maps. Within the Waikato Section of the district plan, the policy area overlay mechanism identifies the location of existing extractive industries by way of an Aggregate Extraction Policy Area overlay; the location of existing and known 'unexploited aggregated resources' through an Aggregate Resource Policy Area overlay and the location of known coal reserves through a Coal Mining Policy Area overlay. Subdivision provisions specific to these overlays are summarised below:

Permitted Criteria	Minimum Status for Resource Consent
Subdivision within an Aggregate Extraction Policy Area	Restricted Discretionary
Subdivision within an Coal Mining Policy Area	Restricted Discretionary
Subdivision within an Aggregate Resource Policy Area	Restricted Discretionary
New allotment boundaries within 200m of the boundary of an Aggregate Extraction Policy Area for sand extraction	Restricted Discretionary

New allotment boundaries within 500m of the boundary of an Aggregate Extraction Policy Area for rock extraction	Restricted Discretionary
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The Franklin Section contains special zones which function in a similar way to the policy area overlays in the Waikato Section of the plan. Specific rules apply to the special zones in relation to aggregate extraction and mining activities which safeguard the extractive industry while also protecting the amenity of adjacent development. These special zones are as follows:

Zone	
Subdivision in the Aggregate Extraction and Processing Zone	Discretionary
Subdivision in the Maoro (Waikato North Head) Mining	Non-Complying

In order to safeguard productive and extractive activities in the Rural and Coastal Zones, the Waikato Section of the District Plan also provides rules that help mitigate potential reverse sensitivity through more restrictive boundary setback provisions. Building setback distances are more restrictive on sites adjacent to, or within a certain distance from land containing productive farming activities, intensive horticultural activities or extractive industries within the identified Aggregate Extraction Policy Area. These Rural and Coastal Zone setback provisions are summaries as follows:

Permitted Criteria	Building Setback Distances
On lots over 1.6ha	25m
On lots between 5000m ² and 1.6ha adjacent to lots under 1.6ha	12m
On lots between 5000m ² and 1.6ha adjacent to lots over 1.6ha	25m
On lots less than 5000m ²	12m
Buildings on lots adjacent to an aggregate extraction policy area containing a sand resource	200m
Buildings on lots adjacent to an aggregate extraction policy area containing a rock resource	500m
Buildings on lots adjacent to a site containing an intensive farming activity	300m

To ensure effects on riparian margins and water resources are minimal, the District Plan includes controls on the location of buildings and wastewater discharge in relation to the margins of inland and coastal water bodies through setbacks provisions. There are also controls on soil disturbance and earthworks to ensure proper sediment and erosion controls are utilised.

Joint Management Agreement (JMA)

Fresh water resources are also an important natural resource in the Waikato District in terms of having cultural significance to Maori, providing a potable water supply to urban and peri-urban areas, providing for agriculture, horticulture and industry as well as recreation and amenity values. However the Waikato District Plan does not manage the use, allocation and health of the freshwater resource itself, as it only has jurisdiction to manage the effects that landuse can have on adjacent water bodies. The

Waikato Regional Plan generally manages the direct health and wellbeing of the freshwater resource through water allocation permits, discharge permits as well as some landuse activities such as soil disturbance.

On March 23rd 2010 the Waikato District Council signed a Joint Management Agreement with Waikato Tainui to enable the Joint Management of the health and wellbeing of the Waikato River and its tributaries within a defined catchment area. In order to provide meaningful direction to the purpose of the agreement, Waikato District Council undertook a District Plan Change (PC5) 'Vision and Strategy' which was publically notified on 13 October 2012. The provisions of PC5 essentially tightened up landuse activities in both the Waikato and Franklin Sections of the Waikato District Plan to ensure that activities do not have an adverse impact on the health and wellbeing of the Waikato River.

