

Te Hui o Te Kaunihera ā-Rohe o Heretaunga Hastings District Council

**Hastings District Rural Community Board Meeting** 

# Kaupapataka

# Open Attachments Under Separate Cover

Te Rā Hui:

Meeting date:

Monday, 14 February 2022

Te Wā:

Time:

2.00pm

**Council Chamber** 

**Ground Floor** 

*Te Wāhi:* Venue:

**Civic Administration Building** 

**Lyndon Road East** 

**Hastings** 



ITEM SUBJECT PAGE

# RURAL COMMUNITY BOARD MEETING 14 FEBRUARY 2022 - SEPARATE ATTACHMENTS TO AGENDA ITEMS 4 AND 7

Attachment 1: Agenda Item 4 - State of the Environment 2015-2019 - FINAL

SOE Report Full Doc (PDF) (JG)

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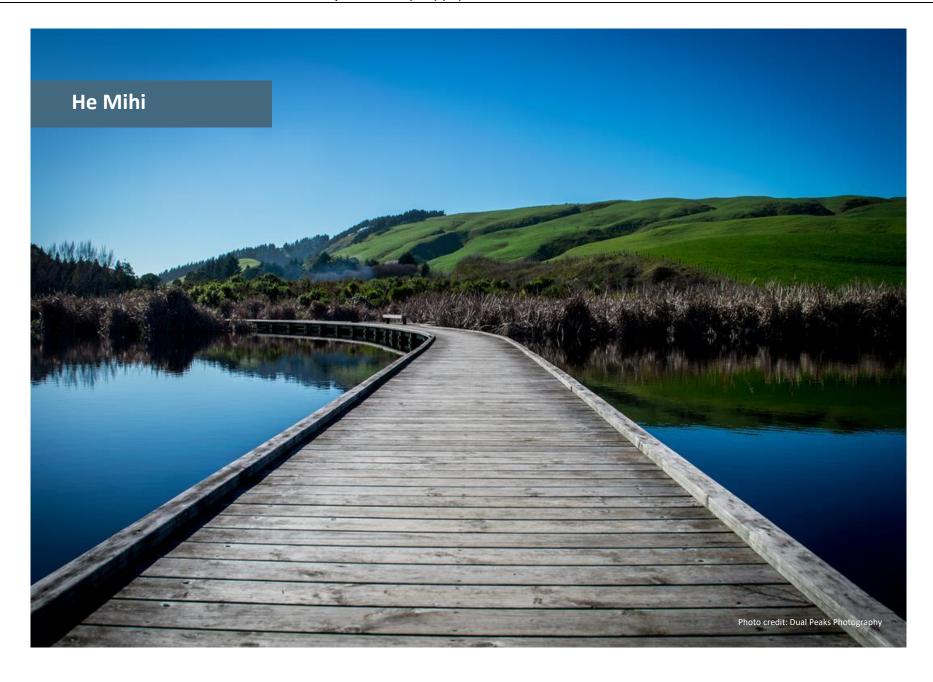
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Kei ngā mana, kei ngā reo, kei ngā pari kārangaranga o tēnā pito, o tēnā takiwā, o tēnā hapū o te rohe whānui o Heretaunga, anei ngā kupu whakamiha ki a koutou katoa!

E tika ana kia tukuna atu ngā whakaaro ki a rātau mā ko ngā rau-o-piopio kua purea atu e ngā hau maiangi, e ngā hau pūkerikeri ki tua o te ārai. Kāti rātau te tira mātai pō ki a rātau, waiho ake ko tātau te tira mātai 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 kui 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 Taiwhenua o te takiwā nei, anei anō te maioha ki a koutou, otirā, ki a tātau katoa.

Otirā, Heretaunga-ara-rau, Heretaunga-haukū-nui, Heretaunga-hāaro-te-kāhu, Heretaunga-raorao-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!

