

Wednesday, 22 September 2021

Te Hui o Te Kaunihera ā-Rohe o Heretaunga

Hastings District Council

District Planning and Bylaws Subcommittee Meeting

Kaupapataka

Attachments Under Separate Cover

Te Rā Hui:
Meeting date: **Wednesday, 22 September 2021**

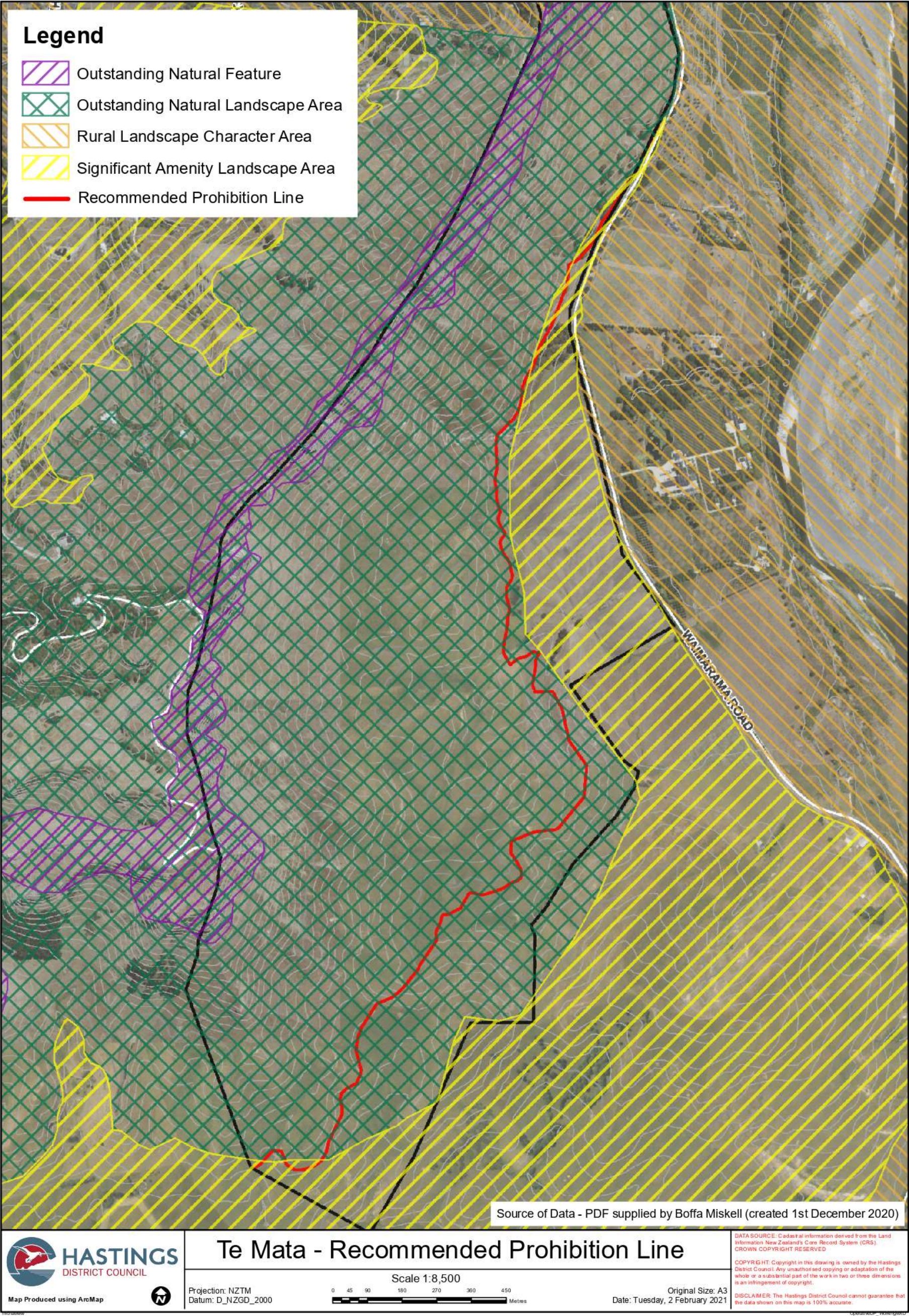
Te Wā:
Time: **1.00pm**

Te Wāhi:
Venue: **Council Chamber
Ground Floor
Civic Administration Building
Lyndon Road East
Hastings**

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TE KAUNIHERA Ā-ROHE O HERETAUNGA

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4.	PROPOSED PLAN CHANGE 4 - PROTECTION OF EASTERN FACE OF TE MATA, TE MATA, TE MATA O RONGOKAKO, TE KARANEMANEMA TE MATA O RONGOKAKO (HEREIN REFERRED TO AS TE MATA ... TE MATA TE TIPUNA)	
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Eastern Face of Te Mata – District Plan Provisions

Activity	Existing Rule	Location	Proposed Rule- Te Mata Eastern Face	Location
Buildings	<ol style="list-style-type: none"> (1) Buildings associated with any activity other than residential and visitor accommodation within the 240m contour– non complying. (2) Buildings for residential or visitor accommodation within the 240m contour – prohibited (3) Buildings greater than 50m² gfa below the 240m contour and within the ONFL- non complying (4) Buildings less than 50m² gfa below the 240m contour and within ONFL – permitted (5) Buildings within the SAL6 permitted 	Section 17.1 Landscapes	<p>Lowering of the Building Prohibition line</p> <ol style="list-style-type: none"> 1) All buildings within the Building Prohibition area other than buildings accessory to land based primary production under 50m² – prohibited. 2) Buildings accessory to land based primary production under 50m² within the Building Prohibition area – non-complying. 3) Buildings greater than 50m² gfa below the Building Prohibition area and within the ONFL- non-complying 4) Buildings less than 50m² below the Building Prohibition line and within the ONFL – RD 5) Buildings greater than 50m² gfa within SAL6 RD 	Section 17.1 Landscapes

Item 4 Proposed Plan Change 4 - Protection of Eastern Face of Te Mata, Te Mata, Te Mata o Rongokako, Te Karanemanema Te Mata o Rongokako (herein referred to as Te Mata ... Te Mata te Tipuna)

Proposed Rules Table - Te Mata Eastern Face

Attachment 2

			6) Buildings less than 50m ² gfa within SAL6 controlled.	
Plantations	Non complying within the entire ONFL Permitted activity within SAL6	Section 17.1 Landscapes and Appendix 43	Non- complying within the ONFL Plantations within SAL6 – RDNN with the exception of revegetation around existing seepage and natural wetland areas.	Section 17.1 Landscapes and Appendix 43
Network Utilities	Non-complying activity including any support structures and associated earthworks	Section 17.1 Landscapes	Non-complying activity including any support structures and associated earthworks. Assessment Criteria includes the consideration of cultural effects.	Section 17.1 Landscapes
Signs	Permitted Activity up to 2.5m ² in area	Section 17.1 and 28.1	Non-complying with the exception of signs relating to safety and Te Mata Trust Board activities.	Section 17.1 and 28.1
Earthworks	Permitted activity up to 200m ³ per site per year and 500m ³ per site per year for maintenance of existing farm tracks fencing and drains. Discretionary activity for cuts with a vertical extent greater than 1 metre	Section 27.1	Permitted activity up to 50m ³ per site per year and 500m ³ per site per year for maintenance of existing farm tracks fencing and drains. Discretionary activity for cuts with a vertical extent greater than 1 metre Re wording of the assessment criteria to make explicit recognition of the effects on cultural landscapes. Re word Policy EMP13 so that there is clear reference to cultural landscapes. SAL6 – Permitted activity up to 200m ³ per site per year and 500m ³ per site per year for maintenance of	Section 27.1

Item 4 Proposed Plan Change 4 - Protection of Eastern Face of Te Mata, Te Mata, Te Mata o Rongokako, Te Karanemanema Te Mata o Rongokako (herein referred to as Te Mata ... Te Mata te Tipuna)

Proposed Rules Table - Te Mata Eastern Face

Attachment 2

			existing farm tracks, fencing, and drains.	
Appendix 43 Outstanding Landscapes			Need to add Cultural issues in as a management issue for ONFL1	
Appendix 44 Significant Amenity Landscapes			Need to add Cultural issues in as a management issue for SAL6	
Fences within ONFL1			Performance standard that any new fences shall be aligned with the grain of the landscape.	



this report we have drawn attention to the fact that this wāhi whenua is inextricably linked with 800–1,000 years of whakapapa. Its soils contain the blood of our tīpuna (transl. ancestors) and taonga (transl. cultural artefacts) that constitute a vitally important cultural heritage for the marae hapū of Heretaunga. This wāhi whenua represents a complex layering of domains of tapu and noa that are linked with the former expressions of kawa, kaupapa and tikanga by our tīpuna (transl. ancestors). The status ‘wāhi whenua’ recognises that this is not only an outstanding natural landscape, it is a landscape what has been shaped by centuries of human occupation.

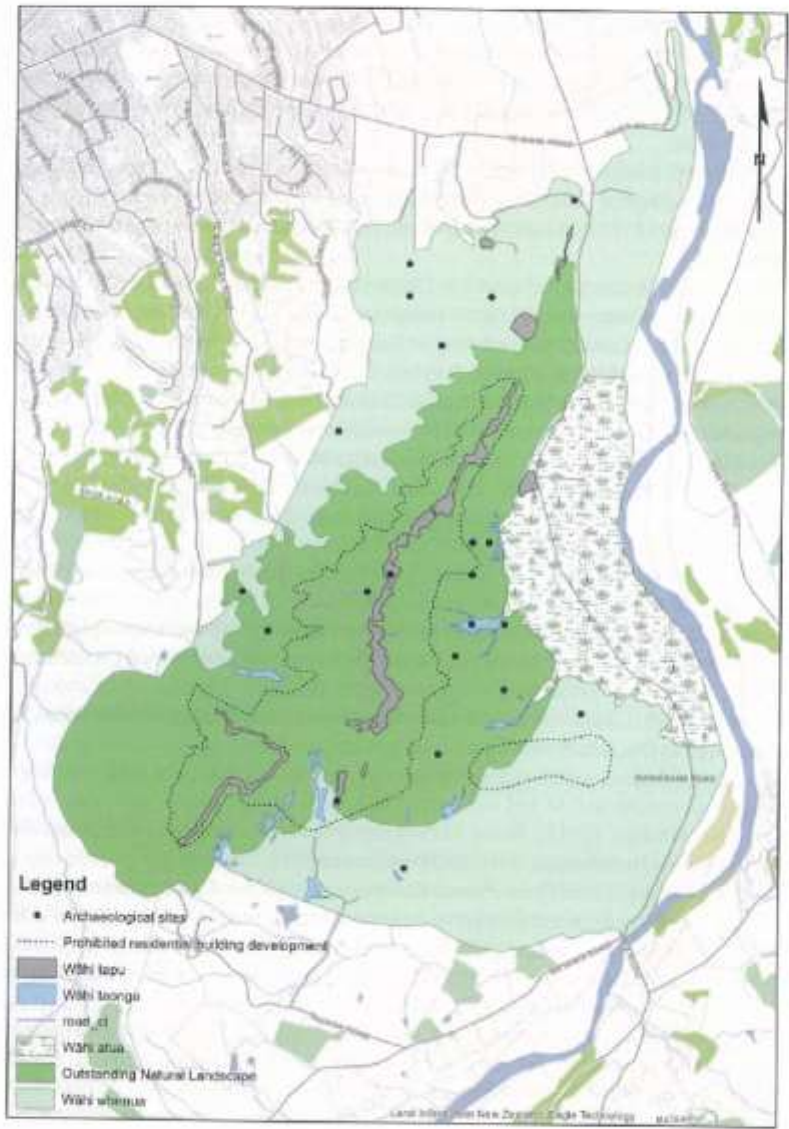


Figure 28 A map of the Te Matā ... Te Mata te Tipuna study area that depicts recommended planning zones in addition to the existing Outstanding Natural Landscape zone and registered archaeological sites (Source: LINZ base map, Adam Forbes 2018, Landcare Research PNW).

Hastings District Council: Te Kaunihera ā Rohe o Heretaunga

2015-2019 State of the Environment Report:
2015-2019 Ko te Pūrongo tō te Taiao

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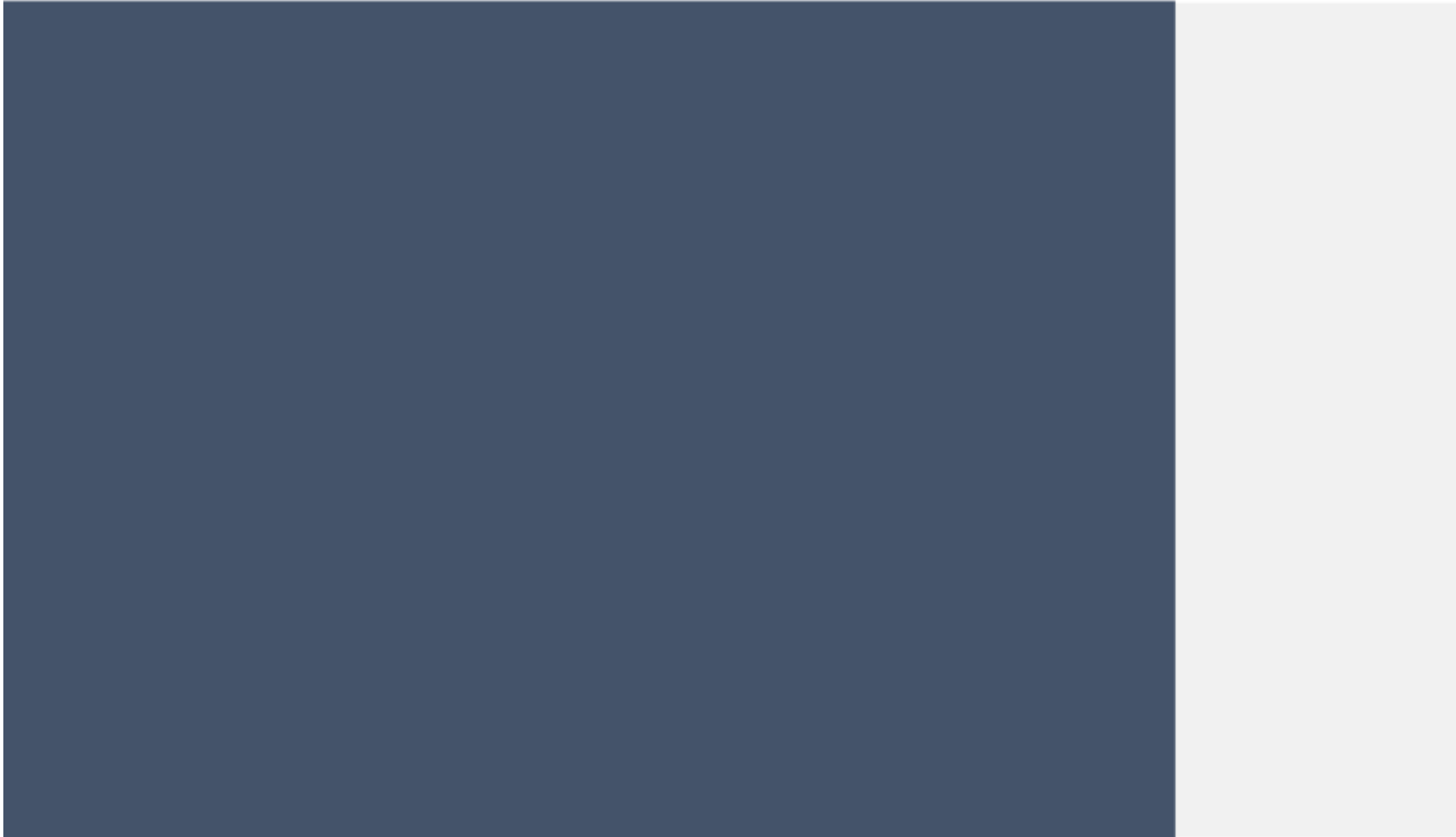
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He Mihi

2019-2021 Ka te Pōrangā tō te Tāia

Kei ngā mana, kei ngā reo, kei ngā pari kārangaranga o tēnā pito, o tēnā takiwā, o tēnā hapū o te rohe whānui o Heretaunga, anei ngā kupu whakamihi ki a koutou katoa!

E tika ana kia tukuna atu ngā whakaaro ki a rātau mā ko ngā rau-o-piope kua pūtea atu e ngā hau maiangi, e ngā hau pūkerikeri ki tua o te ārai. Kātahi rātau te tira mātāi pō ki a rātau, waiho ake ko tātau te tira mātāi ao ki a tātau.

Tēnā rā tātau katoa e whakamana nei i tō tātau reo rangatira i raro i te āhua o ngā kupu kōrero ā hui mā, ā koro mā me ngā tāhuhu kōrero o te rohe whānui o Heretaunga.

Kei ngā marae rua tekau mā whā o Te Kaunihera ā Rohe o Heretaunga, kei ngā hapū kārangaranga, kei ngā Taherenua o te takiwā nei, anei anō te maioha ki a koutou, otiā, ki a tātau katoa.

Otiā, Heretaunga-ara-rau, Heretaunga-hakū-nui, Heretaunga-hāro-te-kāhu, Heretaunga-saorao-haumako, Heretaunga-ringahora, Heretaunga takoto noa; tihei Heretaunga!

Greetings to you the many, many voices from every corner of the district and community of Heretaunga, greetings and salutations to one, to all!

It is important that in moving forward, we acknowledge the past and so we remember our loved ones across the district who have passed on and whose legacies we uphold today.

Greetings to us all as we celebrate our stance as a Council in acknowledging the place of te reo Māori today across Heretaunga district, a language and history that is both rich and pertinent to community development today.

To our marae and hapū across the district and our iwi partners including Post-Settlement Governance Entities and Taharenua, greetings and acknowledgements to you.

And so it is with pride that we acknowledge Heretaunga of its converging Arcadian pathways, Heretaunga of its life-giving dew and waters, Heretaunga of its beauty seen from the eye of the hawk, Heretaunga of its fertile plains, Heretaunga of its hospitality and open arms, and Heretaunga of its many departed chiefs, we acknowledge the living spirit of Heretaunga here with us today!

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2019-2020 Kōwhiri Pūrohunga ki te Tairāro

Introductory Message from the Mayor and Chief Executive

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Item 6

2019-2020 Ka te Pōroanga tō te Tāiao

Introductory Message from the Mayor and Chief Executive

We have great pleasure in presenting to you, the third State of the Environment Report for the Hastings District. The Report is a snapshot of the Hastings District detailing current environmental conditions and the interaction between the people and the environment as at 31 December 2019.



As Mayor and Chief Executive of Hastings District Council, we are proud to present the State of the Environment Report for the wider Heretaunga area. This is a snapshot of current environmental conditions and the interaction between our people and the environment as at 31 December 2019.

Our monitoring and reporting of the state of the environment provides council and our community with information on the condition of the environment we live in. From this, we can identify key environmental pressures and make a plan on how, as a community, we react to those.

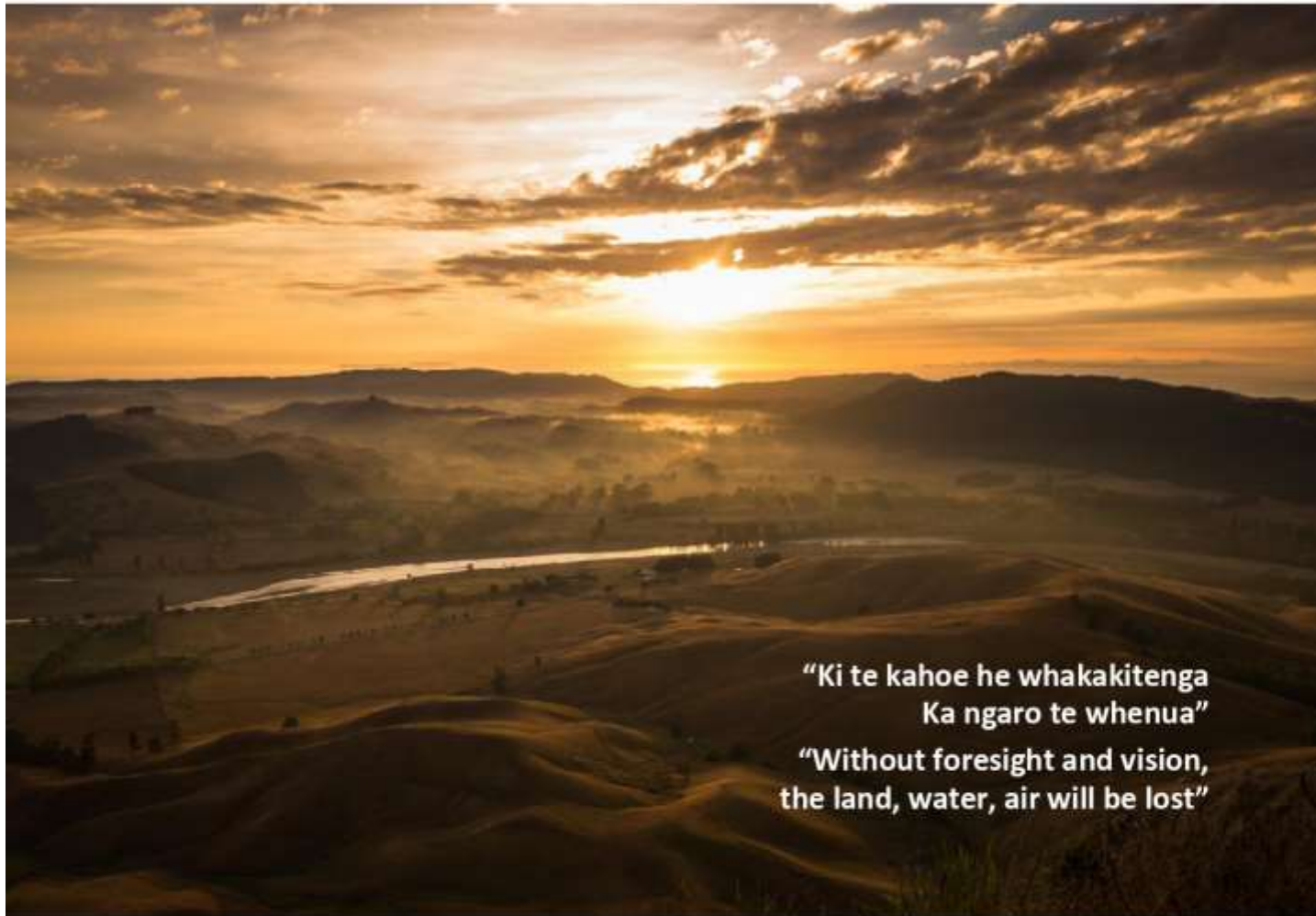
It is important we are all informed about how we are performing in the management of our natural and built environment. This is a report card on not just Hastings District Council's management of the environment, but also the Hawke's Bay Regional Council, local organisations, community groups and individuals who all have a role to play in looking after our environment.

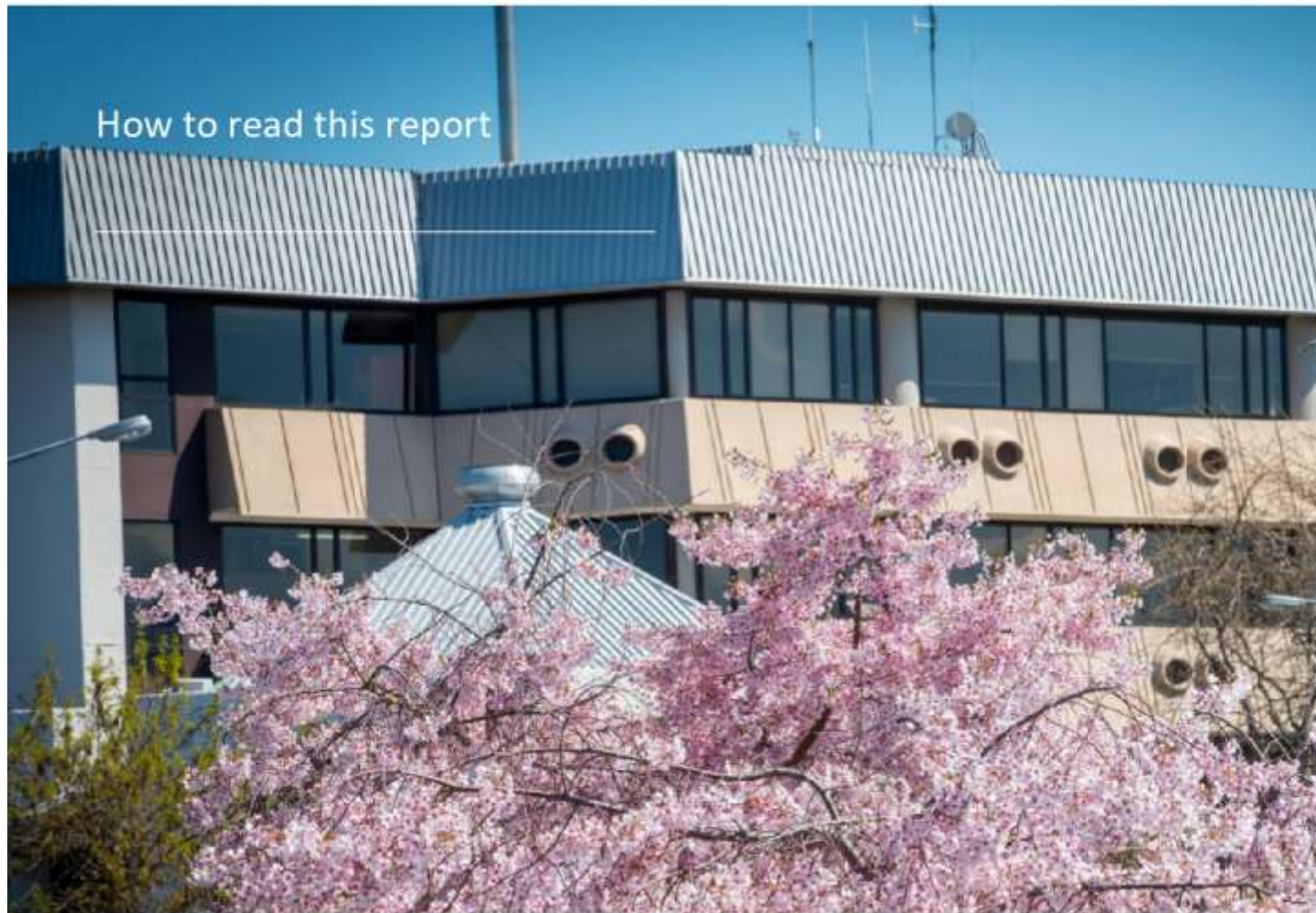
Council has committed to a sustainable development approach as a central theme of its strategic planning framework. It is focused on meeting the needs of its community today, as well as those of future generations. Protecting and enhancing our environment and its productive capacity is key in achieving this, alongside addressing social, cultural and economic factors. This is something that will require the efforts of the whole community.

We all have a part to play in safeguarding our environment for future generations. We see this report as a tool to help those involved in that protection and enhancement through the preparation of plans and strategies that will help our environment in the future.

We will continue to work for a prosperous Council that cares for and sustainably manages the world in which we live.

Hastings District Council | Te Kaunihera o Rohe o Heretaunga // 7





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How to read this report

This State of the Environment Report is organised in two parts.

This first part provides an introduction to state of the environment reporting, the parameters for this Report, a snapshot of Hastings District and its people to provide context in understanding the interaction between people and the environment; and an introduction to commonly held environmental values and customary mana whenua values as they relate to the environment.

The second part of this report describes the state of the District's environment. This commences with a table providing an executive summary of the state of the District's environment under the headings of the following five sections of the Report:

- Sustainable Land Use;
- Amenity, Character & Heritage Management;
- Sustainable Infrastructure;
- Hazard Management; and
- Sustainable Waste Management.

These sections reflect the key topics selected for this State of the Environment Report and align with the functions of the Hastings District Council. It is recognised that these sections are a starting point only, and it is envisaged that future State of the Environment Reports will evolve and may incorporate additional topics relevant to the District's environment, as appropriate.

Each section commences with a summary table which provides a quick glance at the indicators for that topic and a summary of the indicators over the reporting period.

Each section is then divided into sub-topics following a standard format, as follows:

- An introduction;
- A table summarising the relevant community outcomes and District Plan outcomes and how the state of the environment indicators also inform those outcomes;
- Presentation of monitoring information for each indicator;
- A summary statement based on the indicator results for the topic in question; and
- Identification of current and suggested responses for Council and for the community.



Introduction

This is the third State of the Environment Report for Hastings District. It depicts the state of the District's environment as at 31 December 2019.

The process for developing this State of the Environment Report (SoE) has involved:

- Refining on the indicators that formed the basis of the first report in 2008.
- Developing new indicators to supplement the existing and;
- Subsequently determining what supporting data is available and being collected by Hastings District Council and other organisations with the intention of setting in place many of the systems needed to enable monitoring of trends for future reporting.

It has been prepared by Hastings District Council (Council) pursuant to Section 35 of the Resource Management Act 1991 (RMA). Section 35(2)(a) requires monitoring of the state of the environment to the extent appropriate to enable Council to carry out its statutory functions under the Act.

This document also seeks to integrate overlapping monitoring functions in the Local Government Act 2002 (LGA) to monitor and report on progress towards achieving the stated community outcomes for the District (including 'environmental' outcomes) as detailed in the Long Term Plan Council Community Plan (LTCCP) for Hastings District.

The following flow chart indicates where State of the Environment reporting fits within Council's wider monitoring framework.

The LTCCP referred to was replaced with the Long Term Plan which covers the period of 2015 to 2025. This report is based on the prior version being the Long term Council Community Plan 2018 – 2028.



Figure 114: Monitoring Framework

This Report depicts the state of the environment for Hastings District as at 31 December 2019. It focuses on those aspects of the environment that are directly related to the functions of the Hastings District Council as set out in Section 31 of the RMA.

Hastings District Council is responsible for controlling the effects of activities on land including the effects of land use activities on natural hazards, hazardous substances, contaminated land, indigenous biological diversity, noise, and the surface of rivers and lakes.

In contrast, Hawke's Bay Regional Council manages natural resources like air, water, soils and the coastal marine area, at a regional scale. It too has functions in respect of natural hazards, hazardous substances and identifying and monitoring contaminated land. The Hawke's Bay Regional Council (HBRC) are required to produce their State of the

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Environment report on the areas within their control. To reduce repetition, it was decided to remove sections covered by HBARC.

For more detailed reporting on the state of these resources, refer to the Hawke's Bay Regional Council's own State of the Environment Reports including their most recent 2014-2018 report, available at: <https://www.hbrc.govt.nz/environment/state-of-the-environment/soe-five-yearly/>

The State of the Environment Report compiles, assesses and reports on information on the condition of the environment, the key pressures on it, and what responses are in place to address the issues.

At this point, it is helpful to introduce the 'Driving Force – Pressure – State – Impact – Response' (DPSIR) model, which was developed from the Organisation for Economic Cooperation and Development's (OECD) 1993 'Pressure – State – Response' (PSR) model. The PSR and DPSIR models are the most frequently used approach to State of the Environment reporting internationally, and have been adopted in New Zealand, Canada, United Kingdom, and Australia. The DPSIR model has been adopted for this State of the Environment Report for Hastings District.

DPSIR indicators aim to address four fundamental questions:

- What is happening to the environment?
- Why are changes happening to the environment?
- Are these changes to the environment significant?
- What is society's response to these changes to the environment?

'Driving Force', 'pressure', 'state', 'impact' or 'response' indicators can be categorised according to the type of information they provide.

The following table provides a description of each type of indicator:

Table 1. Description of DPSIR Indicators

Indicator type	Description
Driving Force¹	Describes social, demographic, and economic developments. Primary driving forces are population growth and changes in people's needs and activities. These change lifestyles and overall levels of production and consumption, which in turn exert pressures on the environment.
Pressure	Tracks people's use of natural resources and land, and production of waste and emissions (for example, greenhouse gases and particulates into the air). These pressures can change environmental conditions.
State	Describes the quantity and quality of the environment and natural resources (for example, water quality, air quality, or land cover).
Impact	Describes the effects that environmental changes have on environmental or human health (for example, the level of human illness related to exposure to air pollution).
Response²	Describes responses by government, organisations, or the community to prevent, compensate, ameliorate, or adapt to changes in the environment (for example, the introduction of regulations such as national environmental standards and legislative initiatives to protect native vegetation and biodiversity).

Source: Ministry for the Environment (adapted from European Environment Agency, 2008).

While it is important for indicators to have continuity across reporting years in order to identify long terms trends, there are occasions where indicators need to be altered in order to reflect changes in policy direction and goals for the District Plan. *An example of this is the District Plan review. The Proposed District Plan was released for consultation in November 2013, with hearings throughout 2014 and early 2015 and decisions*

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¹ Environment New Zealand 2007, 2017, Ministry for the Environment.

² Driving force indicators for Hastings District are generally found in the following section of this Report – 'Snapshot of the Hastings District and its People'.

³ 'Response' indicators for Hastings District are generally summarised as bullet points in terms of proposed community and council responses and found at the end of each topic in this Report.

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released in September 2015. Therefore, by the time the next State of the Environment Report is produced, there will be a new District Plan in effect, and some indicators may need to be altered accordingly.

Iaukhera & Roka o Heretaunga

Snapshot of Hastings District and its People

2015-2019 Ko te Pōroongo to te Taiao

Our District

The District covers a land area of 527,639 hectares (5,226 km²). The Pacific Ocean is to the east, and our [six](#) neighbouring territorial authorities share the remaining boundaries (see map below).

Figure 2: Hastings District and Neighbouring Territorial Authorities



Source: Hastings District Council

Hastings District comprises the major urban centre of Hastings, several smaller urban areas including Havelock North, Flaxmere, Clive and Whakatu, as well as a number of rural service settlements and coastal settlements.

The landscapes and river systems of our District hold significant cultural, spiritual, ecological, recreational, as well as economic values for us. The hapu [whenua](#) of Ngāti Kahungunu have always valued and acknowledged the bounty of the land as a taonga – 'Heretaunga hauku nui'. The fertile soils, aquifers, waterways and life-giving dew ([hauku nui](#)) combine, providing an environment rich for cultivation, providing manaaki for the mana whenua and the community as a whole.

Our western border is dominated by the presence of the Ruahine and Kaweka Ranges. The major river systems in our District are the Tūkitūki, Ngaruroro, Tutaekuri and Esk Rivers and their tributaries. Our landscape is also dominated by the presence of the Heretaunga Plains and surrounding hills, Te Mata Peak, Kahurangi, Mt Erin – Kōhinurakau, along with the Lake Tutira basin and significant wetlands. These features are also embedded in the oral traditions of the mana whenua.

The Heretaunga Plains, formed as a result of uplift, erosion and fluvial processes, contains some of the most fertile and productive agricultural and [horticulture](#) land in the country. The aquifer system underneath the Heretaunga Plains is the main groundwater resource for the Heretaunga Plains, Hastings and Napier communities, providing 85% of our water requirements.

Hastings District has a mild temperate climate protected from the prevailing westerly winds by the mountain ranges. As a result, we experience a calm, dry, sunny climate characterised by long hot summers and mild winters. These environmental factors contribute to our District's strong association with horticulture, cropping and viticulture, and accompanying recreation and tourism. Hastings is New Zealand's largest producer of apples, pears and peaches, and second largest producer of grapes and wines.

Hastings District is renowned for its fertile soils, plentiful clean water and beautiful scenery, so the quality of our environment and its protection for future generations is very important to us.

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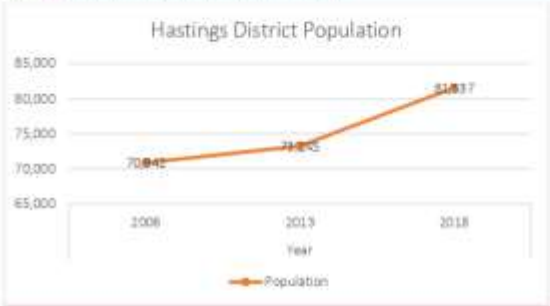
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Our People

District Population

The Hastings District is home to 81,537 people (recorded at the last Census in 2018). Since the 2006 census, the population of our District has grown by around 14.03%.

Figure 333 Hastings District Population 2006-2018



Source: Statistics New Zealand

This increase was greatest between Census 2006 and Census 2018, when the population increased by 10,692 people or 14.03%.

Hastings District's population ranks 10th in size out of the 67 Districts in New Zealand and represents 1.7% of New Zealand's population.

As can be expected, the majority of the District's population reside in the urban areas of Hastings City (41.3%), Havelock North (16.15%) and Flaxmere (13.45%). The remainder of the population is distributed between the small urban areas, such as Clive, Whakatu, and Haumoana, and rural areas of the District.

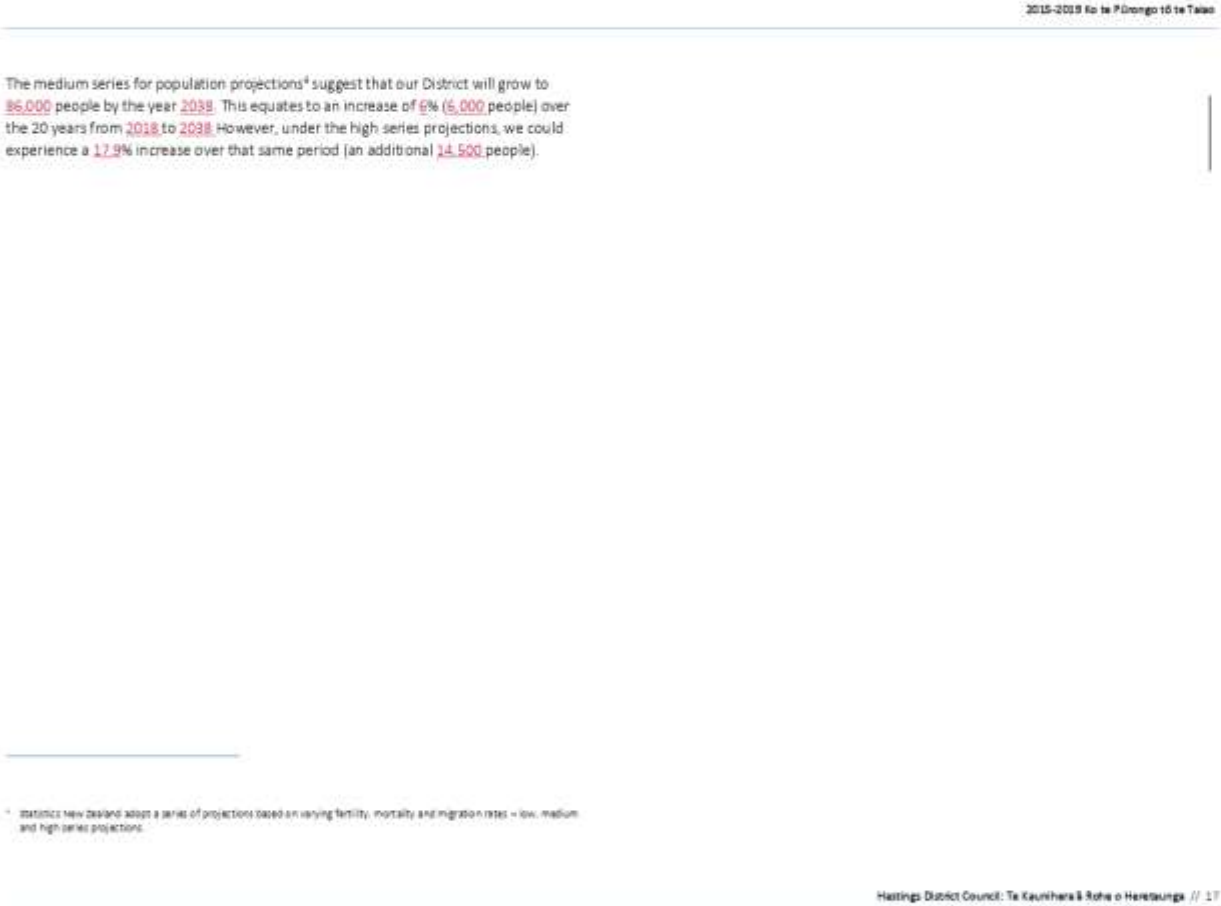
Figure 344 Distribution of Hastings District Population



Source: Statistics New Zealand

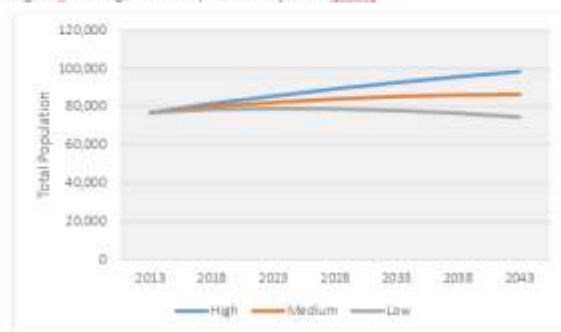
The distribution of the population within our District has altered over the 12 years to 2018, with the population residing in Hastings City and Flaxmere remaining relatively stable with 12.3% and 0.45% increase, respectively, with an increase in the population residing in Havelock North between 2013-18.

Field Code Changed



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Figure 5: Hastings District Population Projections (2020)



Source: Stats New Zealand

Table 2: Low, Medium, and High Population Projections (2020)

	2013	2018	2023	2028	2033	2038	2043
High	76,700	81,500	85,400	89,100	92,500	95,500	100,000
Medium	76,700	80,000	82,100	83,800	85,200	86,000	85,200
Low	76,700	78,400	78,900	79,700	77,000	76,500	74,500

Source: Stats New Zealand

Hastings District has been experiencing a **high** increase in population, particularly in **Hastings City** and parts of the rural area. This increase in population is projected to continue into the future.

Ethnic Composition

Based on the **2018** Census, a higher proportion of us identify as Maori (**27.3%**) compared with 14.9% nationally, and **71.8%** of us identify ourselves as belonging to the European ethnic group (similar to the national figure of 74%).

A total of **22,259** Maori usually live in the Hastings District. This is an increase of **5,448** people since Census **2013**.

Hastings District has a proportion of residents who identify themselves as Maori that is significantly higher than the national average. This is particularly evident in the urban area of Flaxmere where those identifying as Maori make up close to half of the population.

Ethnic population projections to 2021 suggest the proportion of people identifying themselves as 'Maori' in the District will continue to increase.

Our Economy

The economy of the Hastings District is highly dependent on **viticulture** and **horticulture** land uses and associated industries. These **land use** activities rely on the soil resource of the Heretaunga Plains and are located primarily on the fertile soils of the Heretaunga Plains that surround Hastings **City**.

Given the importance of these land uses to the District's economy, it is necessary to manage and protect the soil resource so it is available for **horticulture** and **viticulture** activities that depend on it.

While land based primary production is the primary focus of the Plains Production Zone it is recognised that other rural production activities that do not rely on the soil resource may also be appropriate in certain circumstances.

Hastings District's economy is highly dependent on land based primary production. Therefore, the protection of land suitable for these activities is of very high importance both now, and in the future.

taunihara & Rohe o Heretaunga



Source: Hastings District Council

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Sustainability

Sustainability is a term used interchangeably with concepts such as environmentalism or being 'green'. One of the most commonly used and widely adopted definitions of sustainable development is "meeting the needs of the present generation without compromising the ability of future generations to meet their own needs"³. This is the overarching principle of 'sustainable management' – the promotion of which is the central guiding purpose of New Zealand's 'Resource Management Act 1991' (RMA). Sustainability is about the relationship between people and planet both current and in the future; remembering that we are inextricably part of this planet, and that our societies (including economies) depend upon healthy biological and physical systems. There is a growing realisation that we are currently living beyond our means, and that our way of life is placing an increasing burden on the planet. The environmental impacts of our consumption and production patterns can be severe and an inefficient use of resources. Sustainability or sustainable development is about protecting natural resources and enhancing the environment (where appropriate), and understanding environmental limits. As part of this, there is a movement towards creating sustainable communities that are:

- Active, inclusive and safe
- Environmentally sensitive – providing places for people to live that are considerate of the environment and the flora and fauna that live in it
- Well designed and built – featuring a quality built and natural environment
- Well connected – with good transport services and communication linking people to jobs, schools, health and other services

- Thriving – with a flourishing and diverse local economy
- Well served – with public, private, community and voluntary services that are appropriate to people's needs and accessible to all
- Fair for everyone – including those in other communities, now and in the future⁴



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³ Our Common Future: Report of the World Commission on Environment and Development (1987). Oxford: Oxford University Press (Brundtland Report).

⁴ 'Sustainable Communities: People, Places & Prosperity', 2008, Office of the Deputy Prime Minister (ODPM), HM Government, London.