Other matters

Structure Planning as an effective planning tool for towns, villages and other areas

In New Zealand a structure plan is generally defined as a strategic and spatial framework to guide the development or redevelopment of specified areas. They do this by setting the layout of future land uses and infrastructure. Structure plans typically provide guidance on parameters for the type, form, staging and financing of development. They also tend to incorporate community values and aspirations for the future development of the area. Being strategic in nature, a structure plan should ensure some flexibility with regards to built outcome details.

Notwithstanding the above general definition, structure plans are not prescribed in New Zealand legislation and therefore vary considerably in scope and content across the country.

Structure plans are a useful tool as they provide a strategic framework to authorities and large developers for the co-ordinated development of an area. The value for a developer or authority is in enabling the tying together of spatial planning, provision of supporting infrastructure and finance for development.

The Waikato District Council has undertaken Structure Planning in Pokeno, Te Kauwhata and Tamahere and is currently progressing structure plans in Tuakau and Ngaruawahia. The structure plan process is an effective mechanism that ensures all relevant matters are taken into consideration prior to making changes to zoning and increasing urban style development into the rural environment.

Kyoto Protocol and Carbon Credits

The Kyoto Protocol to the United Nations Framework Convention on Climate Change UNFCCC is an international agreement that seeks to address global warming and delay global climate change. The protocol aims to reduce the total greenhouse gas emissions of developed countries (and countries with economies in transition) to 5 per cent below the level they were in 1990.

The Kyoto Protocol came into force on 16 February 2005 after the protocol was signed and ratified by 55 countries (including the countries responsible for at least 55 per cent of the developed world's 1990 carbon dioxide emissions). New Zealand ratified on 19 December 2002. Only countries that ratify the Protocol are bound by it.

The Kyoto Protocol contains legally binding emissions limitation or reduction objectives (targets) for developed countries. In the five years from 2008 to 2012, individual developed country targets range between eight per cent below and ten per cent above 1990 emission levels.

Parties that are bound by the protocol are required to reduce emissions by meeting their specified targets. Parties may introduce policies and other mechanisms to achieve their assigned limits or

reductions, or they may choose to utilise the flexibility mechanisms provided for in the Kyoto Protocol. The flexibility mechanisms include International Emissions Trading, Joint Implementation, and the Clean Development Mechanism.

Through the flexibility mechanisms developed countries can purchase emissions units from other developed countries or from emissions reduction projects undertaken in another country to offset against their emissions units and enable compliance with their obligations under the Protocol. This essentially means that a country can comply with its emission targets even though its domestic emissions may exceed its targeted amount. The Kyoto Protocol recognises that a reduction in greenhouse gas emissions can be achieved by either reducing overall emissions or by providing carbon sinks such as new forestry (Ministry for the Environment: www.mfe.govt.nz).

The provisions of the Waikato District Plan do not provide for a reduction in carbon emissions or to specifically provide for an increase in carbon sinks to address New Zealand's targets under the Kyoto Protocol.

Where to from here

Mechanisms for monitoring the effectiveness of the district plan provisions will need to be identified, particularly in relation to the subdivision provisions within Plan Change 2 and Plan Change 14, for example:

- number of additional lots created pre PC2, post PC2 decision and from the date that PC2 is declared fully operative
- number of additional lots being sought per consent i.e. 1, 2 or over 2
- number of subdivision consents approved/declined

Monitoring requirements will need to be identified to determine the effectiveness of Plan Change 2 in relation to additional dwellings on existing lots in the Rural and Coastal Zones, for example:

- number of landuse consents for second dwellings before and after the date PC2 was declared fully operative
- number of consents approved/declined

Monitoring requirements will need to be identified to determine the effectiveness of Plan Change 2 in relation to Dependant Person's Dwellings (DPDs) on existing lots, for example:

- number of landuse consents for dependent person's dwellings before and after the date PC2 was declared fully operative
- Number of consents for DPDs approved/declined

Monitor the number of reverse sensitivity complaints in relation to the effects of productive and extractive activities in the Rural and Coastal Zones.

Monitor the number of cases of illegal earthworks and other activities that adversely affect water bodies.