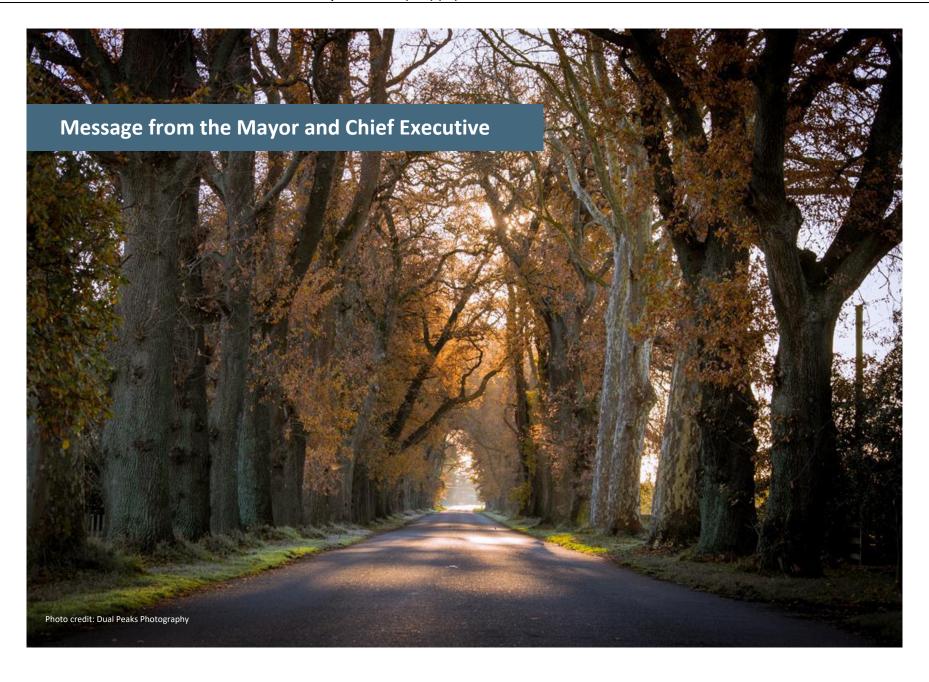
It is important that in moving forward, we acknowledge the past and so we remember our loved ones across the district who have passed and whose legacies we uphold today.

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 Taiwhenua, greetings and acknowledgements to you.

And so it is with pride that we acknowledge Heretaunga of its converging Arcadian pathways, Heretaunga of its lifegiving dews 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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# 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.

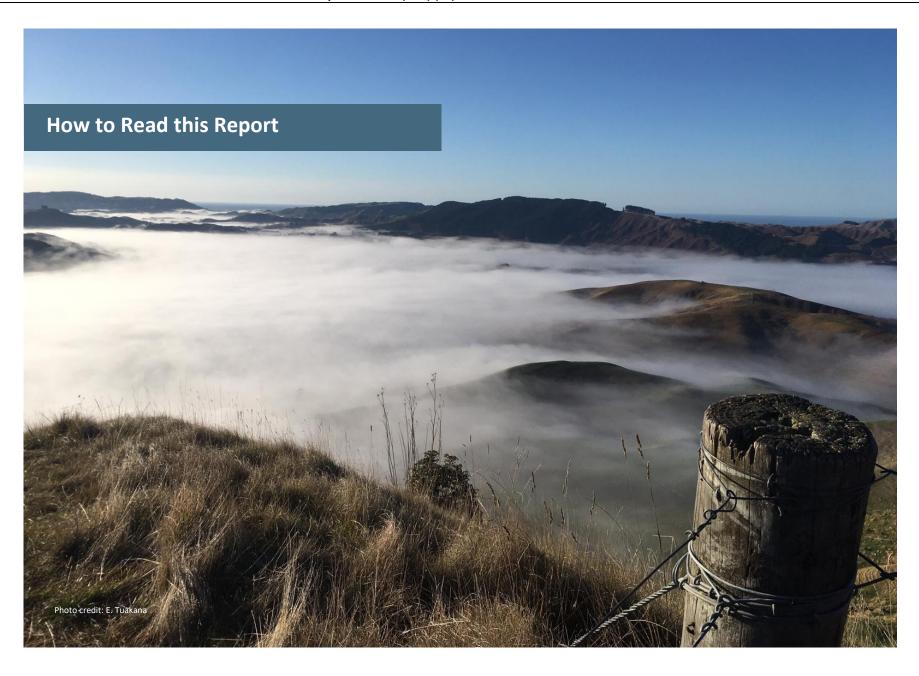
We all have a part to play in safeguarding our environment for future generations. We see this report as a tool to help those involved in that protection and enhancement through the preparation of plans and strategies that will help our environment in the future.

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



Her Worship the Mayor, Sandra Hazlehurst & Chief Executive, Nigel Bickle

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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 for each of the five report sections:

- 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 future State of the Environment Reports will evolve and may incorporate additional topics relevant to the District's environment.