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Mana Whenua Customary Environmental Values

Exercising Partnership – Council and Mana Whenua

During 2017/18 the Council provided the following opportunities for mana whenua to exercise partnership in decision making:

- The Hastings District Council created two new roles in the latter third of 2017 and with the selected appointments starting in March 2018. The roles of Pou Ahurea Matua – Principal Advisor Relationships, Responsiveness and Heritage and Pou Ahurea – Advisor Relationships, Responsiveness and Heritage have been specifically developed to work closely with mana whenua and community to enhance strategic relationships between whānau, marae, hapū, takwheenua, Post Settlement Governance Entities (PSGEs) including Ngāti Kahungunu Inc Incorporated and the Council; and all tāngata whenua in the district.
- Māori Joint Committee's focus is on strategic priorities for mana whenua and tāngata whenua in the district. The committee comprises six mana whenua appointments and six councillors. The committee's terms of reference include:
 - To provide governance level advice to the Council on matters of strategy and policy development across the scope of Council's activities;
 - To develop, update and recommend to Council a policy framework and work programme, known as the Māori Responsiveness Framework;
 - To provide input and advice into the Long Term Plan and the Annual Plan in order to assist Council to effectively consider Māori perspectives and address issues of importance to mana whenua and tāngata whenua; and,
 - To assist the Council as appropriate in conducting and maintaining effective, good faith working relationships with mana whenua and tāngata whenua, including advice on governance arrangements.

- Council is intent on providing opportunities for PSGEs, to be engaged in district planning and development, including economic development to benefit both mana whenua and the community as a whole.
- Council continues to encourage the development of Papakāinga housing through effective cross-sectoral engagement with whānau and hapū, Te Puni Kōkiri and the Māori Land Court. Also, the rates' remission policy for Māori freehold land takes the establishment of Papakāinga developments into account.
- The Tangata Whenua Wastewater Committee continues to monitor the performance of the treatment plant. This special purpose committee works through the development of wastewater solutions integrating tikanga Māori (customary values) alongside the provisions of the Resource Management Act. Accordingly, the biological trickling filter system for the wastewater treatment plant at East Clive has a consent to operate (granted by the Hawke's Bay Regional Council) for a period of 35 years. A condition of the consent is that the Committee meets once a year to monitor the performance of the treatment plant.
- The annual Marae Development Fund has resumed to take a more strategic approach to support marae, after the success of the Marae Whakaute Project that supported our marae capability and capacity to host manuhiri at Te Matatini 2017. An ongoing collegial partnership continues with Te Puni Kōkiri and the Department of Internal Affairs funding processes to support marae whānau and hapū to focus on the physical and cultural revitalisation of our marae; for instance, the marae fire and safety project. The Fund is governed by the Māori Joint Committee.

taunihara & Rohe o Heretaunga

	2015-2019 Ko te Pōroto ki te Taiao
<ul style="list-style-type: none"> The development of the Māori Responsiveness Framework, adopted to guide Council activity and to monitor progress throughout the operations of Council has been a success. The framework continues to be reported on to the Māori Joint Committee every 6 months to record achievements and to identify emerging needs across four areas: <ul style="list-style-type: none"> Governance and relationships; Culture and Identity; Prosperity and Wellbeing; and, Resources and Infrastructure. Following Māori Joint Committee, the Pou Ahurea Matua and the Pou Ahurea's monitoring and review in the latter half of the year, the framework is currently being revamped and refreshed for the ensuing year in order that it too is more transparent across Council, for mana whenua and for the wider community. Te Tira Toitū te Whenua - Hastings District Plan Cultural Values Subcommittee has been established with the specific purpose of considering how the cultural values of Te Mata and other areas of cultural significance are to be integrated within the District Plan. This will include overseeing the formation of a project plan and timeframe, considering the options for any changes proposed to the Proposed District Plan, and the detail provisions of the preferred option. Te Tira Toitū te Whenua will also provide guidance on the consultation that will be required and its purpose will also be extended to look at the same issue with the other cultural values and areas of cultural significance (including outstanding landscapes) within the district. Te Tira Toitū te Whenua comprises eight members; four Councillors from the Hearings Committee and four members appointed by the Māori Joint Committee. An inter-sectoral working group set up to develop effective policy on wāhi taonga / wāhi taonga to inform the development of District Plan rules to apply in a way that harmonises the requirements of the Resource Management Act and customary practices continues to meet. This kaupapa includes the development and production of a culturally appropriate nomination toolkit that takes into account tikanga Māori 	<p>(cultural values), private property rights, the Resource Management Act and mana whenua aspirations in a balanced way.</p> <ul style="list-style-type: none"> Council is encouraging and supporting the continual development of hapū plans including both hapū environmental management plans and hapū community plans. At the later part of the 2017/18 year, Council has entered into relationships with the Waipatu and Bridge Pa hapū communities and is embarking on a journey with the Maungahanui Tangitū Trust in regard to a hapū environmental management or a Mana Whakahoā-ā-rohe plan; that also has positive implications for our other five PSGEs. Council has undertaken a project to establish a framework for the management of the Rene Orchiston harakeke collection located at Longlands. This framework will include provision for mana whenua to: <ul style="list-style-type: none"> Assist and coordinate Council in thinning out the [overgrown] harakeke and cleaning the site; Create a Ngāti Kahungunu ki Heretaunga weavers' database; Establish guidelines for the management of resources in consultation with mana whenua, marae, hapū, taiwhenua, Ngāti Kahungunu Iwi Incorporated (NKII), Te Rūnanganui o Heretaunga (TROH), Ngā Whenua Raua (NWR), and Council officers (HDC); Produce a Kaiākātanga Booklet (contact database, history of the Rene Orchiston collection, tāanga, kawa, protocols, monitoring and maintenance); and, Provide and advocate policies based on mana whenua and mātauranga Māori. Council also works with Ngā Marae o Heretaunga in the maintenance of Ngā Pou o Heretaunga in Civic Square where consultation is currently underway with the next phase of this kaupapa, which involves capturing and making available via technology, the cultural narratives that accompany and underpin each of the Pou in Civic Square. Council, Ngāti Kahungunu Iwi Incorporated, Te Taiwhenua o Heretaunga and mana whenua, from Council's position, have had to work more closely together in this last year to ensure the inclusive vitality of cultural life in the district; to strengthen
Hastings District Council: Te Kaunihera ā Rohe o Heretaunga // 23	

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partnership relationships and to reinforce Council's responsiveness to mana whenua kaupapa.

Nāu te rourou, nāku te rourou ka ora ai te iwi – with your basket and my basket (of kai), the people will be looked after. If there is only one basket or the basket(s) are empty or only part full, then not everyone will be catered to; subsequently, the capacity to exercise partnership in decision-making processes must recognise equitable contribution. Council remains committed to pursuing partnership with mana whenua where the baskets of kai (food), and kai being a metaphor for knowledge, experiences and/or aspirations, are full and equal.

Nō reira, ko Heretaunga haukōnui, Heretaunga ararau, Heretaunga haaro te kaahu, Heretaunga haumako, Heretaunga ringahora, Heretaunga takoto noa, nei te Kaunihera ā-rohe o Heretaunga e mihi ake, e mihi ake, e mihi ake!

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Kaunihera ā Rohe o Heretaunga

2015-2019 Kōwhiri Pūrongo o te Taiaro


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2015-2019 He ta Pōrongo o te Taiao


Summary of the State of the Environment

Key Symbolising the State of the Resource




BASLINE

baseline information from which future trends will be measured




GETTING BETTER

marked improvement in the state of the resource



STEADY

the state of the resource remains steady or only exhibits small fluctuation













GETTING WORSE

marked decline in the state of the resource

The 'Indicator Reference(s)' and 'Related Indicators' columns on the following page area reference to the detailed information for each indicator in the various report chapters.

Hastings District Council: Te Kaunihera o Rehe o Hāwkeiaunga // 27

2015-2019 Ka te Pirangā ki te Taki

State of the Environment Issue: Overall State 2009-2014	Overall State 2015-2019	Summary	Indicator Reference(s)	Related Indicators
SUSTAINABLE LAND USE				
Land Use	 BASELINE	 STEADY	The district's land cover is divided as follows: <ul style="list-style-type: none"> 95% grassland/vegetation cover 4% crops/orchards/vineyard cover 1% built up urban land cover The Rural Zone makes up 93% of the District, the Plains Production Zone ~8%, and urban zones make up ~1%.	LU1 and 2 SD3, VS5
Sustainable Urban Development	 BASELINE	 STEADY	Demand for new dwellings remained consistent with dwelling numbers averaging 282.2 per year. This is higher compared with the previous reporting period. Infill subdivision accounted for 35.95% of all lots created in 2019-2020, compared with 22% during the previous reporting period.	SD1 – 3 LU2, VS2, VS3, VS5, CA1, CA2, NH1 – 3
Protection of Versatile Soils	 STEADY	 STEADY	Approximately 13% of the District is Class I, II and III soils. The number of building consents for new dwellings as a portion of the total dropped slightly for the Plains Production Zone and rose slightly for the Rural Zone. There was a marked increase in the portion of building consents granted for new dwellings in the Rural Residential Zone. Subdivision consents granted in the Rural/Plains Production Zone increased compared with the previous reporting period.	VS1 – 7 LU2, SD1 – 3
AIR & WATER SUSTAINABILITY				
Air Quality	 GETTING WORSE	 GETTING BETTER	Air quality is generally very good. Hawke's Bay Regional Council monitoring indicates that carbon monoxide and nitrogen dioxide levels are well within health guidelines. The number of days where PM ₁₀ in Hastings District that exceeded the National Environmental Standards for Air Quality has decreased. Resident level of concern regarding perceptions of air pollution is still high. In 2008, 67% of residents surveyed were concerned or very concerned about air pollution. In 2014 this had dropped to 40%. However, the number of people who reported being 'a little concerned about air pollution' rose from 14% (2008) to 50% (2014), with the number who were 'not concerned at all' dropping from 33% (2008) to 28% (2014).	AQ1 and 2
Water Quality	 STEADY	 BASELINE	Hawke's Bay Regional Council monitoring indicates that groundwater quality in the Hastings District (particularly the Havelock Plains aquifer) is very high. Marine water quality is also consistently very good, although correspondingly poor in laguna and estuarine areas. Baseline data indicates that public concern about water quality is high, with 68% of people surveyed stating they were either 'concerned' or 'very concerned' about water pollution in the District.	WQ1 and WQ2 CA3, CA4, WSS, WSS









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2015-2019 Ka hae Pōrongo o te Taiāo

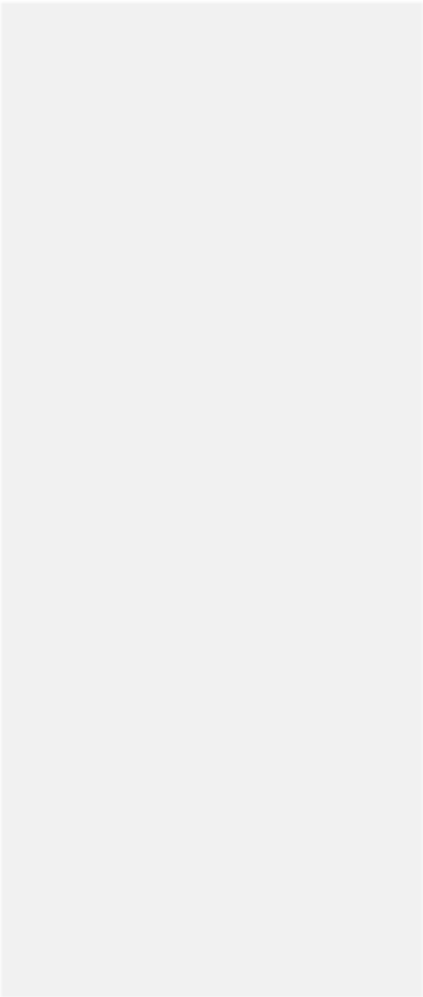
State of the Environment Issue	Overall State 2009-2014	Overall State 2015-2019	Summary	Indicator Reference(s)	Related Indicators
AMENITY, CHARACTER & HERITAGE MANAGEMENT					
Residential Amenity			<p>The top 1000 non-residential activities in residential zones were educational facilities, A1-10 commercial activities and other unclassified activities. Complaints about non-residential activities are trending down.</p> <p>Background noise levels throughout the urban areas of the District are between 35-45dBA (L95). <i>Data for background noise has not been included as part of this reporting period.</i> There are more noise complaints, and 33% of residents surveyed are concerned or very concerned about noise pollution.</p> <p>Residents rate the District as a safe place to live, and satisfaction with parks and reserves and accessibility to recreational facilities is high.</p>	AQ1, NC1, H1, H2, TS, TS-T7, VWS6, VWW4	
Coastal Amenity			<p>There has been little development with a total of six new lots. Half of the new lots were created in Whinrakia and Wapaka.</p>	CA1-4	WQ1, NC1, NH1-3
Natural Heritage/ Landscape Character			<p>3.4% of Hastings District contains a Significant Landscape Character Area or Outstanding Natural Feature. The number of land use and subdivision consents granted in these areas remained steady over the reporting period.</p> <p>1.8% of total land in the District contains an identified area of significant indigenous vegetation or significant habitats of indigenous fauna.</p>	NC1-3	SD1, VS2, VS3
Cultural & Historic Heritage			<p>There are 148 outstanding trees, 64 heritage items, 3 heritage areas, 97 mahiinga sites and 1,204 archaeological sites identified in the District Plan.</p> <p>There were a low number of consents to modify or destroy heritage items or mahiinga areas.</p> <p>There were 28 authority applications (to the Historic Places Trust) to modify or destroy an archaeological site.</p> <p>85% residents surveyed are satisfied with the public art and cultural opportunities in the District.</p>	H1-4	SD1, SD8, VS2, VS3, VS5, CA1

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2015-2019 Ko te Pūrongo ki te Taiao











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Item 6









2015-2019 Ka hae Pōrongo i te Tairā

Sustainable Infrastructure			
Transportation			<p>There is an increasing number of motor vehicles per household in the District. Private Car – 10 Car is the favoured means to travel to work. While total bus passenger numbers per annum are slowly increasing, the vast majority of residents surveyed reported that they did not use public transport at all in the previous 12 months.</p> <p>The number of people cycling to work is higher than the national average but declining in the District. However, especially the number of recreational cyclists has increased. Future reporting on this issue may benefit from additional data collection.</p> <p>WQ1 – 10 A10, A8, A5, A6, A10</p>
Water Management			<p>The District has a consent for 938,410m³ of water in any 7-day average for public water supply.</p> <p>Our domestic water consumption has decreased from 440 litres per day in 2008 to about 380 litres per person per day.</p> <p>Commercial and industrial consumption is also relatively stable about 1,600,000 cubic litres per year.</p> <p>WQ1 – 6 A10</p>
Waste Water Treatment			<p>The District holds two consents for wastewater treatment and discharge – at East Clive and Wapitihi. Discharges from East Clive total an annual daily average of 55,000m³ and are well within environmental standards.</p> <p>95% of the 72% residents connect to the District's sewerage system are satisfied with their sewerage system (note: 5% of survey respondents were not very satisfied with the District's system).</p> <p>WQ1 – 4 WQ1, A10, TW1, TW2</p>
Trade Waste Disposal			<p>There are 10 industries connected to the separated trade waste system. Between 2015/16, there has been five warning notices for non-compliance issued each year.</p> <p>TW1 and 2 WW1 – WW6, H51, H52, HW1, HW2</p>
Energy Use			<p>Annual residential electricity consumption has been steady in Hawke's Bay Region between 2010 and 2016.</p> <p>There is currently no definitive way of monitoring the number of organisations that have taken up sustainable energy use projects. Therefore, there has been no change to how this indicator is monitored since the last report. As the information currently available does not provide for meaningful conclusions to be drawn, this indicator may need to be altered for future State of the Environment monitoring.</p> <p>E1 and 2</p>

Hastings District Council: Te Kaitiaki o Rehe o Heretaunga // 31

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2015-2019 Ka te Pirangā ki te Taki				
HAZARD MANAGEMENT				
Natural Hazards			The District experiences major storm events and flooding, coastal erosion, inundation, NH1-3 and rural wildfires. <i>While there is no control over these natural events occurring since the previous State of the Environment reporting additional mitigation measures have been introduced that are designed to identify and reduce the effects of hazards on our community. Regulatory measures are managed through the Hastings District Plan, the Building Act and Hawke's Bay Regional Coastal Environment Plan. Resource consents in identified hazard areas were high between 2015-2019. This is attributed to the introduction of a new liquefaction identification system which identifies liquefaction risk areas throughout Hastings District.</i>	SD1, SD8, VS2, VS3, A6, CA1, CA2
Hazardous Substances			There were no specific resource consents between 2009 and 2014 required under the HS1 and 2 hazardous facility screening procedure. The average reported incidents occurring per year involving hazardous substances responses were consistent with an average of 13.75 responses per year.	A6, TW1-3, SW1, SW3, HW1, SA4
SUSTAINABLE WASTE MANAGEMENT				
Solid Waste			Solid waste is disposed of to the Omarunui Landfill, serving both Hapier and Hastings districts. The landfill operation generally complies with its resource consent conditions. There have been no significant breaches of consent. Waste volumes to Omarunui Landfill fluctuated over the reporting period and this is indicative of economic activity in the region and changes to legislation. A 2016 report identified that approximately 15% of waste being disposed of at Omarunui Landfill was recyclable and 34% was compostable. In total, 48% of the waste could have been diverted from landfill disposal. The largest contributing volume of waste to landfill was the Commercial and Industrial waste sector which is outside the control of Council. The Joint Waste Management and Minimisation Plan identified opportunities for further consideration to reduce the volume of waste going to landfill, including from the commercial and industrial waste sector. Recycling volumes have remained steady over the reporting period.	SW1-5 HW1
Hazardous Waste			There is an annual collection service for residents to drop off household hazardous wastes (known as HazMobile). HazMobile volumes peaked in 2006 when 27 tonnes were collected across the Hawke's Bay Region. Since 2007, the volume of hazardous waste collected by HazMobile has fluctuated between 14-25 tonnes. Industries and businesses are required to have other arrangements to dispose of their hazardous waste – usually with their supplier, hence no comprehensive information available on the amounts being used or disposed from these sources.	HW1 A6, HS1, HS2, SW2, SA4
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2015-2019 Kōwhiri Pūrongo i te Tāiao

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2015-2019 Ko te Pirongia ki te Tairā

Sustainable Land Use













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2015-2019 Hā te Pōroongo o te Taiāo

Sustainable Land Use

THE ISSUE AT A GLANCE

INDICATOR	STATE 2004-2009	STATE 2009-2014	SUMMARY
Sustainable Land Use			
LU1 Land cover classes			Minimal change. 91.28% grassland/shrubland/forest cover in 2019 (down slightly from 91.4% in 2012) +4.6% crops/orchards/vineyard cover (up slightly from 3.9% in 2005) -0.1% artificial surfaces cover (up slightly from 0.2% in 2012)
LU2 Land use zones			Minimal change. 92.16% Rural Zone -5.89% Plains Production Zone -2% urban zones
Sustainable Urban Development			
SD1 Building consents for new dwellings			Demand for new dwellings over this period are generally at a constant with approximately 1161 applications received.
SD2 Infill subdivision in the Residential Zones			Infill subdivision accounted for 33.80% of all lots created in 2015-2019, compared with 3.7% during the previous reporting period.
SD3 Plan change requests for rezoning from rural to urban			In total approximately 261 ha of Plains Production zoned land was rezoned to Industrial and Residential. The Havelock North land rezoning could count as rural land – so a total of 36ha of rural land rezoned to residential since 2008.
Protection of Versatile Soils			
VS1 Versatile soils in the District			No change. 13% Class I, II and III soils

Hastings District Council: Te Kaitiaki o Rehe o Hāteāunga // 35

2015-2019 Ka te Pōrangā ki te Tāke

INDICATOR	STATE 2004-2009	STATE 2009-2014	SUMMARY
V52 New dwellings in the Rural/Plains Production Zone			The number of building consents for new dwellings <u>exceeds the level of dwelling reported in the previous reporting period</u> . The number of rural dwellings still leads the way for rural/plains establishment. There was a marked increase in the portion of building consents granted for new dwellings in the Rural Residential Zone.
V53 Subdivision in the Rural/Plains Production Zone			Demand for subdivision in the Rural/Plains Production Zone has <u>increased</u> in the current reporting period, compared to the level experienced during the previous reporting period.
V54 'Farm Park' subdivision in the Rural Zone			Demand for Farm Park subdivisions has remained low with <u>five applications received between 2015-19</u> throughout the District. The residential farm park concept is adopted for almost all subdivisions involving more than 3 lots.
V55 Rezoning of Rural/Plains Production Zone land			<p>Since then, however, there have been only 3 rezoning requests affecting <u>Plains Production Zone</u> and no rezoning requests affecting Rural Zone land. In total, approximately 96 hectares (0.33%) of <u>Plains Production Zone</u> land was rezoned for urban development.</p> <p>Two areas of Plains Production zoned land on the outskirts of Hastings (Oranui Road and Irongate) were rezoned to Industrial totaling approximately 185 hectares in 2017. Two areas of Plains Production zoned land were rezoned to Residential (Howard Street, Hastings and Brookvale Road, Havelock North) totaling 57 hectares. Finally, 7.2 hectares of Plains Production zoned land were rezoned to Deferred Hawke's Bay Regional Sports Park.</p> <p>In 2018, 35 hectares of land zoned Havelock North Rural Residential and Character Residential was rezoned to Iona Residential in Havelock North.</p>
V56 Types of Land Use Consents Applied for in the Plains Production Zone			<p>Land use consent for activities not associated with land based primary production activities has been steady, averaging <u>48.5</u> consents per year. There is a small increasing trend in the number of industrial and commercial land use consent applications on the <u>Plains Production Zone</u> over the reporting period.</p>

Amongst other things, the purpose of the RMA is about enabling people and communities to provide for their social, economic and cultural wellbeing now, whilst sustaining the potential of natural resources to meet the reasonably foreseeable needs of future generations and safeguarding the life-supporting capacity of soil.

Section 31 of the RMA gives the District Council the function of managing and controlling the effects of the use, development, or protection of land.

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Land Use

How we use land affects the type of vegetation cover present and the soil beneath. A change in land use can result in a loss of, or change in, vegetation and soil quality.

Loss of vegetation cause erosion and have a negative impact on water quality in streams, rivers and (eventually) groundwater, all of which affects the biodiversity and sustainability of natural resources.

The Proposed Hastings District Plan manages the effects of land use through a mechanism called zoning. Zoning reflects the existing and potential pattern of development within the District. Different areas have their own distinct character within the District. Zoning is used as a framework for standards and other methods which protect and enhance the desirable aspects of the character in each zone.

Indicators

The following table shows the indicators that are used to monitor the state of land use in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Proposed Hastings District Plan, as shown below.

INDICATORS FOR LAND USE

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW IT INFORMS THESE OUTCOMES	RELEVANT DISTRICT PLAN OUTCOMES
		<ul style="list-style-type: none">An environment that is appreciated, protected and sustained for future generations.The Hawke's Bay community is well informed and educated about the environment.	<p>Proposed Hastings District Plan (2013) (As amended by decisions), Section 2.3.3 (c) (How the District Plan will Deliver the Vision)</p> <p>A place based approach has been adopted in drafting the District Plan, identifying those areas of the District that have special characteristics that set them apart from other areas of the District. These areas are identified as Strategic Management Areas (SMAs). There will be a series of Zones with the SMAs that recognise the like areas of land uses.</p>
LU1	Land Cover Classes	State	An understanding of the District's land cover and land use patterns will assist in planning for future development in an integrated way, in achieving sustainable use of land and water resources, and moving to a more compact urban form.
LU2	Land Use Zones	State and Response	

Monitoring information

Indicator LU1: Land Cover Classes

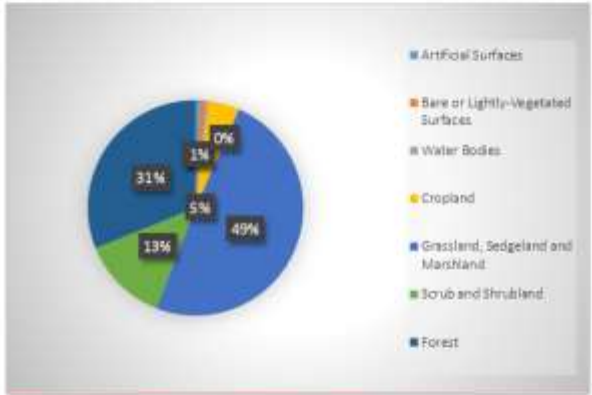
Land cover data provides an indication of the range of land uses in the District, and their relative land area. This provides a good understanding of how the District's land resource is being utilised.

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2015-2019 Ka te Pirangā ki te Taiao

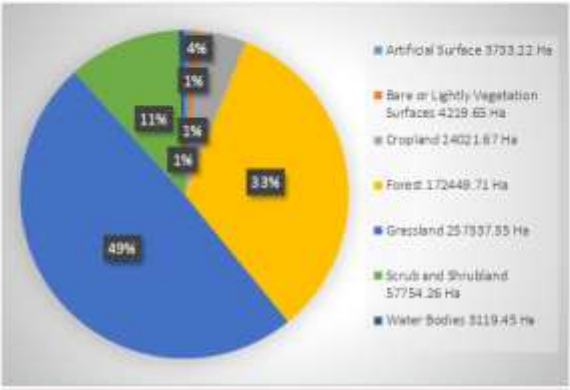
The following graphs show a comparison in land cover between 2012 and 2019. The land cover groupings have been standardised in line with Landcare Research Informatics.

Figure 6: Land Cover of Hastings District (2012)



Source: Land Cover Data Base 3 (LCDB3), Landcare Research Informatics

Figure 7: Land Cover of Hastings District (2019)



Source: Land Cover Data Base 4 (LCDB4), Landcare Research Informatics

The above graphs and following table show that since 2012, there has been a slight change in land cover in the Hastings District with a loss of shrubland and increase in cropping, orcharding, and vineyards.

2015-2019 Ko te Pōroongo o te Taiao

Table 3: Summary of Land Cover Change in Hastings District between 2012 and 2019

Land Cover Group	% of Total (2012)	% of Total (2019)	% Change
Artificial Surfaces (e.g. Built-up Area, Urban Parkland/Open Space, Transport Infrastructure)	0.73	0.71	-2.74
Bare or Lightly-vegetated Surfaces (e.g. Sand, Gravel, Rock, Landslide)	0.79	0.90	+14.05
Waterbodies	0.31	0.80	+17.65
Cropland (e.g. cropland, vineyards, orchards)	4.80	4.80	0
Grassland, Sedgeland and Marshland	49.38	48.48	-0.1824
Shrub and Shrubland (e.g. Gorse/Broom, Manuka/Kanuka, Shrubland)	12.85	11.05	-18.67
Forest (e.g. major shelterbelts, pine forest, exotic forest, indigenous forest)	31.09	33	+6.14

Source: Land Cover Data Books 3 & 4 (LC083 & LC084), Landscape Research Informatics

Hastings District Council: Te Kaitiaki o Rehe o Hēretauranga // 39

Field Code Changed

2015-2019 Ka te Pirangia ki te Taiao

The combined amount of grassland, shrubland and forest cover has dropped slightly from around 93.8% in 2012, to around 93.2% of the District in 2019. The above indicates a slight decrease in shrubland (1.9% decreased), which equates to around 6,495ha) and cropland cover (remained the same), with a corresponding slight decrease in grassland (down 0.9%) and forest cover (up 1.9%). This does not represent significant land cover change, but suggests some possible minor land conversion towards cropland, vineyards and orchards, and some reversion to shrub, may be occurring.

Artificial Surfaces (e.g. built up area and urban parkland/open space areas) in 2012 accounted for approximately 0.73% of the land cover. This is a slight decrease in percentage cover from 2012 (down 0.2%). The amount of bare or lightly vegetated surfaces has decreased by 0.12% while waterbodies has increased by 0.8%.

Indicator LU2: Land Use Zones

Land uses in Hastings District are managed by Zones. A zone is an area of land set aside for a specific range of land uses. Each zone is managed according to the different environmental outcomes that are being sought for the zone. Activities within the zones are managed according to the anticipated environmental effects, and the ability of the District Plan to avoid, remedy or mitigate these effects. As part of the District Plan review, there was a shift towards a place-based approach to zoning which also introduced overarching strategic management areas (SMA).

The Rural SMA for example is the Hastings District's largest environment comprising approximately 481,600 ha of land which accounts for 92% of the District's total land area.



The zones in the Hastings District Plan can be generally grouped as follows:

- **Rural Zone:** traditionally oriented towards land-based primary production but becoming increasingly diversified; provision for limited commercial and industrial activities ancillary to its primary production focus; and limited opportunity for residential lifestyle lot subdivision.
- **Plains Production Zone:** focuses on sustaining the life-supporting capacity of the highly versatile Heretaunga Plains soil resource; residential lifestyle subdivision is discouraged and restricted to only that which provides for the balance to be amalgamated into an adjoining title.
- **Rural-Residential Zone:** accommodates development of peri-urban lifestyle blocks, and is generally located on land with lower fertility soils. This also includes the Special Character Zones (Te Mata and Tukituki) along with the Iona and Havelock North Special Character Zone.

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2015-2019 Kaiake Pōroongo o te Taiao

• **Residential Zones:** covers the main urban residential areas and settlements, and areas identified for future residential expansion¹
 • **Commercial Zones:** 15 commercial zones provide for the different commercial requirements of businesses within the District
 • **Industrial Zones:** Six industrial zones provide for the various levels and types of industrial activity in the District. A seventh industrial zone has been introduced since the first State of the Environment Report. Under the Proposed District Plan there are six industrial zones

The following table shows the area of land within each of the Operative District Plan zones as at the end of 2008, and enables limited comparison with 2014 figures, showing where there may have been gains and losses since the first and second State of the Environment Reports.

Table 44: Area of Zoned Land Use in Hastings District (Operative District Plan and Proposed District Plan and amended by decisions)

Area of Zoned Land Use in Hastings District		AREA (HECTARES) 2008 – OPERATIVE DISTRICT PLAN	AREA (HECTARES) AS 2014 – OPERATIVE DISTRICT PLAN	AREA (HECTARES) AS 2019 – AS AMENDED BY DECISIONS DISTRICT PLAN
Rural	Rural	473,167	473,802	481,673
Plains	Plains	29,580	29,550	31,114
Rural Residential	Rural Residential	1,265	1,505	269.22
	Te Mata Special Character	502	508	517.64

Tukituki Special Character	292	292	300.17
Havelock North Rural Residential	-	-	645.31
Total Special Character	-	-	39.89
Total Rural Residential	2,059	2,800	2,870.17
General Residential	2,002	1,995	2,066.59
Deferred General Residential	5	34	-
Plains Residential	26	25	-
Plains Settlement	-	-	30.59
Coastal Residential	117	132	-
Coastal Settlement	-	-	38.39
Clive-Whakapu Residential	-	-	80.89
Pakemere Community Residential	-	-	3.9
Pakemere General Residential	-	-	219.22
Hastings Character Residential	-	-	59.29
Hastings City Living	-	-	26.09
Hastings General Residential	-	-	2,066.59
Haukoana-Te Awanga Residential	-	-	82.89
Haukoana-Te Awanga Deferred Residential	-	-	3.79
Haukoana-Te Awanga Deferred Residential A	-	-	1.9
Haukoana-Te Awanga Deferred Residential B	-	-	2.22
Havelock North Character Residential	-	-	161.69

¹ The General Residential zone incorporates the main centres of Hastings City, Pakemere and Havelock North, but also Clive and Whakapu. The Plains Residential zone covers the settlements around Pakemere, Bridge Pa and Ormau, and the coastal Residential zone includes the coastal settlements of Haukoana, Te Awanga, Waipatu, Whinaki, Waimarama and Tarewa.

Hastings District Council: Te Kaitiaki o Rehe o Hāreataunga // 41

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2015-2019 Ka te Pōrangā ki te Tāke

	Havelock North General Residential	2	2	291.03
	Waimarama Coastal Settlement	-	-	37.54
	Total Residential	2,150	2,186	3,511.94
Commercial	Central Commercial	49	44	50.17
	Flaxmere Commercial	-	-	3.89
	Havelock North Village Centre Business	-	-	8.18
	Havelock North Village Mixed	-	-	3.58
	Havelock North Village Centre Retail	-	-	8.86
	Commercial Service	29	23	38.23
	Flaxmere Commercial Service	-	-	3
	Large Format Retail	32	16	20.37
	Suburban Commercial	31	12	8.4
	Bridge Pk Suburban Commercial	-	-	0.08
	Cave-Whakatu Suburban Commercial	-	-	5.25
	Haukohe-Te Awanga Suburban Commercial	-	-	1.6
	Waimarama Suburban Commercial	-	-	0.13
	Central Residential Commercial	8	4	-
	Residential Commercial	-	-	5.62
	Havelock North Village Centre	-	18	-
	Flaxmere Village Centre	-	10	3.95
	Total Commercial	148	128	181.62
Industrial	Industrial 1	35	25	-
	Industrial 2	410	410	-
	Deferred Industrial 2	8	71	-
	Industrial 3	4	4	-

Industrial 4	88	88	-
Industrial 5	1	1	-
Industrial 6	54	72	-
Industrial 7	-	8	-
Deferred Industrial 7 = Tomoana	-	8	-
Deferred General Industry	-	-	1.08
General Industry	-	-	642.67
Havelock North Centre Industrial	-	-	4.43
Light Industry	-	-	40.75
Tomoana Food Industry	-	-	17.13
Waimarama Industrial	-	-	95.38
Total Industrial	600	688	803.4

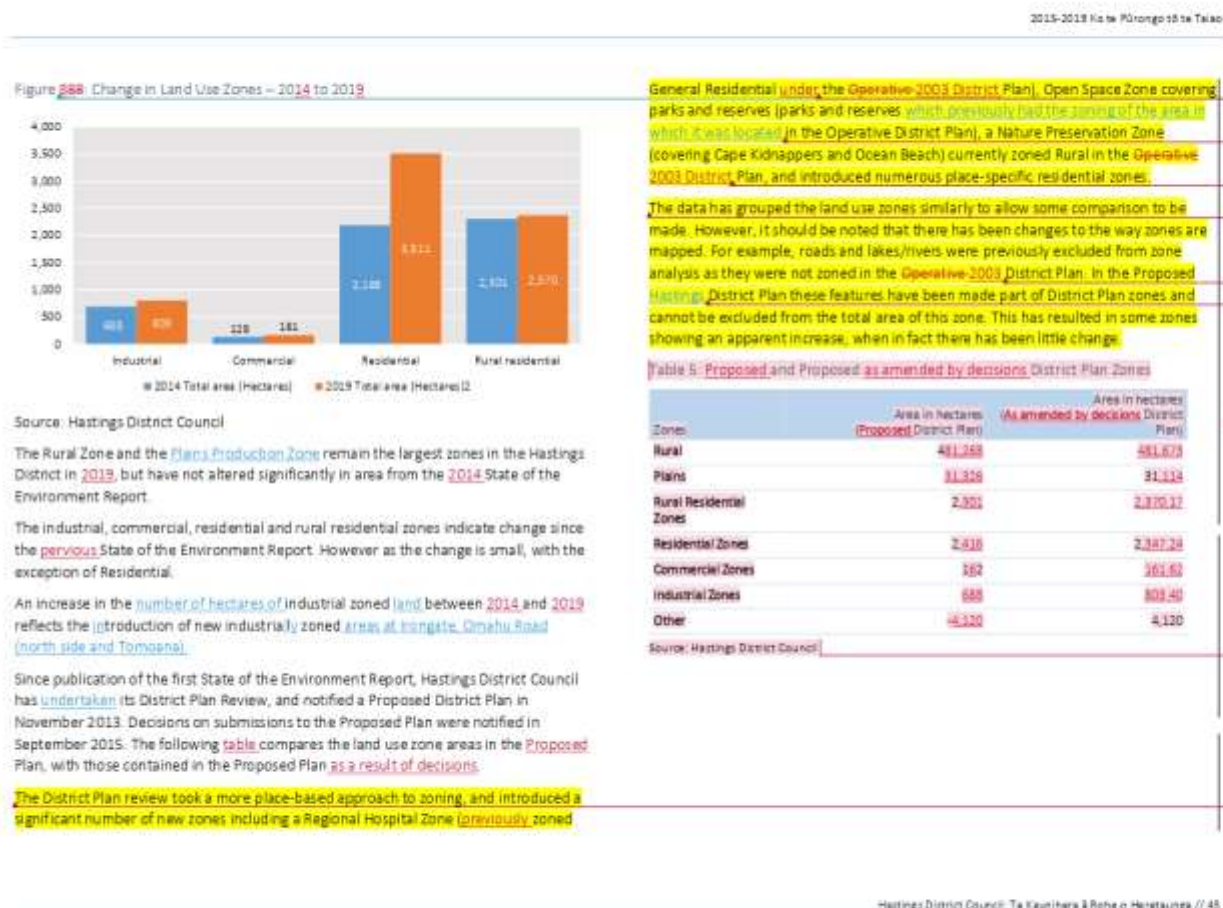
TOTAL (excluding rivers/lakes, Hawke's Bay Regional Sports Park, deferred regional sports park, natural preservation open space, Regional Hospital, and restricted building areas)	507,703	508,654	523,659
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Source: Hastings District Council

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42 // Hastings District Council | Te Kaunihera o Hōne o Herangi



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2015-2019 Ko te Pirangia ki te Taiao

The Proposed District Plan zones were grouped into the following categories for the purposes of the above table:

Rural Zone

- Rural.

Plains Production Zones

- Plains.

Rural Residential Zones

- Rural Residential
- Havelock North Rural Residential
- Te Mata Special Character
- TukiTuki Special Character
- Iona Special Character
- Te Mata Special Character Area

Residential Zones

- Clive-Whakatu Residential
- Coastal Settlement
- Flaxmere Community Residential
- Flaxmere General Residential
- Hastings Character Residential
- Hastings City Living
- Hastings General Residential
- Haumoana – Te Awanga Residential
- Haumoana Te Awanga Deferred Residential A
- Haumoana Te Awanga Deferred Residential B
- Havelock North Character Residential
- Havelock North General Residential

- Havelock North Rural Residential
- Plains Residential
- Waimarama Coastal Settlement.

Commercial Zones

- Central Commercial
- Clive Suburban Commercial
- Commercial Service
- Flaxmere Commercial
- Flaxmere Commercial Service
- Haumoana – Te Awanga Suburban Commercial
- Havelock North Village Centre Business
- Havelock North Village Centre Mixed
- Havelock North Village Centre Retail
- Large Format Retail
- Residential Commercial
- Suburban Commercial
- Bridge Pa Suburban Commercial
- Clive-Whakatu Suburban Commercial
- Haumoana-Te Awanga Suburban Commercial
- Waimarama Suburban Commercial

Industrial Zones

- Deferred General Industrial
- General Industrial
- Havelock North Village Centre Industrial
- Light Industrial
- Tomoana Food Industry
- Whirinaki Industrial

44 // Hastings District Council | Te Kaunihera o Hōne o Hāwea

2015-2019 Ka hae Pōroongo o te Taiaro	
<p>Other Zones:</p> <ul style="list-style-type: none">• Regional Hospital• Hawke's Bay Regional Sports Park• <u>Deferred Hawke's Bay Regional Sports Park</u>• Open Space• Cape Kidnappers – Ocean Beach Nature Preservation	
<p>Hastings District comprises approximately 98% vegetated land cover, and approximately 98.9% of the District is zoned Rural or <u>Plains Production Zone</u>. There have been some minor increases in industrial and residential type zones to provide for current and future demand, although these are relatively small in relation to the total area of rural and <u>Plains Production Zone</u> areas.</p> <p>Land cover and zoning allocation continues to reflect a rural provincial area in New Zealand.</p> <p>Comparisons suggest there has not been any significant change in land cover or land use patterns within the District since the <u>previous</u> State of the Environment Report.</p>	
	<p>Photo: Land Use on the Hetaunga Plains Source: Hetaunga Plains Urban Development Strategy</p>
<p>Responses</p> <p>For Council</p> <ul style="list-style-type: none">• Continue to monitor changes in land cover and land use patterns (zoning) over time, to determine/confirm any areas of the District experiencing significant change or pressure.	
Hastings District Council: Te Kaitiaki o Rehe o Hetaunga // 45	

2015-2019 Ka te Pōrangā ki te Tāke

Sustainable Urban Development

Areas close to the urban centres and the hills surrounding the Heretaunga Plains face considerable pressure to accommodate increased urban activities (commercial and industrial activities) and residential housing.

Photo: Hastings City – Heretaunga Street heading towards Havelock North
Source: Hastings District Council

The price, infrastructure potential and close proximity of the Heretaunga Plains to the urban centres of Hastings City, Havelock North and Flaxmere generate considerable demand to utilise the land for a range of uses. Once land has been converted to urban, it is unlikely that this process will be reversed.

Of course, sustainable urban development is not about no development or urban growth – the issue is about striking an appropriate balance, efficient use of land resources at a rate that balances demand and supply, and investigating alternatives to Greenfield, commercial and industrial expansion. Indicators in this section illustrate whether development is sustainable. A development to the Resource Management Act 1991 will see the removal of the RMA which is set to be replaced with three new pieces of legislation being the:

- Natural and Built Environments Act
- Strategic Planning Act
- Climate Change Adaptation Act

According to Environmental Manager David Parker:

"Urban areas are struggling to keep pace with population growth and the need for affordable housing. Water quality is deteriorating, biodiversity is diminishing and there is an urgent need to reduce carbon emissions and adapt to climate change"

Any future State of the Environment reporting will need to be reassessed against any new possible outcomes as a result of the [overhaul review](#) of the RMA.



Photo: Hastings City – Heretaunga Street heading towards Havelock North

46 // Hastings District Council | Te Kaitiaki o Te Kaitiaki o Heretaunga

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Indicators

The table below shows the indicators that are used to monitor urban development in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Proposed Hastings District Plan, as shown below.



Photo: Hastings City. Huretaungā Stream flowing through Hastings. Photo: Hastings District Council

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2015-2019 Ko te Pirangia ki te Taiao

Indicators

The table below shows the indicators that are used to monitor urban development in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Proposed Hastings District Plan, as shown below.

INDICATORS FOR SUSTAINABLE URBAN DEVELOPMENT

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW IT INFORMS THESE OUTCOMES	RELEVANT DISTRICT PLAN OUTCOMES
		<ul style="list-style-type: none"> An environment that is appreciated, protected and sustained for future generations. Safe and secure communities. A lifetime of good health and wellbeing. Development in Hawke's Bay is sensitive to the need to protect and promote: <ul style="list-style-type: none"> Environmental wellbeing. 	<p>Proposed Hastings District Plan (2013) (As amended by decisions)</p> <p>Section 2.3.1.2 (The Role of the District Plan in Delivering the Vision):</p> <p>...the resources of the District that support land based primary production need to be carefully managed to ensure that they remain available for future generations...the versatile soils of the Heretaunga Plains should be protected from unnecessary development and that future urban growth should be provided for within the existing boundaries of the urban environment. This will require more intensive use of the existing residential areas.</p> <p>Section 2.4.2 Anticipated Outcomes (Urban Strategy):</p> <ul style="list-style-type: none"> UD4.03 Increased intensification of the existing urban environments, while maintaining acceptable levels of residential amenity. UD4.04 Urban development that avoids, remedies or mitigates adverse environmental effects and avoids the loss of valuable finite soil resources on the Heretaunga Plains in line with the Heretaunga Plains Urban Development Strategy. <p>Section 2.8.3 Anticipated Outcomes (Rural Resource Strategy):</p> <ul style="list-style-type: none"> RR5.01 The continued availability, development and utilisation of the life supporting capacity of the Hastings District's soil resources for a range of activities.
SD1 Building Consents for New Dwellings	Pressure	The number of building consents for new dwellings provides a good indication of demand for residential development and can highlight where pressure for development is occurring. Knowing where development pressure is occurring enables better strategic planning towards achieving infill development and a more compact urban form.	
SD2 Infill Subdivision in the Residential Zones	Pressure	Infill subdivision provides for residential demand without encroaching on currently undeveloped land. The higher the rate of infill development the less the impact of development on the District's land resource, as well as enabling efficient provision of services and infrastructure and more compact urban form.	
SD3 Plan Change Requests for Rezoning from Rural to Urban	Pressure	Rezoning of rural land for urban development can directly impact on the potential of the District's land and soil resources to provide for future generations. Together with understanding population dynamics and projections for the District, an understanding of demand and pressure for urban rezoning and where this is occurring, can assist with long term planning for sustainable urban development.	