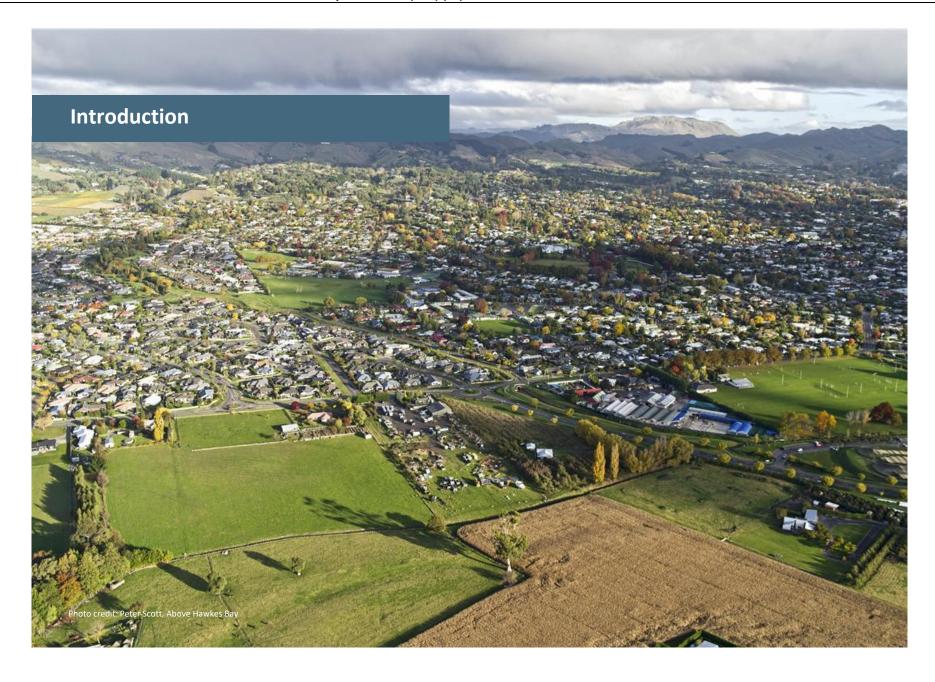
Each section commences with a summary table which provides a quick glance at the indicators for that topic and a summary of the indicators over the reporting period.

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.



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### 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;
- Subsequently determining what supporting data is available and being collected by Hastings District Council.

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.

Figure 1: 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.

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

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/

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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. Like the previous State of the Environment Report, the DPSIR model has again been adopted for this report. This assists with continuity across reporting years.

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?<sup>1</sup>

'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 Force <sup>2</sup>	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).
Response <sup>3</sup>	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, 2003).

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.

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<sup>&</sup>lt;sup>1</sup> Environment New Zealand 2007', 2007, Ministry for the Environment.

<sup>&</sup>lt;sup>2</sup> 'Driving force' indicators for Hastings District are generally found in the following section of this Report – 'Snapshot of the Hastings District and Its People'.

<sup>3 &#</sup>x27;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.



### **Our District**

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.

The District covers a land area of 522,639 hectares (5,226 km<sup>2</sup>). The Pacific Ocean is to the east, and our six neighbouring territorial authorities share the remaining boundaries (see figure 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 Whakatū, as well as a number of rural service 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 hapū of Ngāti Kahungunu have always valued and acknowledged the bounty of the land as a taonga — 'Heretaunga haukū nui'. The fertile soils, aquifers, waterways and lifegiving dew (haukū nui) combine, providing an environment rich for cultivation, providing manaaki for 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 Tukituki, Ngaruroro, Tūtaekurī and Esk Rivers and their tributaries. Our landscape is also dominated by the presence of the Heretaunga Plains and surrounding hills, Te Mata Peak, Kahurānaki, Mt Erin – Kohinerākau / Kōhinurākau, along with the Lake Tūtira basin and significant wetlands. These features are also embedded in the oral traditions of 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.

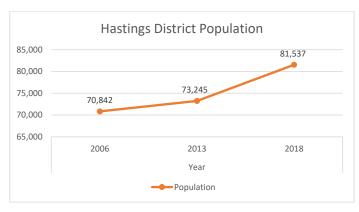
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# Our People

### **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 3: Hastings District Population 2006 – 2018



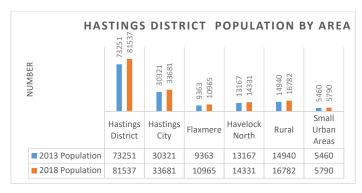
Source: Statistics New Zealand

This increase in population was greatest between Census 2006 and Census 2018, when the population increased by 10,695 people or 14.03%.

From the 67 Districts in New Zealand, Hastings District's population ranks 10<sup>th</sup> 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 smaller urban areas, such as Clive, Whakatū, and Haumoana, and rural areas of the District.

Figure 4: 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 (2.3% and 0.45% increase, respectively). The portion of the population residing in Havelock North between 2013 and 2018 grew by 0.9%.

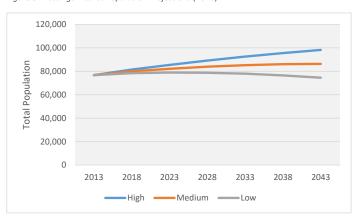
The medium series for population projections<sup>4</sup> suggest that our District will grow to 86,000 people by the year 2038. This equates to an increase of 6% (6,000 people) over the 20 years from 2018 to 2038. However, under the high series

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<sup>4</sup> Statistics New Zealand adopt a series of projections based on varying fertility, mortality and migration rates – low, medium and high series projections.

projections, we could experience a 17.9% increase over that same period (an additional 14,500 people).

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	98,200
Medium	76,700	80,000	82,100	83,900	85,200	86,000	86,300
Low	76,700	78,400	78,900	78,700	77,900	76,500	74,500

Source: Stats New Zealand

Overall, 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 Māori (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 22,269 Māori 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 Māori that is significantly higher than the national average. This is particularly evident in the urban area of Flaxmere where those identifying as Māori make up close to half of the population.

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



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# **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 resources of the Heretaunga Plains and are located primarily on the fertile soils of the Heretaunga Plains that surround Hastings City.

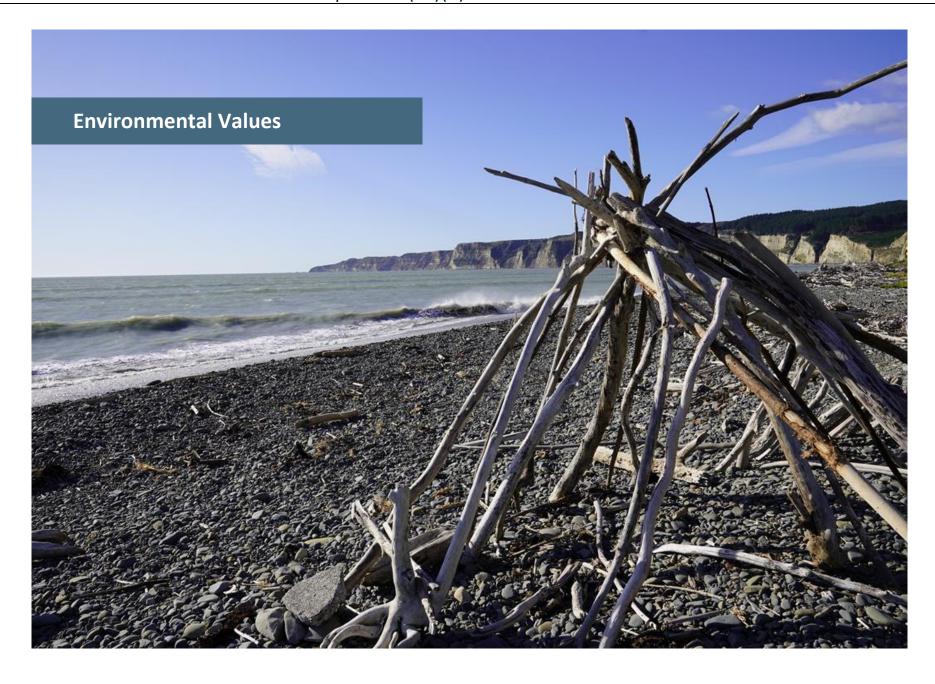
Given the importance of these land uses to the District's economy, it is necessary to manage and protect the soil resource so it is available for horticulture and viticulture activities that depend on it.

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.



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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"5. 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 future<sup>6</sup>.



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

Sustainable Communities: People Places & Prosperity', 2005, Office of the Deputy Prime Minister (ODPM), HM Government, London.