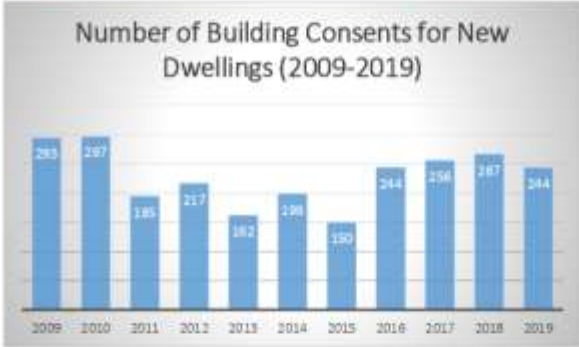
48 // Hastings District Council | Te Kaunihara o Rohe o Heretaunga

Monitoring Information

Indicator SD1: Building Consents for New Dwellings

Building consents for new dwellings are a measure of the level of demand for residential urban development in the District. The following graph show the number of building consents for new dwellings for each year between 2009 and 2019.

Figure 919: Number of Building Consent for New Dwellings (2009-2019)



Source: Hastings District Council

Over the five years between 2015 and 2019, there were 1,161 building consents granted for new dwellings. There is a constant upward trend in dwelling levels after 2015.

Compared with the previous reporting period, these statistics reflect population growth and a buoyant economy.

The three leading groups for dwelling development is Hastings General Residential (329), rural (213) and Havelock North General Residential (187).

Figure 1044: Map of Rural Census Area Units in Hastings District



Other census area units experiencing significant growth in new dwellings between 2001 and 2008 were:

Indicator SD2: Infill Subdivision in the Residential Zones

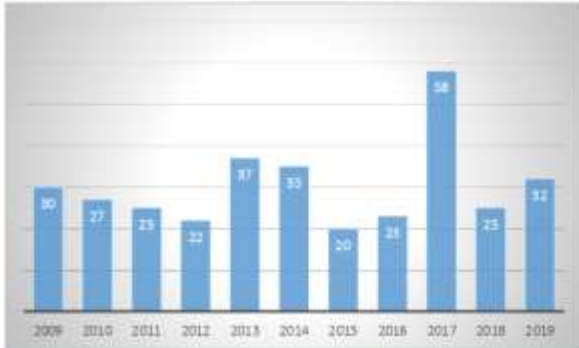
Infill development often represents an efficient form of urban development. There has been a lower rate of infill subdivision in the urban residential areas of the District (General Residential Zone) over the current reporting period. The lower level of infill subdivision likely reflects a less buoyant property market in 2015, among other factors. Apart from the 2017 peak, low levels of subdivision have continued through the current reporting period.

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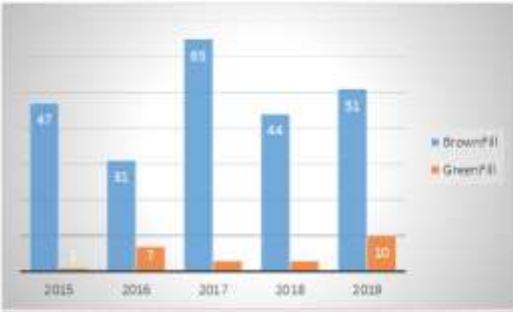
2015-2019 Ko te Pirangi ki te Taiao

Figure 1112: Number of Infill Subdivisions Granted in the Residential Zones (2009-2019)



Source: Hastings District Council

Figure 12344: Brownfield and Greenfield lots created in residential zones



Source: Hastings District Council

As reported in the first State of the Environment Report, infill/consolidation accounted for 40% of all new lots created in the General Residential Zone between 2005 and 2008. For the subsequent period to 2014, this proportion has declined slightly to 37% of all new lots.

The Heretaunga Plains Urban Development Strategy (HPUDS⁹) directs urban growth in Napier and Hastings and on the Heretaunga Plains from 2015 onwards, and targets consolidation/infill at 60% of all new residential development by 2045 (see HPUDS Growth Strategy Parameters diagram in Figure 14).

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⁹ Heretaunga Plains Urban Development Strategy, 2010, Hastings District Council, Napier City Council & Hawke's Bay Regional Council

2015-2019 He te Pōrongo o te Taiaro

Indicator SD3: Plan Change Requests for Rezoning from Rural to Residential/Rural Residential

In 2018, 55 hectares of land zoned Hazelock North Rural Residential and Character Residential was rezoned to Iona Residential in Hazelock North while Whirinaki had 7000m² rezoned from rural zone to Coastal Settlement zone.

During the previous State of the Environment reporting period, Council undertook a review of the Hastings District Plan, resulting in the Proposed Hastings District Plan as amended by decisions in 2015. This process included a review of the policy framework, methods and rules in the District Plan that guide development.

Through this process, a number of submissions sought rezoning of land within the District, including rezoning of rural and plains-zoned land to facilitate additional areas of urban and low density residential development. Thirty one proposals to rezone were received where decisions on these submissions were released in September 2015, followed by a period for appeals and resolution of any appeals.




Photo: Aotaki
Urban Development
Area
Source: Google
Map

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Responses

For the Community:

- Take up opportunities to participate in the review of urban development strategies and future rezoning proposals in the District.

For Council:

- Continue to promote best practice land development examples and good practice guidelines
- Contribute to reviews of the Heretaunga Plains Urban Development Strategy (HPUDS) for a co-ordinated approach to urban development across the Heretaunga Plains.

Hastings District Council: Te Kaunihera o Rehe o Heretaunga // 55

2015-2019 Ko te Pōrangā ki te Taiao

Protection of Versatile Soil

Class I, II and III soils are generally considered the most fertile and versatile, and contain the greatest productive potential for farming and horticulture.

Hastings District has a finite resource of good quality rural land. The District's economy heavily relies on the Heretaunga Plains soils for horticulture and viticulture, and rural pasture land for sheep and cattle. The loss of high quality rural land to residential development could in the future compromise the ability of the District to support the extensive farming, **horticulture and viticulture** industries on which much of the community relies.

The rural land resource, and particularly the Heretaunga Plains soil resource, is important to the District for economic, cultural and social reasons. The Heretaunga Plains is a resource rich area of New Zealand, blessed with high value soils, good water supply and a temperate climate. With such resources the Plains have been the focus for settlement, with the main industrial base being in support of the agriculture and horticulture sectors.

The value of the soil and water resource to the economy and the wellbeing of the community has changed little over time. Ongoing growth in the residential and industrial sectors, along with changing **horticulture** practices has led to increasing competition for the water and soil resources.

Areas of rural land are often purchased and subdivided into smaller lots for residential and lifestyle purposes, particularly close to townships, although this is offset by the amalgamation of larger lots.

Diversification and intensification of activities in the rural area also means pressure to divide rural land into smaller and smaller lots, likely in an attempt to offset capital investments. Land fragmentation can result in a shortage of properties of suitable size for viable farming and **horticulture** units in the future.

Since the first State of the Environment Report was published, Hastings District Council, Napier City Council and Hawke's Bay Regional Council have embarked on a **collaborative approach towards managing urban growth on the Plains from 2015 to 2045**. The **joint Strategy** was first adopted in 2010, then a reviewed version re-adopted by the three councils in early 2017 (HPUDS 2017).

One of the key drivers for HPUDS was community recognition that both the soils and water resource are finite and under increasing pressure and could be better managed. Also of relevance is the Regional Policy Statement which became operative in 2014. This was the first statutory document that gave effect to HPUDS.

Through the District Plan Review and development of the Proposed Hastings District Plan, Hastings District has sought to implement relevant aspects of HPUDS with inclusion of **objectives**, policies and rules to ensure future growth is comprehensively and sustainably managed.

Indicators

The table below shows the indicators that are used to monitor the state of the versatile soils in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the **Proposed** Hastings District Plan, as shown below.

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52 // Hastings District Council, Te Kaitiaki & Pōke o Heretaunga



Photo: Versatile Soils of the Heretaunga Plains
Source: Hawke's Bay Regional Council

2015-2018 Ka hae Pōroango iB te Tāiao

Hastings District Council: Te Kaunihara ā Rehe o Heretaunga // 58

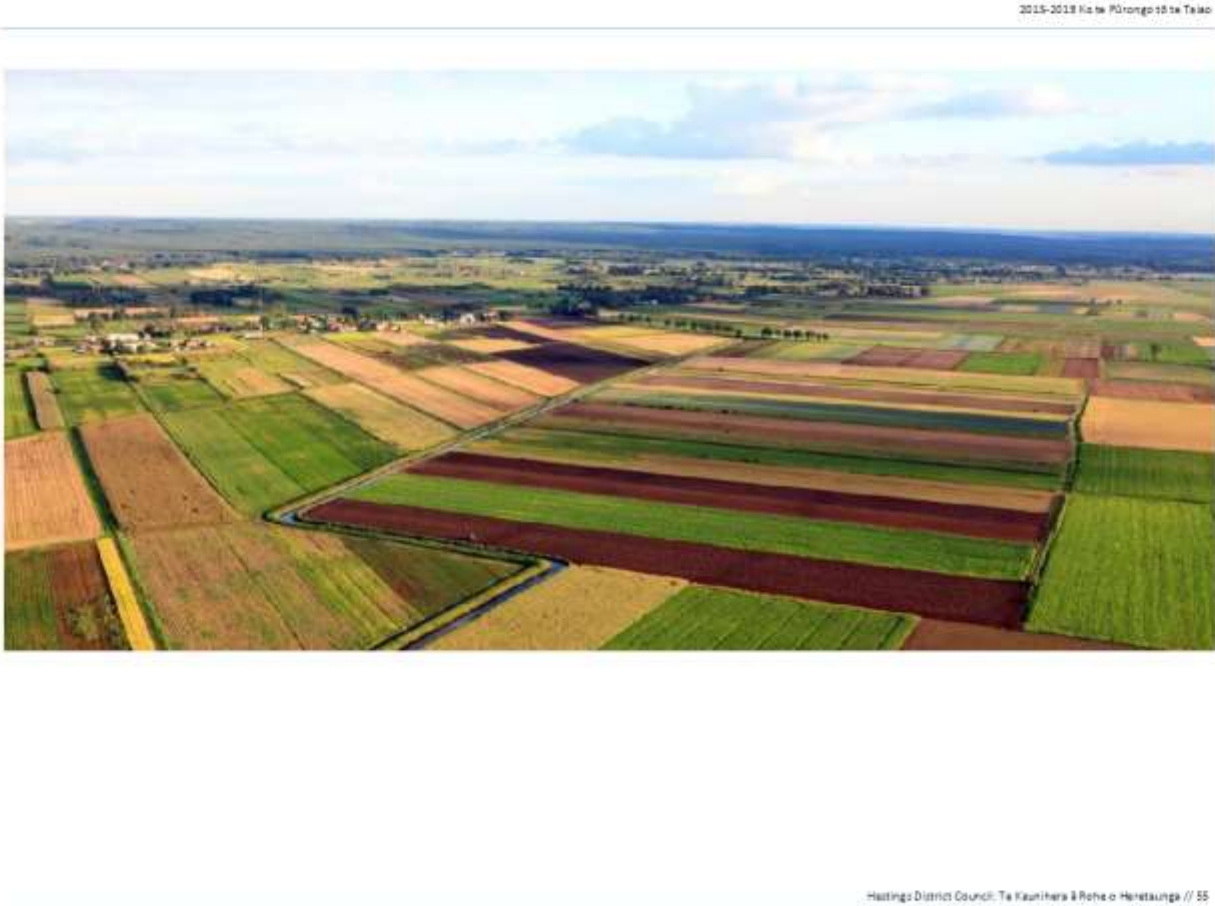
2015-2019 Ka te Pirangi ki te Taiao

INDICATORS FOR PROTECTION OF VERSATILE SOILS

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW IT INFORMS THESE OUTCOMES	RELEVANT DISTRICT PLAN OUTCOMES
		<ul style="list-style-type: none"> An environment that is appreciated, protected and sustained for future generations. Development in Hawke's Bay is sensitive to the need to protect and promote environmental wellbeing. 	<p>Proposed Hastings District Plan (2015) (As amended by decisions)</p> <p>Section 2.3.2.2 (The Role of the District Plan in Delivering the Vision)</p> <p>...the resources of the District that support land based primary production need to be carefully managed to ensure that they remain available for future generations...the versatile soils of the Heretaunga Plains should be protected from unnecessary development and that future urban growth should be provided for within the existing boundaries of the urban environment. This will require more intensive use of the existing residential areas. (Section 2.4.2 Anticipated Outcomes (Urban Strategy))</p> <ul style="list-style-type: none"> UD-02 Increased intensification of the existing urban environments, while maintaining acceptable levels of residential amenity. UD-04 Urban development that avoids, remedies or mitigates adverse environmental effects and avoids the loss of valuable finite soil resources on the Heretaunga Plains in line with the Heretaunga Plains Urban Development Strategy. <p>Section 2.8.3 Anticipated Outcomes (Rural Resource Strategy)</p> <ul style="list-style-type: none"> RRS-01 The continued availability, development and utilisation of the life supporting capacity of the Hastings District's productive and resources for a range of activities.
V51	Versatile Soils in the District	State	The amount of versatile soils in the District indicates the state of the soil resource, and assists in understanding the rarity of the resource and the effect of loss of valuable finite soil resources both for present and future generations.
V52	New Dwellings in the Rural/ Plains Production Zone	Pressure	The number of new dwellings in the rural area gives a good indication of the pressure for residential development in the rural area.
V53	Subdivision in the Rural/ Plains Production Zone	Pressure	The number of subdivisions to create additional sites, including lifestyle lots, in the rural area gives a good indication of the pressure the rural soil resource is under, and an understanding of this enables informed response towards protecting this resource.
V54	'Farm Park' Subdivision in the Rural Zone	Pressure	Farm parks are one method of providing for low density residential demand with less impact on the life supporting capacity of the soils. The number of farm parks and sites created can inform ongoing attempts to achieve balance between use, development and protection.
V55	Re-zoning of Rural/ Plains Production Zone Land	Pressure	Re-zoning of the Plains Production Zone is a good indicator of the impact of urban expansion and development on the extent of the finite soil resource of the Heretaunga Plains.
V56	Land Use Consents Granted in the Plains Production Zone	Pressure	The types of land use consents that are granted in the Plains Production Zone provides an indication of what activities are occurring on the finite soil resource other than those directly related to land-based primary production, and thereby what pressures are impacting on it.

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54 // Hastings District Council: Te Kaunihera o Hōne o Heretaunga



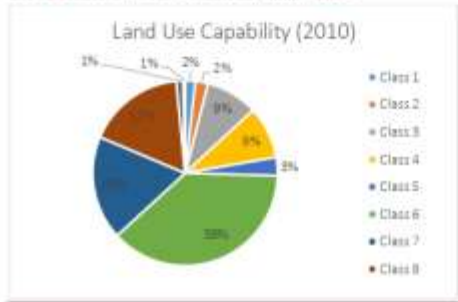
2015-2019 Ko te Pirangia ki te Taiao

Monitoring information

V51: Versatile Soils in the District

Class I, II and III soils are generally considered the most fertile and versatile, and contain the greatest productive potential for farming and horticulture. There are 68,514 hectares (or 13.1%) of the District comprising class I, II or III soils.

Figure 13.14: Land Area by Land Use Capability (2010)



Source: LRI Land Use Capability Data, Landcare Research

The New Zealand LRI data (including the Land Use Capability data) has not been updated since 2010, and there are no plans to review it in the near future.

Indicator V52: New Dwellings in the Rural/Plains Production Zones

New dwellings in the Rural and Plains Production Zones provide a useful indication of the urbanisation of the soil resource.

The settlement pattern in the Heretaunga Plains Urban Development Strategy (HPUDS) is made up of key growth areas that have been identified within Napier City and Hastings District. HPUDS outlines a settlement pattern out to 2045 involving an increase in the number of households on smaller lots. This is achieved by focusing development into the key growth areas identified.

The key elements of the settlement pattern out to 2045 are:

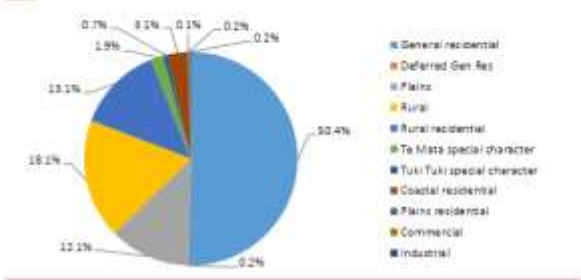
- 60% intensification (10 – 20% intensification or brownfields)
- 35% greenfield
- 5% of population in rural areas.

One of the aims of HPUDS is to have defined urban areas. This allows for more cost effective and efficient servicing and creates definite boundaries between the urban and rural environments⁹.

The following chart compares the actual distribution of building consents for new dwellings in the Hastings District by zone for 2015 to 2019 against the previous State of the Environment reporting period.

⁹ Heretaunga Plains Urban Development Strategy, 2010, Hastings District Council, Napier City Council & Hawke's Bay Regional Council.

Figure 1416: Comparison of Building Consents for New Dwellings by Zone for 2015-2019



Source: Hastings District Council

Figure 1516: Total Building Consents by Zone (2015-2019)

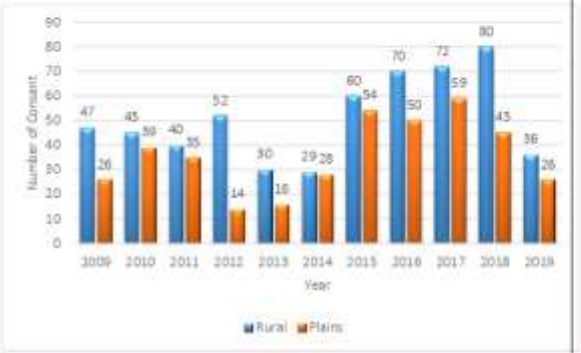
Source: Hastings District Council

Just over half of all new dwellings in the period from 2015 to 2019 were within the urban zones.

As expected, this was mostly within the General Residential Zones which accounted for 50.4%, with a further 3.1% in the Coastal Residential Zone.

Another third comprised 12.1% and 18.1% of new dwellings in the Plains Production and Rural Zone, respectively. In the previous reporting period, these figures were 13% and 12% respectively. The Rural Residential Zone contributed 13.1% (compared to 5.6% in the previous reporting period). This suggests that attempts to redirect residential development away from the Plains and into the Rural Residential Zone and wider Rural Zone is having some effect. The proportion of new dwellings in the Ta Māta and Tūki Tūki Special Character Zones has largely remained the same at about 2.6% (combined) of all new dwellings.

Figure 1517: Building Consents for New Dwellings in the Rural & Plains Production Zones (2009-2019)



Source: Hastings District Council

Demand for building consents to erect new dwellings in the Rural Zone and Plains Production Zone shows continuing demand, comparison to the previously reporting period. Though new dwellings in the Plains Production Zone fell to its lowest point in 2019, at just 26 dwellings. However, overall since 2015, the number of new dwellings in the Plains Production Zone has increased dramatically significantly with an average of 46 consents received per year.

Interestingly, the level of building consents for new dwellings in the Rural Zone has altered dramatically with dwelling numbers almost doubling compared to the previous reporting period. This may be due to the number of Rural Zone subdivisions compared with Plains Production Zone subdivision over the reporting period.

2015-2019 Ka te Pūranga ki te Tāke

Indicator V53: Subdivision in the Rural/Plains Production Zones

Subdivision can lead to [land](#) fragmentation and an increased and accelerated supply of smaller sites may not safeguard the life-supporting capacity of the [finite rural sea-land](#) resource. Fragmentation creates expectation of higher land value [than larger rural properties](#), making land aggregation [less appealing](#).

HDC has [maintained a strong policy position on adhering to](#) the provisions of the [Plains Production Zone](#) to protect the [Plains Production Zone](#) resource. [This strong policy stance position is reflected in the](#) number of successful Environment Court cases supporting the Council's stance on soil protection. The following graphs show that the number of Plains [Production](#) and Rural Zone subdivision consents granted has dropped significantly.

Subdivision in the Plains [Production](#) and Rural Zones therefore, is an indicator of fragmentation of the rural land resource. The following graphs show the number of subdivision applications granted for the Plains and Rural Zones for the 5-year period to [2019](#)¹⁹.

Figure 1738: Total number of subdivision consents granted in the Rural and [Plains Production Zones 2015-2019](#)



Source: Hastings District Council

For the [current reporting period](#), subdivisions in the Rural Zone have [an average of 26](#) applications a year. This likely reflects [high](#) demand due to a variety of factors, including [the change in lifestyle choices to possibly policy and rule changes enabling development](#).

[Non-complying](#) activities represent development [is](#) contrary to the District Plan [provisions](#). Therefore, the number of [Non-complying](#) subdivisions provides a strong indication of 'pressure' to develop land over time.

¹⁹ The subdivision data used for this indicator excludes any subdivisions solely for the purpose of boundary adjustment, creating rights of way, or amalgamation.

2015-2019 Ka hae Pōroongo o te Taiaro

The proportion of Non-complying subdivisions in the Rural Zone out numbers Controlled and Discretionary activities by approximately three applications to one for the previous reporting period. Whilst in nominal terms, the number of Non-complying subdivisions in the Rural Zone has remained steady with an average of 10 applications received per year for 2015-19. The number of Controlled activities has increased while the number of Non-complying applications have decreased. This may be a result of the reduction in lifestyle lots size from 1.5-2.5 hectares to 4000m²-2.5 hectares. The reduction in lot size will not impact on the sites ability to be serviced and developed and reduces the loss of rural land as a residential lifestyle lot.

Figure 1818- Subdivision Applications in the Rural Zone (2009-2019)



Source: Hastings District Council

Subdivision applications affecting the Plains Production Zone have historically been low over the 2009-2014 reporting period (averaging about 4 per year). However, the number of applications gradually increased from 2015 onwards, averaging around 13 applications per year.

The proportion of Non-complying subdivisions in the Plains Production Zone has gradually increased between 2015 and 2019 to almost 16% of all total subdivisions received (24 of the 68 applications). However Non-complying subdivisions have declined since the previous State of the Environment reporting period. In numerical terms this is an average of 13 applications per year.

Figure 1920- Subdivision Applications in the Plains Production Zone (2009-2019)



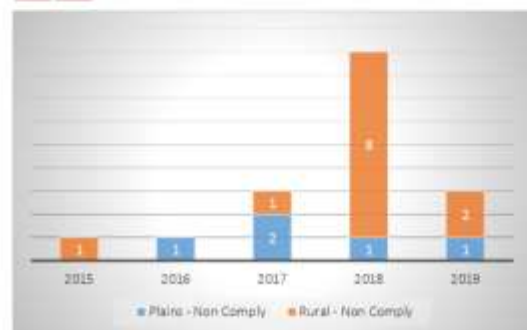
Source: Hastings District Council

The following graphs show the number of successful Non-complying subdivisions in the Plains Production and Rural Zones, and the number of subsequent new lots created.

Hastings District Council: Te Kaunihara o Rehe o Hāretauanga // 58

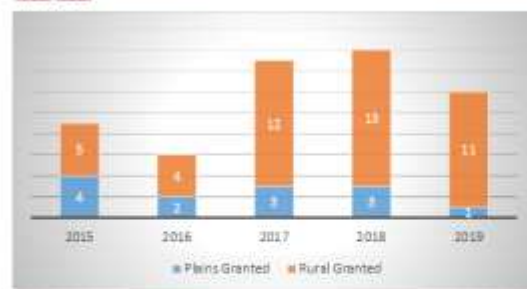
2015-2019 Kōwhiri Pūrangia ki te Taki

Figure 2024: Non-complying Subdivision Granted in the Rural & Plains Production Zones (2015-2019)



Source: Hastings District Council

Figure 2122: Non-complying Lots Established in the Rural and Plains Production Zones (2015-2019)



80 // Hastings District Council, Te Kaitiaki o Te Kaitiaki o Haurangi

Source: Hastings District Council

Apart from the 2018 peak in consents, the total number of non-complying subdivision applications has reduced over the 5-year period. However, since then the number of non-complying subdivision applications have remained fairly steady with an average of 15 applications per year for both rural and Plains Production Zone.

The higher number of lots granted in the Rural Zone may reflect the approval of a farm park.

Subdivisions of this nature most likely continue to reflect the carving off of surplus land or dwellings to release capital, which is generally provided for in the District Plan in limited circumstances where the balance area is amalgamated to form larger rural lots.

Subdivision in the Rural and Plains Production Zones between 2014 and 2019 appears to indicate reduced pressure on the rural soil resource for residential development purposes, and effective control of land fragmentation on the Plains.

Indicator Y54: 'Farm Park' Subdivision in the Rural Zone

Residential Farm Parks are another mechanism to cater for demand for rural residential lifestyle sites. 'Farm parks' are a form of rural residential development which recognises a desire for smaller rural residential sites, and enabling this by retention of the majority of the parent title for continued land based activities (often administered by a body corporate comprising the owners of the residential sites).

The benefit of farm park subdivisions, in contrast with traditional rural subdivision, is efficient and effective operation of the balance farm/lot in the long term i.e. minimising the loss of productive soils, and better compatibility with the pattern of development on adjoining land, and avoiding reverse sensitivity issues/conflict with neighbouring land based activities. The uptake of residential farm park provisions can provide an indication of a more sustainable rural subdivision approach when compared with standard lifestyle subdivision.

The Hastings District Plan specifically provides for 'farm park' developments in the Rural Zone as discretionary activities under certain conditions. Farm park subdivisions are not specifically provided for in the Plains Production Zone, reflecting the strong emphasis away from fragmentation of the Plains soil resource.

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2015-2019 Kaitiaki Māori Te Kaitiaki	
<p>There were 6 residential farm park subdivision applications in the Rural Zone during the previous State of the Environment reporting period. A further 5 farm park applications have been applied for between 2015 and 2019. These are:</p> <ul style="list-style-type: none"> • RMA20150841 – 35 Site Residential Farm Park Subdivision (Limestone Properties Ltd) • RMA20140417 – (ENV-2016-WLG-000007) 13 residential farm park sites (Ocean Beach Land Holdings Ltd) • RMA20180087 – vary farm park consent to increase by one lot (Matangi Trustee Company Ltd) • RMA20180329 – 21 residential farm park (Ohiti Road, Crownthorpe) • 11-lot subdivision (Matangi Road), applied for in 2013, granted in 2015 – non-complying. <p>The residential farm park concept was relatively new to the District at the time of the first State of the Environment Report. After more than 10 years, farm parks are still relatively small in number, but contribute towards subdivision applications in the Rural Zone involving the creation of more than 3 lots. This suggests that the larger rural lifestyle subdivisions in the Hastings District are adopting more sustainable land use principles.</p> <p>Given the small numbers, it may be that farm park subdivision is not a particularly informative indicator of pressure on the rural resource, and on versatile soils in particular, and it would be worth reviewing the value of retaining this indicator for future State of the Environment monitoring or combining this into the wider rural/plains subdivision indicator (VS3). However, there have been a number of resource consent applications to establish commercial, industrial, and residential activities in the Plains and Rural Zones, suggesting there is still some pressure on these areas of the District. This will be discussed in further detail in indicator VS6.</p> <p>Indicator VS5: Rezoning of Rural/Plains Production Zone Land</p> <p>The demand for and granting of plan changes to rezone Rural and Plains Production Zoned land reflects a direct loss of soils for land based primary production purposes.</p> <p>Two areas of Plains Production zoned land on the outskirts of Hastings (Omahu Road and Irongate) were rezoned to Industrial totaling approximately 185 hectares in 2017.</p>	<p>Two areas of Plains Production zoned land were rezoned to Residential (Howard Street, Hastings and Brookdale Road, Havelock North) totaling 57 hectares. Finally, 2.2 hectares of Plains Production zoned land were rezoned to Deferred Hawke's Bay Regional Sports Park.</p> <p>In 2018, 55 hectares of land zoned Havelock North Rural Residential and Character Residential was rezoned to Iona Residential in Havelock North.</p> <p>At Haumoana, 3.6 hectares of Plains Production zoned land was rezoned to Deferred Residential, whilst at Te Awanga 8.3 hectares were rezoned Residential and 4.2 hectares rezoned Deferred Residential. Whirinaki had 7000m² rezoned from Rural zone to Coastal Settlement zone.</p> <p>Indicator VS6: Types of Land Use Consents Granted in the Plains Production Zone</p> <p>It was identified in the first State of the Environment Report that monitoring the demand and types of land use consents for activities not directly related to land based primary production, could provide further valuable information about pressure to develop on the versatile soils of the Hetaunga Plains.</p>
Hastings District Council: Te Kaitiaki & Rehe o Hetaunga // 63	

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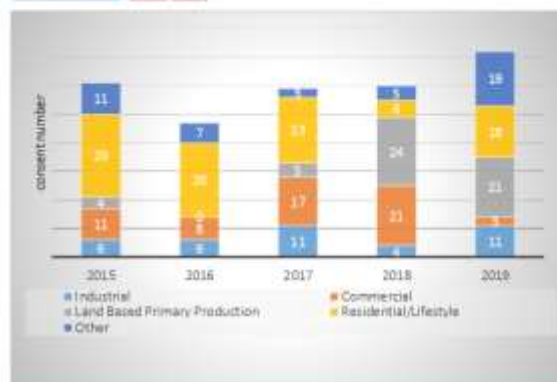
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2015-2019 ko te Pirangi ki te Taiao

Figure 228- Types of Land Use Consents applied for in the Plains Zone (2015-2019)



Source: Hastings District Council

The number of land use consents for activities not directly related to land based primary production has averaged 49 consents per year (and ranged from about 36-57 in any given year). The data suggests a small increasing trend to establish industrial and commercial land use activities in the Plains Production Zone, peaking in 2017 and 2018, and a fairly constant demand for residential/lifestyle consents (averaging about 29 consents per year). A large proportion of those residential/lifestyle consents over this period were for oversized secondary dwellings, yard encroachments, or relocated dwellings.

Between 2015 and 2019, building consents for new dwellings in the Plains Production Zone averaged 22 new dwellings per year falling to their lowest point to just 6 dwellings in 2018.

The number of subdivision consents granted has dropped to between 20 and 30 applications a year over the reporting period. This is compared with the previous

reporting period, where up to 70 Rural Zone subdivisions were granted each year. Of those, the number of non-complying subdivisions in the Rural Zone has remained steady at around 14-44 applications per year.

Subdivision applications affecting the Plains Production Zone dropped dramatically from 2009-2015 onwards, to an average of around 3.6 applications per year.

Much of this downward trend in building consents and subdivision demand likely reflects softening of demand as a result of tougher economic conditions.

Since 2015 the number of non-complying subdivision applications in the Rural and Plains Production Zones has remained fairly steady at around 5-16 applications per year.

Subdivision in the Rural and Plains Production Zones between 2015 and 2019 appears to indicate reduced pressure on the rural soil resource for residential development purposes, and also suggests particularly effective policy to control land fragmentation of the Plains Production Zone by providing for lifestyle lots only where the amalgamation of balance lots into complying land holdings occurs.

Land use consents in the Plains Production Zone have remained fairly steady, with a small increasing trend to establish industrial and commercial activities in the Zone, peaking in 2018.

Responses

For the Community

- If you wish to live in the country, consider buying properties in the established Rural Residential and Lifestyle Character Zones.

For Council

- Continue to review the effectiveness of District Plan provisions applying to subdivision and development in the Plains Production Zone.
- Continue to monitor the types of resource consents applied for in the Plains Production Zone to track pressure on the finite soil resource of the Heretaunga Plains from activities not directly related to land based primary production.
- Monitor the aggregation of land supported by cutting of surplus residential sites.

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2015-2018 Kaiake Pōroongo iā te Tāiao

- Continue to implement and review the Heretaunga Plains Urban Development Strategy (HPUDS).



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2015-2019 He ta Pōroongo i te Tairā

Air & Water Sustainability

THE ISSUE AT A GLANCE

INDICATOR	STATE	STATE+	SUMMARY
Air Quality			
AQ1 Level of particulate matter (PM ₁₀) in the air			Overall PM ₁₀ concentration levels are improving, as has the number of non-compliances with the NES. In 2014, the levels exceeded the guideline on only 5 days – the lowest number of occasions since continuous monitoring began back in 2008. However, Hastings still has a way to go to achieve full compliance with the NES guidelines.
AQ2 Residents' concern regarding air pollution			Level of concern is improving, with 40% surveyed being concerned or very concerned about air pollution in 2014, compared to 47% in 2008.
Water Quality			
WQ1 Surface water quality			It is difficult to conclude whether or not there has been any change in surface water quality in the Hastings District based on the information currently available. However, action is being taken to improve surface water quality. As highlighted above, more detailed reports are expected to become available in November 2015.
WQ2 Council's urban stormwater discharge consent compliance			Hastings District Council has 35 resource consents to divert and discharge urban stormwater in and around Hastings City and Hawke's Bay. These were granted in 2010 and monitoring of the discharge from the HDC network has been on-going since 2010 and a significant amount of data has been gathered. This information indicates there are contaminants associated with stormwater discharge.
WQ3 Residents' rating of water pollution as a problem			Level of concern that water pollution is a real problem in the Hastings District is high – with 70% surveyed being concerned or very concerned.

Hastings District Council: Te Kaitiaki & Rehe o Heretaunga // 65

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2015-2019 ko te Pōrangahau te Taitā

The management of air and water quality are functions of the Hawke's Bay Regional Council under Section 30 of the RMA.

The following section summarises representative monitoring work undertaken by the Hawke's Bay Regional Council in respect of water and air quality, specifically for Hastings District. The Hawke's Bay Regional Council's own State of the Environment Reports provide more detailed reporting on the state of these resources for the region.

The Hastings District relies heavily on its soil and water resources. The activities using these resources throughout the rural area in particular make a significant contribution to the social and economic well-being of the District. In the Hastings District, water is essential given the dry weather patterns experienced. The largest source of water is the Heretaunga Basin – a vast groundwater resource which provides for the communities of the District, as well as supporting industrial and agricultural activities.

According to Hawke's Bay Regional Council, Hawke's Bay enjoys reasonably clean air due to a relatively low population, low traffic volumes and only a few major industries. However, local air quality does occasionally experience times of reduced quality, which has been largely attributed to domestic heating (wood burners and fires) in the cold winter months.

The Regional Council has also determined that the District enjoys very good groundwater and marine water quality. Surface water quality (rivers and lakes), however, is somewhat less consistent across the District.

HDC Stormwater Network Consent

The Urban Stormwater Consent held by Hastings District Council (HDC) was granted in May 2010 by the Hawke's Bay Regional Council (HBRC). It is a 12 (twelve) year consent to protect and where appropriate, enhance inland waterways by managing the quantity and quality of the stormwater discharges from Hastings, Flaxmere, Clive and Havelock North to protect the aquatic environment.

It is envisaged that on-going collection of information and review of that information will drive changes to the management of the stormwater system over the life of the consent. These changes will be monitored and assessed. Further changes will be made to the management of the network, based on the collection and analysis of monitoring data and system performance.

To achieve this long term change, the consent contains a number of conditions which broadly fall into the following groups. The management approach is based on these themes, with targeted strategies put in place that are consistent with the consent conditions. A catchment management plan has been developed to provide guidance and to implement methods to increase awareness of stormwater related issues and to improve the overall discharge from the main urban areas in the Hastings district.

HDC STORMWATER MANAGEMENT APPROACH



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Air quality within Hawke's Bay is generally very good, but on some calm cold winter nights, when temperature inversions form, levels of very fine smoke particles can exceed health standards.

Hawley's Bay Regional Council monitoring shows that the level of particulate matter in the Hastings Airshed has continued to exceed the National Environmental Standards for Air Quality (NES)⁴². In the DRSIR Model, particulate matter levels in the air are a 'State' Indicator.

Indicator AQ1: Levels of Particulate Matter (PM_{2.5}) in the Air

Map of the Iberian Peninsula showing the distribution of the Iberian lynx. The map is color-coded: dark green for the Guadalquivir basin, light green for the Sierra de Guadarrama, yellow for the Sierra de Guadarrama, and purple for the Sierra de Guadarrama. A legend on the right side of the map provides details for each color-coded area.

Map: Anshadu on Hunter's Bay
(Source: Hunter's Bay Regional Council)

¹⁰ ACCOUNTS MANAGEMENT (including Movements of Shares) Relating to Certain of our Subsidiary, Direct and Other Taxable Subsidiaries, 2004-2006 subsequent agreements.

2015-2019 Ka te Pōrangā ki te Tāke

In 2011, amendments to the NES were made to introduce new split target compliance dates depending on the state of the air quality in each airshed, to reflect more realistic compliance targets.

The Hastings Airshed is now required to achieve no more than three exceedances by 1 September 2016, and no more than one exceedance by 1 September 2020.

It is important to note that whilst the timeframe has been amended to be more achievable, the value of the PM_{10} standard itself ($50\mu g/m^3$ as a 24-hour average, which is the World Health Organisation global guideline) has not changed.

Figure 24: Airsheds with the Highest Annual Number of PM_{10} Exceedances, 2006–2012

TABLE 6: AIRSHEDS WITH HIGHEST ANNUAL NUMBER OF EXCEEDANCES OF THE PM_{10} STANDARD, 2006-2012

Rank	2006	2007	2008	2009	2010	2011	2012
1	Nelson A (54)	Otago-1 (55)	Otago-1 ¹ (91)	Otago-1 (60)	Otago-1 (76)	Otago-1 (64)	Otago-1 (60)
2	Otago-1 (50)	Tairāroa (48)	Otago-2 ¹ (46)	Tairāroa (36)	Otago-2 (42)	Christchurch (34)	Tairāroa (34)
3	Richmond (37)	Rotorua (29)	Rotorua (39)	Otago-2 (35)	Tairāroa (38)	Tairāroa (30)	Redfish (27)
4	Tairāroa (36)	Nelson A (35)	Tairāroa (37)	Nelson A (34)	Invercargill (35)	Otago-2 (25)	Invercargill (28)
5	Christchurch (28)	Redfish (25)	Hastings (28)	Rotorua (27)	Kaipoi (28)	Kaipoi (23)	Christchurch (19)
6	Kaipoi (25)	Richmond (21)	Nelson A (25)	Kaipoi (23)	Redfish (22)	Otago-1 (17)	Richmond (16)
7	Ashburton (26)	Kaipoi (20)	Christchurch (22)	Richmond (21)	Rotorua (18)	Rotorua (18)	Rotorua (18)
8	Nelson B (24)	Christchurch (17)	Richmond (20)	Tairāroa (17)	Tairāroa (15)	Ashburton (15)	Tairāroa (15)
9	Rotorua (23)	Ashburton (13)	Kaipoi (18)	Redfish (16)	Christchurch (15)	Nelson A (15)	Kaipoi (14)
10	Hastings (18)	Hastings (15)	Redfish (18)	Christchurch (15)	Hastings (15)	Invercargill (12)	Rangiora (12)

¹—From 2009, results represent the consolidation of Airsheds: Ashburton, Clyde and Cromwell dist.

²—From 2009, results represent the consolidation of Airsheds: Ashburton and Ashburton.

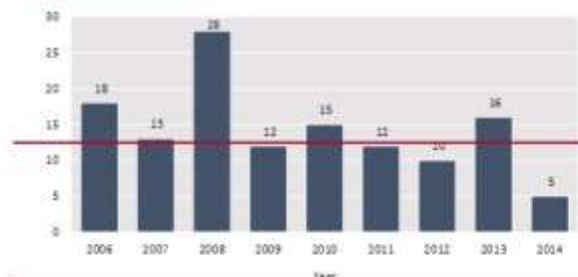
88 // Hastings District Council, Te Kaitiaki o Haurangi

Source: Ministry for the Environment 2014 & Airshed Progress Report 2012, Wellington

Hastings featured in the ten airsheds with the highest annual number of exceedances of the PM_{10} standard in New Zealand, for 5 out of 7 years between 2006 and 2012. Data was not available for 2013 and 2014.

The monitoring site for the Hastings Airshed is located at St John's College, Hastings. The following graph shows the number of days where PM_{10} in the air exceeded the National Environmental Standards for Air Quality (NES) as measured at this site. The previous State of the Environment Report only had 3 years' worth of data on PM_{10} levels from the St John's site using a continuous Beta Attenuation Monitor. There is now 9 years' worth of data available.

Figure 25: Number of days where PM_{10} exceeded National Environmental Standard for Air Quality at St John's College



Source: Hawke's Bay Regional Council

In these first 3 years of monitoring, PM_{10} exceeded the national air quality guidelines an average of 20 days per year. The number of exceedances peaked at 28 days in 2008.

Since that time, the number of exceedances has improved, averaging 13 days per year between 2009 and 2013. In 2014, the levels exceeded the guideline on only 5 days—the lowest number of occasions since continuous monitoring began.



2015-2019 Ka te Pōrangā ki te Tāke

Indicator AQ2: Residents' Concern Regarding Air Pollution

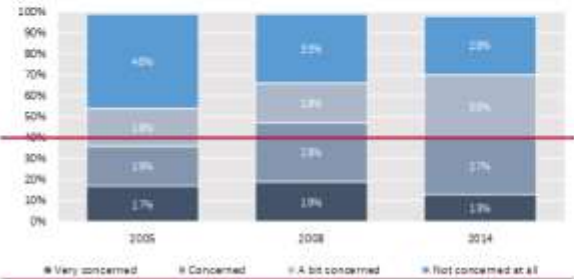
Resident's level of concern regarding air pollution gives further insight into the quality of air in the District. Until 2008, Hastings District Council commissioned bi-annual Communitrak Surveys.

At the time of the first State of the Environment Report, almost half of the 503 respondents to the Council's Communitrak Survey were concerned about air pollution. Overall, 47% of those surveyed were 'concerned' or 'very concerned' about air pollution in 2008, significantly higher than in 2005 (35%).

This survey has since ceased. An alternative survey (Public Voice Survey) was undertaken in 2014, and 358 people responded to an identical question regarding concern about air pollution.

In the Public Voice Survey, 40% of those surveyed were 'concerned' or 'very concerned' about air pollution. This suggests an improvement in people's perception of air pollution in the District. It is important to note however, that the most recent survey may have been carried out under slightly different survey parameters and may have introduced issues in terms of consistency.

Figure 27: Level of Concern Regarding Air Pollution (2005-2014)



Source: Communitrak and Public Voice Surveys, Hastings District Council

Whilst air quality in the District is generally very good, Hastings remains in the top 10 worst areas in New Zealand for the number of times PM₁₀ levels exceed the National Environmental Standard for Air Quality per year.

However, since the first State of the Environment Report, overall PM₁₀ concentration levels have improved, as has the number of non-compliances with the NES¹⁴. In 2014, the levels exceeded the guideline on only 5 days – the lowest number of occasions since continuous monitoring began. This improvement has been largely attributed to the phasing out of inefficient domestic woodburners and open fires for home heating as a result of new rules.

¹⁴ For more detailed information about the state of air quality in the Hastings District, refer to the Hawke's Bay Regional Council's State of the Environment Reports.

At the same time, Hastings District resident surveys indicate the community is somewhat less concerned about air pollution, with the proportion of respondents being "concerned" or "very concerned" falling from 47% in 2008, to 40% in 2014.

~~For the Community~~

- ~~For Council~~

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2015-2019 Ko te Pūranga tā te Tāke

Water Quality

Water is incredibly important in the Hastings District, particularly given the dry climate.

The groundwater resource is of particular significance as a main source of water for irrigation, industrial processing and especially drinking water. Hawke's Bay Regional Council monitors groundwater levels at various locations. A full network of monitoring sites were not installed until the early 1990's, so knowledge of groundwater level response to human influences is primarily limited to the last 30 years⁷². On the Heretaunga Plains, groundwater level declines have mainly occurred west of Hastings, near Flaxmere, and between Roy's Hill and Fenukū in the major recharge area, but the rates of decline vary between sites and across seasons.

Groundwater quality, particularly from the Heretaunga Plains basin, is generally of high quality. Hawke's Bay Regional Council monitors groundwater quality at key groundwater catchments in the region. Nitrate-nitrogen concentrations and the occurrence of E. coli are key indicators for both environmental and health related reasons, including the New Zealand Drinking Water Standards (NZDWS). In most cases, nitrate-nitrogen and E. coli levels are well within those national standards set by the Ministry of Health. Monitoring has not detected any elevated pollutants or naturally occurring chemicals of concern in this resource to date.

Future climate change scenarios indicate it is likely to get drier and warmer than average, and the Regional Council anticipates that this will lead to a reduction in aquifer recharge rates and an increasing demand for groundwater. They therefore consider ongoing monitoring of aquifer levels and groundwater quality as essential.

Overall, Hawke's Bay Regional Council advises that marine water quality is also consistently very good, although poor in estuarine areas (Waipohia Lagoon, Māreketara Lagoon, Waipuka Stream at Ocean Beach, and Puhokio Stream at Waimarama). Coastal water quality is addressed in more detail in the section of this Report relating to coastal amenity (and in the Regional Council's own state of the environment reporting).