# 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, 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, taiwhenua, Post Settlement Governance Entities (PSGEs) including Ngāti Kahungunu Iwi 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 tangata 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 Kökiri 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.
- 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:

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- Governance and relationships;
- o Culture and Identity;
- o Prosperity and Wellbeing; and,
- o Resources and Infrastructure.
- Following a Māori Joint Committee workshop on April 2018 and a presentation
  by the Pou Ahurea Team on the framework, the framework was revamped and
  refreshed for the 2019 year and beyond. Emphasis of this review centred on
  making the framework more transparent and culturally bound to mana
  whenua aspirations and narratives.
- 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 partially operative 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 Councilor's 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 (cultural values), private property rights,
  the Resource Management Act and mana whenua aspirations in a balanced
  way.
- 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 Pā hapū communities and is embarking on a journey with the Maungaharuru Tangitū Trust in regard to a hapū environmental management or a Mana Whakahono-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:
  - Assist and coordinate Council in thinning out the [overgrown] harakeke and cleaning the site;
  - o 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 lwi Incorporated (NKII), Te Rūnanganui o Heretaunga (TROH), Ngā Whenua Rāhui (NWR), and Council officers (HDC);
  - Produce a Kaitiakitanga Booklet (contact database, history of the Rene Orchiston collection, tikanga, 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 lwi 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 partnership relationships and to reinforce Council's responsiveness to mana whenua kaupapa.

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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 haukūnui, Heretaunga ararau, Heretaunga hāro-o-te- kāhu, Heretaunga haumako, Heretaunga ringahora, Heretaunga takoto noa, nei te Kaunihera-ā-Rohe o Heretaunga e mihi ake, e mihi ake, e mihi ake!



Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /22



# Summary of the State of the Environment

### Key Symbolising the State of the Resource



baseline information from which future trends will be measured



marked improvement in the state of the resource



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



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 ā-Rohe o Heretaunga /24

State of the Environment Issue	Overall State 2009-2014	Overall State 2015-2019	Summary	Indicator Reference(s)	Related Indicators
USTAINABLE LAND USE					
Land Use	SASELINE	STEADY	The district's land cover is divided as follows:  93% grassland/vegetation cover  6% crops/orchards/vineyard cover  1% built up urban land cover  The Rural Zone makes up 93% of the District, the Plains Production Zone ~6%, and urban zones make up ~1%.	LU1and 2	SD3, VS5
Sustainable Urban Development	SASELINE	STEADY	Demand for new dwellings remained consistent with dwelling numbers averaging 232.2 per year. This is higher compared with the previous reporting period.  Infill subdivision accounted for 35.95% of all lots created in 2015-2019, compared with 37% 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 Zones increased compared with the previous reporting period.	VS1 – 7	LU2, SD1 – 3
MENITY, CHARACTER &	HERITAGE MANAGE	MENT			
Residential Amenity	CHANNG BETTE	STEADY	The top three non-residential activities in Residential Zones were educational facilities, commercial activities and other unclassified activities. Complaints about non-residential activities are trending down.  Background noise levels throughout the urban areas of the District are between 35-45dBA (L95). Data for background noise has not been included as part of this reporting period. There were 5,491 less noise complaints compared with the previous reporting period, and 33% of residents surveyed are concerned or very concerned about noise pollution.  Residents rate the District as a safe place to live, and satisfaction with parks and reserves and accessibility to recreational facilities is high.	A1 – 10	NC1, H1, H2, WS6, WW4

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /25

State of the Environment Issue	Overall State 2009-2014	Overall State 2015-2019	Summary	Indicator Reference(s)	Related Indicators
Coastal Amenity	STEADY	STEADY	Apart from the East Road Plan Change, there has been little development with a total of six new lots. Half of the new lots were created in Whirinaki and Waipātiki.	CA1 – 4	NC1, NH1 – 3
Natural Heritage/ Landscape Character	SASELINE	STEADY	1,382km² or 26.45% of Hastings District contains a Significant Amenity Landscape (SAL), Rural Character Landscape (RCL), Coastal Character Landscape (CCL) and Outstanding Natural Features Landscapes (ONFL). The number of land use and subdivision consents granted in these areas are high compared with the previous reporting period with a majority of consents located within the Rural Character Landscape.	NC1 - 3	SD1, VS2, VS3
Cultural & Historic Heritage	SASELINE	OKNING BELLE	There are 148 outstanding trees, 94 heritage items, 3 heritage areas, 93 wāhi taonga sites and 1,204 archaeological sites identified in the District Plan.  There was a total of 7 consents received to modify or destroy heritage items or wāhi taonga areas.  There were 28 authority applications (to the Historic Places Trust) to modify or destroy an archaeological site.  88% of residents surveyed are satisfied with the public art and cultural opportunities in the District.	H1 – 4	SD1, SD3, VS2, VS3, VS5, CA1
SUSTAINABLE INFRASTRI	UCTURE				
Water Management	STEADY	STEAD	The District Council has a consent for 928,470m³ of water in any 7-day average for public water supply.  Our domestic water consumption has decreased from 440 litres per person per day in 2008 to approximately 380 litres per person per day.  Commercial and industrial consumption is also relatively stable about 1,600,000 cubic litres per year.	WS1 – 6	A10