Surface water quality in the District however, is not always the best, particularly during low flow periods in summer and after heavy rainfall and flood events. For the purposes of this State of the Environment Report, surface water quality remains the representative indicator of water quality.

Water quality has a history of deterioration over time across New Zealand, and Hawke's Bay/Hastings District is no different. Since the first State of the Environment Report, there have been considerable policy changes affecting freshwater management. Hawke's Bay Regional Council notified Plan Changes 5 and 6 to the Regional Resource Management Plan, in the midst of these regional plan changes, Central Government

⁷²—Regional Key Friends—The State of Our Environment Summary Report 2009-2014, 2009, Hawke's Bay Regional Council

2015-2018 Kaiake Pōroango 18 te Taiaro	
<p>also introduced its National Policy Statement for Freshwater Management, which came into effect in August 2014.</p> <p>Proposed Plan Change 5 was notified in October 2013, and provides enhanced guidance and direction about how land and freshwater resources are to be managed across the region in an integrated manner. Amongst other things, Plan Change 5 outlines a broad approach to managing leaching of nitrogen, faecal coliform bacteria and phosphorus from the use of production land.</p> <p>As yet, this plan change has been adopted.</p> <p>Proposed Plan Change 6 was notified in July 2013, and presents a catchment-specific change to the Regional Resource Management Plan specific to the Tukituki River catchment. This change addresses specific water allocation and water quality issues in the catchment, and forms part of a wider proposal for the catchment that included resource consent applications for the proposed Awarua Water Storage Scheme. As at 2015, this plan change has been adopted.</p> <p>Water quality monitoring of the District's rivers is undertaken by the Hawke's Bay Regional Council. Some of the issues identified by the Hawke's Bay Regional Council, as affecting surface water quality in Hastings District, are:</p> <ul style="list-style-type: none"> • Pollution from land use activities alongside rivers and waterways; • Loss of riparian and aquatic vegetation; and • Dumping of rubbish alongside rivers and waterways; <p>In the OPEIR Model, surface water quality sampling is a 'State' indicator.</p> <p>In 2010 Hastings District Council was granted a discharge consent by the Hawke's Bay Regional Council for all urban stormwater discharges from the Hastings District Council stormwater network.</p> <p>Since 2010 HDC has undertaken a significant level of monitoring of the stormwater network pipe-end discharges, sediment sampling of the receiving environment directly downstream of the pipe-end and ecological surveys of aquatic life in the receiving environment, as required by the network consent. In addition to this routine monitoring, Hastings District Council have undertaken similar monitoring along tributaries leading to the Karamu Stream.</p>	<p>The Karamu Stream is the ultimate receiving environment for all urban stormwater flows from the Hastings, Havelock North, Elmore and Clive communities. This information is shared with the Hawke's Bay Regional Council on a regular basis so a collaborative approach to understanding the surface water quality issues and where attention is best focussed to improve the quality of these waterways.</p> <p>Hastings District Council has recently produced a first generation stormwater catchment management plan in 2015 to focus on methods to improve the management and quality of stormwater discharges from the stormwater network.</p> <p>Monitoring Information</p> <p>Indicator WQ2: Urban Stormwater Discharge Compliance</p> <p>Since 2011, sediment quality, macroinvertebrate community structure, and stormwater quality were monitored at multiple sites across a number of waterways that receive stormwater runoff from the Hastings urban area.</p> <p>The most comprehensive monitoring was of benthic sediment quality. Sediment monitoring covered a total of 33 sites across 17 tributaries of the Karamu Stream; plus 6 sites on the main stem of the Karamu Stream. Muddy Creek at Clive was also included in this monitoring. Thirty-three sites were sampled in 2011 and 33 sites were sampled annually since 2012.</p> <p>Semi-quantitative (non-replicated) macroinvertebrate sampling was carried out during 2011 at 33 sites, and at 34 sites during 2014. Comparative samples are available at 31 sites for the 2011 and 2014 surveys.</p> <p>Water quality monitoring during rainfall events were carried out at 3 sites – Ruahapea 4, Irongate 2, and Wellwood 1 over a small number of individual rainfall events. Each site was located near the end of the reticulated urban stormwater network and results confirmed there are instances where the stormwater water contamination levels are above the low level trigger values in the ANZECC guidelines.</p> <p>Sediment Quality</p> <p>Concentrations of stormwater indicator contaminants (Copper, Lead, Zinc, Total Polycyclic Aromatic Hydrocarbons) in sediments vary widely across the 33 sites. For example, the 'background' sites 'Awarua 1' and 'Raupare 2', which receive no urban stormwater</p>
Hastings District Council: Te Kaitiaki & Rehe o Heretaunga // 75	

2015-2019 Ka te Pōrangā ki te Taiao

runoff show consistently low concentrations, while depositional waterways such as the Ruahapā, Riverles, Mollery, Mahara, Windsor, Tomoana, and Wellwood Drains, the Irongate Stream, and sites within the Karamu Stream as far upstream as Havelock North, typically show signs of contamination by one or more stormwater indicator parameters—most commonly zinc.

Comparison of stormwater contaminant concentrations in sediments from the Havelock North streams suggests accumulation of contaminants is less of an issue in these steeper gradient/higher-velocity environments. It is possible a greater proportion of contaminants would be transported to the Karamu Stream, within which deposition is more likely to occur. The most contaminated sediments are found in the Ruahapā Stream (RUAA) where zinc and lead concentrations are well in excess of the respective ANZECC High Trigger Value, and other contaminants such as arsenic, chromium, mercury, nickel and PAH are elevated—in particular at the urban edge.

Typically in the depositional tributary waterways stormwater indicator contaminant concentrations are highest at the urban edge and decrease steadily in a downstream direction toward the Karamu Stream. Elevated concentrations of stormwater contaminant concentrations at most tributary monitoring sites (where they are available) immediately prior to convergence with the Karamu Stream suggest some transport of contaminants from urban areas to the Karamu Stream. An accumulation of stormwater indicator contaminants within the Karamu Stream, in a downstream direction, supports the view that urban stormwater contaminants are mobilised to the Karamu Stream. No data has been collected downstream of the Karamu—Raupare confluence (i.e. in the Clive River) so it is not known what contaminant concentrations are in the lower catchment.

Macroinvertebrates

Macroinvertebrate communities are most healthy in the Havelock North streams, where SQMCI results suggest 'Fair' and 'Poor' quality. Semi-quantitative invertebrate sampling in Havelock North streams suggest reasonably stable conditions between the 2011 and 2014 sample events. Low gradient tributaries of the Karamu Stream, and the Karamu

Stream itself, support macroinvertebrate community scores fitting the qualitative description 'Poor'. There is some variation in sample scores between 2011 and 2014, however, the significance or causes of those differences are difficult to determine, and a causative link to stormwater contamination is equally difficult to establish. Macroinvertebrate community scores in the Ruahapā Stream, especially at the urban edge (RUAA), were notably reduced in 2014 compared to 2011—and the score returned from RUAA during 2014 (SQMCI = 27) suggests a heavily impacted, very unhealthy aquatic environment.

Stormwater Quality

In stormwater, zinc is the key dissolved stormwater contaminant consistently found, with lead and copper typically present in lesser concentrations. Of the three sites where stormwater has been sampled, Ruahapā 4 has the highest concentrations of stormwater indicator parameters. Stormwater discharged from the Irongate 3 outlet was found to have increased zinc downstream after reasonable mixing. However, interestingly, the discharge outlet had an apparent (although not always statistically significant) diluting influence on nutrients and turbidity as measured downstream of the outfall after reasonable mixing.⁷⁴

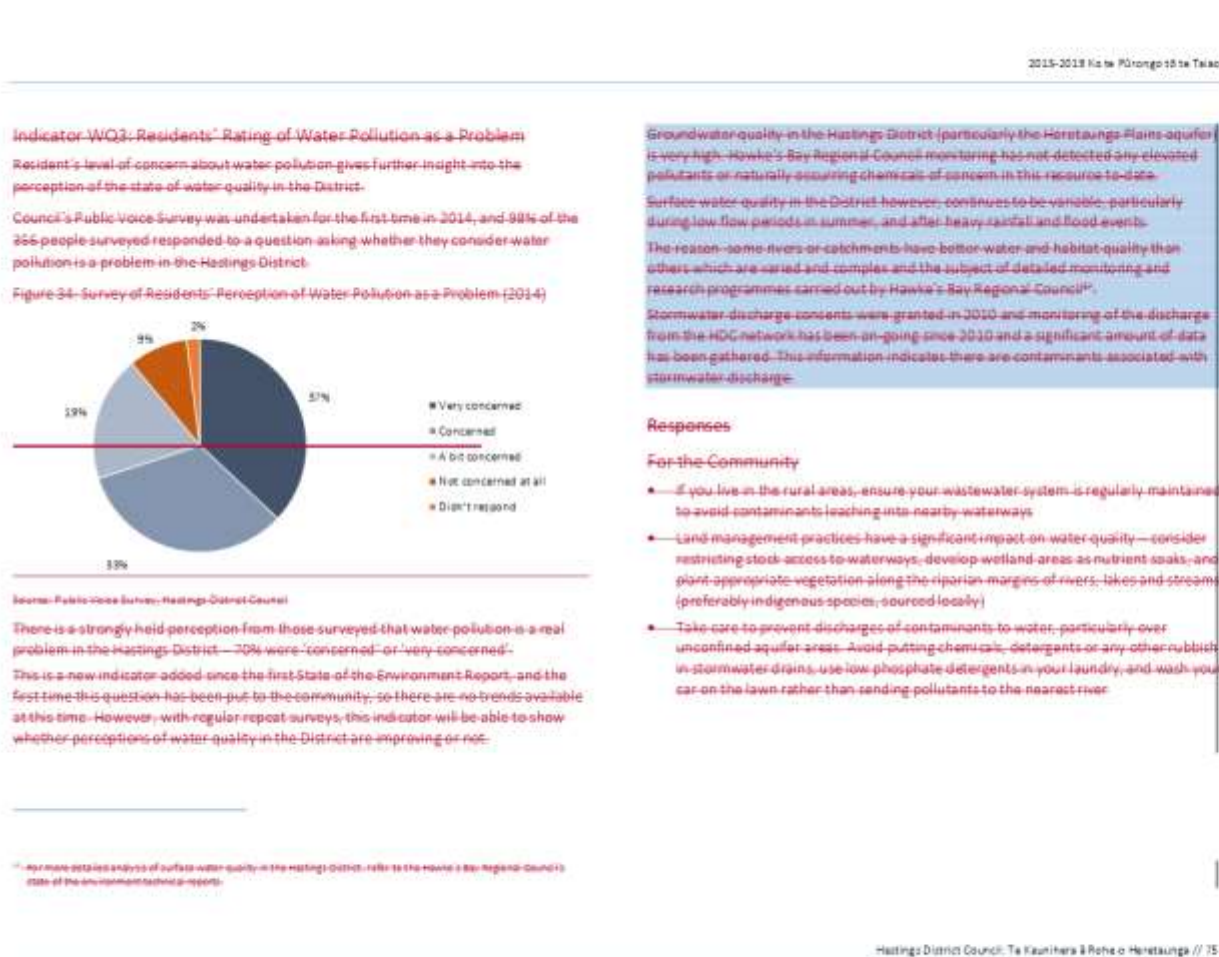
Stormwater Quantity

In addition to stormwater quality management, the network consent requires Hastings District Council to mitigate the effects of increased runoff from new developments within the urban areas of the district.

Council now requires new developments to be compliant with the Hastings District Council's Engineering Code of Practice and other relevant documents so that individual sites control stormwater runoff to minimise the risk of overloading the network, causing ponding issues within roads and private property.

⁷⁴ Summary of Findings from Hastings District Urban Stormwater Monitoring—Forbes Ecology

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Groundwater quality in the Hastings District (particularly the Heretaunga Plains aquifer) is very high. Hawke's Bay Regional Council monitoring has not detected any elevated pollutants or naturally occurring chemicals of concern in this resource to date. Surface water quality in the District however, continues to be variable, particularly during low flow periods in summer, and after heavy rainfall and flood events. The reason some rivers or catchments have better water and habitat quality than others which are varied and complex and the subject of detailed monitoring and research programmes carried out by Hawke's Bay Regional Council¹. Stormwater discharge consents were granted in 2010 and monitoring of the discharge from the HDG network has been on-going since 2010 and a significant amount of data has been gathered. This information indicates there are contaminants associated with stormwater discharge.

Responses

For the Community

- If you live in the rural areas, ensure your wastewater system is regularly maintained to avoid contaminants leaching into nearby waterways
- Land management practices have a significant impact on water quality—consider restricting stock access to waterways, develop wetland areas as nutrient soaks, and plant appropriate vegetation along the riparian margins of rivers, lakes and streams (preferably indigenous species, sourced locally)
- Take care to prevent discharges of contaminants to water, particularly over unconfined aquifer areas. Avoid putting chemicals, detergents or any other rubbish in stormwater drains, use low phosphate detergents in your laundry, and wash your car on the lawn rather than sending pollutants to the nearest river

2015-2019 Ka te Piranga tā te Tāiao

- Water is no longer the abundant luxury we can afford to waste. Reduce wastage of water as a habit, not just during drought periods. Only use what you need when you need to.
- Avoid dumping rubbish in and around rivers, streams and other waterways.

For Council

- Implement programmes to address the source of industrial pollutants entering the stormwater network.
- Continue to work collaboratively with the Hawke's Bay Regional Council and other stakeholders to improve stormwater quality and enhancement of downstream waterways where practical.
- Continue to monitor Council's own discharges to ensure they do not contribute to the pollution of the District's water resources.
- Continue to work with the District's smaller communities where there are wastewater reticulation issues.
- Continue to initiate and contribute to planting initiatives to provide shade over lowland streams and to enhance riparian (riverside) vegetation.
- Continue to survey the community's perception of water quality in the District.

Commented [JT28]: David McKenzie to update

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2019-2020 Kaia Ika Ora te Pūrangā ki te Taiao

Amenity, Character and Heritage Management

THE ISSUE AT A GLANCE

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
Residential Amenity			
A1 Non-residential activities in residential zones			Top 5 non-residential activities in residential zones were for 'educational facilities', 'other activities' and 'commercial activities'.
A2 Complaints about non-residential activities in residential zones			Complaints were trending downwards from the 2016 reporting period. This corresponds with a sharp increase in complaints about signage.
A3 Background noise levels			Background noise levels between 35-45dBA (L95). The latest data has not been published.
A4 Noise Complaints			Apart from the increase of noise complaints between 2014 and 2016 the number of noise complaints has reduced between the years.
A5 Residents perception of noise pollution			Perception of noise pollution has reduced, with 33% surveyed being concerned or very concerned about noise pollution, compared with 40% during the 2009-2014 reporting period.
A6 Residents' perception of the District as a safe place to live			Slight decrease from the previous review in that 84% surveyed considering it a safe place to live.
A7 Provision of open space areas			The total reserve provision for the Hastings District is 586.9ha (land owned by HDC) or 7.52ha/1000 people.
A8 Residents satisfaction with parks and reserves			Remained high at 95% surveyed being satisfied, compared with 94% in 2014.
A9 Residents' satisfaction with accessibility of recreational facilities			Remained high at 90% surveyed being satisfied compared with 92% in 2014.

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Commented [JT30]: I could not find data as complaints received were not based on as a collective as the enforcement was undertaken by a contractor

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2015-2019 Hāte Pōrongo tāke Teiao

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
A10 Residents' rating of quality of life			High with 80% surveyed perceiving high quality of life. <i>This is down from the 2014 report.</i>
A11 Residents' rating of sense of pride in the way their city looks and feels	-		Relatively high, with only 2% reporting that they do not feel proud of the way Hastings looks and feels.
Coastal Amenity			
CA1 Subdivision and development in Coastal Residential Zone			Relatively limited, and mostly within Waimarama and Te Awanga settlements.
CA2 Demand for new coastal residential areas			There has not been a great deal of demand for new coastal residential areas. With the exception of the District Plan review, there were no applications to rezone land for coastal residential purposes. Resourcing requests as part of the District Plan review are still being considered. This may result in some new coastal residential areas by the time the next State of the Environment Report is produced.
CA3 Coastal water quality for recreation			Marine water quality very good. Freshwater/estuarine sites poor. Some improvement in sediment levels at Pukio Stream.
CA4 Coastal water quality for recreational shellfish gathering			During the current reporting period, Ministry for the Environment guidelines were exceeded more often than during the previous reporting period.
Natural Heritage/Landscape Character			
NC1 Subdivision and development in Significant Landscape Character Areas (SLCAs) or Outstanding Natural Features and Landscapes (ONFLs)			In the <i>Proposed</i> District Plan, there were 2 SLCAs, 5 ONFLs, 8 SLCAs, 9 SLCAs, 7 SLCAs comprising of 3.7% of total land area. Decreasing number of subdivision and land use consent applications affecting these areas.
NC2 Building activity within Significant Landscape Character Areas (SLCAs) or Outstanding Natural Features and Landscapes (ONFLs) Areas			One building was built within an identified ONFL area. Building activity concentrated on SLC4 (Heretaunga Hills), but also SLC2, SLC3 and SLC5.
NC3 Resource consents relating to areas of significant indigenous vegetation and significant habitats of indigenous fauna	-		Between 2015 and 2019, there were 35 land use consents and 22 subdivision consents relating to land located within a 'Recommended Area for Protection'.

Hastings District Council: Te Kaitiaki & Te Kaitiaki Heretaunga // 79

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2015-2019 Ka te Pōrangahā te Tāke

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
ISS4 Significant indigenous vegetation and Significant habitats of indigenous fauna			Land are covered by GE2 covenants
Cultural & Historic Heritage			
H1 Residents' perception of public art and cultural opportunities			High with 52% surveyed being satisfied
H2 Council spending on heritage and culture	-		Council spending on Arts & Heritage, Murals, Façade Enhancement, Council Heritage Buildings, urban parks, and the streetscape had generally increased over the reporting period. There has been a corresponding improvement in residents' sense of pride in the way Hastings City looks and feels. As part of the required earthquake strengthening works to Te Whi (Whakapapa District House) \$16,717,584 was spent between 2014-2019. Over the same period, spending on Public Art has reduced.
H3 Consents to modify/destroy Heritage Items and Whāi Tangi			The Proposed District Plan lists 148 outstanding trees, 18 significant trees, 85 heritage items, 8-4 heritage areas, 4 heritage buildings (in Te Mata Special Character Area), and 103 whāi tangi sites. There were just 13 resource consents relating to registered heritage or whāi tangi items between 2015-2019.
H4 Archaeological sites and Authorities to modify/destroy Archaeological Sites			Over the reporting period, there were 52 authorisations granted.

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Section 31 of the RMA gives the District Council the function of managing and controlling the effects of the use, development, or protection of land, and of particular relevance to the state of the amenity, character and heritage of the District.

Amenity values are defined in Section 2 of the RMA as "those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes".

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2015-2019 He ta Pōroango o te Taiao

Residential Amenity

Hastings is the primary urban area of the District, with several smaller urban areas including Havelock North, Flaxmere, Clive and Whakatu, as well as a number of rural service, coastal and marae settlements.

As the commercial and business centre, Hastings provides the principal focal point of business activity, employment, retailing and entertainment.

The majority of the population live in the urban and plains areas.

The 2005 New Zealand Urban Design Protocol describes urban design as being:

"...concerned with the design of the buildings, places, spaces and networks that make up our towns and cities, and the ways people use them. It ranges in scale from a metropolitan region, city or town down to a street, public space or even a single building. Urban design is concerned not just with appearances and built form but with the environmental, economic, social and cultural consequences of design. It is an approach that draws together many different sectors and professions, and it includes both the process of decision-making as well as the outcomes of design."

Urban design is about connecting people and their places – making a successful environment that works now and into the future. Hastings District Council has adopted the NZ Urban Design Protocol, committing to creating sustainable and successful urban places for the community.

The community demands a high quality urban environment with attractive places to live, work and undertake business and recreation, well connected and easy to get around. The Hastings community has a vision to enhance its valued lifestyle, culture and heritage. These are often subjective values.

New development can alter the amenity, character and heritage of its surroundings. The District Plan deals with issues such as compatibility, density and design to ensure amenity values are maintained or enhanced over time.




Photo: Residential Development – Aratahi, Havelock North
Source: Hastings District Council

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Hastings District Council: Te Kaunihira o Rehe o Hēretauranga // 82

ITEM 6

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2019-2019 Ka te Pūranga ki te Taiao

Indicators

The table below shows the indicators that are used to monitor the state of residential amenity in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Proposed Hastings District Plan, as shown below.

INDICATORS FOR RESIDENTIAL AMENITY

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES
		<p>Relevant Outcome Statements:</p> <ul style="list-style-type: none"> Safe and secure communities Development in Hawke's Bay is sensitive to the need to protect and promote environmental well-being Supportive caring and inclusive communities Safe and accessible recreational facilities Enhanced provision of a variety of safe physical recreational opportunities 	<p>Proposed Hastings District Plan (2015) (As amended by decisions)</p> <p>Section 2.4 (Urban Strategy)</p> <ul style="list-style-type: none"> A well-functioning residential market that is able to cater for and respond to demand for residential housing with the focus on compact development Increased intensification of the existing urban environments, while maintain acceptable levels of residential amenity The completion of the HRPUS implementation programme Urban development that avoids, remedies or mitigates adverse environmental effects, particularly in respect of the Heretaunga Plains Unconfined Aquifer and avoids the loss of valuable finite soil resources on the Heretaunga Plains in line with the Heretaunga Plains Urban Development Strategy Increased Papakāinga development on Māori land and on land close to marae Tangata Whenua values and aspirations related to urban development are recognised and provided for
A1 Non-Residential Activities in Residential Zones	Pressure	Non-residential activities can positively or adversely affect the amenity values of surrounding residential areas depending on the scale and nature of the activities	
A2 Complaints about Non-Residential Activities in Residential Zones	Pressure	Understanding the type and extent of non-residential activities occurring in residential areas and monitoring complaints arising from such activities, enables Council to monitor the efficiency of the District Plan provisions and to assess the impact of, and tolerance for, such activities over time	
A3 Background Noise Levels	State	Monitoring background noise levels within residential environments and changes to those levels resulting from changes in land uses, may indicate changes in amenity values over time	
A4 Noise Complaints	Pressure	Monitoring noise complaints in residential areas indicates the impact of changing housing styles and densities or impacts of changing land uses or tolerance of noise by residents	
A5 Residents' Perception of Noise Pollution	State	Measuring resident's perception of noise pollution in their environment provides a relative indicator of amenity values. People have limited noise tolerance levels e.g. levels at which noise causes health impacts such as sleep deprivation	
A6 Residents' Perception of the District as a Safe Place to Live	State	Remained high with 84% of those surveyed finding Hastings to be a safe place to live	
A7 Provision of Open Space Areas	State	The provision of quality well located open space areas is a key measure of amenity and urban design quality	

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2015-2019 Ka hae Pōroango o Bāte Tāiao			
A8	Residents' Satisfaction with Parks and Reserves	State	88% of those surveyed were satisfied with the district's parks and reserves
A9	Residents' Satisfaction with Accessibility of Recreational Facilities	State	Remained high at 90% surveyed compared with 81% in 2014
A10	Residents' Sense of Pride in the way the City Looks and Feels	State	Sense of pride in the way the City looks and feels is another good indicator of amenity
A11	Residents' Rating of Quality of Life	State	Rating the quality of life provides a good overall indicator of amenity, reflecting people's overall appreciation of their environment and lifestyle opportunities

Hastings District Council: Te Kaitiaki o Rehe o Hāreataunga // 88

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2015-2019 Kōwhiri Pūoro te Taiao

Monitoring Information

Indicator A1: Non-Residential Activities in Residential Zones

The amenity of residential areas may be affected by the types of land use activities undertaken. Residential activities use land and buildings for the purpose of permanent living accommodation. This includes dwellings and garages. Any activity outside of this is considered to be non-residential. It should be noted that there is a certain expectation and level of acceptance for limited non-residential activities in residential areas, such as the corner shop, small home occupations, local doctors etc.

Some non-residential activities in the residential zones are permitted in the District Plan, and data on activities that do not trigger the need for resource consent is difficult to obtain without comprehensive survey. However, data on non-residential activities for which resource consents were required, can give some general information in terms of demand for such activities in residential areas. An increase in demand could suggest some pressure on residential amenity. Such information would also enable identification of any trends and possibly establish some correlation with people's appreciation of their residential neighbourhood.

The following graph show the broad categories of the types of non-residential activities in Residential Zones that were granted resource consent during the period 2015-2019.

Half of the resource consents granted for non-residential activities in Residential Zones were for extensions or variations to existing activities.

The most common non-residential activities that required resource consent are as follows:

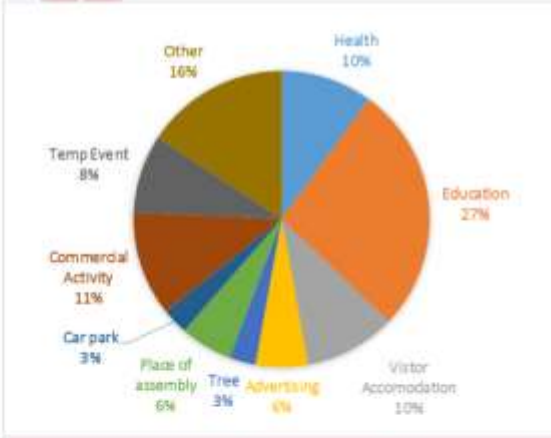
- 1) Education Facilities (19 resource consents granted)
- 2) Other (11 resource consents granted)
- 3) Commercial Activity (8 resource consents granted)

The majority of resource consents for education facilities were for education facility upgrades.

The graphs below show that over the period of 2015-2019, there is demand for commercial activities, healthcare facilities, and other non-residential activities that go beyond the limits set in the District Plan. This is different compared with the results of the 2009-2014 State of the Environment Report.

The following graph shows the types of non-residential activities granted resource consents during the five year period of 2015-2019.

Figure 23: Resource Consents Granted for Non-Residential Activities in Residential Zone (2015-2019)



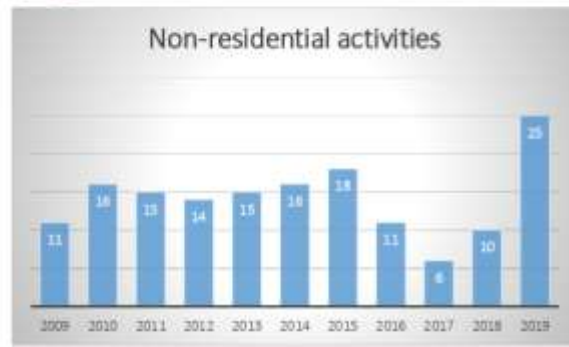
This shows that education facilities, commercial activities, and other activities were the most common non-residential activities granted resource consent in residential

2015-2019 Ka te Pōrogo 18 te Taiāo	
zones. Compared with the previous reporting period, education facilities, temporary events and offices were the three most required non-residential consents.	
Hastings District Council Te Kaunihera ā Rohe o Hāwkeiaunga // 85	

2015-2019 Kōwhiri Kōwhiri Kōwhiri

While the total number has varied over this period, reaching a peak of 25 consents in 2019, the number of consents granted each year has remained relatively low over the past 5 years.

Figure 24.35: Number of Non-Residential Activities in the General Residential Zone



Source: Hastings District Council

The graph below shows that approximately 50% of resource consents were for alterations to existing activities and therefore do not relate to the establishment of new non-residential activities. Each year, there were resource consents granted for new non-residential activities in the General Residential Zone. This means the total number of consented non-residential activities is on the increase. However, this may not threaten residential amenity. This is because non-residential activities are able to co-exist with residential activities without generating adverse effects when the scale and character is appropriate, as supported by District Plan rules. Therefore, the number of complaints about non-residential activities will provide a better indication of the threat to amenity non-residential activities pose in the residential zone.

Figure 25.42: Resource consents for new activities compared with alterations to existing activities



Source: Hastings District Council

A2: Complaints about Non Residential Activities

Changes in the volume of complaints about non-residential activities undertaken in residential zones can provide useful information about residents' concerns in relation to their appreciation of residential amenity.

The data between 2015-2019 was not accessible. In the future there will need to be a system established to monitor complaints received by zone and activity. The storage and location for records will need to be easily accessible for future references. Between 2008 and 2012, there was a significant drop in the number of complaints recorded. However, in the final two reporting years the number of complaints spiked. Over this same period, complaints about signage accounted for approximately 50% of the total number of complaints. This was significantly higher than in previous years and therefore accounts for a significant proportion of the relatively high number of complaints and reflects a tighter approach to signage compliance.

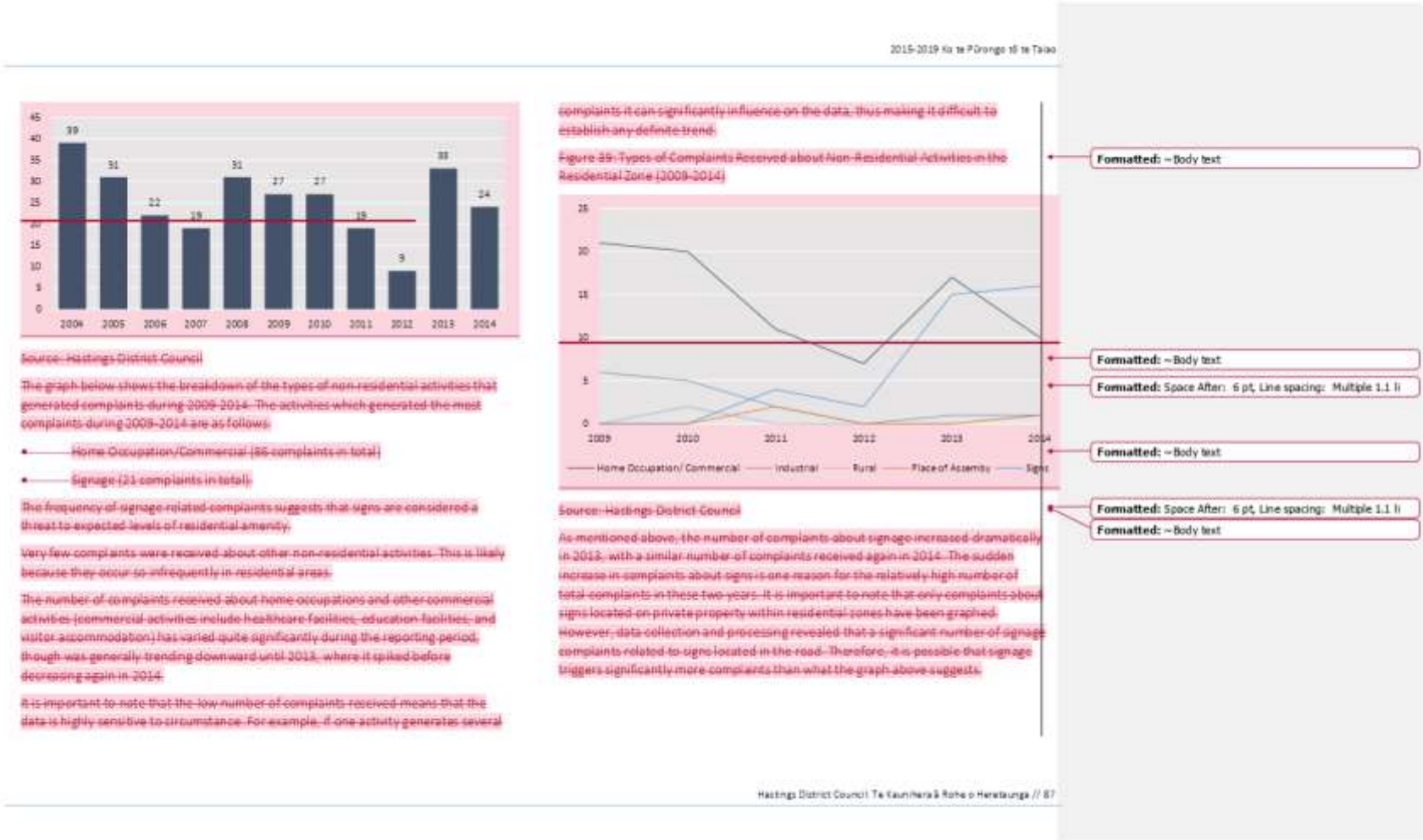
Figure 38: Non-Residential Activity Complaints (2004-2014)

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2015-2019 Kōwhiri Pūoro te Tāiao

Both the local body elections and the referendum on fluoridation were in 2013, with the general election the following year. This meant there was an increase in signage around the District and is one possible reason for the increase in complaints about signage.

The increase in complaints could also be a result of Council adopting a more stringent approach to dealing with non-compliant signage and a more accurate system of recording complaint details.

Indicator A3: Background Noise Levels

Changes in background noise levels in residential areas are a key indicator of amenity values.

People are sensitive to noise levels and excessive noise can affect people's health and wellbeing. The background sound level has an impact on the perceived intrusiveness of a given noise source. A higher background sound level may 'mask' (i.e. conceal) some unwanted noises. Someone playing a loud stereo in a quiet residential area (a low background noise area) may draw complaint whereas the same activity near a busy road (with a higher background noise) may not cause complaint.

Background noise levels are taken from 37 different monitoring sites in the Hastings District. Sites 1-17 are located in Hastings City, Sites 18-22 are in Flaxmere, and sites 23-28 are in Havelock North. In all, monitoring is a time consuming exercise requiring a number of variables to enable accurate data collected. This exercise is not a straight forward exercise and is time consuming for accurate data collection.

The data collection for background noises have not been attached to this report. Any future reports will include the monitoring for the 2015-19 along with the current background noise readings.

Council surveyed background sound levels at various sites throughout the District in 2010¹⁴. For measurements of the background sound, it is necessary to exclude local intrusive sounds or sounds of an intermittent nature which are not normally present at a site.

The New Zealand Standard NZS 6802:1991 Assessment of Environmental Sound prescribes that the L95 be used as the descriptor applied to the measurement data to determine the level of background sound¹⁵. It is the level exceeded 95% of the time within the measurement interval. This is consistent with District Plan referencing, which applies NZS 6802:1991. It should be noted that this standard has been updated, and is the one that is referred to in the Proposed District Plan. However, as the Operative District Plan references the earlier standard.

The following graph shows background noise levels at 37 different monitoring sites in the Hastings District. Sites 1-17 are located in Hastings City, Sites 18-22 are in Flaxmere, and Sites 23-28 are in Havelock North.

The background noise environment tends to average between 35 and 45 dBA (L95). The higher readings correlate with those sites located in mixed or commercial and industrial locations (Sites 5 and 6 are in central Hastings in a largely commercial/light industrial environment; Site 25 is in central Havelock North in a mixed use commercial environment, and Sites 29 and 30 are in close proximity to the Whakatu industrial area).

The 2006 State of the Environment Report included the 2005 survey data which provide a good snapshot of the background noise environment at that time. By comparison, it does not appear that there has been a great deal of change in background noise between the two surveys.

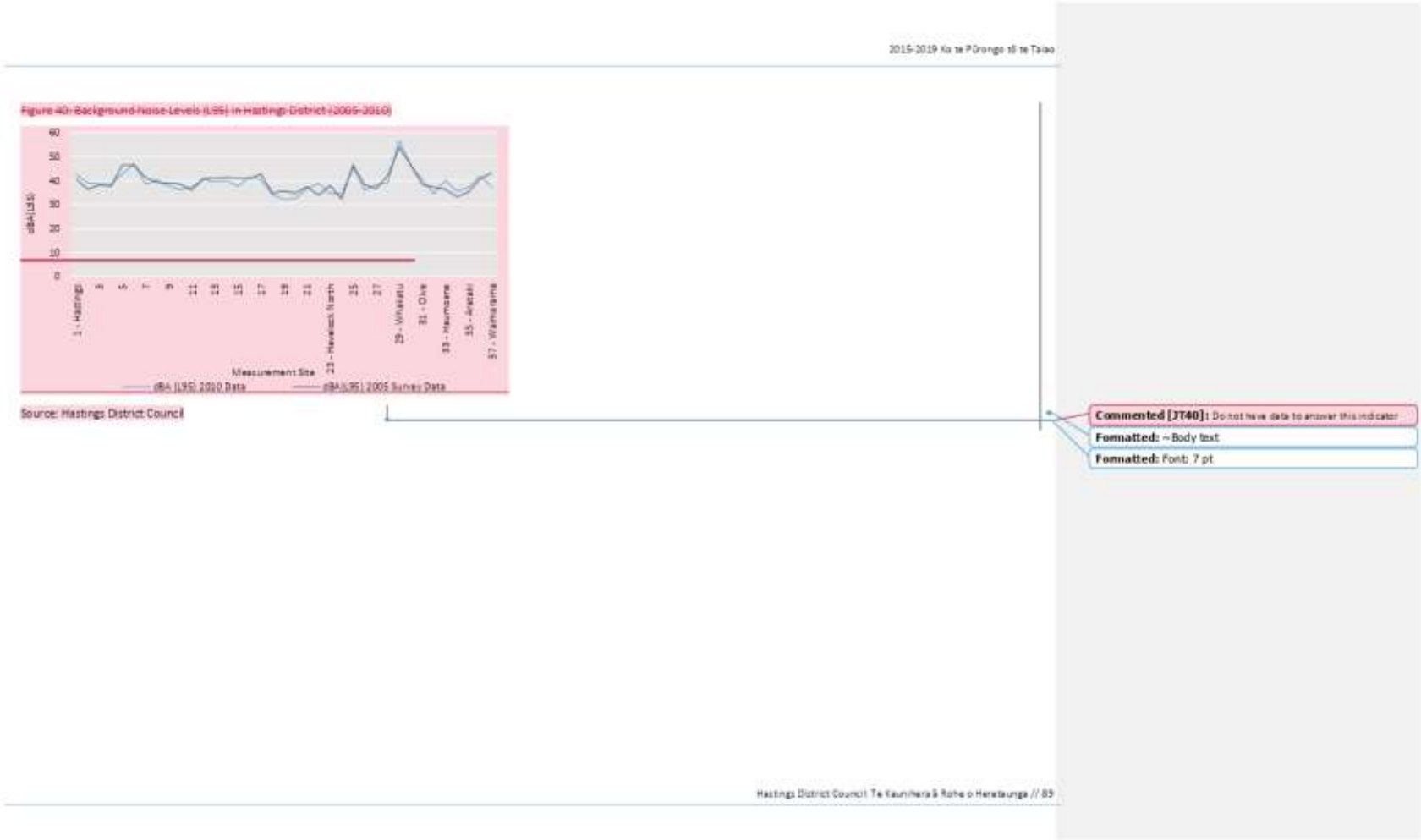
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¹⁴ "2010 Background Sound Level Survey" 2010, Hastings District Council.

¹⁵ "More recently new New Zealand Standards NZS 6802:2009 and NZS 6802:2020 have been issued. These adopt the European standard for background sound levels namely the L90 descriptor in order to ensure the District's monitoring program remains up to date. The future both the L90 and L95 descriptors are being recorded."



2015-2019 Kōwhiri Pūoro te Tāiao

The following graph shows the total number of noise complaints and monitoring consents between 2015-2019.

Figure 254: Noise Complaints Received by Hastings District Council 2015-2019/20

	2015-16	2016-17	2017-18	2018-19	2019-20
Excessive noise complaints	857	2872	2385	1857	2084
Resource consents requiring monitoring	596	640	758	685	465
Resource consents monitored	309	243	415	923	465

Apart for the 2016-17 peak, noise complaints have decreased in the 5-year period. However, the majority of this increase occurred between years 2015 and 2017. Noise complaints continue to decrease after 2016-17, before increasing in 2019-20. While there is an element of variability in more recent years, the general trend over the last 5 years is that noise complaints have decreased.

Indicator A5: Perception of Noise Pollution

Measuring resident's perception of noise pollution provides a further relative indicator of residential amenity values. Surveying people's level of concern regarding noise pollution provides a good overall perception of noise nuisance.

The following graph shows the results of Council's 'Public Voice Survey' and the Public Voice survey which replaced Communitrak in 2014. Many of the survey questions in the Public Voice survey replicated the Communitrak survey in order to produce results that could be compared with previous years.

This indicator shows that concern about noise pollution is increasing. It is interesting to note that the number of noise complaints has stabilised, yet concern about noise pollution has continued to increase. In 2008 and 2014, 32% and 40% of people surveyed reported being concerned or very concerned about noise pollution.

In 2019, this remained steady at 33%. An additional 34% reported being a little concerned. Only 33% of the 2019 survey respondents said they were not concerned at all about noise pollution. This is compared with 38% and 28% in 2008 and 2014 respectively.

Figure 274: Residents' Concern about Noise Pollution (2008-2019)



Source: Hastings District Council Communitrak Survey (note: numbers do not add up to 100% as those who did not answer the question were not graphed).

However residents aged over 60 years of age, who live in one or two person households or who have resided in the District for more than 10 years were slightly more likely to feel very concerned. Although the Public Voice survey was not subject to the same analysis, the questions from Communitrak were directly transferred to the Public Voice survey. Therefore, the analysis of Communitrak results carried out by NRB Ltd is considered relevant.

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2015-2019 Kōwhiri Pūoro te Tāiao



However, according to NRM Ltd's analysis of the survey results in 2008, Hastings District as a whole was below its peer group (similar Local Authorities) and the national average in terms of the percent saying "Yes, Definitely" (24% Hastings District, 32% Peer Group, 30% National Average).

This comparative data is no longer available, so it is not possible to track the District's performance against its peer group, and the national average.

As a whole, the number of people who reported the District as a safe place to live has increased each year the surveys were undertaken.

Indicator A7: Provision of Open Space Areas

The total Reserve provision for the Hastings District is 596.9ha (land owned by HDC) or 7.32ha/1000 people. However there is justification to include Te Mata Peak to the reserve provision, as this land was gifted to the people of Hawke's Bay in 1927 by the Chambers Family. It is protected in perpetuity as a recreation reserve and available for recreational purposes for all citizens of Hawke's Bay under the management of a charitable trust. The inclusion of Te Mata Peak brings the total to 696.44 or

8.54ha/1000 people. The Hastings urban areas has 131.45ha or 4.15ha/1000 people. Havelock North urban area has 76.32ha or 5.25ha/1000 people. Flaxmere has 63.83ha or 6.16ha/1000 people and the Rural area has 324.88ha or 13.87ha/1000 people.

Urban properties within walking distance of a park:

- Properties within 500m of a park Hastings 87.7%
- Properties within 500m of a park Flaxmere 100%
- Properties within 500m of a park Havelock North 97.4%
- Total properties within 500m of a park 82.1%

Urban properties within walking distance of a playground:

- Properties within 500m of a playground Hastings 53%
- Properties within 500m of a playground Flaxmere 88.7%
- Properties within 500m of a playground Havelock North 58.2%
- Total properties within 500m of a playground 59.8%

Indicator A8: Residents' Satisfaction with Parks and Reserves

It is not just the quantity, but the quality of open space and recreational facilities that is a key factor determining the pleasantness and desirability of a place to live, work and do business.

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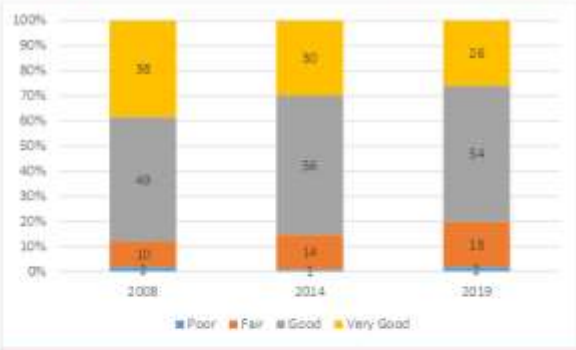
2015-2019 Kōwhiri Pūoro 16 te Tāiao

Indicator A10: Residents' Rating of Quality of Life

Perception of quality of life in the District indirectly indicates a general appreciation of amenity in its widest sense. A good rating of quality of life suggests a correspondingly high level of appreciation of amenity.

The following graph shows that the large majority of those surveyed during the Council's Communitrak and public voice survey perceive their quality of life to be high. The proportion of survey respondents who rated quality of life in Hastings District as being 'Good' or 'Very Good' has remained steady between 2014 and 2019, being 86% and 86% respectively. The number of survey respondents who identified with the most positive and most negative responses (poor and very good) both increased between 2014 and 2019. However, the general trend is one of consistency with previous results.