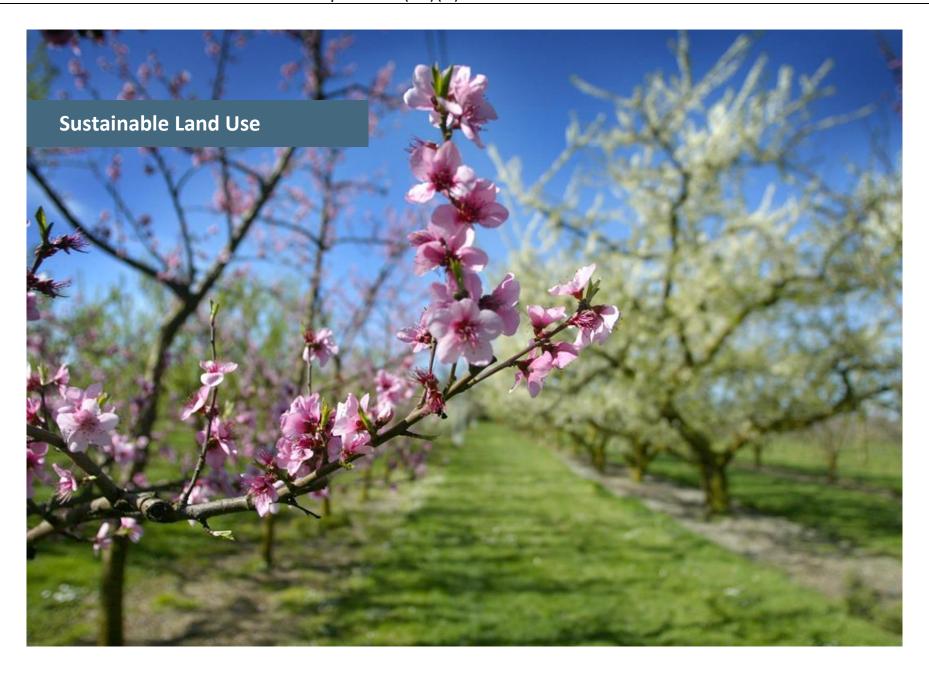
Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /26

State of the Environment Issue	Overall State 2009-2014	Overall State 2015-2019	Summary	Indicator Reference(s)	Related Indicators
Waste Water Treatment	CHANNG BETH	STEADY	The District holds two consents for wastewater treatment and discharge – at East Clive and Waipātiki. Discharges from East Clive total an annual daily average of 53,000m <sup>3</sup> and are well within environmental standards.  72% residents connect to the District's sewerage system. 95% of those connected are satisfied with their sewerage system (note: 5% of survey respondents were not very satisfied with the District's system).	WW1 – 4	A10, TW1, TW2
Trade Waste Disposal	OR THE BETTE	STEADY	There are 30 industries connected to the separated trade waste system. Between 2015/19, there has been five warning notices for non-compliance issued each year.	TW1 and 2	WW1 – WW4, HS1, HS2, HW1
HAZARD MANAGEMENT					
Natural Hazards	STEADY	STEADY	The District experiences major storm events and flooding, coastal erosion, inundation, and rural wildfires. 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 and 2019. This is attributed to the introduction of a new liquefaction classification system which identifies liquefaction risk areas throughout Hastings District.	NH1 – 3	SD1, SD3, VS2, VS3, A6, CA1, CA2
Hazardous Substances	STEADY	ORTHING BETTE	Six Resource Consents were received between 2015 and 2019 required under the 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.	HS1 and 2	A6, TW1 – 3, SW1, SW3, HW1

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /27

State of the Environment Issue	Overall State 2009-2014	Overall State 2015-2019	Summary	Indicator Reference(s)	Related Indicators
JSTAINABLE WASTE MA	ANAGEMENT				
Solid Waste			Solid waste is disposed of to the Ōmarunui Landfill, serving both Napier and Hastings Districts. The Landfill operation generally complies with its Resource Consent conditions. There have been no significant breaches of consent.	SW1 – 5	HW1
	MITING BETTE	STEADY	Waste volumes to Ōmarunui Landfill fluctuated over the reporting period and this is indicative of economic prosperity in the region and changes to legislation.		
			A 2016 report identified that approximately 15% of waste being disposed of at Ōmarunui Landfill was recyclable and 34% was compostable.		
			In total, 49% 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.		
Hazardous Waste			There is an annual collection service for residents to drop off household hazardous wastes (known as HazMobile).	HW1	A6, HS1, HS SW2,
	BASELINE	STEADY	Between 1999- 2019, 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.		