Figure 3146: Rating the Quality of Life in Hastings District Comparison 2008-2019

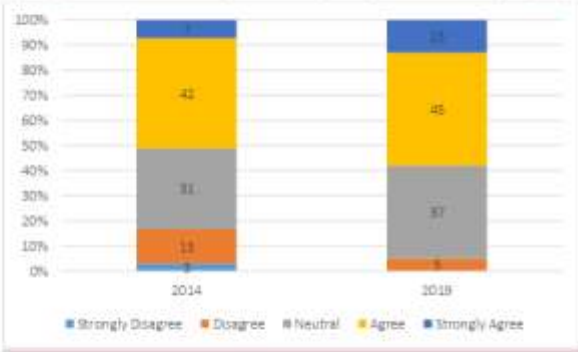


Source: Hastings District Council Communitrak Survey and Public Voice Survey

In 2008, Hastings District sat well within its peer group (similar Local Authorities) and the national average with an 87% rating for 'good' or 'very good', compared with 85% (peer group) and 86% (national average). However, comparison data was not available for the 2014 year.

Indicator A11: Residents' Sense of Pride in the way Hastings City looks and feels

Figure 3247: Residents' sense of pride in the way the city looks and feels (2014-2019)



Source: Hastings District Council Survey and Public Voice Survey

Sense of pride in the way the city looks and feels is a broad measure of indicating satisfied residents' are with urban amenity. This indicator has been included in the State of the Environment Report for the first time, so there is no comparison data available.

It is difficult at this stage to draw any significant conclusions from the indicators for residential amenity. Many of the above indicators (particularly those relating to non-residential activities and complaints in residential areas and noise), need additional monitoring over a longer period to give more useful information.

2015-2019 Ka te Pōrangō 15 te Tāiao	
<p>There were 45-70 resource consents to <u>undertake new or existing</u> non-residential activities in the residential zones of the District between 2014 and 2019. Educational facilities were the most prevalent, followed by <u>education facilities, commercial activities</u> and <u>others</u>. With controls, these are appropriate in residential environments and do not pose a threat to residential amenity.</p> <p>On average, resident surveys in 2005-2008 and 2014 indicated the community is concerned about noise pollution.</p> <p>The total number of noise complaints has <u>gradually reduced over the last 4-year period to 2019</u>.</p> <p>It is important to note that as this that multiple noise complaints received by the same person about the same noise source are included in total figures and may have an impact on the trend observed. Future reporting would benefit from looking more closely at the source of noise complaints; so as to avoid counting multiple complaints by the same person more than once where it is not appropriate to do so.</p> <p>In the meantime, residents' perception of safety, level of open space provision, satisfaction with parks and reserves and accessibility of recreational facilities, along with quality of life ratings suggest that the perception of amenity generally is fairly high, and comparable to that of similar Local Authorities and the national average.</p> <p>Responses</p> <p><u>For Community</u></p> <ul style="list-style-type: none"> • Get to know, and be considerate of, your neighbours • Make use of the many facilities within your community • Celebrate and support the positive aspects of your community. <p><u>For Council</u></p> <ul style="list-style-type: none"> • Monitor the trend for increasing number of non-residential activities establishing in residential areas • Complete a survey of Background Noise levels on a five yearly basis, with the next survey to be undertaken in later 2021 as 2020 was missed due to the Covid 19 virus. 	<ul style="list-style-type: none"> • Review the causes of noise pollution in residential areas to identify methods to reduce the perception of noise pollution • Identify source of noise complaints • Continue to survey residents' perception of quality of life, and satisfaction with the facilities provided in their neighbourhood. • <u>To implement a system for monitoring and tracking complaints received by year. This will enable easier data collection for future reference.</u>
Hastings District Council Te Kaunihera o Hāwea Hāwea 55	

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Coastal Amenity

Coastal settlements within the District are generally low residential density and dotted along the coastline. They provide another option for residential living, where the amenity and character of these settlements are shaped by the coastal environment.

There are often competing demands between protecting a sometimes fragile coastal resource, and the community's desire for access to and the use, development and enjoyment of its resources.

These small settlements have grown on the coast as holiday places, around traditional marae settlements or as rural service centres including Whirinaki, Waimarama, Haumoana, Te Awanga, Waipatiki and Tangaroa.

In recent times more permanent dwellings have established in these centres and some also offer basic commercial services.

Council's growth strategy has identified coastal areas where urban development can more readily be accommodated and by default, those areas where development should be resisted in order to protect coastal amenity and character. Much of this also relates to adequate infrastructural provision and coastal hazards.

The coast also has significant value as a place of recreation – swimming, picnicking, walking, surfing, diving and fishing. It also has significant cultural, spiritual and ecological values for mana whenua. The coast has played an important part in history for mana whenua, being a place of occupation and settlement, a source of food, of materials for whakairo, raranga and the making of tools and weapons. The coast contains numerous urupa and sites of significance for mana whenua.

Indicators

The table below shows the indicators that are used to monitor coastal amenity and character in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.



Photo: Ocean Beach
Source: Hastings District Council

2015-2018 He ta Pōrongo o te Taiao

INDICATORS FOR COASTAL AMENITY

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		Relevant Outcome Statements: An environment that is appreciated, protected and sustained for future generations. The natural qualities of Hawke's Bay's lakes, streams, waterways and coastlines are protected and enhanced.	Proposed District Plan (2015) (As amended by decisions) Section 2.7 (Coastal Environment Strategy) <ul style="list-style-type: none">Improved understanding of the values and matters of significance that exist within the Coastal Environment.An integrated management approach to the use, development, and protection of the Coastal Environment is implemented.The protection of natural, cultural, heritage, and scenic features of the coast, that reflect the significance of such features to the character of the Coastal Environment, and their contribution to the community's social, cultural and natural heritage.The adoption of long term sustainable development strategies for each of the coastal communities.Wāhi Māori values and interests will be recognised and provided for in Council's management of the coastal environment.
CA1	Subdivision and Development in the Coastal Residential Zone	Pressure	These indicators will enable Council to monitor trends for urban development particularly in coastal residential settlements and adjacent rural zones. This will assist in understanding if and where there are any pressures, in pursuing long term sustainable development strategies for the District's coastal communities, and ensuring the coastal environment is managed and protected.
CA2	Demand for New Coastal Residential Areas	Pressure	
CA3	Coastal Water Quality for Recreation	State	These indicators provide an improved understanding of the natural qualities of the District's coastal environment and where there may be issues with its health and management in terms of suitability for recreation and as a food source. This indicates how well the coastal environment is being managed, protected and sustained for future generations.
CA4	Coastal Water Quality for Recreational Shellfish Gathering	State	

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2019-2019 Ka te Pōrangā ki te Tāke

Monitoring information

Indicator CA1: Subdivision & Development in the Coastal Environment

Council, through the District Plan, balances the need to provide for a diverse range of housing demands whilst striving to protect and sustain the amenity and character of coastal areas for future generations. Residential development in the coastal environment is a good indicator of pressure, as it relates directly to people's access to and appreciation of the coastal environment, and has the most influence on coastal character.

The following graph shows the number of subdivision applications granted in the Coastal Residential Zone, and the number of additional lots created, in the ten year period from 2009 to 2019.

Prior to the decisions reached in 2015 as part of the District Plan review, all coastal development was classed as coastal residential.

Figure 334B: Number of Subdivisions Granted in the Coastal Residential Zone (2009-2019)



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Source: Hastings District Council

Few subdivisions have taken place in the Coastal environment – with an average of 1 subdivision per year over this period. It is worth noting that the total number of subdivision consents granted in the Coastal Residential Zone has dropped over the 10 year reporting period.

The higher number of lots in 2004 is largely attributable to two subdivisions in Waimarama creating an additional 7 lots and 13 lots respectively. Another spike occurred in the year 2013, as a result of a six lot subdivision in Te Awanga.

The additional lots can be split by settlement as follows:

	Number of Extra Lots Created (2009-2014)	Number of Extra Lots Created 2015-2019	Total Number of Extra Lots Created
Coastal Settlement		3	
Haumoana/Te Awanga		2	
Waimarama Coastal		1	
Coastal Residential	10		18

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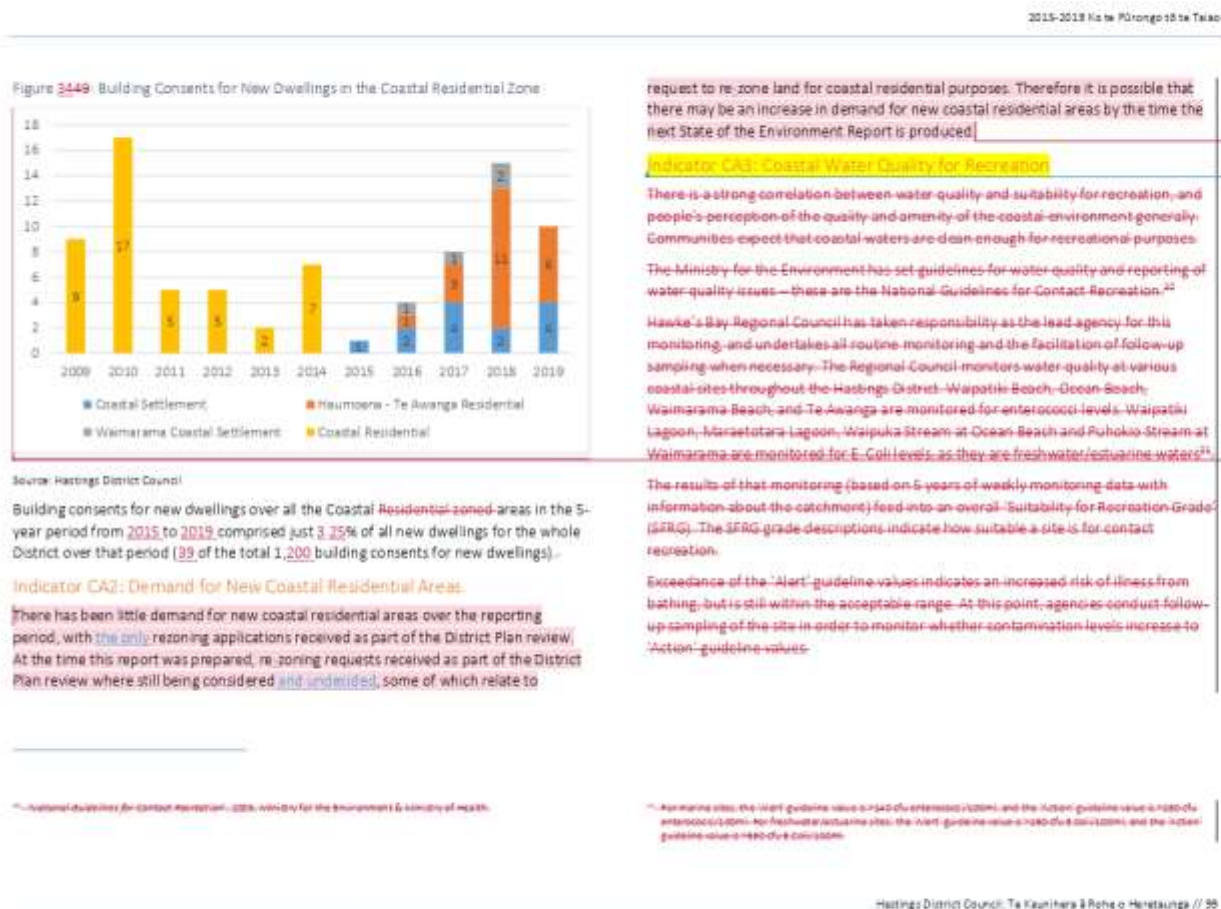
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Over the reporting period, whirinaki or waiopaki (coastal settlement) have grown the most over recent years. Haumoana, Te Awanga, and Waimarama have grown considerably less.

Similar to the last reporting period, most subdivisions in the Coastal areas over this period were 1 or 2 lot subdivisions, most likely as a result of infill subdivision. In this sense, pressure to develop the established coastal settlements appears low, but this may merely reflect the lack of available land within all the Coastal areas.

The number of building consents for new dwellings in the various coastal areas can provide a further picture of development over time.

The following graph shows that residential building activity has fluctuated over the ten year period to 2019, with spikes in 2010 and 2018, but confirms that development in the established coastal settlements of the District has been relatively limited, with no obvious trend of increase or decrease. One pattern to emerge is that while there has been a low number of lots created, there are still coastal lots available to build new dwellings.



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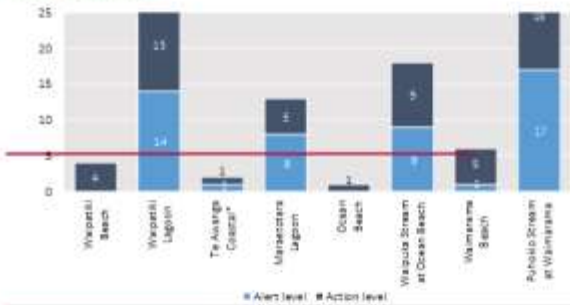
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2015-2019 Ka te Piranga ki te Taiao

If contamination exceeds the 'Action' guideline values, then the water poses an unacceptable health risk from bathing. At this point, signs are erected at the bathing site, and the public informed that it is unsafe to swim at that site.

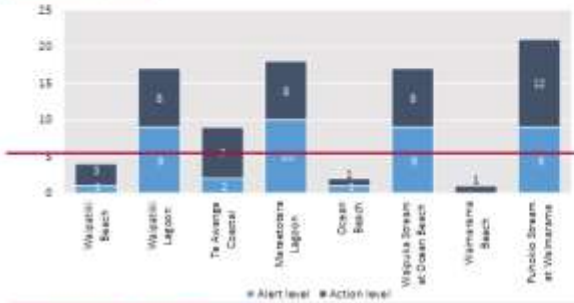
The following graphs compares the number of times the guidelines were exceeded ('Action' and 'Alert' levels) at each of the coastal monitoring sites in Hastings District in the 5-year period to 2007/08 as reported in the first State of the Environment Report, against the current reporting period to 2012/13. No data for the 2013/2014 year was available at the time this report was prepared.

Figure 50: Number of Times Recreation Water Quality Guidelines Where Exceeded (2008/09-2007/2008)



Source: Hawke's Bay Regional Council

Figure 51: Number of Times Recreation Water Quality Guidelines Where Exceeded (2008/09-2012/2013)



Source: Hawke's Bay Regional Council

Comparison of the two reporting periods indicates that the level of exceedances overall were slightly higher in the current reporting period than for the previous 5-year period. Most sites experienced similar levels of exceedance. Wapetiki Lagoon, Waimarama and Puhia Stream experienced fewer exceedances. However, two sites appear to have experienced more exceedances (Te Awanga and Muriwai Lagoon).

The length of restrictions imposed on swimming at various beaches in the Hastings District by the Public Health Unit within the Hawke's Bay District Health Board, following 'Action' level contamination, was not formally recorded until 2008. In that one year, there were 7 instances of restrictions imposed (4 of these were for the same period but in different locations following a significant rainfall event, and were for a period of only 2 days).

Over the current reporting period, there have only been a total of 8 instances of restrictions imposed on swimming at various beaches in the Hastings District by the Public Health Unit within the Hawke's Bay District Health Board, following 'Action' level contamination.

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Table 6- Swimming Restrictions Imposed on Beaches in Hastings District (2008-2014)

Location	Date	Days Restriction in Place
Waipuka Stream at Ocean Beach	31-Dec-2009	8
	2-Feb-2013	8
	3-Jan-2014	8
	28-Jan-2014	25
Puhokio Stream at Waimarama	3-Jan-2014	15
	29-Jan-2014	29
Waipatiki Lagoon	29-Jan-2014	11

Notes: Public Health Unit

Of these, 4 of the 8 instances involved restrictions over two locations on two separate occasions—on 1 January 2014, restrictions were imposed at Waipuka Stream and Puhokio Stream, and on 28 January 2014 restrictions were imposed at Waipuka Stream and Waipatiki Lagoon, following significant rainfall events.

The length of time swimming restrictions were in place, however, varied. During the 3 January 2014 episode, restrictions were in place for 8 days at Waipuka Stream and 15 days at Puhokio Stream. For the 28 January 2014 episode, restrictions were in place for 25 days at Waipuka Stream and 11 days at Waipatiki Lagoon. It is worth noting that restrictions were also in place for a period of 29 days at Puhokio Stream only a few days later, from 29 January 2014 onwards. January/February of 2014 was a particularly bad period for swimming restrictions.

In terms of the 'Suitability for Recreation Grade' (SFRG), all but one of the coastal monitoring sites have retained the same grading as the previous reporting period.

Ocean Beach retains a 'Very Good' grading. Waimarama Beach and Waipatiki Beach continue to achieve a 'Good' grading. Te Awanga Beach has a 'Fair' grading. Overall, Hawke's Bay Regional Council advises that marine water quality is consistently very good.

Maratetara Lagoon is 'Poor', and Waipatiki Lagoon, Waipuka Stream and Puhokio Stream all achieve a 'Very Poor' grade. Puhokio Stream has permanent signs in the area warning the public of potential health risks.

Waipuka Stream is the only site to have received a change in grade since 2005/06—recently downgraded from 'Poor' to 'Very Poor' in 2012/13.

For these sites that are not deemed suitable for recreation (with an SFRG of 'good' or 'very good'), Hawke's Bay Regional Council has undertaken further investigations to determine why this is the case. The Regional Council has determined that more work is required to understand why Te Awanga Beach does not have a higher grading than 'Fair'.

The grading for Maratetara Lagoon has been identified as likely reflecting the limited flushing and warmer temperatures experienced in coastal lagoons. For Waipatiki Lagoon and Waipuka Stream, faecal source work carried out by the Regional Council has highlighted waterfowl as significant sources of contamination¹⁰. Ironically, the presence of waterfowl contributes to coastal amenity. These estuarine areas often have considerable birdlife.

Puhokio Stream, whilst still graded as 'Very Poor' has shown some encouraging signs of improvement, continuing to exhibit a noticeable reduction in bacterial numbers, with no exceedance of the guidelines in the 2011/12 and only 3 'Action' and 1 'Alert' in the 2012/13 seasons. This further validates that ongoing land management and increased awareness of preventing stock access in streams is starting to have observable effects on water quality.

¹⁰—Hawke's Bay Friends—The State of Our Environment Summary Report 2008-2014-2015, Hawke's Bay Regional Council

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2015-2019 Ka te Pōrangā ki te Tāke

Gradual improvement at Waipahi Lagoon appears to further confirm the benefits of the installation of the community wastewater scheme for the Waipahi Beach settlement, resulting in less faecal bacteria entering the lagoon.

Indicator CM4: Coastal Water Quality for Recreational Shellfish Gathering

Te Awanga and Waipahi Beach are also monitored for suitability for the collection of shellfish. Monitoring for this only began in 2005/2006. Te Awanga has a reef environment historically known to harbour mussels. Waipahi Beach is also popular for the collection of shellfish, and sampling is carried out near the start of the rocky reef system.

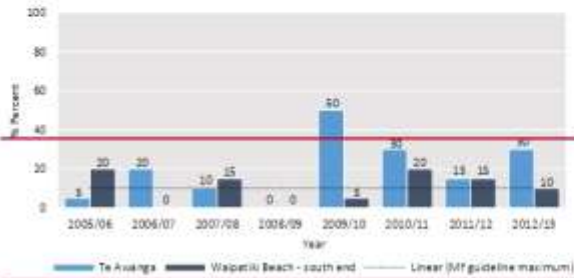
Hawke's Bay Regional Council samples these sites weekly during each season (November to March)—a total of 20 samples per season.

The Ministry for the Environment and Ministry of Health have set microbiological water quality guidelines for recreational shellfish gathering²⁴.

Beaches fail to comply with the guidelines when 10% of samples over the season exceed the guideline of acceptable faecal coliform levels²⁴. The guidelines use faecal coliform indicator organism values to denote the potential presence of pathogenic bacteria, viruses and protozoa.

Thus, once a site has more than two (2) non-compliant samples during a season (which equates to 10% of all samples taken), it is deemed to have breached Ministry for the Environment and Ministry of Health guidelines—at which point, the public are required to be notified of the health risks associated with the collection of shellfish in that location.

Figure 52: Percentage of Samples Exceeding Guidelines for Recreational Shellfish Gathering



Source: Hawke's Bay Regional Council

²⁴—Microbiological water quality guidelines for Marine and Freshwater Recreational uses (MF-MRW) June 2005, Ministry for the Environment & Ministry of Health.

²⁵—The Ministry for the Environment and Ministry of Health guideline for acceptable faecal coliforms is 1000 faecal coliforms per 100 ml of water.

2015-2019 Ka te Pōrongo i te Taiaro	
<p>The results in the above graph for the two shellfish gathering waters within the Hastings District reveal that compliance for shellfish gathering is reasonably poor.</p> <p>At Te Awanga compliance appears to have worsened – with samples breaching the guidelines every season since 2009/10. In 2009/10, 50% of the samples breached the guidelines, and 30% of the samples breached the guidelines in 2010/11 and 2012/13. Waipatiki Beach compliance is better, but has fluctuated over the period – achieving compliance for only 4 of the 8 years of available monitoring data.</p> <p>The results in the above graph for the two shellfish gathering waters within the Hastings District reveal that compliance for shellfish gathering is reasonably poor. At Te Awanga compliance appears to have worsened – with samples breaching the guidelines every season since 2009/10. In 2009/10, 50% of the samples breached the guidelines, and 30% of the samples breached the guidelines in 2010/11 and 2012/13. Waipatiki Beach compliance is better, but has fluctuated over the period – achieving compliance for only 4 of the 8 years of available monitoring data.</p> <p>Development in the established coastal settlements of the District has been relatively limited, and there have been only two requests to rezone land for coastal residential development to date (one approved, and one withdrawn).</p> <p>Currently, data is not readily available to determine exactly what is occurring in the coastal environment outside of the Coastal Residential Zone (i.e. on rural zoned land in the coastal margin). Anecdotally, there have been a number of subdivisions processed by Council for 'lifestyle' purposes in this area, particularly around Waimarama and Ocean Beach.</p> <p>Hawke's Bay's marine water quality is very good – Waipatiki Beach, Ocean Beach and Waimarama Beach are all graded 'good' or 'very good'. Freshwater/estuarine sites are not so good. Waipatiki & Mataroto Lagoon and Waipuka & Puhakio Streams are all graded 'poor' or 'very poor'. None of the gradings for coastal monitoring sites in the Hastings District have altered significantly in the five seasons to 2012/13.</p> <p>There has been a noticeable improvement in bacterial levels for Puhakio Stream since 2000, but not sufficient to improve its overall grading. Puhakio Stream is permanently signposted, warning the public of potential health risk.</p> <p>Monitoring at Te Awanga and Waipatiki Beach for their suitability for the collection of shellfish only began in 2005/06. Results show compliance at Te Awanga appears to have</p>	<p>worsened – with samples breaching the guidelines every season since 2009/10. Waipatiki Beach compliance is better, but has fluctuated over the period – achieving compliance for only 4 of the 8 years of available monitoring data.</p> <p>Responses</p> <p>For Community</p> <ul style="list-style-type: none"> • Care for the coastal environment by removing your rubbish and taking your waste away and disposing of it appropriately. • If you live in the coastal environment, and operate a septic tank or wastewater treatment system, ensure it is operated and maintained according to the supplier's instructions. • Connect to the community sewerage scheme in your coastal settlement, if there is one. <p>For Council</p> <ul style="list-style-type: none"> • Improve public awareness of what contributes to degraded stormwater quality. • For future reporting, Council will collect data on residential subdivisions in the Rural & Plains Zone adjoining the coastline or current Coastal Residential Zones. This will enable a wider understanding of pressure for coastal development in the District. • Council continues to investigate the feasibility of community sewerage schemes for Waimarama and Te Awanga/Haumoana.
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2015-2019 Ka te Pōrangā ki te Tāiao

Natural Heritage/Landscape Character

Natural heritage is the legacy of physical landscapes and natural environments identified as having unique or outstanding characteristics that should be protected for future generations.

The significance of the physical landscape is based on how it is perceived and what it means to people. Landscape is the relationship between natural and human landscape patterns, human experience, and perception of these patterns, and meanings associated with them. Landscapes encompass both physical and intrinsic aspects. **Mana whenua** view the landscape as an historical record of past events. The landscape depicts occupation and whakapapa, showcasing the relationship between the people and the land. Oral traditions and landscape features combine to convey the history of **hapu whenua** in the District.

Hastings is characterised by, and known for, its significant natural landscape, with sun-baked hills surrounding a fertile basin of orchards, vineyards and farms.

Hastings District has simple and dramatic natural landforms which strongly express the geological processes forming the east coast of the North Island.

The natural heritage and landscape character of the District is distinct and highly valued by the community. Protection of natural heritage and landscape character is largely achieved through District Plan provisions. The **Proposed** District Plan identifies:

- 'Significant Vegetation, Habitats & Geological Sites' termed 'Recommended Areas for Protection' (RAPs), being those remnants of significant indigenous vegetation and significant habitats of indigenous fauna in the District; and
- 'Significant Amenity Landscapes' (SALs) and 'Outstanding Natural Features and Landscapes' (ONFLs), being significant landscapes and landscape features identified throughout the District. **The Outstanding Landscapes also include Cultural Landscapes**

Indicators

The table below shows the indicators that are used to monitor the state of natural heritage and significant landscapes in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the **Proposed** Hastings District Plan, as shown below.



Photo: Te Māori Pāka
Source: Hastings District Council

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2015-2018 He ta Pōrongo o te Taiāo

INDICATORS FOR NATURAL HERITAGE/LANDSCAPE CHARACTER

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		<p>Relevant Outcome Statements:</p> <ul style="list-style-type: none"> An environment that is appreciated, protected and sustained for future generations 	<p>Proposed District Plan (2015) (As amended by decisions)</p> <p>Section 17.3 (Natural Features and Landscapes)</p> <ul style="list-style-type: none"> The values of important natural features and landscapes are not compromised by inappropriate building development, earthworks and the siting of building development or plantations. A range of contrasting landscape types continues to provide a rich mixture of landscape amenity throughout the District. There is a greater public awareness of the different landscape areas throughout the district, and the activities that could have an adverse effect on the key elements, patterns, and character that contribute to the significance of those landscape areas. Buildings do not visually intrude on the natural form of rural and coastal ridgelines and spurs. Large scale earthworks do not visually intrude on the natural form of rural and coastal ridgelines, spurs, and hill faces. Plantations are visually integrated with underlying landforms and the surrounding landscape. Compact forms of urban settlement enhance the distinction between 'town and country', reinforce the identity of the settlement in the rural context in which they are located. <p>Section 20.1 (Indigenous Vegetation and Landscapes)</p> <ul style="list-style-type: none"> Improved protection of areas of significant indigenous vegetation, significant habitats of indigenous fauna and significant geological sites. Maintenance and enhancement of the biodiversity of indigenous plant and animal species within Hastings District and the natural habitats and ecosystems that support them. A greater public awareness of the type, location, significance and vulnerability of indigenous vegetation, habitats and geological sites and available methods of protection. Practical recognition of areas of significant indigenous vegetation and significant habitats of indigenous fauna and their importance to the community.
NC1	Subdivision and Development within Significant Amenity Landscape (SAL) & Outstanding Natural Features and Landscapes (ONFL)	Pressure	<p>Protection of significant and outstanding landscapes is a critical component of the wider environment which the community strives to protect for future generations in a sustainable manner and to recognise the importance of these landscapes to Māori. The number of significant and outstanding landscapes identified in the District Plan and thus afforded specific protection by the Resource Management Act is a valuable measure of how appreciated and protected such resources are. Hastings has a variety of landscapes which contribute to its cultural heritage and character. Maintaining the diversity of the District's landscape heritage relies upon maintaining the features that give the District its character and protect its cultural heritage. The volume and type of consents for development directly affecting SALs and ONFLs provides an indication of pressure on these landscapes and risk of damage or loss.</p>

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2015-2019 Ka te Piranga tā te Tāiao			
NC2	Building Activity within Significant Amenity Landscape (SAL) or Outstanding Natural Feature Landscape (ONFL) Areas	Pressure	(refer above)
NC3	Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna	State	Human habitation and land development has resulted in most of the District's natural landscape(s) being modified. Today there are very few areas of remnant indigenous vegetation remaining. This increases the importance of protecting those remaining areas of native forest, wetlands, and regenerating scrubland. The number of significant natural areas identified in the District Plan and thus afforded specific protection by the Resource Management Act, and also those areas protected by private covenant (e.g. QEII open space covenants), are a valuable measure of how appreciated and protected such resources are.
NC4	Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna		
2015-2019 Hastings District Council: Te Kaunihara ā Rohe o Heretaunga			

2015-2019 Kaia Iā Pōroongo o te Taiāo	
<p>Monitoring Information.</p> <p>Indicator NC1: Subdivision and Development Activity within Significant Amenity Landscape (SAL), Coastal Character Landscapes (CCL), Rural Character Landscape (RCL) or and Affecting Outstanding Natural Features and Landscapes (ONFL)</p> <p>The number of significant and outstanding landscapes identified in the Proposed District Plan and thus afforded specific protection by the Resource Management Act is a valuable measure of how appreciated and protected such resources are.</p> <p>The Proposed District Plan, as of 2019 identifies a total of 17,600 hectares of land as being of significant amenity landscape or as containing outstanding natural features and landscapes. This equates to approximately 3.4% of the total land area of the District. These areas are delineated on the Planning Maps.</p> <p>'Outstanding Natural Features and Landscapes' (ONFLs) include:</p> <ul style="list-style-type: none"> Te Mata Peak and Te Mata East Face (ONFL1) Kahuranaki (ONFL2) Mount Erin – Kohinurakau (ONFL3) Cape Kidnappers and Rangaiia Coast (ONFL4) Whakaari Headland – Tangoio Bluff (ONFL5) Maungaharuru Range, Titikura, and Te Waka (ONFL6) Kaweka and Ruahine Ranges (within Forest Park boundaries) (ONFL7) Motu O Kura – Bare Island and Waimarama Coast (ONFL8) <p>Together these features cover approximately 81,357 hectares in the District.</p>	<p>'Rural Character Landscapes (RCLs), Coastal Character Landscapes (CCLs) and Significant Amenity Landscapes (SALs) are listed by their general location, including:</p> <ul style="list-style-type: none"> Maungaharuru Te Waka (RCL1) Edisdale Valley (RCL2) Tutaekuri Valley (RCL3) Hills surrounding Heretaunga Plains (Koropipi, Swamp Road Hills, Matapono Hills, Ngaruroro Valley, North Eastern Raukawa Hills and Puketapu Hills (RCL4) Raukawa – Kaokarua (RCL5) Havelock Foothills (RCL6) Tuki Tuki Valley – (Mid and Upper Valley) (RCL7) Cape Kidnappers Headland (SAL1) Lake Tutira Basin (SAL2) Maungaharuru Range, Titikura, and Te Waka (SAL3) Roy's Hill – Hills surrounding Heretaunga Plains (SAL4) Te Aute Valley including Lake Poukawa, Te Aute Hill, Raukawa Range and Kaokarua Range (SAL5) Te Mata Peak Surrounds (SAL6) Mount Erin – Kohinurakau Surrounds (SAL7) Waitangi (SAL8) Clifton (CCL1) Tangoio Beach Settlement (CCL2) Ocean Beach Settlement (CCL3) Waimarama and Peach Gully (CCL4) Waipetiki Beach (CCL5) <p>Together these features cover approximately 138,291 hectares in the District.</p>
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Hastings District Council: Te Kaunhere & Rahe o Heretaunga // 107	

2015-2019 Ka te Piranga ki te Taiao



Photo: [Tukikau Valley](#)
Source: Hastings District Council

Te Mata Peak (ONF1) and Cape Kidnappers (ONF4) are nationally and internationally recognised landscape features. The remaining areas and features have either regional or local significance.

2015-19 Hastings District Council: Te Kaunihara o Rohe o Heretaunga

The identification of and corresponding District Plan provisions relating to Significant Amenity Landscapes (SALs) and Outstanding Natural Features and Landscapes (ONFLs) are the principle mechanism to retain these resources for future generations to appreciate. Collectively, these areas fall within the Natural Features and Landscapes section of the Proposed District Plan.

The focus of District Plan provisions is on buildings, earthworks and plantations on prominent ridgelines, hill faces and other landscape features, as these are considered to pose the greatest risk to these landscapes.

Whilst all subdivisions trigger the need for a resource consent, only some land use activities in these identified landscape areas trigger the need for resource consent.

The District Plan has specific rules for some ONFLs. In SALs, earthworks, plantations and most non-residential buildings do not trigger consent under the Landscape provisions, unless they lie in the Rural Residential Zone.

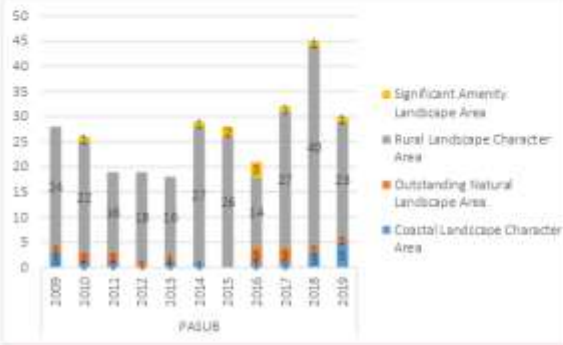
There are a number of activities that do not trigger the Landscape provisions in the District Plan but which may have some cumulative, albeit minor, impact on these landscapes. Currently, it is difficult to gather data on these unrestricted land use activities.

The following data essentially only represents pressure from the more significant developments in the SAL areas, or developments occurring in the more significant ONFL areas of the District in general.

This still represents a useful relative indicator in terms of trends over time, and captures those activities that are most likely to impact on the landscapes.

2019-2018 Ka te Pōroongo o te Tāiao

Figure 356: Subdivision Consents Granted in the Landscape RMU (2009-2019)



Source: Hastings District Council

From the above graph, the number of subdivision consents that have the potential to affect the identified Landscapes between 2009 and 2019, were consistent in number averaging 29 consents per year, and trended upwards in the 2018-19 year period.

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2015-2019 Ka te Pōrangia ki te Tāiao

Given the relatively small number of resource consents in these areas, the data is highly sensitive to human error associated with data entry. Therefore future reporting would benefit from a concentrated effort to record details of resource consents accurately, as over time it would more provide more reliable data identifying those landscapes which are experiencing the greatest or growing pressures, and whether there are certain types of activities affecting particular landscape areas.

Indicator NC3: Building Activity within Significant Amenity Landscape Areas (SALs) or Outstanding Natural Features and Landscapes (ONFL) Areas

Another relative measure of development pressure in the Landscape Areas, RMU is actual building activity. The following graph shows the number of building consents granted within the respective SALs, RLC, ONFLs and CLCAs between 2015 and 2019. As a result of recent Environmental case law regarding the use and classification of identified landscape areas, Council view this as an opportunity to amend its current landscape classification as part of the District Plan review. These new classifications are as follows:

- Significant Amenity Landscape Area
- Rural Landscape Character Area
- Outstanding Natural Features and Landscape Area
- Coastal Character Landscape Area

The results may vary compared with the previous reporting period.

Table 69: Building Consents by ONFL/SAL/CLC and RLC Area (2015-2019)



Source: Hastings District Council

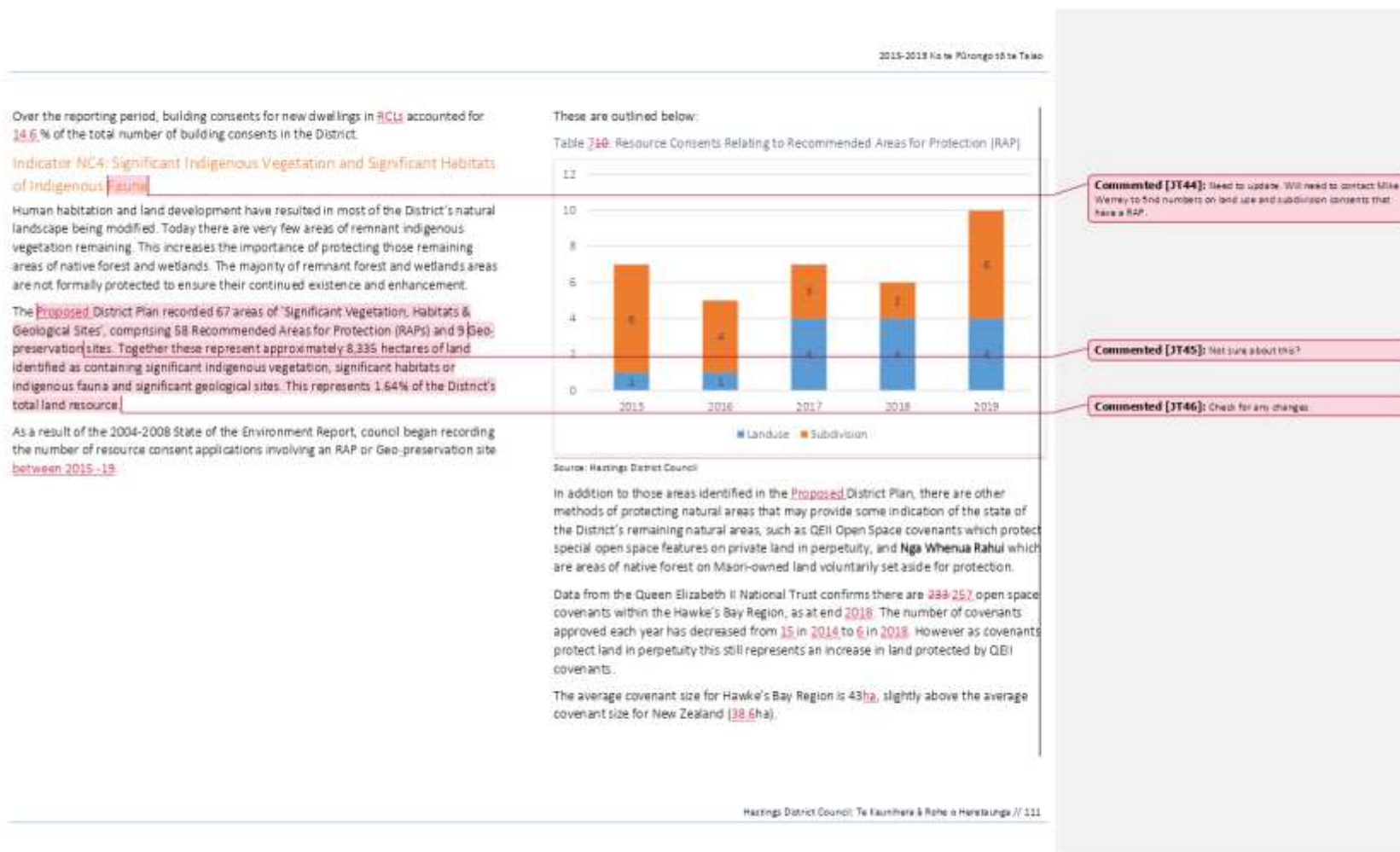
As shown above, building within the ONFLs are low with only four applications received between 2015 and 2019.

This indicates that the restrictive planning provisions to build in the more highly-valued outstanding landscapes of the District (the restriction on buildings over 50m² required

Building is not as constrained in the RLC areas, and this is evident in the number of building consents granted within those areas over the whole of the reporting period. Consents have concentrated on RCL2 (Eskdale Valley), RCL3 (Tutaekuri Valley), RCL4 (Hills Surrounding Heretaunga Plains (Korokipo, Swamp Road Hills, Matapiro Hills, Ngaururoro Valley, North Eastern Raukawa Hills and Puketapu Hills), RCL5 (Raukawa/Kakaoroa Valley), RCL6 (Heretaunga Foothills), and RCL7 (Tukituki Valley (Mid and Upper Valley)).

This is not necessarily an indication of pressure of itself, or of an adverse impact on landscape values, as it may merely reflect that RCL has desirable areas for building, and contains areas suitable for building.

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2015-2019 Ka te Piranga tā te Tāke

Information on Nga Whenua Rahui within the District will be added in future state of the environment reporting.



Approximately 198,291ha (92.4%) of Hastings District is currently identified in the Proposed District Plan as 'outstanding natural landscapes and features' or 'significant landscape character areas'. These notations place additional restrictions on the use, development and subdivision of land. The number of resource consents affecting these features or areas has decreased.

In addition, the Proposed District Plan identifies 67 areas of 'significant vegetation, habitats and geological sites' and there are also a number of QEII Open Space covenants on private land in Hastings District.

Responses

For Community

- If you are building or developing in the District, recognise and integrate your developments into the landscape
- Take the time to learn about or visit some of the outstanding landscapes and natural areas within the District.

For Council

- Council has initiated a number of projects which enhance the protection of the natural heritage and landscape character of the District. These include the CBD Strategy which seeks to maintain views of the Te Mata Peak icon from the Hastings City centre
- In 2005 Council completed a separate set of Landscape Guidelines for developers to use when planning anything from stand-alone developments to larger projects. The purpose of the Guidelines is to encourage development design that protects and enhances the qualities of Hastings District's rural landscapes.

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2015-2018 He taonga o te Taiao	
Cultural and Historic Heritage	
Cultural heritage comprises the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations.	
Positive public perception, awareness of the cultural and historic issues and support for investment in the District's heritage are important components of any successful programme to protect and enhance the resource for future generations.	These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.
The built heritage of hapu <i>whenua</i> are the marae of which there are 23 in the Hastings District. The District has 99 sites of significance registered as <i>wāhi-taonga</i> in the District Plan. These sites record important events and cultural practices. Protecting these sites from inappropriate development assists the oral traditions and customary practices of <i>tangata whenua</i> with <i>mana whenua</i> , and protects cultural and historic heritage values for the community as a whole.	
Hastings District has numerous recorded cultural heritage items including historic areas, buildings and objects, trees, <i>wāhi taonga</i> and archaeological sites.	
Specific legislation designed to protect heritage items includes the Heritage New Zealand Pouhere Taonga Act 2014 and the Resource Management Act 1991. The Heritage New Zealand Pouhere Taonga Act 2014 provides a framework for the identification and listing of heritage items and archaeological sites. The District Plan identifies those heritage resources worthy of protection and identifies methods to assist in the preservation of heritage resources. Some items in the District Plan also list Historic Places Trust registered items.	
Indicators:	
The table below shows the indicators that are used to monitor the state of cultural and historic heritage in the District.	
Hastings District Council: Te Kaunhere & Rahe o Heretaunga // 115	

2015-2019 Ka te Piranga tā te Tāiao



Photo: Street Sculpture in Hastings CBD
Source: Hastings District Council

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114 // Hastings District Council: Te Kaunihara ā Rohe o Heretaunga

2015-2018 Heke Pōroongo 18 te Taiaro

INDICATORS FOR CULTURAL & HISTORIC HERITAGE

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		<p>Relevant Outcome Statements:</p> <ul style="list-style-type: none"> Communities that value and promote their unique culture and heritage Places, spaces, activities and events celebrating and strengthening the identities of all cultures within Hawke's Bay Māori culture and language is respected, promoted and strengthened in the community 	<p>Operative District Plan</p> <p>Section 12.3.6 (Heritage Items & Trees)</p> <ul style="list-style-type: none"> The preservation of a representative range of heritage items of significance to present and future generations of Hastings District residents and visitors Maintenance and enhancement of heritage items to enable their continued use and enjoyment while not detracting from their heritage value Reduction in the destruction of heritage buildings The retention, within their natural life span, of trees or groups of trees, which have outstanding heritage value to the District's residents and visitors Greater public awareness of heritage within the District <p>Section 12.3.6 (Wāhi Tapu)</p> <ul style="list-style-type: none"> Recognition of the cultural importance of Wāhi Tapu sites to Tangata Whenua Protection of notified Wāhi Tapu sites from the effects of land use activities Active participation of Tangata Whenua in the management of their ancestral land and resources Identification of places of special significance to the Tangata Whenua, and the maintenance of their values <p>Proposed District Plan (2015) (As amended by decisions)</p> <p>Section 16.1 (Wāhi Taonga and Sites of Significance)</p> <ul style="list-style-type: none"> Recognition of and provision for Tangata Whenua cultural relationships associated with <u>Wāhi Taonga</u>, <u>Wāhi Taonga</u> and sites of significance Protection of listed <u>Wāhi Taonga</u> and <u>Wāhi Taonga</u> sites from the effects of land use activities Active participation of Tangata Whenua in the management of their ancestral land and resources <p>Section 18.1 (Heritage Items and Notable Trees)</p> <ul style="list-style-type: none"> The preservation of a range of Heritage Items of significance to present and future generations of Hastings District residents and visitors Reduction in the destruction of heritage buildings The retention of the character of identified heritage streetscapes that enhance the heritage value of the Hastings CBD The retention, within their natural life span, of trees or groups of trees which have outstanding heritage value to the District's residents and visitors
H1	Residents' Perception of Public Art and Cultural Opportunities	Public perception and awareness of public art and cultural opportunities gives an indication of people's appreciation of their culture, and reflects respect for and strengthening of the identities of all cultures within the District	
H2	Council spending on heritage and culture	Monitoring Council spending on heritage and culture enables the identification of trends in investment in heritage and culture	

Hastings District Council: Te Kaunhere & Rāke o Heretaunga // 115

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2015-2019 Ka te Piranga tā te Tāke

H3	Consents to Modify/Destroy Heritage Items and Wāhi Taonga	Pressure	The number and location of heritage items and wāhi taonga provides a snapshot of the District's cultural heritage and, in the case of wāhi taonga , identification of places of special significance to Tangata Whenua and a respect for Māori culture and values. The extent to which formal methods of protection are afforded to heritage items in the District indicates how much we appreciate and respect the cultural heritage of our District, and assists in the retention of these resources. The number of consents to modify or destroy heritage items or archaeological sites can identify pressure on historic and cultural resources.
H4	Archaeological Sites and Authorities to Modify/Destroy Archaeological Sites	Pressure	The number of new archaeological sites surveyed over time provides an indirect indication of development pressure as archaeological survey generally accompanies development proposals, but also reflects the management and preservation of historic heritage for future generations. The number of authorities to modify or destroy archaeological sites can identify pressure on historic heritage.