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /28



# Sustainable Land Use

# The issues at a glance

INDICA	TOR	STATE 2009 - 2014	STATE 2015 - 2019	SUMMARY
Land U	se			
LU1	Land cover classes			Minimal change. 93.29% grassland/shrubland/forest cover in 2019 (down slightly from 93.4% in 2012)
				4.6% crops/orchards/vineyard cover (up slightly from 3.9% in 2005)
				0.71% artificial surfaces cover (down slightly from 0.73% in 2012).
				The remaining 1.4% accounts for waterbodies in the District. s
LU2	Land use zones			Minimal change.
				92.16% Rural Zone
				5.95% Plains Production Zone
				1% urban zones.
				The remaining 0.89% of land comprises areas that are not covered by the above zones, for example waterbodies and reserves.
Sustair	nable Urban Developme	ent		
SD1	Building consents for new dwellings			Demand for new dwellings over this period are generally constant with approximately 1161 applications received
SD2	Infill subdivision in the Residential Zones			Infill subdivision accounted for 35.95% of all lots created in 2015-2019, compared with 37% during the previous reporting period.
SD3	Plan change requests			In total approximately 261 ha of Plains Production zoned land was rezoned to Industrial and Residential.
	for rezoning from rural to urban			The Havelock North Iona rezoning would count as rural land – so a total of 56ha of rural land rezoned to residential since 2008.

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /30

INDICAT	TOR	STATE 2009 - 2014	STATE 2015 - 2019	SUMMARY
Protecti	ion of Versatile Soils			
VS1	Versatile soils in the District	(X)		No change.  13% Class I, II and III soils.
VS2	New dwellings in the Rural/Plains Production Zones			The number of building consents for new dwellings exceeds the levels of dwelling reported in the previous reporting period.  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.
VS3	Subdivision in the Rural/Plains Production Zones			Demand for subdivision in the Rural/Plains Production Zones has increased in the current reporting period, compared to the level experienced during the previous reporting period.
VS4	'Farm Park' subdivision in the Rural Zone			Demand for Farm Park subdivisions has remained low with five applications received between 2015 -19 throughout the District. The residential farm park concept is adopted for almost all rural subdivisions involving more than 3 lots.
VS5	Rezoning of Rural/Plains Production Zone land			Since 2014, there have been only 3 rezoning requests affecting Plains Production Zone and no rezoning requests affecting Rural Zone land. In total, approximately 96 hectares (0.33%) of Plains Production Zone land was rezoned for urban development.
				Two areas of Plains Production zoned land on the outskirts of Hastings (Ōmāhu 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.
				In 2018, 55 hectares of land zoned Havelock North Rural Residential and Character Residential was rezoned to Iona Residential in Havelock North.
				As part of the District Plan review a rezoning request was lodged with structure plan for 10.08 hectares of plain zone land on East Road, Haumoana. As a result, 5.97 hectares was approved which has resulted in the creation of 16 lots. The remaining 3.09 hectares is zoned as Haumoana – Te Awanga deferred residential.
VS6	Types of Land Use Consents Applied for in			Land use consent for activities not associated with land based primary production activities has been steady, averaging 48.5 consents per year.
	the Plains Production Zone			There is a small increasing trend in the number of industrial and commercial land use consent applications in the Plains Production Zone over the reporting period.

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /31

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.

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /32

## 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 can 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.



Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /33

#### **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> <li>An environment that is appreciated, protected and sustained for future generations.</li> <li>The Hawke's Bay community is well informed and educated about the environment.</li> </ul>	Proposed Hastings District Plan (2015) (As amended by decisions), Section 2.3.3.6 (How the District Plan will Deliver the Vision)  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 within the SMAs that recognise the like areas of land uses.
LU1	Land Cover Classes	State	An understanding of the District's land cover and land a achieving sustainable use of land and water resources,	use patterns will assist in planning for future development in an integrated way, in and moving to a more compact urban form.
LU2	Land Use Zones	State and Response		

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /34

Ітем 4

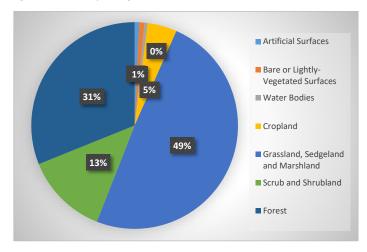
#### **Monitoring information**

#### 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.

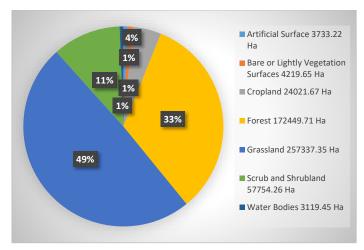
The following graphs show a comparison in land cover between 2012 and 2019. The land cover groupings have been standardised in line with Landcare Research Informatics.