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Indicator H1: Residents' Perception of Public Art and Cultural Opportunities

Figure 36: Residents' Satisfaction with Public Art and Cultural Opportunities in the Hastings District



The same question was asked as part of the Public Voice Survey. Of the 292 respondents, 88% of respondents reported being either "fairly satisfied" or "very satisfied" with public art and cultural opportunities in the District. This is a good improvement and

Indicator H2: Council spending on heritage and culture

Hastings District Council

Indicator H3: Consents to Modify/Destroy Heritage Items and

The number of heritage and **wāhi taonga** items provides an indication of the cultural capital present in the Hastings District. As at **2019**, there were 315 heritage items (including **300 notable trees**) and **99 Wāhi Taonga** sites recorded in the **Proposed District Plan**.

Table 811: Heritage Items in the Proposed District Plan

Hastings District Council: Te Kaunihara o Hauraki Heretaunga W 113

2015-2019 Ka te Pirongia ki te Taiao

Heritage Items (H1-H87 not consecutive (including approximately 75 heritage buildings))	85
Historic Areas	5
Heritage Buildings/Features (Te Mata Special Character Area)	24
Wāhi Taonga sites (W1-W12 not consecutive)	22
Total	136

Modification or destruction of heritage items can impact on the cultural and historic heritage of the District. The number of resource consents to modify or destroy listed heritage items can therefore identify growing pressure on these sites, and gives a general indication of pressure on cultural heritage.

It should be noted that not all activities affecting heritage items are necessarily detrimental – resource consents are often required even where the activity is beneficial to the maintenance and protection of a heritage item.

The above results indicate that pressure on listed heritage items, outstanding trees and wāhi taonga sites in the District is very low.

There have only been seven resource consents affecting these items over the reporting periods of 2015-2019. Of these buildings were altered externally or required internally strengthening. One wāhi taonga application was received in 2019 to construct an open canopy. The proposal did not modify the wāhi taonga but because the wāhi taonga is attached to the site, consent is required.

Resource consents relating to heritage items between 2015 and 2019 involved:

- Alterations to signage on heritage item in 2015 (H49).
- External alteration to heritage item in 2016.
- Signage on a heritage building in 2016.
- Earthquake strengthening works to opera house in 2017 (H814).
- Earthquake strengthening the Havelock North Transformer House and Shelter (H880) in 2017.
- Fire safety works, decorative screen and glazer canopy for opera house and municipal building in 2019 (H814 and H813).

Resource consents relating to wāhi taonga items between 2015 and 2019 included:

- Proposed construction of an open canopy at a wāhi taonga site in 2019 (W13 wāhi pakanga and Unipai).

Given the small number of resource consents relating to heritage and wāhi taonga items, it is difficult to draw conclusive trends. However, it appears pressure on these items is low.

Indicator H4: Archaeological Sites and Authorities to Modify/Destroy Archaeological Sites

According to NZAA files, there are currently 1397 recorded archaeological sites in the Hastings District.

It should be noted that the file is only a record of those sites that have been surveyed and formally recorded. It does not reflect the total number of archaeological sites present in the District – given that sites are generally only surveyed in response to development proposals or specific request, the vast majority of the District has not been subject to detailed archaeological survey.

The Heritage New Zealand has received few applications for authorities to modify or destroy archaeological sites in the period to the end of 2019. In total, 25 of the 31 authorities were granted between 2015-2019. The authorities had conditions imposed to minimise impacts on the archaeology present. Many of these authorities involved multiple archaeological sites, and some involved site modification as well as site destruction.

The relatively low number of authorities granted suggests there is little pressure on archaeological sites within the District. The small number authorities required as a result of subdivision or development proposals is in stark contrast to the number of subdivisions that have occurred in the District over this period (there were 186 subdivisions between 2015 and 2019 in the Plains & Rural Zones alone). However, it is possible that there are sites being modified or destroyed for which no data is available.

The constraints of the data mean that there is currently no good indicator for measuring the state or quality of archaeological resources in the District.

Commented [J149]: According to Mary O'Keefe who maintains records at central filekeeper for NZAA

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2015-2019 Heke Pōrongo o te Taiao

Satisfaction with arts and cultural opportunities in the District is very high and, along with the number of heritage items listed in the District Plan, this suggests that the cultural heritage of the District is presently well appreciated.

Pressure on historic and cultural heritage in Hastings District appears very low, with very little activity affecting items listed and protected in the District Plan between 2004 and 2014.

Applications for authorities to modify or destroy archaeological sites have similarly been very low in number, although little can be drawn from this in terms of presenting an accurate picture of the health of historic heritage in the Hastings District as many sites are either unrecorded or may be being modified without formal approval.

The indicators do not measure the quality or health of the various heritage resources in the District. An accurate picture of the state of historic and cultural heritage in the District is therefore difficult to assess at this stage.

Responses

For Community

- Alert Council or the NZAA when potential archaeological sites are uncovered.
- Find out about the stories that relate to major heritage sites, and get to know the history of your District and local area.
- Treasure the memories of kaumatua and elders in our community.

For Council

- Continue to survey residents' satisfaction with access to arts and cultural opportunities.
- Continue to initiate programmes to raise community awareness of and support for the cultural heritage of the District.
- Ensure effects on archaeology are assessed in the processing of subdivision applications.



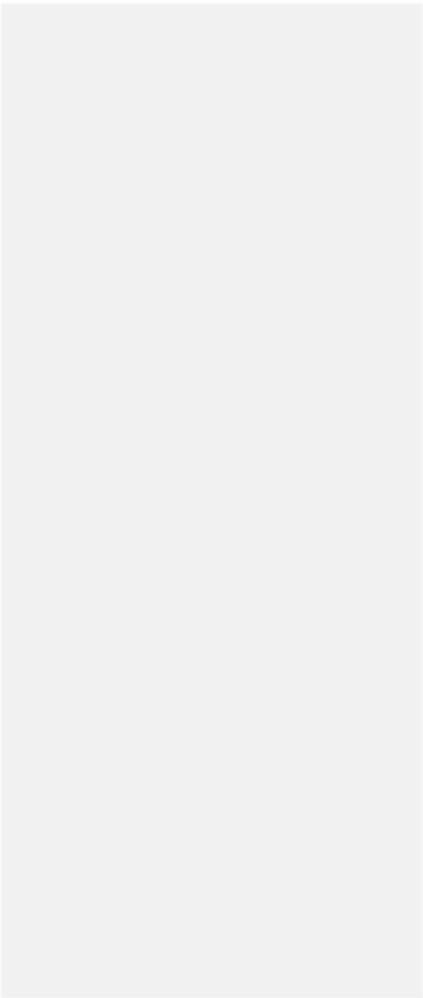
Photo: Municipal Theatre, Hastings
Source: Hastings District Council

Hastings District Council: Te Kaunhere & Rahe o Heretaunga // 119

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2015-2019 Ko te Pūrongo ki te Taiao

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2015-2019 Ka te Pōrangā ki te Tāke

Tangata Whenua with Mana Whenua

The 2004-2008 State of the Environment Report identified that future reports would benefit from including indicators that specifically monitor the relationship between Council and Tangata Whenua with Mana Whenua.

The indicators we seek to gather quantitative data in order to obtain information that is measurable and can be compared across reporting years. Over time, monitoring will allow trends to be identified and actions for improvement to be taken accordingly.

The broad indicators below are considered a preliminary step towards monitoring and reporting on this important relationship. They will be refined, improved, and expanded upon in subsequent years as knowledge and understanding develops. The following indicators are still in the early stages of development and as such are not refined to the point where data can be collected and meaningful conclusions drawn. However, this chapter has been included in this report to show the progression from the previous 2004-2008 report and to signal that a 'continuous improvement approach' will be taken to monitoring this relationship.

Refining and expanding on the draft indicators outlined below will require discussions with Tangata Whenua with Mana Whenua to ensure that the focus is on pertinent issues and allows meaningful conclusions to be drawn. For example, indicators may focus on matters such as who was involved, what type or what level of support was offered, when and where the support was offered, how many groups were involved, and how much support was provided.

By the next state of the environment report, it is intended that the following indicators will have been improved to the point where data can be collected and used to form a baseline that future monitoring can be compared to.

THE ISSUE AT A GLANCE

INDICATOR	SUMMARY
Marae Development & Hapu Development	
MD1: Marae development projects in Hastings District	Monitor the level of support Hastings District Council offers towards Marae development (e.g. Marae upgrades, water supply, and waste water systems) and development on Marae land adjoining Marae (e.g. opportunities for Papakāinga Development).
HD1: Hapu development in Hastings District	Monitor the number of Hapu Development Plans filed by Council and how Hapu Development Plans inform Council plans and policies.
Ecological Projects	
EP1: Ecological projects that are informed by cultural knowledge and values	Have cultural knowledge and values informed ecological projects such as native re-vegetation projects.
EP2: Consultation with Hapu when preparing Reserve Management Plans	Monitor whether hapu are included in co-management regimes and whether Reserve Management Plans make provision for revegetation with native plants for flora and pharmacology in a way that will attract better partnerships for care and access to plantation resources consistent with customary practices.
Language and Information	
LI1: Use of Te Reo Māori in Council documents and processes	How Te Reo Māori is included in Council documents and processes and whether Māori place names are known and used.
LI2: Opportunity to include Māori advice in Council projects	Is information made available to whānau and hapu in sufficient time to advise Council of cultural values and practices to achieve best practice in the process and outcomes of projects to benefit both Māori specifically and the community in general.

Commented [JT51]: After discussing with Dr James Graham it was decided to remove this section as the achievement is under the Mana Whenua customary environmental values.

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2015-2019 Ka te Pūranga ki te Taiao

Sustainable Infrastructure

THE ISSUE AT A GLANCE

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
Transportation			
T1 Motor vehicle registrations			Registrations increasing, slight increase in proportion of registered vehicles that are eco-friendly
T2 Motor vehicle ownership			Increasing access to motor vehicles and increasing number of motor vehicles per household
T3 Modes of transport to work			Private car highest at 6.2%. Proportion cycling to work is higher than national average, but decreasing. Lower than national average for other modes of non-motorised transport to work.
T4 Bus passenger numbers			Increasing bus passenger numbers
T5 Residents' frequency of use of public transport in the previous 12 months			Through bus passenger numbers are increasing, the number of people using buses remains very low, with approximately 22% reporting that they have not used public transport the previous 12 months. This suggests that a small number of people are using the bus more frequently (accounting for higher numbers of bus passenger numbers), while the vast majority do not use public transport at all.
T6 Residents' rating of ease of access to public transport facilities			Despite the data in the previous indicator, residents rate public transport's access to facilities high, with 20% reporting that it is easy to use. This suggests that it is not access issues that prevent people from using public transport.
T7 Bikes and bike-road injuries			In the same the report was prepared, there was no new crash data available on NZTA reports to the date of the last report. Higher crash rates associated with bikes than national average were observed, although there was some gradual improvement.
T8 Residents' satisfaction with Council roads			Significant reduction, with 51% surveyed being satisfied. This is compared with 86% in 2014.
T9 Residents' satisfaction with cycling facilities in the District			High satisfaction, with 85% satisfied compared with 91% in 2014.





















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Commented [JT54]: NZTA function











2015-2018 He ta Pōroongo o te Taiao

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
T10 Residents' feeling of safety for pedestrians and cyclists			High satisfaction with footpaths with 85% satisfied, compared with 83% in 2014. Feeling of safety when riding a bike has significantly reduced , with the proportion of survey respondents who felt cycling was dangerous or very dangerous increasing from 25% in 2014 to 28% in 2015.
Water Management			
WS1 Consented water takes held by HDC for water supply purposes			12 resource consents held by HDC for community supplies, providing for abstraction of 958,470m³ of water in any 7-day average. This is compared with 15 resource consents held by HDC for community supplies, providing for abstraction of 140,000m³ of water in any 7-day average at the date of the last State of the Environment Report.
WS2 Domestic water consumption			Improving, with domestic water consumption per person per day dropping from an average 558 litres per day at the last State of the Environment Report, to 580 litres per person per day in 2012-2014.
WS3 Commercial and industrial water consumption			Relatively stable at around 1,600,000 cubic litres per year. It is expected that this may increase over the next reporting period as a result of water exports.
WS4 Public health water quality grading			Data not currently available.
WS5 Compliance with drinking water standards			Data not currently available.
WS6 Residents' rating of water quality			Continued high satisfaction with the water supply with 52% surveyed being satisfied.
Wastewater Treatment			
WW1 Consented wastewater discharges held by HDC			Two consents are held by HDC for community wastewater schemes – (1) East Clive Clean Outfall Consent and (2) Waipariki Scheme Consent.
WW2 Compliance with conditions for wastewater discharges			Quality of wastewater discharged from the East Clive Wastewater Treatment Plant meets the consent condition requirements. The Waipariki Wastewater Scheme results show that the scheme has met technical compliance in 2003/04 and 2014/15 and has had some environmental non-compliance. Environmental non-compliance relates to the Nitrate limit being exceeded.
WW3 Volume of wastewater produced			Annual average daily volume from East Clive Plant is approximately 48,500m ³ . This is compared with 48,500m³ at the time of the previous report.
WW4 Residents' satisfaction with Sewerage System			Continued high satisfaction with only 5% of respondents stating they were not satisfied with the Wastewater system.

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2015-2019 Ka te Pōrangā ki te Taiti

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
Trade Waste Disposal			
TW1 Amount of trade waste discharged through the separated trade waste conveyance system			Looking at individual discharges it would appear that the total volume of trade waste over this period from 2015-2019 has continued on a slight downward trend.
TW2 Number of industries connected to the separated trade waste conveyance system			There are 30 industries connected to the separated trade waste system. This is compared with 28 at the time of the last report.
TW3 Number of reported incidents of non-compliant discharges of trade waste			There were five trade waste consent warning notices issued.
Energy Use			
E1 Electronic consumption			Annual residential electricity consumption has been steady in Hawke's Bay Region between 2010 and 2014.
E2 Sustainable energy use projects			There is currently no definitive way of monitoring the number of organisations that have taken up sustainable energy use projects. Therefore, there has been no change to how this indicator is monitored since the last report. As the information currently available does not provide for meaningful conclusions to be drawn, the indicator may need to be altered for future State of the Environment monitoring.

Section 31 of the RMA gives the District Council the function of managing and controlling the effects of the use, development, or protection of land.

The District's environmental health depends a great deal on the essential infrastructural 'bones' of a functioning community – transportation, water, wastewater, trade waste and energy. This chapter profiles how well the District is doing in relation to the sustainability of this infrastructure, as well as the options people take around sustainable resource use and disposal.

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Item 6

2015-2018 Heke Pōrongo o te Taiāo

Transportation

Transportation networks are critical in the daily functioning of the District. As a community the Hastings District is highly dependent on the mobility of its population, and particularly dependent on a well-designed roading network as its primary means of physical communication.

The District is a major producer of primary produce and manufactured goods and linkages to both domestic and international markets are crucial in maintaining a healthy economic sector²⁵.

The continued high dependence on motor vehicles also has a negative impact on the environment and communities – human cost in terms of crashes and fatalities, effect on air quality due to vehicle emissions, demand on existing road networks and pressure to develop new roads, and continued reliance on finite fossil fuel resources, hence the growing importance of public transportation networks and provision for non-motorised forms of transport, such as cycling and walking.

The transport system links people and opportunities.

The vision for transport in Hastings is to connect people and places, products and markets. This will be achieved by providing a safe road network that gets people and goods where they want to go, however they choose or need to get there. This needs to be achieved in a sustainable and resilient manner for an affordable whole of life cost.

The key challenges facing our transport system are:

- We have ageing assets that will need renewal.
- Growth in traffic loading is putting pressure on the capability of the network.

Increased industry productivity and changes in land use are resulting in unreliable travel time and safety of the network.

- Lack of resilience in the roading network can isolate communities and industry.
- Road safety risks across the network results in death and serious injury.
- Low levels of walking and cycling.

The overarching goals for the Hastings transport system are:

- A range of transport options move people safely and efficiently.
- More people walking and cycling more often.
- Maintaining a resilient, accessible and safe network that is capable of meeting user demands.

The Hastings Transport Network Business Case 2020 identified three key issues:

- Increased industry productivity and changes in land-use is resulting the transport system not meeting the needs of users.
- Poor user behaviour and transport system deficiencies increases the risk of death and serious injuries.
- Poor uptake of active travel and public transport is negatively impacting on community wellbeing.

²⁵ Section 2.8.8 of the operative Hastings District Plan

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2015-2019 Ko te Pūranga ki te Tāke

To address these issues, a balanced programme was proposed with a bias towards community wellbeing and road safety. This programme aims to:

- Improve road safety;
- Improve customer experience;
- Increase community wellbeing;
- Increase uptake of active travel and PT.

The *Hastings Active Transport Business Case 2020* signalled that gaps in levels in service and the perception that walking and cycling is unsafe and inconvenient is limiting their uptake, resulting in high car dependency. It proposes a balanced work programme with a mix of infrastructure projects and low cost / high impact soft measures. There is also a focus on travel behaviour and demand management. The two objectives of this programme are to:

- Increase the use of active transport;
- Improve the perception of active transport as safe and convenient.
- The *Regional Land Transport Strategy 2008-2018*²⁶ (as required by the *Land Transport Management Act 2003*) sets out the strategic direction for land transport in the Hawke's Bay region. Key actions for the Hawke's Bay Region are in the areas of:

- Travel Demand Management;
- Roadway Improvements;
- Improved Land Transport Planning and Design;
- Improved Communication and Integration;

- Rail Improvements; and
 - Facilitation of Alternatives to Private Passenger Transport.
- It is noted that this Strategy has been replaced by the *Regional Land Transport Plan (RLTP) 2015-2025*. However, the RLTP 2015-2025 is outside of the reporting period and will not be referred to further in this document. Some transport indicators used in this report may need to be altered or replaced for the next report in order to track whether or not the outcomes of the RLTP 2015-2025 are being achieved.
- The *Heretaunga Plains Transportation Study*²⁷ is a key strategic document for the District, and outlines how improvements are to be made to the road network. In addition, Hastings District Council operates *Cycling and Walking Strategies*, in response to the *National Walking and Cycling Strategy*²⁸.
- The *Hastings Cycling Strategy*²⁹ seeks to:
- Provide for the safe and efficient movement of cyclists to, from and between all areas in the District;
 - Improve access to, from and within the District by bicycle;
 - Promote and increase cycling as a viable mode of transport;
 - Achieve a coordinated and integrated approach to cycling in the transport system; and
 - Encourage cycling and the use of facilities throughout the community.
- The *Hastings Walking Strategy*³⁰ seeks to:
- Encourage walking in the District;
 - Connect parks, reserves, and points of interest;
 - Incorporate existing walking tracks;
 - Incorporate shared use of the cycle paths enabled by the *Cycle Strategy*; and

²⁶ *Hawke's Bay Regional Land Transport Strategy 2008-2018* (2008), Hawke's Bay Regional Council.
²⁷ *Heretaunga Plains Transportation Study* (2004), Joint Hawke's Bay regional and territorial authorities and Transit New Zealand.

²⁸ *Leading there – an active by cycle strategy implementation plan 2008-2009* (2008), Ministry of Transport & Land Transport New Zealand.
²⁹ *Towards better cycling – the Hastings cycling strategy* (2018), Hastings District Council.
³⁰ *Hastings walking strategy* (2018), Hastings District Council.

2015-2018 Hei te Pōroongo i te Tairāro

● Enhance safety for pedestrians

Hawke's Bay Regional Council has also developed a Regional Passenger Transport Plan¹⁴. The purpose of this Passenger Transport Plan is to provide guidance for the Regional Council in the provision of public passenger transport services, by outlining the passenger transport needs of the region, the Council's objectives and policies to address those needs, and the services required to meet them.

The three strategies outlined above have not been updated since the last State of the Environment Report. Therefore, the outcomes remain relevant to this report.

Indicators

The table below shows the indicators that are used to monitor traffic and transport in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.




Photo: Cars on Havelock Street, Hastings – early mid 1960's
Source: Hastings District Council

¹⁴ Hawke's Bay Regional Passenger Transport Plan 2008-2014-2018, Hawke's Bay Regional Council

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INDICATORS FOR TRANSPORTATION

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		<p>Relevant Outcome Statements:</p> <ul style="list-style-type: none">Transport infrastructure and services that are safe, effective and integrated.A safe and efficient transport network.An inclusive, accessible and affordable transport system.An integrated transport system with efficient linkages supporting national and regional economic development.	<p>Proposed District Plan (2015) (As amended by decisions):</p> <p>Section 25.1 (Transportation)</p> <ul style="list-style-type: none">A transportation network that actively encourages alternative transport modes.A safe and efficient District Transport Network.
2017	Residents' Satisfaction with Council Roads	State	
2017	Residents' satisfaction with cycling/walkway infrastructure in the District	State	
2017	Residents' Feeling of Safety for Pedestrians and Cyclists	State	

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2015-2019 Ka te Piranga ki te Taiao

Total registered vehicles rose 3.5% over the 5-year period from 2005-2013¹³².
Car registrations increased by 2.67% (an additional 2,120 cars) over the 5-year period; truck registrations rose 3.5% (536 trucks); bus registrations rose 39.87% (on 2005 numbers (360 buses); motorcycle registrations rose by 18.02% (322 motorcycles); and moped registrations rose by 32.88% (53 mopeds).
However, it is interesting to note that the above trends are quite different when based on the 2009-2013 figures.

¹³² This data excludes trailers, tractors, exempt vehicles and miscellaneous vehicles (a miscellaneous vehicle is a registration status, is one which by its design is not of a commonly defined vehicle type e.g. dock engine, etc.).

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Figure 5-7: Types of vehicles registered in the Napier-Hastings District (2005–2013)

Percentage Change in the Number of Vehicles Registered 2005–2013								
	CARS	RENTAL CARS	TAXIS	TRUCKS	BUSES	MOTORCYCLES	MOPEDS	TOTAL
2005–2013	2.67%	-34.4%	10.01%	3.50%	89.67%	18.02%	13.88%	8.80%
2009–2013	-0.1%	4.34%	12.50%	0.26%	8.94%	-8.18%	-24.60%	-0.18%

Source: New Zealand Transport Agency
Note: Shaded cells indicate vehicle types with significant change

The number of rental cars registered in the District decreased over the 9-year period, but with a noticeable increase in the last 5 years. The number of rental cars registered was significantly higher in 2005 than in any other year and dropped fairly rapidly between 2005 and 2013, before beginning to increase again.

The 2004–2008 State of the Environment Report noted a rapid increase in the number of registered motorcycles and mopeds during the years 2005–2008. A possible reason for this was high fuel costs. A general increase in the number of both can be observed over the 9-year period. However, this increase occurred almost solely between years 2005 and 2008.

Though the number of registered motorcycles and mopeds in 2013 was still higher than in 2005, the last six years have seen the number of registered motorcycles and mopeds decline quite rapidly, despite fuel costs remaining high. It is possible the fluctuation in registered mopeds and motorcycles was due to changes requiring more of these types of vehicles to be registered.

Since 2005 all vehicle types, except rental cars, have grown in number. At the time of the 2004–2008 State of the Environment Report, both cars and trucks dropped slightly as a proportion of all registered vehicles in the District (cars comprised 78.6% of all registered vehicles in 2005 dropping to 77.1% in 2008). Trucks dropped from comprising 3.6% of all registered vehicles in 2005 to 1.7% in 2008. Trucks as a proportion of all registered vehicles in the District has remained relatively steady (1.7.3%) as of 2013, and the proportion of cars increased slightly to 79.2%. This shows that use of private cars as a mode of transport has remained relatively stable over the two reporting periods.

2015–2018 Ka hiri Pōtongu 18 te Tairā

Indicator T2: Motor Vehicle Ownership

As for total vehicle registrations, the number of motor vehicles per household is an indicator of traffic congestion, fossil fuel consumption and air pollution.

The following graph shows the distribution of motor vehicles per household for Hastings District in the 2013 census closely mirrors that for New Zealand as a whole:

Table 12: Access to Motor Vehicles in Hastings District and New Zealand (2013)

Number of Motor Vehicles	Hastings District (%)	New Zealand (%)
No access	2,058 (7.7%)	116,378 (7.5%)
One	9,461 (35.4%)	552,813 (35.0%)
Two	9,756 (36.9%)	363,095 (26.4%)
Three or more	3,871 (14.8%)	257,471 (18.3%)
Not elsewhere included	1,482 (5.8%)	69,742 (5.0%)
Total	26,601	1,454,179

1—As figures are for households in private owned dwellings. Absentees are excluded.

2—In 1996–2001, this includes 'not specified' data and in 2001, 'not stated' data. From 2006, responses are identifiable and 'not stated' data is included.

Source: Statistics New Zealand

The table below shows how motor vehicle ownership in Hastings District has changed between consecutive census periods from 1996 to 2013.

Table 13: Access to Motor Vehicles in Hastings District per Household (1996–2006)

Number of Motor Vehicles	1996	2001	2006	2013
No access	2,550 (11%)	2,243 (9%)	1,782 (7%)	2,058 (7.7%)
One	9,270 (40%)	8,916 (37%)	8,347 (33%)	9,461 (35.4%)
Two	7,882 (32%)	8,313 (33%)	9,333 (37%)	9,756 (36.9%)
Three or more	2,661 (12%)	3,144 (13%)	4,043 (16%)	3,871 (14.8%)
Not elsewhere included	1,095 (5%)	1,203 (5%)	1,149 (5%)	1,482 (5.8%)
Total	23,058	23,820	25,152	26,688

Source: Statistics New Zealand

Around 40% of households in Hastings District had one motor vehicle in 1996. In 2001, this had fallen to 37% of households, and roughly 35% in 2006 and 2013.

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The percentage of households with no motor vehicles had also fallen in over the 17-year period between 1996 and 2013, from 11% to 2.7% of households.

During the period between 2006 and 2013, households with access to two or more motor vehicles decreased slightly, while those with access to either one or no motor vehicles increased slightly. This is in contrast to the previous decade. Both the economic recession and the fact the population is aging are possible reasons for this.

Despite the 2013 data, the above information indicates a growing access to motor vehicles, and an increase in multiple vehicle ownership in the Hastings District. Again this mirrors that for New Zealand as a whole.

Increasing access to, and level of, vehicle ownership suggests growing traffic volumes and likely increase in fossil fuel consumption, and a potential for increased air pollution and traffic congestion. Technological improvements in fuel consumption and fuel types may have alleviated this to some small extent. For this reason, a future indicator may focus on the number of hybrid or electric cars registered in the District.

Indicator T3: Means of Travel to Work

This indicator provides us with a picture about how people get to their place of employment. Public transport (passenger bus or train) and non-motorised forms of transport (such as cycling, walking and jogging) generally represent the more sustainable means of travel to work.

These graphs are based on Census data and only include those who travelled to work on Census day. Those who worked from home, or did not work on Census day have not been included in the following graphs.

The following pie chart indicates that in 2013, 67% of employed people aged 15 years and over drove a private vehicle to work on census day and about 15% drove a company vehicle to work, with another 5% being passengers in private or company vehicles. Only about 13% took public transport or engaged in non-motorised means of travel (by bicycle or walked/jogged).

Figure 58: Means of Travel to Work on Census Day in Hastings District (2013)^{1,2}



1. All figures are for the employed census usually resident population aged 15 years and over.
2. Graph excludes those who did not travel to work on Census day (i.e. those who worked from home and those who did not work on Census day).

Source: Statistics New Zealand

Figure 59: Means of Travel to Work in Hastings District over Time



Source: Statistics NZ

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The distribution of 'means of travel to work on census day' changed very little between 2001, 2006, and 2013. While it appears those using public transport or non-motorised transport may have decreased slightly over the reporting period (11% in 2001 and 10% in 2013) this is not a significant enough to determine a trend. Factors such as rounding could account for such minor variation. These static transport patterns broadly reflect national trends.

The distribution for Hastings District compares similarly to that for New Zealand as a whole. However, nationally about 16% took public transport, biked or walked to work on census day (compared to 11% in Hastings District).

Hastings District had a slightly higher number of those traveling to work by bicycle on census day in 2013 than the national level (4% versus 3% nationally). However, the number of people cycling to work has not increased dramatically when compared with previous years. However, there has been a visible increase in the number of people cycling for recreational purposes. Future state of the environment reporting could benefit from collecting data on this. Refer to Indicator 39 for further information related to cycling in the District.

Table 14 - Hastings District Means of Travel to Work on Census Day Distribution Compared to National Distribution

	2001		2006		2013	
	Hastings District	New Zealand	Hastings District	New Zealand	Hastings District	New Zealand
Drove Private Motor Vehicle	68%	64%	67%	63%	67%	63%
Drove Company Vehicle	10%	13%	10%	14%	15%	14%
Passenger in Acoustic Company Vehicle	2%	5%	2%	5%	5%	5%
Public Transport	5%	3%	5.4%	5%	3%	6%
Bicycle	5%	3%	4%	5%	4%	3%
Walked or jogged	5%	7%	5%	7%	5%	7%
Motorbike/Power Bike	2%	1%	2%	1%	1%	2%
Other	1%	1%	1%	1%	1%	1%

Source: Statistics NZ

Compared to the national distribution, 2013 census data reveals that Hastings District had a lower proportion of people that travelled to work by public transport (1% versus 6% nationally), or walked/jogged to work (5% versus 7% nationally).

The lower than average proportion of people using public buses or walking or jogging may be a function of the large rural hinterland in Hastings District limiting transport choices, and the inter-relationship

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between the two neighbouring cities of Napier and Hastings in terms of employment options.

However, there is obviously scope to encourage greater travel to work by more sustainable modes of transport including car pooling.

Indicator T4: Bus Passenger Numbers

Public transportation systems can increase accessibility for residents and encourage a reduction in the use of private motor vehicles, which in turn reduces congestion and can help reduce overall vehicle emissions.

In Hastings District, the only public passenger transport currently available is a public bus system administered by Hawke's Bay Regional Council. The Regional Council are responsible for:

- Contracting public passenger transport services for the Hawke's Bay region;
- Marketing and promoting passenger transport services provided; and
- Seeking funding for passenger transport services including funding for its administration and associated infrastructure such as bus shelters and service signage.

Bus passenger patronage for the period 2002/03 (financial years) to 2013/2014 (financial year) show an overall positive trend with over 620,110 passengers in 2013/2014 – an approximate 63% increase on 2002/03 passenger numbers. This improving trend could be interpreted as a being a combination of better bus services, more awareness of and access to public transport options, and the increasing cost of fuel over recent years.

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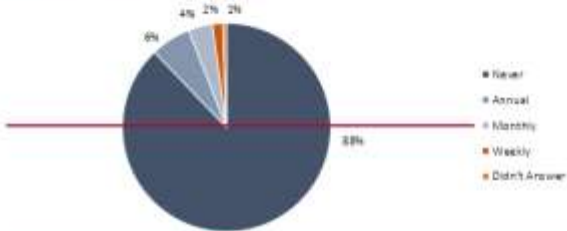
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population of 10,000-29,999 and rural areas having a population of less than 10,000 people) used public transport in the previous 12 months. While the 2014 Public Voice data cannot be conclusively compared with the Ministry of Transport data, it appears that the Hastings District is well below average in terms of public transport use.

Figure 61: Residents' Frequency Using Public Transport in the last 12 Months (2014)



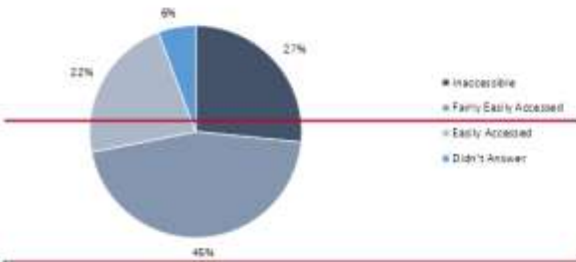
Source: Hastings District Council

Indicator T6: Residents' rating of ease of access to public transport facilities

Accessibility to public transport may a key determinant to use of public transport; if people perceive public transport options to be accessible, they may use it more often. The following graph, based on the Public

Voice survey, provides baseline data as to how Hastings residents rate the accessibility of public transport options in the District. Over a quarter of those surveyed considered public transport to be inaccessible and almost of quarter of those surveyed stated that public transport was easily accessed. A further 45% reported that public transport was only 'fairly easily accessed'.

Figure 62: Residents' Rating of Public Transport Accessibility (2014)



Source: Hastings District Council

The number of people who reported public transport as 'easily accessed' (22%) contrasts with the fact only 12% of survey respondents reported using public transport at all in the previous 12 months. This suggests that

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while accessibility and usage are linked, accessibility is not the sole driver of public transport usage trends.

Indicator T7: Serious and Fatal Road Injuries

At the time the report was prepared, there was no crash data available on NZTA's website post 2009. At the date of the last report, higher crash and casualty rates than national average were observed, although there was some gradual improvement. The increasing number of cars on roads brings greater risk of injury and fatality from motor vehicle accidents. Examining the number of crashes, and the number of resulting fatalities and injuries, provides a picture of the safety of the District's roads. The following data has been compiled from crash statistics compiled by the New Zealand Transport Agency (NZTA)³⁴.

In the period from 2005 to 2009, there were 56 fatal crashes resulting in 65 fatalities, and 241 serious injury crashes resulting in 333 serious injuries. In the past decade, the worst year was 2005 when there were 18

fatal crashes and 48 serious injury crashes resulting in 23 deaths and 71 seriously injured.

Figure 63: Fatal & Serious Injury Crashes for Hastings District (1999-2009)



Source: New Zealand Transport Agency

While the number of fatal crashes fluctuates year-to-year, the total number of fatal and serious injury crashes has been slowly decreasing

³⁴ Hastings District Area of Inquiry Report 2009-2007 (June 2010), used NZTA, and briefing notes on road safety issues for Hastings District for the 2008-2009 period.

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over the last five years. The reasons for this are likely to be a complex function of education, enforcement and engineering improvements.

The rate of crashes and casualties 25 per 10,000 population can also be readily compared against the District's peer group and the national average.

NZTA group Hastings District with other similar local authority areas with large provincial towns and hinterland, identified as 'Group C' 26.

The information shows that between 2000 and 2009 Hastings District has had growing crash and casualty rates per 10,000 population, and significantly higher rates than its peer group or New Zealand as a whole.

Figure 64: Crashes per 10,000 Population (2000-2009)

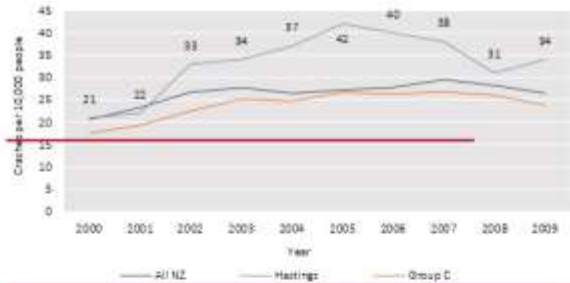


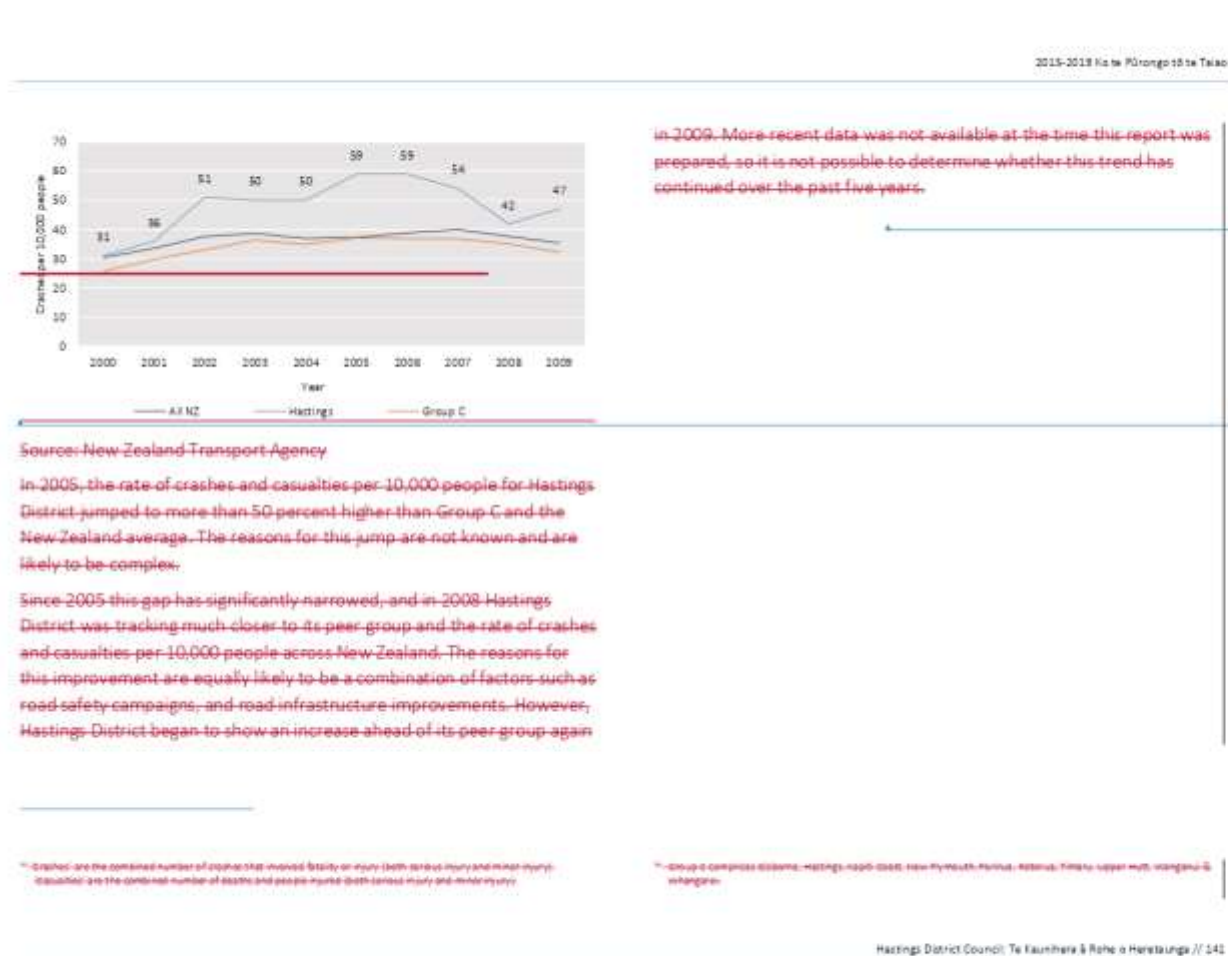
Figure 65: Casualties per 10,000 Population (1999-2008)

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in 2009. More recent data was not available at the time this report was prepared, so it is not possible to determine whether this trend has continued over the past five years.

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The areas of high concern for Hastings District over the period from 2005 to 2009 were:

- Reducing alcohol/drug impaired drivers
- Increasing the safety of young drivers
- Safe roads and roadsides
- Safe driving speeds
- Increasing the safety of motorcyclists

Rural Loss of Control

Rural loss of control accounted for 33% of all injury crashes in the Hastings District between 2005 and 2009. These accounted for 35 deaths, 170 serious injuries, and 495 minor injuries. Crashes on state highways accounted for 47% of the accidents and 75% of total fatalities. The remainder occurred on local rural roads. Most of these accidents involved a single vehicle losing control. However, data for the last five years show a decreasing trend in the number of crashes caused by rural loss of control. Speed and alcohol were other factors that commonly led to accidents on rural roads.

Intersections

During the most recent five year period for which data is available (2005 – 2009) 40% of all crashes in Hastings District occurred at intersections. These crashes resulted in 16 deaths and 91 serious injuries. The latest

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<p>Five year trends show a decrease in the number of intersection injury crashes, though numbers increased slightly between 2008 and 2009.</p> <p>The locations of intersections with a high number of crashes in the District were:</p> <ul style="list-style-type: none">• SH50/SH50A• Nelson St North/St Aubyn St West• SH50A/Maraekakaho/York Road• Pakowhai Road/Elwood Road• St Aubyn Street East/Wilowpark Road North• SH2/Napier Road• Pakowhai Road/Farndon Road• Havelock Road/St Georges Road. <p><u>Vulnerable Road Users</u></p> <p>In Hastings District vulnerable road users (pedestrians, cyclists, and motorcyclists) constituted 31% of all injuries, 23% of deaths, and 33% of serious injuries over the over the five year period (2005-2009).</p> <p>The number of crashes involving cyclists spiked in 2009, with the total number jumping from 23 to 37. However, there were no fatalities in 2009.</p> <p>The worst accident locations or routes for cyclist injuries in the District were:</p> <ul style="list-style-type: none">• Omaha Road Route• Porter Drive Route	<p>Formatted: Default Paragraph Font, Font: Not Bold</p> <p>Formatted: Default Paragraph Font, Font: Not Bold</p> <p>Formatted: Default Paragraph Font, Font: 12 pt, Not Bold, Font color: Accent 2, English (New Zealand)</p>
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- Porter Drive/Te Aute Road
- St Aubyn St West/Willowpark Road
- Southampton St West/Southland Road
- St Aubyn Street West/Grays Road
- Tomoana Road/Frederick Street
- Tomoana Road/Heretaunga Street W
- Heretaunga Street East/Willowpark Road North

Alcohol

Alcohol-affected drivers contributed to 15% of injury crashes in the Hastings District, leading to 19 deaths and 58 serious injuries. The number of alcohol-related crashes decreased in 2008 and 2009 after a spike in 2007. A trend that is worth noting is that 55% of drivers at fault in alcohol-related accidents held a learner licence, restricted licence, had never held a licence, or were disqualified. Drivers under the age of 25 were at fault in 44% of alcohol-related injury crashes over this period.

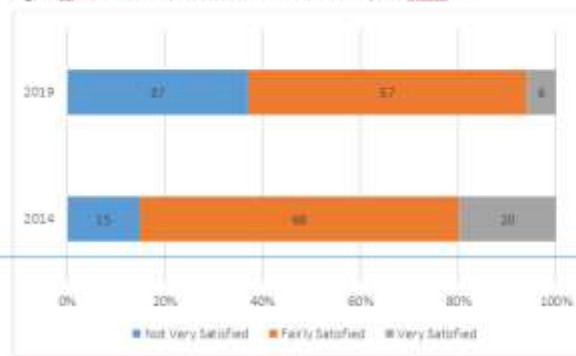
Indicator T1: Residents' Satisfaction with Council Roads

Resident's satisfaction with Council roads gives some insight into the state of Council roading infrastructure.

The following graph shows that over half of those surveyed during the Council's Public Voice Survey were satisfied with Council roads in 2019.

With 63% of those surveyed being 'fairly' or 'very satisfied', down from 86% in 2014.

Figure 3.766 Residents' Satisfaction with Council Road (2014-2019)



Source: Hastings District Council Communicate Survey and Public Voice Survey

The following graph shows there has been a downward trend in residents' satisfaction with Council roads (with those 'fairly' or 'very satisfied' reduced to 63% 2019 compared with the high level in 2014). This may reflect the frustration and expectation of residence roading issues over this period.

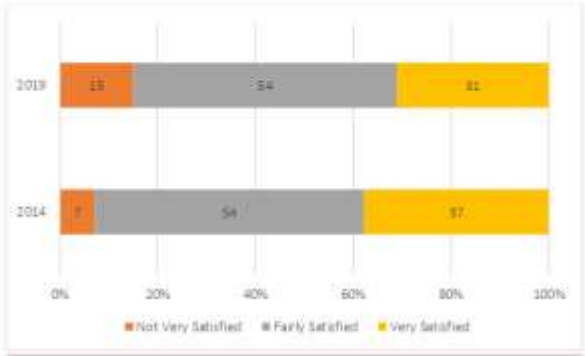
Indicator T2: Residents' satisfaction with cycling/walkway infrastructure in the District

In comparison to the 2014 survey, respondents displayed high levels of satisfaction with cycling facilities in the District with 85% reporting they were either fairly or very satisfied with cycling facilities.

15% of those surveyed indicated that they were not very satisfied with cycling facilities. This has increase compared with the previous reporting period.

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Figure 3367: Residents' Satisfaction with Cycling Facilities (2014-2019)



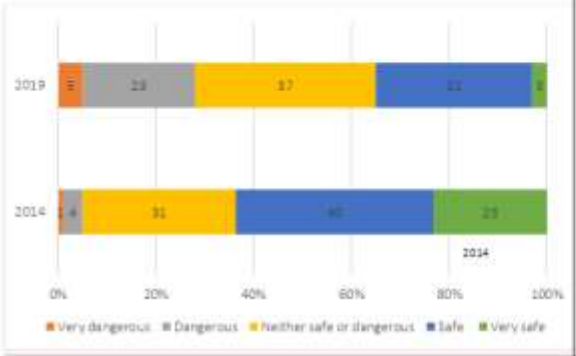
Source: Hastings District Council Communitrak Survey and Public Voice Survey

Indicator T3: Residents' Feeling of Safety for Pedestrians and Cyclists

Residents' feeling of safety as pedestrians and cyclists gives some insight into aspects that might be hindering the use of more sustainable modes of transport. In 2008, Council added two questions to its survey for the first time.

These related to satisfaction with the quality and safety of footpaths, and the feeling of safety while riding a bicycle in the District. These same questions were asked again in 2014.

Figure 3368: Residents' Feeling of Safety Riding a Bicycle in Hastings District (2014-2019)



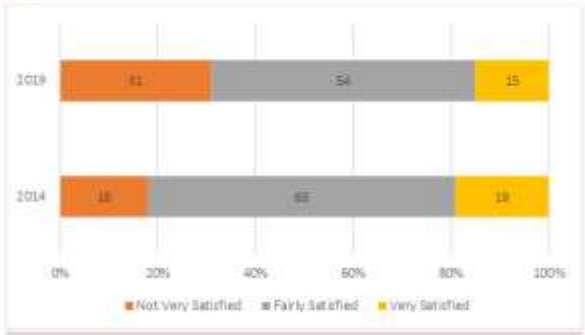
Source: Hastings District Council Public Voice Survey

The following graph shows that in 2014, a quarter of the respondents to the survey felt safe, and only 23% felt 'very safe'. A further 31% felt it was neither safe nor dangerous. Significantly, 5% of respondents felt riding a bike in the District was dangerous.

In 2019, there was significant movement between those finding it very safe and dangerous to cycle. However 28% of respondents considered riding a bike dangerous or very dangerous. A further 37% stated riding a bike was neither safe nor dangerous. Only 35% of respondents considered riding a bike either safe or very safe. This contrasts with the fact that 69% of those surveyed indicated they were satisfied with cycling facilities in the District. This suggests that while residents are satisfied with existing cycling facilities, such as trails and paths, they do not feel safe when riding a bike in parts of the District where these facilities do not exist.

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Figure 4069 Residents' Satisfaction with the Quality and Safety of Footpaths (2014-2019)



Source: Hastings District Council Public Voice Survey

The graph above shows that the majority of those surveyed were satisfied with the quality and safety of footpaths in both 2014 and 2019.

In 2019, 82% of those surveyed being 'fairly' or 'very satisfied'. By 2019 63% of those surveyed reported being fairly or very satisfied with the quality of footpaths in the District.

As with other survey results, the questions require closed answers so do not fully explain what is require for people to feel satisfied with the level of service that council provide.

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Overall, the results for the State of the Environment in relation to Hastings' Transportation infrastructure are mixed.

Residents' satisfaction with Council roads has decreased from the previous reporting period in 2014.

The baseline data from the 2019 survey shows relatively high levels of satisfaction with walking and cycling facilities, but almost a third of those surveyed do not feel that riding a bike is safe. Residents' satisfaction with the quality and safety of footpaths is reasonably high but there is still room for improvement.

Future surveys will enable some trend information to be identified over time in this respect and will help to uncover what is deterring people from using public and non-motorised forms of transport.


Responses

For Community

- Take opportunities to walk or cycle to work, school and neighbouring amenities.

For Council

- Continue on-going publicity around healthy living and sustainable modes of transportation
- Encourage sustainable transport choices in new developments
- Continue to implement Hastings District Council's Walking and Cycling Strategies, including promoting walking and cycling to school and work
- In future, Council will survey residents about re recreational cycling what deters them from using public transport or non-motorised transport options



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ITEM 6

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Water Management

Water management refers to all aspects of providing freshwater for [residential](#), commercial and industrial activities within the District.

Where does Hastings District's water come from?



Source: Hastings District Council

The Heretaunga Plains unconfined aquifer is the main ground water resource for the Heretaunga Plains, Hastings and Napier communities, providing 85% of their water requirements¹¹. The water drawn off the aquifer is used for public water supply, irrigation and industrial uses.

Hastings is lucky to have a good supply of fresh, clean water from its underground aquifers, but we should not take this for granted.

The Council sources its public water supply for the District from 11 water supply systems via [24](#) individual bores/wells, and two springs in the Waimarama area. Fluoride is currently added to the water in the Hastings, Havelock North and Flaxmere water supplies to aid dental health.

The two largest reservoirs at Havelock North each hold 10,000,000 litres of water. During the night, water from the bores/wells is pumped through the network to the 15 reservoirs in the district, and from there it is distributed via 497km of water mains to homes and [businesses](#).

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¹¹ Section 2.2.2.5 of the [2015-2019 Hastings District Plan](#).

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In addition, there are a number of smaller, privately-managed water supplies throughout the District (managed by schools, marae, local communities etc).

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Indicators:

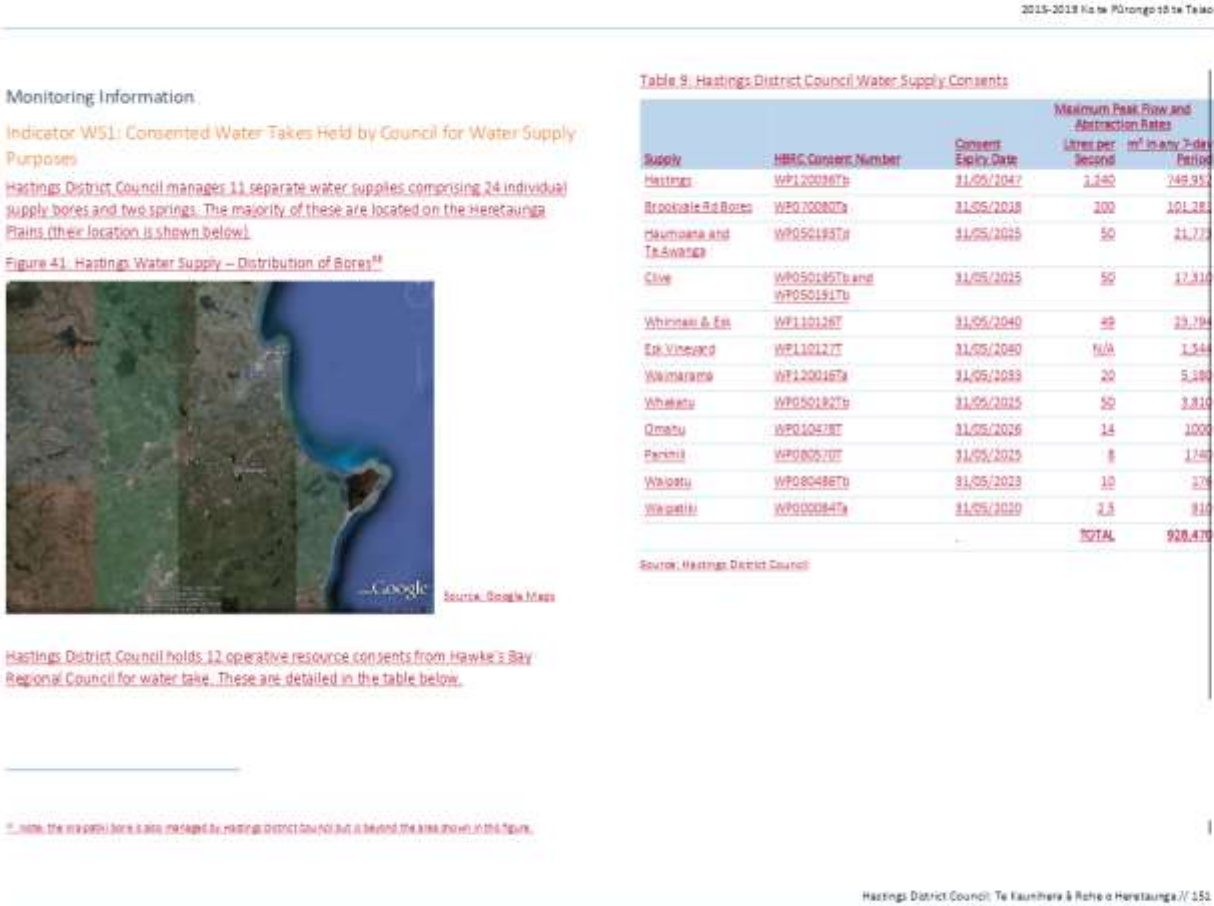
The table below shows the indicators that are used to monitor water services in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.

INDICATORS FOR WATER MANAGEMENT

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		Relevant Outcome Statements: <ul style="list-style-type: none">An environment that is appreciated, protected and sustained for future generations	Proposed District Plan (2019) (As amended by decisions) Section 80.1 (Subdivision and Land Development) <ul style="list-style-type: none">Maintenance of public health and safetyProvision of a water supply of suitable quality and quantity to meet the needs of likely or potential land uses on the sites, including water for fire control and suppression
WS1 Consented Water Takes Held by Council for Water Supply Purposes	Pressure	These indicators will enable Council to monitor trends around the security and quality of water services infrastructure, and the quality of drinking water for community consumption.	
WS2 Domestic Water Consumption	Pressure		
WS3 Commercial and Industrial Water Consumption	Pressure		
WS4 Public Health Water Quality Grading State			
WS5 Compliance with Drinking Water Standards	State		
WS6 Residents' Satisfaction with the Water Supply	State		

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2015-2019 Ka te Piranga ki te Taki

Indicator W52: Domestic Water Consumption

In Hawke's Bay, water consumption is highly seasonal – summer consumption can almost double winter consumption.

Demand in some supplies is also influenced by seasonal population growth, for example Waimarama, where the summer population growth sees a three-four fold increase in water use.

As a community water supplier, HDC has an important role in promoting efficient use and minimising waste. As a consent condition attached to many of our resource consents HDC has developed a Water Conservation and Demand Management Strategy outlining HDC's commitment to a range of measures that will achieve an efficient use of water and thereby minimise the effects of abstraction on surface and groundwater resources.

The Hastings Urban supply consents provide for a stepped increase in annual allocation during the term of the consent in order to provide for growth. Figure 2 below shows the ongoing tracking of use against consented take and growth.

Figure 42: Hastings Urban Water Supply – Consent allocation vs actual usage



Source: Hastings District Council

As shown in Figure 3 below, since 2016 the averaged consumption per capita across all supplies has climbed following changes to supply operation including the introduction of chlorination to the supply networks.

Leak repairs are now stabilising and proactive renewals programs continue to be enhanced.

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Figure 3: Hastings Water Supply – Domestic Water Usage¹⁰



Source: Hastings District Council

Since the last report:

- An additional 615 connections have been made across all HDC Water supplies.
- Adoption and ongoing implementation of our Drinking Water Strategy. The completion of new infrastructure in the Hastings Urban supply in 2021 will

¹⁰ The figures on water usage for Hastings District Council water supplies include fire hydrant testing, machine system flushing, boiler firing and fire usage, some unmeasured parks and garden usage, system leakage, and unmeasured industrial and commercial usage.

allow network pressures to be reduced. This is anticipated to reduce network leakage and overall water consumption.

- HDC has ceased all take from the Portsmouth Road bore in Flaxmere except for emergency and operability purposes. This bore provided nearly 80% of Flaxmere's water supply, but was found to have stream depletion effects on the Irongate Stream. Increased abstraction from sites that lessen or remove impact on stream depletion have replaced this source. The higher yielding Frimley Bore field is being further developed to ensure resilience of supply.
- The Paki Paki community was connected to the Hastings Urban supply in 2012. This was driven from both the loss of supply to some properties serviced from shallow bores during the summer months as well as aesthetic water quality issues in the public supply. This project was subsidised by Ministry of Health's CAP funding scheme.
- The Haumoana and Te Awanga supply has ongoing aesthetic water quality issues (taste and odour) including elevated Manganese in the source water. A new water supply bore yielding better quality water has been drilled and will be connected to the supply in 2020 with the commissioning of a new Water Treatment Plant.

Indicator WS3: Commercial and Industrial Water Consumption

Commercial and industrial water consumption from HDC public water supplies has increased at the end of the reporting period. The change is due to both an increase in metered properties and improved management of the metering system.

2015-2019 Ka te Piranga ki te Taiao

Figure 4. Commercial and Industrial Water Consumption in Hastings District



Source: Hastings District Council

It is important to note that these figures do not include many of the large industries such as Heinz Wattle's and McCain's who obtain their own processing water from private bores consented by the HRC. Some industry have connections to Council supply to meet domestic needs, such as drinking water for staff.

Indicator WS4: Public Health Water Quality Grading

Currently there is no national requirement for supplies to be graded and since the Health (Drinking Water) Amendment Act of 2007, the emphasis has moved towards ensuring supplies meet the Drinking Water Standards and the requirements of the Act. HDC's water supplies are currently ungraded.

Indicator WS5: Compliance with Drinking Water Standards

Hastings District Council manages 11 water supplies, comprising 26 abstraction sources, 25 treatment plants and 17 distribution zones. The remaining supplies in the district are privately owned and managed.

All of the Hastings District Council's supplies are managed to comply with the requirements of the Health Act 1956, Health (Drinking Water) Amendment Act 2007 (HDWAA) and the Drinking Water Standards for New Zealand 2005 (Revised 2018).

All HDC supplies over 500 population have an operative Water Safety Plan (WSP).

Safe drinking water is the Hastings District Council's highest priority. The extent of changes in the way Council is managing drinking water safety has been informed by the Board of Inquiry findings following the Havelock North contamination event which occurred in August 2016, and there is commitment at the highest level to achieve this.

These changes have occurred across the entire drinking water space from catchment to tap including:

- Chlorination of all drinking water supplies starting 2017
- Treatment upgrades
- New water treatment plants being installed which will comply with protozoa- and bacteriological criteria of the DWSNZ (2018)
- Improving our understanding of source risks through the ongoing catchment risk assessment work and managing the risk through development of source protection zones (SPZs) and associated processes
- Restructured business with additional skilled resources
- New internal processes, standards and systems

New requirements for contractors

- A significant emphasis on quality assurance

Complying with the DWSNZ requires a combination of treatment processes (UV, chlorination) and routine monitoring of the source, treatment plant and reticulation. All supplies complied with the DWSNZ bacteriological requirement from 2016 to 2019. This is attributed by the implementation of chlorination throughout all the supplies as well as monitoring frequencies and test results as per DWSNZ requirements.

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2015-2019 Heke Pōroango o Rākei Tekei	
<p>Protozoa compliance has not been achieved for some of the HDC supplies due to the current WTP not being validated against the DWSNZ criteria, or due to the bore losing security status after previously being classified as secure meaning treatment processes are now required.</p> <p>A significant program with funding committed in the LTP will see new source development, network modifications and Water Treatment Plants and reservoirs installed to ensure all supplies are capable of meeting the compliance requirements of the DWSNZ by the end of 2021.</p> <p>The below table summarises the compliance status of the HDC supplies from compliance years July 2015 to June 2019.</p>	
Hastings District Council: Te Kaunhere o Rākei o Heretaunga // 155	

Ward name	2015-2016		2016-2017		2017-2018		2018-2019		Comment
	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	
Ward 1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 1 is the only ward in the district that has a ward committee.
Ward 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 2 is the only ward in the district that has a ward committee.
Ward 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 3 is the only ward in the district that has a ward committee.
Ward 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 4 is the only ward in the district that has a ward committee.
Ward 5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 5 is the only ward in the district that has a ward committee.
Ward 6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 6 is the only ward in the district that has a ward committee.
Ward 7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 7 is the only ward in the district that has a ward committee.
Ward 8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ward 8 is the only ward in the district that has a ward committee.

Ward 1

Ward 2

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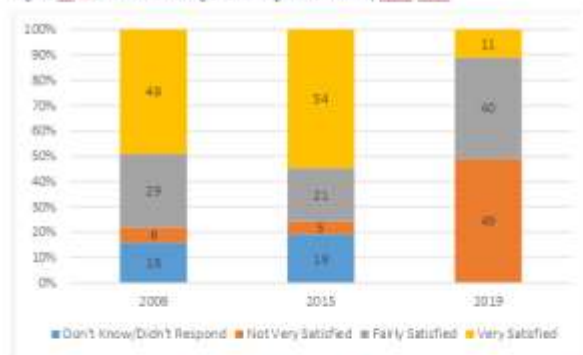
2015-2019 He ta Pōrongo o te Taiao

Indicator W56: Residents' Satisfaction with the Water Supply

Resident's satisfaction with their water supply gives some insight into the state of water for domestic supply. Approximately 75% of residents were provided with piped water supply in 2019, down from 79% in 2008.

The following graph shows there has been little change in level of satisfaction since between 2008-2015, with those 'fairly' or 'very satisfied' remaining stable at between 78% and 75%. In comparison to the 2019 results, almost half of those surveyed were not very satisfied with the water quality. A possible reason is the chlorination of the district's water supply to ensure safe drinking water.

Figure 43.24: Residents Rating of Drinking Water Quality 2008-2019



Source: Hastings District Council Community and Public Voice Survey

Hastings is very fortunate to have this valuable water resource in the aquifer system beneath us that supports our communities; however, this should not be taken for granted. The Council sources its water from 24 individual bores as well as two spring sources in the Waikarama area. These sources support 11 community water supplies across the district comprising of 16 water treatment plants and 17 distribution zones. Water is distributed to the homes and businesses in the communities through over 500km of water mains and over 21,000 connections. Pump stations and reservoirs are installed at key points in the network to ensure adequate supply is maintained throughout the day.

Responses

For Community

- By taking a few simple steps to reduce your water usage now, you can help ensure future generations enjoy the same access to good quality water, such as turning off the tap, fixing leaks, and using water saving devices on showers, washing machines and toilets.

For Council

- Demand management, and water conservation measures are a strong focus for Council into the future, including a public education campaign, an active leak detection program, and implementation of zone management and pressure reduction across the main supplies (Hastings, Havelock North and Flaxmere)
- Council will continue to work towards improving and maintaining the quality of drinking water through the proposed planned upgrades to water supply infrastructure.

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2015-2019 Ka te Pōrangā ki te Tāke

Wastewater Treatment

Wastewater is the term used to describe a combination of domestic sewage (from showers, baths, toilets and kitchens) and trade wastes (liquid wastes produced by many industrial and commercial processes).

The provision of a wastewater system (sewerage scheme) is fundamentally important in terms of ensuring public and environmental health and well-being. The Wastewater System collects, treats and manages wastewater disposal from homes, work places, businesses and industries in urban areas. The HDC Wastewater System's ability to accept industrial wastewater (trade waste) is critical for the social and economic well-being of the District and Region.

Without wastewater schemes, there would be significant environmental and human health issues, especially within rapid growing and populated urban areas. In today's modern urban environment, wastewater schemes are developed in conjunction with the statutory processes of the RMA to ensure that **adverse** environmental effects are avoided, remedied or mitigated to an acceptable level.

The existing HDC Wastewater Scheme is made up of a network of pipes and pumps which collects the wastewater from Hastings, Havelock North, Flaxmere, Whakatu and Clive and conveys the wastewater to HDC's East Clive Wastewater Treatment Plant (WWTP) which after treatment discharges the combined wastewater streams from the two separate networks (as discussed below) through the 2,750m offshore ocean outfall into the marine receiving environment of Hawke's Bay.

The wastewater network comprises two separate networks:

- 1) A domestic and non-separable **industrial** wastewater system that primarily collects domestic wastewater and a small amount of trade waste from industries that are not able to connect to the separated industrial trade waste system. At the WWTP this wastewater is screened and treated **in-use** Biological Trickling Filters (BTFs). The BTFs are used to grow bacteria which biologically treat the wastewater to the required standard.
- 2) A separated industrial wastewater system that collects industrial trade wastes. Trade wastes are treated on-site at individual industrial premises to comply with the Water Services Bylaw requirements, prior to discharge into the separated industrial wastewater system. At the WWTP the trade wastes are screened through a 1mm slotted screen prior to mixing with the treated domestic and non-separable wastewater stream.

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2015-2019 Ka te Piranga ki te Taki

INDICATORS FOR WASTEWATER TREATMENT AND DISPOSAL

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		<p>Relevant Outcome Statements:</p> <ul style="list-style-type: none"> An environment that is appreciated, protected and sustained for future generations 	<p>Proposed District Plan (2019) (As amended by decisions):</p> <p>Section 30.1 (Subdivision & Land Development)</p> <ul style="list-style-type: none"> Maintenance of public health and safety. Provision of facilities for wastewater disposal and stormwater disposal for new sites.
WW1	Consented Wastewater Discharges held by Council	Pressure	These indicators will enable Council to monitor trends around the security and integrity of delivery of the District's community wastewater treatment and disposal systems, and the effects of wastewater disposal on the natural environment.
WW2	Compliance with Consent Conditions for Wastewater Discharges	Response	
WW3	Volume of Wastewater Produced	Pressure	
WW4	Total Number of complaints received by the Council about any of the following: a) Sewage odour b) Wastewater system faults c) Wastewater system blockages d) The Council's response to issues with its Wastewater system	State	
TW1	Amount of Trade Waste Discharged through the Separated Trade Waste Conveyance System	Pressure	These indicators will enable Council to monitor trends around the safety and efficiency of trade waste disposal in the District.
TW2	Number of Industries Connected to the Separated Trade Waste Conveyance System	Pressure	
TW3	Number of warning notices issued	Pressure	

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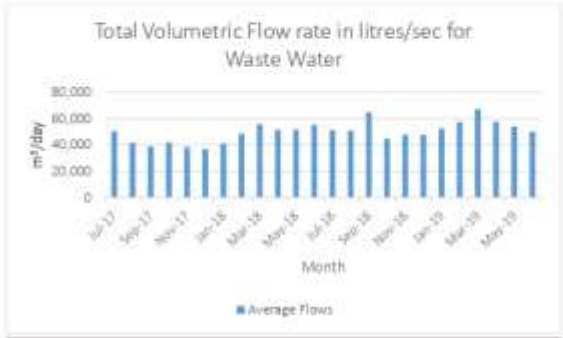
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2015-2018 He ta Pōroango o te Taiao	
<p>Monitoring Information</p> <p>Indicator WW1: Consented Wastewater Discharges Held by Council</p> <p>Hastings District Council holds two main resource consents granted by the Hawke's Bay Regional Council (HBRC) for the discharge of wastewater from community Wastewater schemes:</p> <ol style="list-style-type: none"> 1) East Clive Wastewater Treatment Plant – the consent (CD130214W) is to discharge final combined wastewater into Hawke Bay at East Clive via the long offshore outfall <ul style="list-style-type: none"> • Consent granted on the 25th June 2014 with a consent expiry on 31 May 2049 (35 year term); and • The consented maximum discharge rate is for 2800 litres per second. <p>The consent was granted following an extensive consenting process that involved technical, environmental and public health assessments, consultation with the community and iwi and finally a public submission process.</p> <p>The consent is for a 35 year term, with the requirement for nine yearly reviews. The reviews will consider system performance and technological advancement and will make recommendations about possible treatment improvements.</p> 2) Waipatiki Wastewater Scheme – the consent (DP050397L) is for discharge of wastewater to land <ul style="list-style-type: none"> • Granted in 2005 and will expire on 31 May 2025 (20 year term); • Maximum rate of application of effluent of 5mm/m²/day; and • Maximum volume of discharge of 76m³ per day (532m³ over a 7 day period) during Stage 1, and 172m³ per day (1204m³ over a 7 day period) at completion of Stage 2. <p>The Waipatiki Wastewater Scheme has been designed to cater for the established properties within the Waipatiki coastal settlement, as well as the 29-lot subdivision granted in 2003.</p> 	<p>Approximately 90% of properties designed for connection to the scheme have been connected, with only half a dozen properties still electing to continue with on-site septic tanks. There is provision for a second stage development when either the 76th connection occurs or when the discharge volume reaches 76m³ per day, whichever occurs first.</p> <p>Indicator WW2: Compliance with Consent Conditions for Wastewater Discharges</p> <p>East Clive Wastewater Treatment Plant</p> <p>The annual compliance report for 15/16, 16/17, 17/18 has been generally been complying with conditions. A couple of minor non-compliance has been reported. The annual compliance report for 18/19 is still being processed.</p> <p>Waipatiki Wastewater Scheme</p> <p>The annual compliance reports for 15/16, 16/17, 17/18 has met technical compliance but not met environment compliance. For 17/18 the technical and environmental compliance was not met. Environmental non-compliance relates to the nitrate limit being exceeded. The annual compliance report for 18/19 is still being processed.</p> <p>Indicator WW3: Volume of Wastewater Produced</p> <p>Waste Water Treatment Plant East Clive</p> <p>The following graph shows the average daily volume of wastewater based on the marine outfall pump station flow records from the East Clive Wastewater Treatment Plant included in the 2017/19 Compliance Reporting. This is baseline data and flow trends against the new consent conditions framework will be developed over time.</p>
Hastings District Council: Te Kaunhere o Rāhō o Heretaunga // 161	

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2015-2019 Ka te Pōrangā ki te Tāke

Figure 44: Average Daily Flow



Source: Hastings District Council 2017/18 Compliance Reporting Section 4.3

Due to the availability of data because of equipment changes, only data between July 2017 – May 2019 could be collected. The flows between the different quarters reflect the difference between various seasons of the different industries within the wastewater network. The highest median flow and the maximum flow recorded were consistent which is the fruit and vegetable processing season while the September 2018 spike could have been caused by a weather event causing an increase in water flow. The trade waste from these industries form a large proportion of the industrial flow during these periods.

Waipatiki Wastewater Scheme

There have been no Waipatiki Wastewater Scheme volume exceedances.

Indicator WW4: Satisfaction with the Wastewater System measure based on:

The number of complaints about the wastewater system is an indicator of residents' satisfaction with the water supply.

Wastewater complaints received by the Council are about any of the following:

- a) Sewage odour
- b) Wastewater system faults
- c) Wastewater system blockages
- d) The Council's response to issues with its sewerage system.

Expressed per 1000 connections to the Council's Wastewater system, the satisfaction measure is 11.86 complaints per 1000 customers.

The graph below shows the total number of complaints per annum.

Figure 45: Total number of complaints received

Year	Domestic Satisfaction (NPR)	Serviced Properties (NPR)	Total Complaints
2015/16	15.90	22,896	364
2016/17	27.70	23,068	639
2017/18	21.69 (Updated)	23,422 (Updated)	508
2018/19	24.03	23,973	576
2019/20	18.73	24,135	452

Source: Hastings District Council 2014/15 Compliance Reporting Section 4.3

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2015-2019 Ka te Piranga tā te Tāiao

There has been a general downward trend in the volume of tradewaste discharged to the system. The number of industries connected to the separate tradewaste system, and the number of warning notices has remained consistently low.

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2015-2019 He ta Pōroango o te Taiaro	
Responses	
For Community	For Council
<ul style="list-style-type: none">• Do not pour chemicals, paints or thinners (or the like) down any drain• For the wider community, notify Council compliance staff if you observe unsafe trade waste disposal practices• For users of trade waste services, ensure compliance with trade waste guidelines so as to minimise the likelihood of Non-complying discharges and resulting potential for adverse environmental effects	<ul style="list-style-type: none">• Continue to look at opportunities to make improvements to all wastewater infrastructure, and to service future growth• Continue to monitor and manage trade waste discharges under the Water Services Bylaw• Continue to carry out monitor sampling and reporting as required by resource consent conditions• Look at new technologies to assist in meeting conditions of consent/permitted activity standards for trade waste• Public education is being used effectively to improve compliance. The Council has good information on best practice and responsible methods for trade waste disposal. A 'guide' document is being prepared for the Council's website• Encourage new industries to connect to the separated trade waste system• Record discharge rates through the separated trade waste system• Formally record any breaches of trade waste consent observed, including those that did not result in the issue of official non-compliance notices, to obtain a more complete picture of industrial trade waste disposal in the District• Continue to investigate new technologies that would assist industries to meet their conditions of consent or the permitted activity standards
Hastings District Council: Te Kaunihiri o Rāhe o Hāweaunga // 165	

2015-2019 Ka te Pōrangā ki te Tāke

Energy Use

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Monitoring energy use can result in clear information about our environment in relation to consumption, standard of living and sustainability.

It is expected that the information available to monitor energy use will improve over time. Information is available at a general level on electricity usage for the Hawke's Bay region. There is little information at a District level at present.

Future research could be directed at Council's own use of fossil fuels, electricity usage for its offices, and sustainable energy use projects adopted by Council.

It would be useful and appropriate to include climate change indicators in any future State of the Environment Report, where possible. At this stage, data on climate change at a Hastings District scale is not readily available. Climate change is currently monitored at national level by the Ministry for the Environment as part of State of the Environment reporting for New Zealand as a whole.

Indicators

The table below shows the indicators that are used to monitor energy use in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.

INDICATORS FOR ENERGY USE

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		Relevant Outcome Statements	H1.
		• An environment that is appreciated, protected and sustained for future generations	
E1 Electricity Demand	Pressure	These indicators will provide information on trends in energy consumption and uptake of more sustainable energy sources in order to better protect the environment for future generations.	
E2 Sustainable Energy Use Projects	Response		

Monitoring Information

Indicator E1- Electricity Consumption

The previous State of the Environment Report monitored annual maximum electricity demand for the Hawke's Bay Region. However, difficulty in obtaining this data for 2009-2014 meant that this indicator had to be altered. Instead, data has been collected showing annual residential electricity consumption for Hawke's Bay region. This data was available between 2010 and 2014 and at the regional level only, so is not specific to

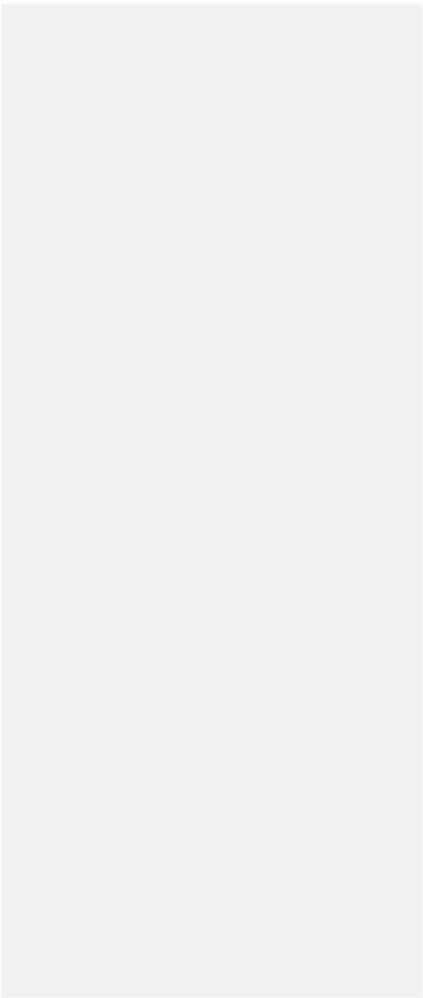
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2015-2019 Ko te Pūrongo ki te Taiao

Hazard Management

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Item 6

2015-2019 He ta Pōrongo o te Taiāo

Hazard Management

THE ISSUE AT A GLANCE

INDICATOR	STATE 2004-2008	STATE 2009-2014	SUMMARY
Natural Hazards			
NH1: Natural hazard events			Hastings District experiences a range of natural hazards related to its climate including major storm and flood events, coastal erosion and inundation and rural wildfires. While the number of warnings and rural wildfires have trended downwards, it is important to acknowledge that the number of natural hazard events is largely random.
NH2: Area of land identified as 'Natural Hazards'			It is expected that this may change as a result of the District Plan review as natural hazards which are already managed under other legislation, such as the Building Act and the Hawke's Bay Regional Coastal Environment Plan, have been removed so as to avoid duplication.
NH3: Number of consents for subdivision/land development within the Natural Hazards			Resource consents affecting natural hazards have remained relatively steady. With the exception of a peak in 2010, there were 8-16 for land use consents and 1-4 for subdivision consents.
NH4: Monitoring and reporting on building consents granted within Natural Hazards	-		The number of building consents for both habitable and non-habitable buildings in Natural Hazards area fluctuated between 149 - 259 between 2015-2019.
Hazardous Substances			
HS1: Number of consents involving employment of the hazardous facility screening procedure			As Resource consents between 2015 and 2019 were required as a result of applying the hazardous facility screening procedure and none between
HS2: Number of reported incidents and callouts to hazardous substances spills			Spills involving hazardous substances have dropped. However, this could be the result of changes as to who responds to these types of incidents.

Section 31 of the RMA gives Hastings District Council the function of managing and controlling the effects of the use, development, or protection of land. Of particular relevance to the state of the environment in respect of hazards, this includes for the purpose of:

- The avoidance or mitigation of natural hazards; and
- The prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances.

The Hastings District is subject to a variety of hazards. These hazards include natural events such as earthquakes and flooding, to events involving hazardous substances originating from our industrial and ~~horticulture~~ activities.

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2015-2019 Ko te Pūrongo ki te Taiao

Natural Hazards

The Hastings District has the potential to suffer effects from several different natural hazard types. This includes earthquakes, coastal erosion, flooding, droughts, snow fall, volcanic activity and tsunamis.

Whilst natural hazard events are largely the result of natural processes and 'Acts of God', their impacts on the environment and severity are influenced by land use patterns, development and human activity.

The Hastings District Council aims to avoid hazards through District Plan provisions where appropriate, and the Building Act. This includes the avoidance of subdivision on land subject to natural hazards or potential natural hazards, and the avoidance of subdivision where it could accelerate or worsen the risk of natural hazards.

Indicators

The table below shows the indicators that are used to monitor natural hazards in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.



Photo: The Heretaunga Plains in flood in 1955.

Breaches of the stopbanking system were common in the 1950's due to the ground uplift and settlement effects of the 1931 earthquake which reduced river channel capacity, and the severe ground shaking which weakened the stopbank structure in places.

Source: Hawke's Bay Regional Council

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2015-2018 He ta Pōroongo o te Taiao

INDICATORS FOR NATURAL HAZARDS

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		<p>Relevant Outcome Statements:</p> <ul style="list-style-type: none"> An environment that is appreciated, protected, and sustained for future generations. Safe and secure communities. A lifetime of good health and wellbeing. 	<p>Proposed District Plan (2019) (As amended by decisions)</p> <p>Section 15.1 (Natural Hazards)</p> <ul style="list-style-type: none"> New Residential Zones are located outside of avoidable hazard risk areas. Where building development is already within a hazard area, the reasonable risk of the hazard is reduced and/or mitigated by minimum floor levels, buffers, setbacks or other building standards. Reduction in risks to people and the community from natural hazards has been achieved by the avoidance of hazards where they may pose a significant risk to human life, property and infrastructure in proposed new development areas and by mitigation for existing development areas. <p>Section 30.1 (Subdivision and Land Development)</p> <ul style="list-style-type: none"> Avoidance of subdivision on land that remains subject to natural hazards or potential natural hazards. Avoidance of subdivision where it could accelerate or worsen the risk of natural hazards. Maintenance or enhancement of public health and safety.
NH1	Natural Hazards Events	State	This indicator will enable Council to monitor trends around the type and nature of natural hazards occurring in the Hastings District, and their severity. Information on natural hazard events (such as significant flood events, storm surge events, rural fire events, and coastal erosion trends) will also, over a long timeframe, contribute to an understanding of the effects of climate change in the District.
NH2	Area of Land Identified as 'Natural Hazards' area	State and Response	This indicator indicates the state of the environment in terms of risk/vulnerability to natural hazards.
NH3	Number of Consents for Subdivision/Land Development within the Natural Hazards area	Pressure	This indicator will indicate any trends toward, and pressure for, development of land identified as subject to natural hazards.
NH4	Building consents granted within Natural Hazards area	Pressure	Monitoring the number of building consents granted within areas identified in the District Plan as Natural Hazards, enables pressure on these areas to be identified.

Hastings District Council: Te Kaunhere o Rākeia Hāreketanga // 171

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2015-2019 Ka te Pirangi ki te Taiao

Monitoring Information

Indicator NH1: Natural Hazard Events

The following indicator provides a snapshot of recent natural hazard events related to weather and climate that have impacted on communities (such as major storm and flood events, coastal erosion and inundation events, and rural wildfires).

Figure 4880: Civil Defence Warnings EOC Activations



Source: Hastings District Council

Whilst natural hazard events are not related to human activity, they do contribute to an understanding of how the presence of people and associated development can exacerbate their effects on people, property and the natural environment.

Ongoing recording of such natural hazard events may also, in the future, contribute to an understanding of the effects of climate change on the District over time (temperature, rainfall and weather patterns, sea level rise).

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Major Storm and Flood Events

Hawke's Bay is often affected by flooding – on average, a severe storm or flood happens every 10 years.

When floods threaten communities they become a hazard. In Hawke's Bay, stopbanks have been built alongside many of the rivers to hold in the extra flood water.



Photo: Ngaruroro River in Flood, Waitangi Railway Bridge – August 2009

Source: Hawke's Bay Regional Council

The table below shows the numerous major storms resulting in severe flooding in Hawke's Bay since 1867.

Commented [J167]: Update with recent event

2015-2018 Ka hae Pōroongo o te Taiaro

Table 1066 Major Storm and Flooding Events Recorded in Hawke's Bay (to 2019)

Year	Date	Event
1867	25 May-4 Jun	A large flood in Hawke's Bay, which according to the local Maori, there was no flood to compare with it in the previous forty years. Rainfall in Napier was 380 mm in four days. The Tukituki, Ngaruroro and Tutakuri all overflowed their banks at several locations, causing extensive flooding.
1899	4 Dec	Heavy rain cause flooding in the Waipawa River, with the highest levels ever known. The Tutakuri and Ngaruroro Rivers broke their banks, resulting in widespread damage.
1897	17 Apr	356 mm of rain fell in Napier over four days. The Ngaruroro River broke its banks between Roy's Hill and Fernhill and menaced Hastings. It also broke its banks south of Roy's Hill and flowed along a very old course. The Tutakuri River broke its banks and joined with floodwaters from the Ngaruroro River to flood Clive and Napier.
1917	13 Jun	Flooding estimated to be bigger than that of 1897 and nearly as bad as the 1867 flood, caused widespread damage in Napier. 187mm fell in 36 hours. At Morea, 522mm fell in four days, of which 319mm fell in 24 hours.
1924	11-12 Mar	Rainfall at Raddington was 510mm in 10 hours with 230mm falling in 2.75 hours. At Eskdale, 419mm was recorded in nine hours.
1936	1 Feb	A cyclonic storm resulted in extensive flooding throughout Hawke's Bay. In Napier 101mm fell in 24 hours.
1938	23-25 Apr	Esk Valley Floods. Severe flooding was widespread after three days of heavy rain, with exceptional falls in some areas. In three days, 610mm fell at Tutira, and a staggering 1,000mm at Puketitiri (with 590mm in one day).
1941	4 May	Very heavy rain fell on central and southern Hawke's Bay. At Porangahau 406mm fell in 24 hours, and the Porangahau River rose 14.3m above normal causing extensive flooding.
1948	13-14 May	In the Waioke River catchment 307mm fell in three days at Onepoto, and 260mm at Tui in the same period. The Waioke River rose to a record height and flooded buildings in the Waioke township.
1953	27-28 Jan	Exceptionally heavy rainfall over the Wairarapa, Elsthorpe and Manatitara area. In the Mangarapu Valley 549mm was registered in 24 hours, with the bulk of the fall occurring over six hours.
1974	15 Jun	Flooding in Napier from 157mm of rain in 24 hours.
1980	28 Dec	Rainfall at Whenuahana was recorded at 157mm in 48 hours. The Ngaruroro River breached the stopbank at Tairford resulting in serious flooding.
1988	7-10 Mar	Cyclone Bola was the most significant event in New Zealand since Cyclone Alison in the South Island in 1975. Bola caused considerable damage in the Gisborne and Waioke districts. The highest total rainfall for the three day period was 635mm recorded at Puketitiri.

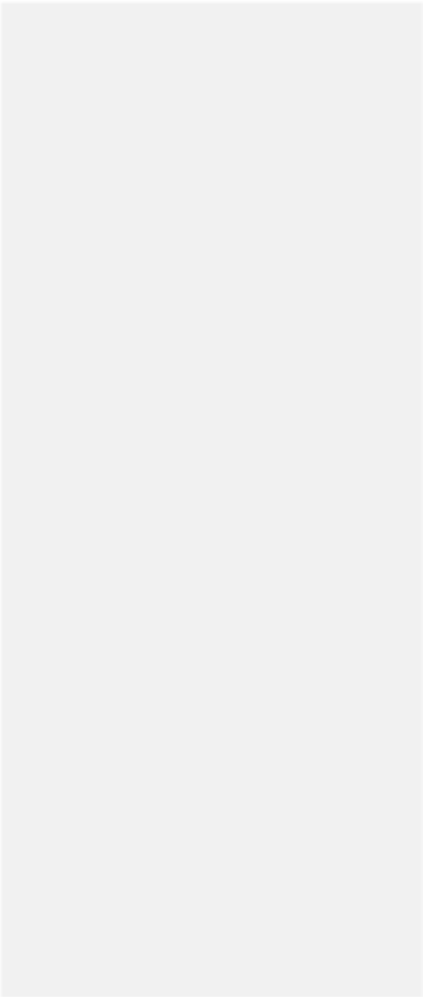
Year	Date	Event
1997	2-5 Jun	Waioke District declared a Civil Defence Emergency at 1900, terminated at 2100 next day. About 100 people evacuated at Nuhaka after flooding and power failure associated with storm.
2001	9 Dec	A chain of thunderstorms formed up the eastern coast of New Zealand, which resulted in downpours in Hawke's Bay. In Napier and Hastings, 50mm of rain fell in the hour before noon – close to the average for the entire month. It caused millions of dollars of damage from water and surface flooding and damaging some roofs and shop stock. It was cited as a 1/100-year rainfall event for Napier and Hastings city areas.
2002	10 Jan	An electrical storm formed near Waipukurau in the evening, travelled north and resulted in 77mm of rain in 90 minutes in Hastings and 70mm in Napier. The storm turned streets into rivers, damaged footpaths and properties, caused power cuts and flooded shops as stormwater systems were unable to cope with the second 1/100-year downpour in a month.
2004	15 Feb	Southern Hawke's Bay was hit with southerly winds and heavy rain. In 24 hours starting from around noon on Sunday, 15,228.5 mm fell at Sheg Rock, and 197 mm fell at Wallingford. The Tukituki River reached a 5-year level. Surface flooding occurred in Otane, Waipawa, Waipukurau, and Takapau. Porangahau area was worst hit, with roads, the cemetery, businesses and houses flooded, and around 6 families evacuated.
2004	18 Oct	A thunderstorm dumped several days' worth of rain on Napier in just a few hours – described as a 'rainbomb' producing a 1/50 year event – the rain quickly filled up drains, and then roads. However, the rain was so intense (up to 180mm of rain recorded in a few hours in the epicentre of Tamatea/Greenmeadows) the water then also flooded numerous properties, with 8 homes being flooded and firms in the Onekawa industrial area estimating losses in the millions.
2007	17 Jul	Several houses in Maraekakaho were evacuated. Army units evacuated 200 students and staff marooned at Pukekākaho School. Maraekakaho residents called it the worst flooding in 50 years.
2009	5 Oct	Heavy snow fell on the Napier Taupo Road closing the road and trapping over 100 people. The local 4WD Club and NZ Defence assisted police to ferry people to safety.
2011	27 Apr	Coastal flooding event affecting Haumoana, Te Awanga, Clifton and Waimarama where a local rain event flooded properties and closed roads. 9 people at Waimarama and the Te Awanga Motor Camp were evacuated and 6 homes were flooded.
2017		<u>Snow and flood event in Napier/Taupo road closed along with Taihape – Roadnet (Gentle Annie Road).</u>
2018	Mar	<u>Esk river floods and severe weather in June closing Napier-Taupo road after heavy rain caused slips and flooding.</u>

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Source: Hawke's Bay Civil Defence Emergency Management Group website and Hastings District Council
Records

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Item 6

Coastal Erosion and Inundation

Coastal erosion is the removal of material at the coast causing the shoreline to retreat landward. The processes include not only the work of the sea, but also that of the wind, migrating river mouths and tidal inlets, coastal landslides and tectonics. Coastal erosion can also be caused, or exacerbated, by man-made structures placed in the coastal environment, which interfere with natural coastal processes.

Coastal inundation is the flooding of low-lying coastal areas by seawater. This occurs when storm surges or heavy swells, often coinciding with high tides, overtop beach crests. Beach front properties can also suffer from direct wave attack causing damage and localised flooding. Low-lying areas, which experience coastal erosion, can also be at greater risk of coastal inundation as natural barriers are weakened.

Erosion has been causing damage to property in the Hastings District since at least the 1850's. In particular, concern has grown at Clive, Waimarama, Haumoana and Te Awanga. The following table describes the two major coastal inundation events affecting Clive and Haumoana in recent history.

Table 1117: Major Coastal Inundation Events Recorded in the Hastings District (to 2019)

Year	Date	Event
1974	Aug	Seawater flooded three hundred hectares of horticultural and urban land in East Clive. To prevent a recurrence a sea exclusion bank was constructed in 1976-77 along the coastal area. However, the shoreline continued to recede and erosion was accelerated by the Hastings sewer outfall constructed in 1979. By 1982 erosion had substantially decreased the ponding area between the beach berm and the sea exclusion bank and it was twice overtopped by the sea. The long-term vulnerability of the area was recognised and in 1985 a scheme was initiated to move the sea exclusion bank further inland.
2002	3 Apr	About 20 Haumoana residents had to leave their homes as the high seas threatened a dozen properties near the corner of East and Clifton Roads, with some properties receiving major structural damage. The rough seas destroyed fences, cracked doors and tossed up stones smashing windows.
2007	17 Jul	Previously damaged house lost in heavy swell at corner of East and Clifton Roads, Haumoana. <u>The Maraekakaho community was flooded in July 2007. A few houses were evacuated, while others were accessible only to residents.</u>
2008	8 Feb	Heavy swells of up to 6m, generated by the aftermath of cyclone Gene, pounded the coast and threatened beach front homes, with the wave level reaching homes opposite the Te Awanga Puti. Haumoana and Te Awanga homes sustained the most damage.

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2008 Jul	Three storms in a one-week period occurred, resulting in the Clifton Motor Camp losing some of its land when established pohutukawa trees and 2m of coast were washed away when high tide came in.
2010 24 May	High seas along Clifton shoreline undermined six to eight metres of land by the Marine Club and motor camp.
2019	<u>Cape Coast landslide causing serious injuries to two tourists and resulting in the closure of the coast walk to Cape Kidnappers.</u>

Source: Hawke's Bay Civil Defence Emergency Management Group website



Photo: High seas at Haumoana - April 2002
Source: Hawke's Bay Civil Defence Emergency Management Group

According to the 2014 report, the shoreline from Clive to Clifton has a net northerly drift of beach material resulting in significant coastal retreat. The long term shoreline retreat at Clifton Beach is on average 0.75m per year; Haumoana and Te Awanga 0.30m-0.70m per year; and Waimarama 0.13m per year.

With sea level rise predicted to accelerate over the next 100 years coastal erosion and inundation will continue to occur in Hawke's Bay, but the extent remains difficult to accurately predict. Extensive research has been carried out over the last 10 years resulting in an improved understanding of coastal processes acting along the Hawke's Bay coast. This has resulted in review of Hawke's Bay Regional Coastal Plan provisions, and has been updated in the review of the Hastings District Plan.

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Rural Wildfire

A wildfire is an unplanned fire. During periods of drought, the risk of rural wildfires increases. There have been numerous large rural fires in Hawke's Bay in the past.

Hawke's Bay has the second highest annual average summer temperature in New Zealand, with a summer average of 24°C, with an annual rainfall of 780mm/year. During periods of general, strong, west to north-west flow over the North Island, the winds across lowlands can be warm, dry winds and in extreme cases temperatures may be 27-40°C with a relative humidity of 8-30 percent.

Every year the Rural Fire Authorities in Hawke's Bay are required to fight large rural fires. The Hastings District is one of the largest in the North Island. Just over half of the District is under the jurisdiction of the Hastings District Council Rural Fire Authority. The remaining half of the District is under the jurisdictions of the Bay of Plenty Rural Fire District and the Department of Conservation Rural Fire Authority.

The graph below depicts the statistics of hectares burnt and number of fires for the Hastings District Council for the financial years 2014/15 to 2019/20 inclusive. The overall trend is consistent with the number of vegetation fires, there are two spikes in the fire damage to vegetation over this period. One was the Waimarama fire event in 2017.

Figure 4984: Vegetation Fire Statistics and Damage by Area (ha)



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Source: Regional Fire and Emergency NZ Report September 2021

Imposition of fire restrictions and total fire bans are mechanisms open to Rural Fire Authorities to minimise the risk of fire in the District under powers given to them under the Forest and Rural Fires Act 1977.

Restricted Fire Seasons were in place on 4 separate occasions between mid-2015 and mid-2019 (compared with 7 occasions over the last reporting period). These were from:

- December 2015 – April 2016
- October 2016 – March 2017
- November 2017 – March 2018
- November 2018 – March 2019

No data on a complete Total Fire Ban was received.

Indicator NH2: Area of Land Identified as 'Natural Hazards'

The Hastings District has land classified as being at risk to natural hazards. The following graph shows the total land area in each of the Natural Hazards in the Hastings District, where these are identified on the Proposed District Plan Maps.

Data from the follow hazard categories are included:

- Liquefaction Medium
- Liquefaction High
- Coastal Hazard Areas 1, 2 and 3
- Flood Risk Areas
- River Hazard Overlay
- Fault Line Avoidance Areas

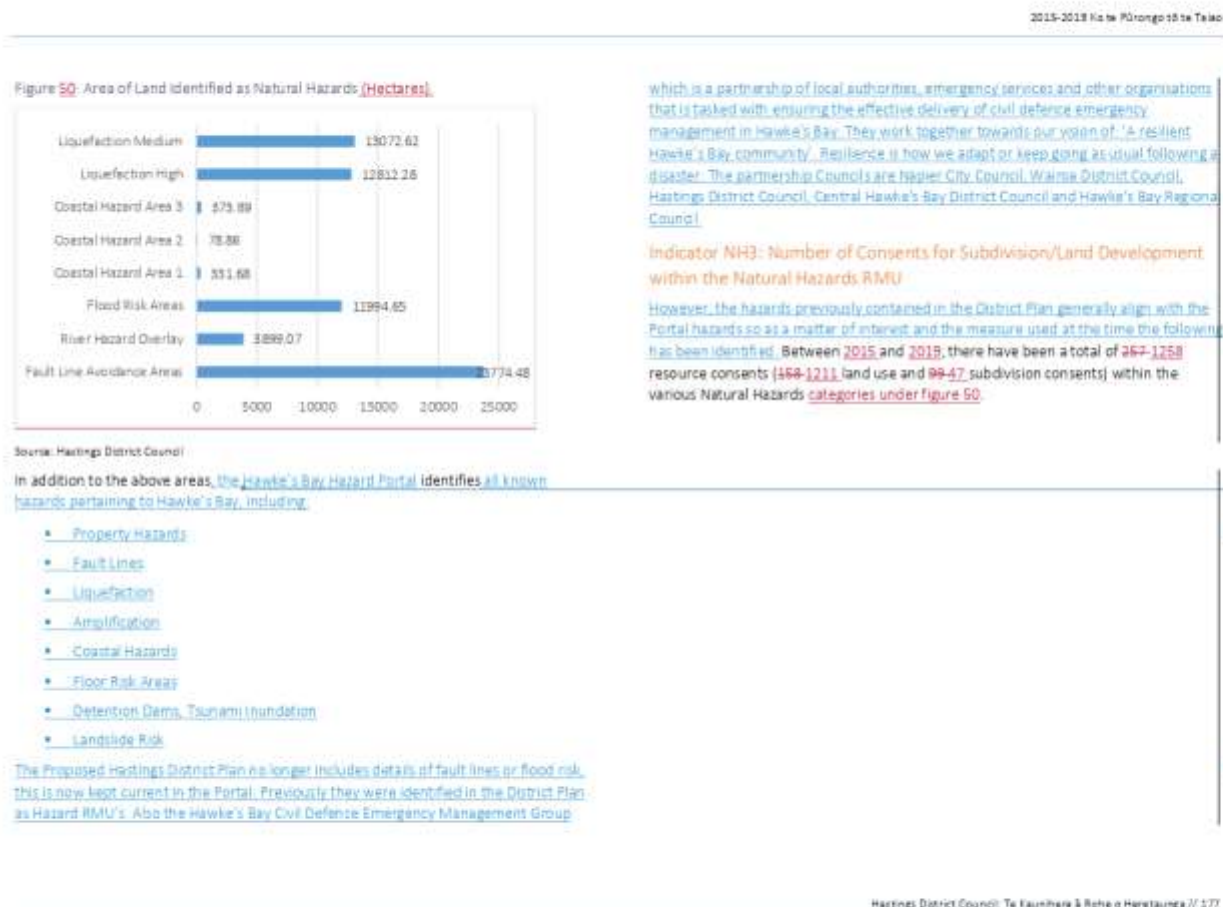
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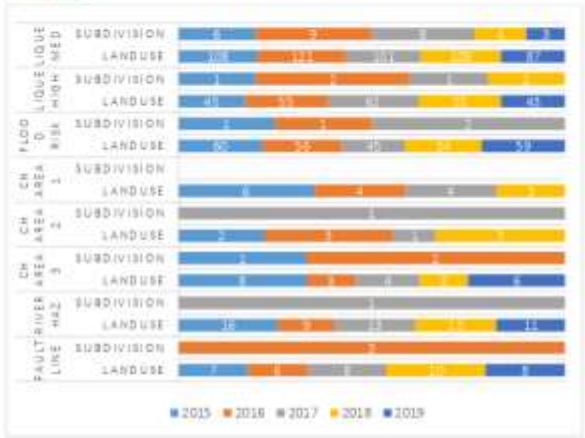
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2015-2019 Ka te Piranga ki te Taiao

Figure 5.188: Number of Land Use & Subdivision Consents within Natural Hazards RMUs (2015-2019)



Source: Hastings District Council

The number of resource consents within an identified Natural Hazards is five times more than the number of consents received for the previous reporting period. A possible reason for this is the new classifications which now includes medium and high liquefaction. The top three areas where consent was obtained were in the medium and high liquefaction area followed by flood risk areas. The area with the least number of consent was in the coastal hazard area 2 which by land area was smallest of the eight identified areas in being 78.86 hectares.

Please note that the number of consents does not reflect the number of consents required to establish within a natural hazard area, but is attached to a property when consent was applied for.

Indicator NH4: Building consents granted within Natural Hazards RMUs

The number of building consents granted in Natural Hazards RMU has increase due to the number of classifications for natural hazards. Liquefaction are two new fields were a majority of applications included high on medium liquefaction levels. As covered under indicator NH3. Please note that liquefaction is not required as part of this SoE report as consent for a site containing liquefaction can be addressed as part of the building consent. The inclusion of liquefaction builds a larger picture of other hazards that may be associated when developing.

The majority of building consents for new buildings were for non-habitable buildings and overall numbers were low. This suggests the demand for new dwellings in areas located within an identified Natural Hazard is relatively high given the inclusion of high and medium liquefaction.

Figure 5.264: Building Consents in Natural Hazards (2015-2019)



* Only building consents for new buildings are graphed above
Source: Hastings District Council

	2015-2018 Kaiake Pōroango iBite Teiao
<p>Hastings District suffers from a range of natural hazards related to weather and climate (such as major storm and flood events, coastal erosion and inundation events, and rural wildfires).</p> <p>Recording natural hazard events contributes to an understanding of how the presence of people and associated development can exacerbate the effects of such hazards on people, property and the natural environment. It may also, in the future, contribute to an understanding of the effects of climate change on the District over time.</p> <p>Approximately 1.6% of the Hastings District's land area is currently identified on the District Plan Maps as subject to Natural Hazards RMU. Approximately 90% of that is identified as River or Flooding RMU. Therefore Natural Hazards RMUs cover a relatively small part of the District. Identification and refinement of hazard prone areas is on-going.</p> <p>The number of resource consents within the Natural Hazards RMU generally rose over the period to 2008, peaking in 2007 at 44 (more than double the number for 2004), but has since dropped.</p> <p>Inundation of the coastal areas of Clifton and Te Awanga continues to be a significant risk or threat.</p>	
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Responses

For Community

- Consider the risk of natural hazard when purchasing a property or building a home e.g. flooding, coastal hazard and land instability risks
- Be aware of, and adhere to, fire restrictions when in force
- Have an emergency plan in place, and enough supplies to be able to support yourself in your home for at least 3 days in the event of a natural disaster.

For Council

- Monitor building consents and resource consents in current Flooding areas and also HBRC flooding areas
- Carefully manage development in coastal hazard areas with a view to avoiding development in the most at risk areas
- Review the Natural Hazards areas on the District Plan Maps to reflect continued research and improved flood modelling by Hawke's Bay Regional Council, identification of coastal hazard zones¹⁸⁸, and further areas of land instability risk as they become known.

¹⁸⁸ In February 2004, consultants Rankin and Taylor limited prepared a report for Hawke's Bay Regional Council which assessed coastal hazard risks for the Hawke's Bay coastline.

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Hazardous Substances

The Hastings District has a strong horticulture, viticulture and agricultural industry, each involving the use of various hazardous substances including herbicides, pesticides, and associated activities such as cool stores.

These substances, if not handled correctly, pose a significant hazard to people and communities within the District, as well as to the natural environment.

Uncontrolled release of hazardous substances into the environment has the potential to result in:

- Contamination of water, soil and air
- Short and long term damage to ecosystems
- Accumulation of persistent substances in the bodies of humans and animals; resulting in chronic and/or long term damage to their health
- Acute damage to human health through exposure to substances affecting skin, mucous membranes, respiratory and digestive systems
- Damage to the environment from fire or explosion events
- Damage to human health and property from fire or explosion events

The potential for environmental damage from spills is of particular concern where hazardous substances are stored or used next to streams, lakes, aquifers and other sensitive areas.

Indicators

The table below shows the indicators that are used to monitor hazardous substances in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.



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INDICATORS FOR HAZARDOUS SUBSTANCES

INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		Relevant Outcome Statements: <ul style="list-style-type: none">An environment that is appreciated, protected, and sustained for future generations.	Proposed District Plan (2019) (As amended by decisions): Section 29.1 (Hazardous Substances and Genetically Modified Organisms) <ul style="list-style-type: none">Appropriate precaution is taken in the management of hazardous substances over the Heretaunga Plains Unconfined AquiferActivities utilise hazardous substances where necessary for their operations, in appropriate locations
HS1: Number of Consents Involving Employment of the Hazardous Facility Screening Procedure	Pressure	Hazardous substances are a risk to the environment. To protect our environment and sustain it for future generations we need to minimise, manage and dispose of hazardous substances in a safe manner. Monitoring the number of activities requiring the employment of the hazardous facility screening procedure gives a good indication of what, where and the volume of hazardous substances in the District. It also gives an indication of the potential risks posed to the environment, and enables better protection for present and future generations.	
HS2: Number of Reported Incidents and Callouts to Hazardous Substances Spills	Pressure	The number of reported callouts to hazardous substance spills again indicates the potential risks posed to the environment and the need for controls.	

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Monitoring Information

Indicator H51: Number of Resource Consents Involving Employment of the Hazardous Facility Screening Procedure

The Hazardous Facility Screening Procedure (HFSP) was designed as a screening tool to assist Council in deciding the risks posed by the use and storage of hazardous substances. This procedure was originally designed by a consortium of District and Regional Councils and the Ministry for the Environment, and has been adopted and tailored to reflect the Hastings District context. This has changed where the use of Hazardous Facility Screening Procedure has not been used.

Between 2015 and 2019, there have been 6 sites in where the definition for Hazardous substances and Major Hazardous facility is used, resulting in a requirement for a resource consent application for the use or storage of hazardous substances.

These sites were located in:

- RMA20150107 Storage and dispensing of diesel exhaust;
- RMA20150405 Soil disturbance on a hail site;
- RMA20150421 LPG cylinder storage increase;
- RMA20160175 Aerosol packing and storage;
- RMA20170399 Soil disturbance on hail site
- RMA20180217 Self-service fuel stop and storage tank

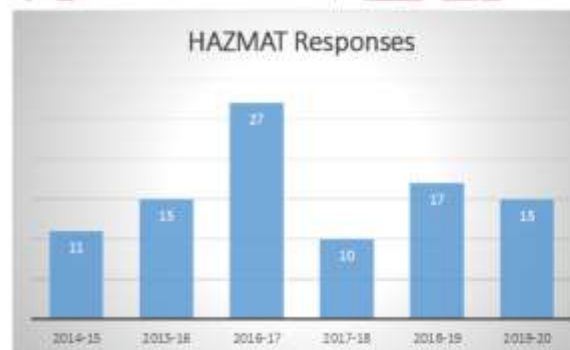
Groundwater in the Heretaunga Plains Unconfined Aquifer (the main groundwater resource for people living on and adjacent to the Heretaunga Plains) is vulnerable to contamination from the effects of activities on the surface. This is because there is no impermeable surface sediment which would prevent or minimise the downward flow of contaminants. None of the 4 sites listed above were situated over the Heretaunga Plains Unconfined Aquifer.

There have not been any specific resource consents that required HFSP to be employed between 2009 and 2014.

Indicator H52: Number of Reported Incidents and Callouts to Hazardous Substances Spills

The number of reported spills involving hazardous substances has fluctuated slightly over the last three years, but the number of reported incidents per year has dropped from an average of 40 over the last reporting period to 10.

Figure 5345: Hazardous Substances Incidents & Spills (2014/15 to 2019/20)



Source: Fire and Emergency New Zealand

Hazardous substance spills are dealt with by the Fire and Emergency New Zealand (FENZ) and/or Hawke's Bay Regional Council (HBRC). Apart from the 2016-17 spike, the number of responses have been consistent.

The Environmental Protection Agency (EPA) and WorkSafe NZ are responsible for the collection and collation of information relating to hazardous substance events.

Between 2004 and 2008, there have been 4 sites in which the Hazardous Facility Screening Procedure was used, resulting in a requirement for a resource consent to use

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re-store hazardous substances. There were no specific resource consents that used the HFSR in 2009-2014.

The number of spills involving hazardous substances reported to Hastings District Council's Emergency Management Team has fluctuated over the last reporting period, but averaged about 40 reported incidents per year. This has dropped to an average of 10. However, as hazardous substance spills are now dealt with by the New Zealand Fire Service and/or Hawke's Bay Regional Council, it is likely that there are many incidents which HOC's Emergency Management Team are not involved in.

Responses

For Community

- Only use hazardous substances when absolutely necessary
- If you are using or storing any hazardous substances make sure that they are being used and stored in accordance with appropriate guidelines and regulations to avoid contaminating the land, air or water
- Unwanted hazardous substances should not be disposed of with general rubbish – the annual HazMobile Collection is a safe and easy way to dispose of such waste
- If you see or smell any chemical or oil spills, call the Hawke's Bay Regional Council Pollution Hotline Phone: (0800) 108 838 and tell the Pollution Response Team about it, or the New Zealand Fire Service

For Council

- Ensure Council staff are trained in the use of the Hazardous Facility Screening Procedure
- Ensure Council's Emergency Management staff continue to be suitably trained and maintain readiness to respond to emergency callouts involving hazardous substance spills
- Continue to work with EPA, WorkSafe NZ, the New Zealand Fire Service and Hawke's Bay Regional Council's Pollution Response Team to ensure appropriate response to incidents involving hazardous substance spills.

















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Sustainable Waste Management

THE ISSUE AT A GLANCE

INDICATOR	STATE 2009-2014	STATE 2015-2019	SUMMARY
Solid Waste			
SW1 Environmental performance of Omerunui Landfill			HBRC compliance monitoring reports indicated that the landfill generally complied with all its conditions of consent.
SW2 Volume of solid waste disposed			The volume of <u>total</u> solid waste disposed of to the landfill has <u>increase over this period (2015-2019) by 22%, this is reflective of the economic growth in the region over the same period.</u>
SW3 Composition of solid waste disposed to landfill			While a large portion of material in the landfill is recyclable or compostable (40%), this has <u>fluctuated but is an overall improvement</u> since the last report.
SW4 Fly-tipping incidents in the District			<u>The number of illegal dumping in the Rural and urban areas has been increasing from a total of 394 in 2011-12 1760 for the 2018-20 period. 33.01% of complaints were in the Rural.</u>
SW5 Volume of recycling			The volume of recycling collected via Council services has been steady over the current reporting period.
SW6 Residents' satisfaction with provision of recycling facilities			High satisfaction with provision of recycling facilities, rural facilities have been installed across the district over the reporting period. <u>According to the public voice survey, 57% of the respondents were fairly or very satisfied with the District's recycling facilities.</u>
Hazardous Waste			
HW1 Volume of hazardous waste disposed			HaMobile <u>provided annually and collects on average 20 tonnes of hazardous waste. Volumes remain steady during the current reporting period.</u>

Section 31 of the RMA gives the District Council the function of managing and controlling the effects of the use, development, or protection of land, and of particular relevance to sustainable waste management, this includes for the purpose of:

- The prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances (which would include hazardous waste); and
- The prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land.

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Solid Waste

Waste is materials and energy which have no further use and are released into the environment as a means of disposal. Waste can be in solid, liquid or gaseous form. This section looks at solid waste.

It is in the community's best interest to encourage residents to be more resourceful, diverting as much unnecessary waste as possible to prolong Oamaruui Landfill's life.

The Waste Minimisation Act defines 'waste' as "anything disposed of or discarded".

Most of the things we do, buy and consume generate some form of waste. If not managed properly, it can have a negative impact on people's well-being and the health of the environment. Reducing these impacts can be achieved by reusing items rather than throwing them away, and through recycling. The Council actively encourages as much waste reduction and recycling as possible and has a duty to manage waste in a way that minimises any effects on the District's land, air and water resources.

The Hastings District is served by one landfill, known as Oamaruui Landfill, which is situated at Oamaruui Road and is jointly owned by the Hastings District and Napier City Councils. It is only open to commercial operators/contractors with a Waste Disposal Licence (it is not open to the general public). There are also a small number of private cleanfills in the District.

Landfills produce leachate and greenhouse gases as materials break down slowly. Like most modern landfills, Oamaruui is constantly managing leachate and greenhouse gases, and this will continue well after closure.

Oamaruui landfill has highly engineered and successful systems to capture liquids and gases produced by the waste. However, Hastings District and Napier City Councils believe it is better to divert these materials from Oamaruui in the first place rather than managing (and paying for) them at the landfill.

Eventually, landfills reach capacity and a new landfill is needed. This is a costly process and increases the area over which contamination can occur. The goal is to reduce the amount of waste going to the landfill and to manage the disposal of waste so that the effects on the environment are minimal.

In 2018 Hastings District and Napier City Councils adopted a new Joint Waste Management and Minimisation Plan which sets out the actions that both Councils will undertake to manage waste and resource efficiency across the region.



Photo: Oamaruui Landfill
Source: Napier City Council

2015-2019 Ka te Pōrangā tā te Tāke

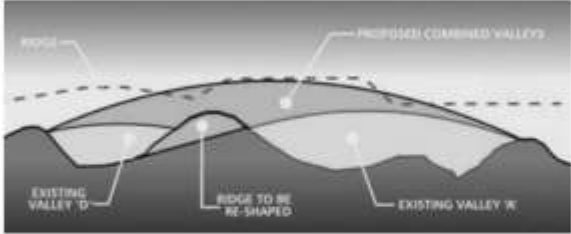
Indicators

The table below shows the indicators that are used to monitor solid waste in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.

INDICATORS FOR SOLID WASTE

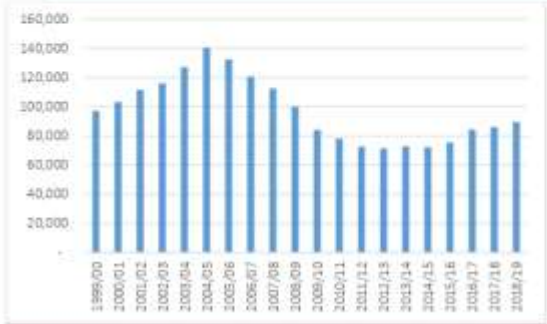
INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
		Relevant Outcome Statements: <ul style="list-style-type: none"> An environment that is appreciated, protected and sustained for future generations. Hawke's Bay is clean, green and pollution free. 	NIL
SW1	Environmental Performance of Otarunui Landfill	Pressure	Monitoring the quality of the environment (in this case water) surrounding a landfill shows the actual impact (if any) that the leachate from waste disposal is having on the environment.
SW2	Volume of Solid Waste Disposed	Pressure	The generation and disposal of solid waste puts pressure on land, water and air as wastes break down and produce contaminants that can enter the environment. Waste production over many years can result in the accumulation of pollution in the land and water surrounding the landfill. The risk associated with these contaminants are mitigated and managed via the engineered aspect of the site.
SW3	Composition of Solid Waste Disposed to Landfill	Pressure	Some types of waste have greater effects on the environment than others (such as organic waste). Understanding the types of waste are being disposed of at the Landfill provides information to assist Council implement ways to reduce certain types of waste to further protect the environment.
SW4	Ry-tipping incidents in the District	State	Ry-tipping is a major environmental issue and monitoring the number of incidents provides an indication of the level of waste disposed of incorrectly and will assist Council to find ways of reducing the problem.

SW5	Volume of Recycling	Pressure	Recycling reduces the amount of waste being disposed to the landfill (it's a 'reuse' aspect of waste management).
SW6	Residents' Satisfaction with Provision of Recycling Facilities	State	Monitoring residents' satisfaction with recycling facilities is useful to identify whether there is a need to improve or expand this service.

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<p>Monitoring Information</p> <p>Indicator SW1: Environmental Performance of Omarunui Landfill</p> <p>The Omarunui Landfill comprises of four valleys identified as suitable for refuse disposal. Area A received waste between 1988-2007 and is now closed. Area D has been operational from 2007 and <u>has an estimated 4 years of capacity remaining. The remaining landfill space at Omarunui Landfill is expected to serve the Hastings and Napier communities for 50+ years beyond 2025.</u></p> <p>The life expectancy of the landfill depends on the amount of waste being received. Reducing the amount of waste going to the landfill means the life expectancy of the facility increases accordingly. The longer the landfill lasts, the less impact our waste disposal will have on the environment, through postponing the need for another waste disposal facility <u>and reducing the amount of pollutants produced.</u></p> <p>The Omarunui Landfill is a fully contained municipal landfill, meaning nothing should leave the site by way of pollution. Leachate is collected and re-circulated and methane gas is turned into electricity to power approximately 1000 homes. The Landfill is accredited with an ISO9000:2001 environmental management system.</p> <p>Omarunui Landfill prescribes to best international practice and construction of <u>valley Area D</u> (the currently active part of the landfill) utilised a three liner system using: clay, Geosynthetic liner and HDPE plastic liner.</p> <p>The following images show the final layout of the Omarunui Landfill in 2025.</p> 	<p>Source: Napier City Council</p> <p>Hastings District Council and Napier City Council hold a number of resource consents from Hawke's Bay Regional Council (HBRC), associated with the operation of the Omarunui Landfill:</p> <ul style="list-style-type: none">• DP040122A – to discharge odour, landfill gas and dust to air;• DP040120La – to discharge leachate and waste from landfill to land; and• DP040121W – to discharge stormwater to water via stormwater retention ponds. <p>HBRC compliance monitoring reports for the 2014/15 year indicated that the landfill generally complied with all its conditions of consent.</p> <p>Indicator SW2: Volume of Solid Waste Disposed</p> <p>Most of the waste that comes to the landfill is from the commercial sector and the refuse transfer stations (RTSs). The two refuse transfer stations in the Hastings District are Blackbridge RTS on Mill Road, Clive, and Henderson Rd RTS in Hastings.</p> <p>The following graph shows the <u>total</u> tonnage of solid waste received at the Omarunui Landfill (being the combined tonnage of waste from the refuse transfer stations, commercial waste operators and industrial waste sources from both Napier City and Hastings District).</p>
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Figure 5.486: Volume of Solid Waste to Refuse Transfer Stations (1999/00 – 2018/19)



Source: Hastings District Council

The results of this indicator show the fluctuating trend of waste being sent to landfill which is also indicative of economic prosperity in the region and changes to legislation. The largest portion of waste to landfill was Commercial and industrial waste which is outside the control of Council services. The Joint Waste Management and Minimisation Plan identified opportunities for further consideration to reduce the volume of commercial waste entering landfill.

Indicator SW3: Composition of Solid Waste Disposed to Landfill

Using the Ministry for the Environment published Solid Waste Analysis Protocol Solid Waste Analysis Protocol (SWAP) surveys are carried out at the Omarunui Landfill and each refuse transfer station every third year. The first SWAP survey was carried out in 2007 for Hastings District and Napier City Councils⁴⁴. Surveys have been undertaken in 2009, 2012, 2016 and 2019. The survey report contains detailed information on composition resulting from both a visual and 'sort and weigh' audit.

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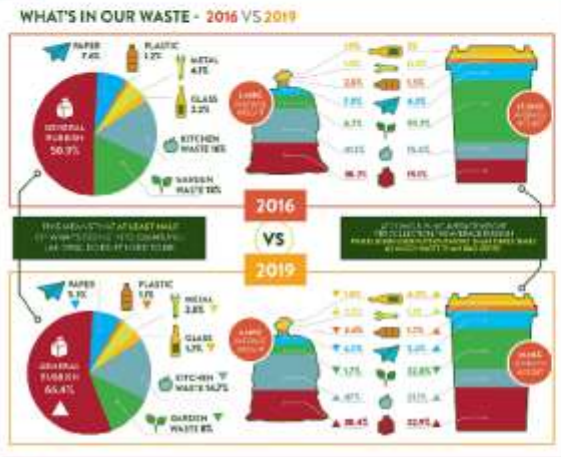
⁴⁴ Survey of Solid Waste in Hawke's Bay, March 2002, Waste Net Consulting

Figure 55: Composition of Overall Waste to Omarunui Landfill (2016-2019)



Source: Hastings District Council

Figure 56: Composition comparison of waste streams to Omarunui Landfill (2016 and 2019)



Source: Hastings District Council

In 2016, Organic material was the largest single component of the overall waste stream being disposed of at Omarunui Landfill, comprising 40% of the total. Paper, plastics, and timber were all present in similar proportions to each other in the overall waste, ranging from 9-12% of the total by weight.

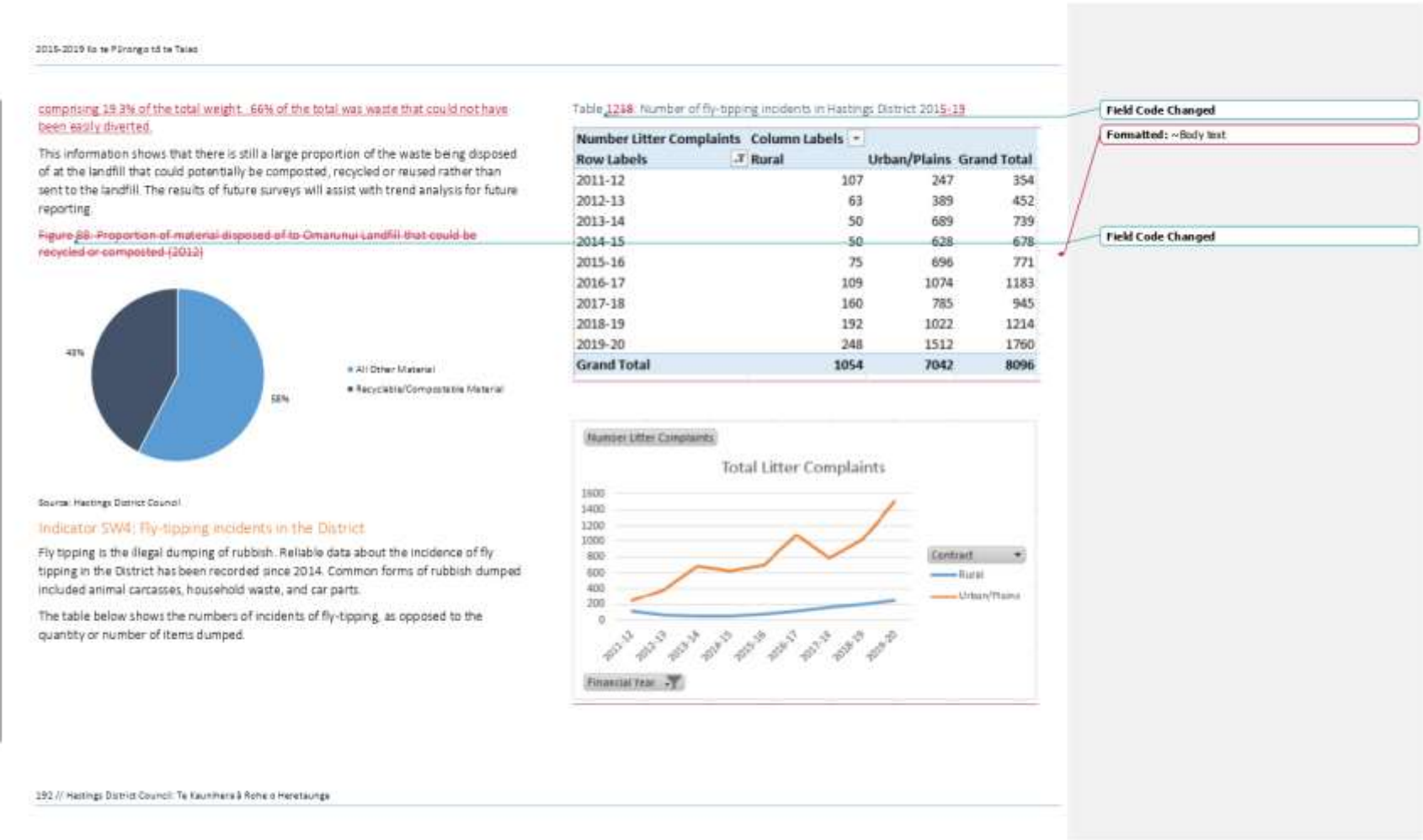
Approximately 15% of waste being disposed of at Omarunui Landfill was recyclable and 34% was compostable. In total, 49% of the waste could have been diverted from landfill disposal.

In 2019, Plastics was the largest component of the general waste stream to landfill, comprising 22.3% of the total. Organic material was the second largest component,

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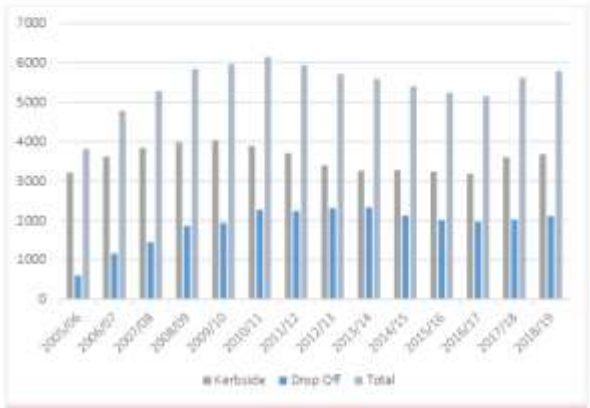




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2015-2019 Ko te Piranga ki te Taka



Source: Hastings District Council



Hazardous Waste

Hazardous waste is waste in solid, liquid or gaseous form that is toxic. This includes things such as paints, solvents, garden and household chemicals, petrol, oil and diesel, batteries, gas cylinders and light bulbs.

Hazardous waste can be dangerous at every stage of its 'life'. It can cause fire or toxic fumes, can be poisonous, and can leak and contaminate the soil or groundwater.

Hazardous waste can have significant impacts on the environment if not disposed of properly, and needs special disposal facilities to prevent it from contaminating the environment. If it ends up in our landfill, it could pollute our environment.

Indicators:

The table below shows the indicators that are used to monitor hazardous waste in the District. These indicators are also used to inform other monitoring programmes for the District, such as Community Outcomes Monitoring and monitoring achievement of the anticipated outcomes in the Hastings District Plan, as shown below.

INDICATORS FOR HAZARDOUS WASTE			
INDICATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES
		Relevant Outcome Statements: <ul style="list-style-type: none">An environment that is appreciated, protected, and sustained for future generations.Hastings Bay is clean, green and pollution free.	Operative District Plan Section 3.3.3.3 Hazardous Substances: <ul style="list-style-type: none">Appropriate siting and control of hazardous facilities.Avoidance of unacceptable risk to the community and the environment from the use, storage and transport of hazardous substances.A reduction in the number of accidents and the extent of adverse environmental effects due to the release of substances stored and used at hazardous facilities.Adoption of better site management and operational practices.Avoidance of contamination of the natural environment from facilities storing and using hazardous substances.Improved community and industry awareness of risks posed by activities using, storing or transporting hazardous substances. Proposed District Plan (2015) (As amended by decisional fit,
HW1, Volume of Hazardous Waste Disposed	Pressure		Hazardous waste is very toxic to the environment. To protect our environment and sustain it for future generations we need to minimise any contamination from hazardous waste by managing and disposing of it in a safe manner.

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Monitoring Information

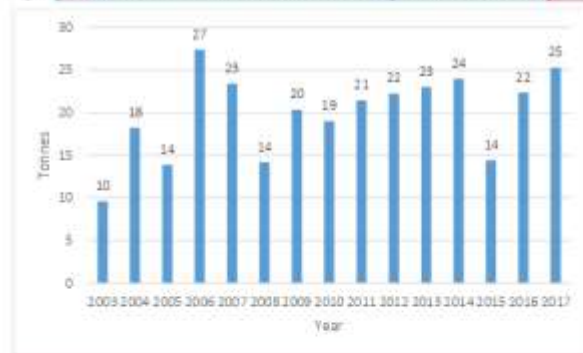
Indicator HW1: Volume of Hazardous Waste Disposed

Currently, there is no comprehensive data on the volume of hazardous waste disposed of in the District, as there are numerous avenues for its disposal. That does not mean there is not significant hazardous waste being generated. For instance, Council recovers an average of 12 tonnes of oil from transfer stations per annum. The volume of waste collected through the HazMobile is also a good indicator.

The HazMobile is a concept established by the former Auckland Regional Council and brought to Hawke's Bay. It's a free service for householders provided by the Hawke's Bay Regional Council, Hastings District Council, and Napier City Council.

The HazMobile stations itself in a carpark in Hastings or Napier once a year so that householders can dispose of their hazardous wastes – for example old paints, waste oil, batteries and household and garden chemicals – safely.

Figure 5992: Volume of Hazardous Waste Collected through HazMobile (2003-2017)



Source: Hastings District Council

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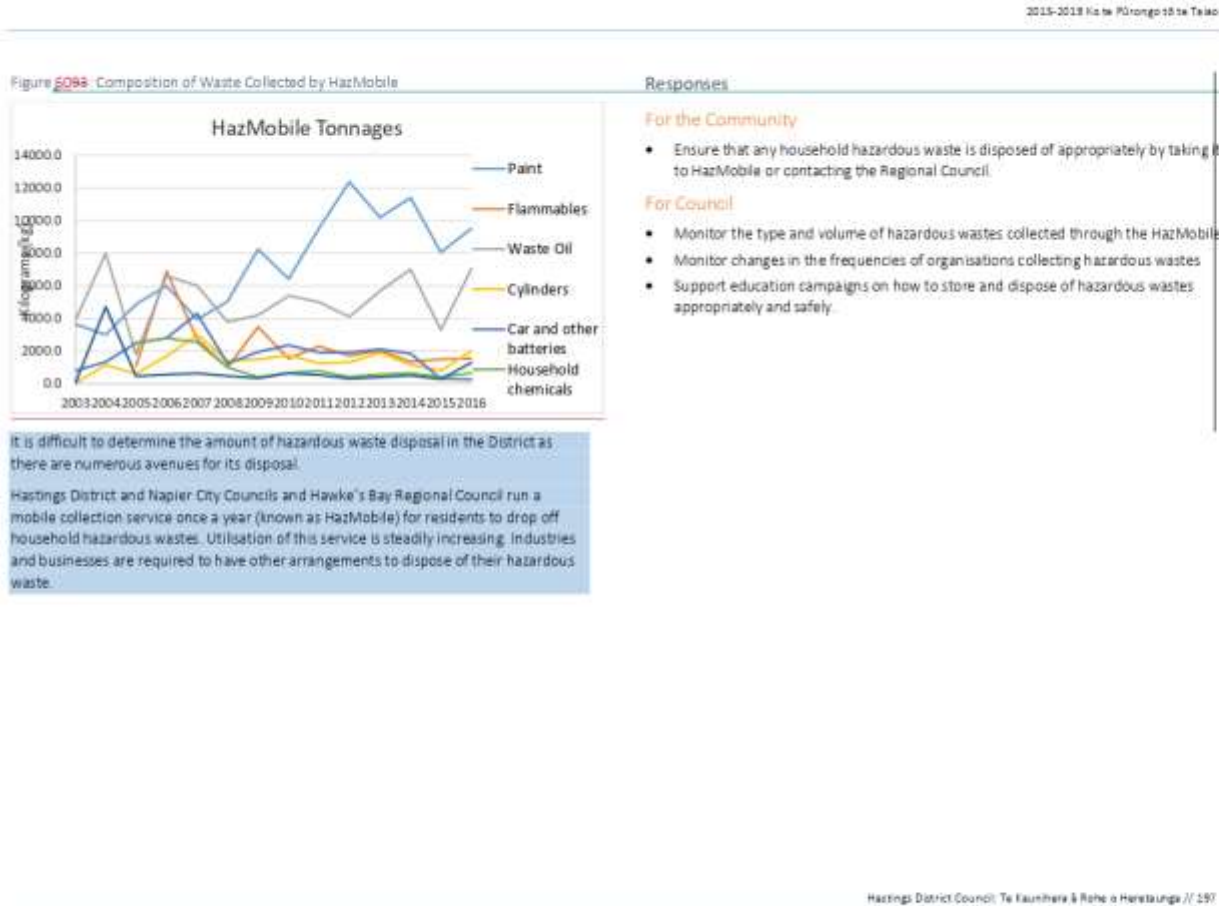
The previous graph shows the volume of hazardous waste collected through HazMobile from 2003 to 2014 for the Region, and shows that the volume of hazardous waste has trended upwards, peaking in 2006 when 27 tonnes of hazardous waste was collected across the Hawke's Bay Region.

The steady participation of HazMobile suggests that Hastings residents are becoming increasingly aware of the service and making use of it to dispose of common household hazardous waste.

Industries and businesses within the District are required to have other arrangements to dispose of their hazardous waste. This is usually with the supplier and therefore no information is available on the amounts being used or disposed.

Take back schemes such as the 'Resene Paintwise' programme (a product stewardship programme which recycles old paint) are accounting for a percentage, as is the Regional Council's Agricultural Chemical collection which services the District's farms twice yearly.

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Contaminated Sites

Contaminated sites are properties or areas of land or soil where hazardous substances are present at levels above background levels and where they are likely to pose an immediate or long-term risk to human health or the environment.

This is usually from activities that have been, or are being, undertaken on sites that use chemicals and toxic substances, such as industries or some forms of horticulture. As well as endangering the health of people, animals and the environment generally, these substances also limit the future use of land. While a few sites are known to the Council, there are likely to be a number of sites that are unknown or have yet to be investigated. The Council is continuing to the work with Hawke's Bay Regional Council to identify, categorise, and where necessary, work with the site owner to remediate sites as they are identified.

In 2011, the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health was introduced (NES Soils). This requires any piece of land which has contained a "HAIL" activity (Hazardous Activities and Industries List) to address the NES when subdividing, or changing use. The NES requirements are more stringent than Operative District Plan provisions and therefore, the previous data presented under this indicator will be obsolete.

Responses

For Council

- Continue to work with the Hawke's Bay Regional Council and landowners to identify and appropriately manage contaminated sites in the District.
- [Hawke's Bay Regional Council have a register of contaminated sites.](#)
- Draft new indicators that reflect the changes to the way contaminated sites are managed.

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