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, 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.

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	0.60	-24.05
Waterbodies	0.51	0.60	+17.65
Cropland (e.g. cropland, vineyards, orchards)	4.60	4.60	0
Grassland, Sedgeland and Marshland	49.33	49.24	-0.1824
Shrub and Shrubland (e.g. Gorse/Broom, Manuka/Kanuka, Shrubland)	12.95	11.05	-14.67
Forest (e.g. major shelterbelts, pine forest, exotic forest, indigenous forest)	31.09	33	+6.14

Source: Land Cover Data Bases 3 & 4 (LCDB3 & LCDB4), Landcare Research Informatics

The combined amount of grassland, shrubland and forest cover has dropped slightly from around 93.4% in 2012, to around 93.29% 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 1.91%). 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 0.19% while waterbodies has increased by 0.9%.

#### Indicator LU2: Land Use Zones

Land uses in Hasting 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 lona and Havelock North Special Character Zone.

Hastings District Council - Te Kaunihera ā-Rohe o Heretaunga /36

- Residential Zones: covers the main urban residential areas and settlements, and areas identified for future residential expansion<sup>7</sup>
- 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.

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 4: Area of Zoned Land Use in Hastings District

Area of Zor	ned Land Use in Hastings D	istrict		
ZONES		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	869.22
	Te Mata Special Character	502	503	517.64
	TukiTuki Special Character	292	292	300.17
	Havelock North Rural Residential	-	-	643.31

<sup>7</sup> The General Residential Zone incorporates the main centres of Hastings City, Flaxmere and Havelock North, but also Clive and Whakatū. The Plains Residential Zone covers the settlements around Paki Paki, Bridge Pā and

	Iona special character	-	-	39.83
	Total Rural Residential	2,059	2,300	2,370.17
Residential	General Residential	2,002	1,995	1066.53
	Deferred General Residential	5	34	-
	Plains Residential	26	25	-
	Plains Settlement	-	-	30.53
	Coastal Residential	117	132	-
	Coastal Settlement	-	-	38.35
	Clive-Whakatū Residential	-	-	80.86
	Flaxmere Community Residential	-	-	3.9
	Flaxmere General Residential	-	-	319.31
	Hastings Character Residential	-	-	53.23
	Hastings City Living	-	-	56.09
	Hastings General Residential	-	-	1066.53
	Haumoana-Te Awanga Residential	-	-	97.88
	Haumoana-Te Awanga Deferred Residential	-	-	3.78
	Haumoana-Te Awanga Deferred Residential A	-	-	1.9
	Haumoana-Te Awanga Deferred Residential B	-	-	2.22
	Havelock North Character Residential	-	-	361.66
	Havelock North General Residential	=	-	291.03

Õmāhu, and the Coastal Residential Zone includes the coastal settlements of Haumoana, Te Awanga, Waipātiki, Whirinaki, Waimārama and Tangoio.

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /37

2015 – 2019 Ko te Pūrongo tō te Taiao

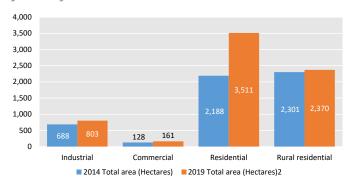
	Waimārama Coastal Settlement	-	-	37.54
	Total Residential	2,150	2,186	3,511.34
Commercial	Central Commercial	49	44	50.17
	Flaxmere Commercial	-	-	3.98
	Havelock North Village Centre Business	-	-	8.16
	Havelock North Village Mixed	-	-	3.58
	Havelock North Village Centre Retail	-	-	8.86
	Commercial Service	29	23	38.23
	Flaxmere Commercial Service			3
	Large Format Retail	32	16	20.57
	Suburban Commercial	31	12	8.4
	Bridge Pa Suburban Commercial	-	-	0.08
	Clive-Whakatū Suburban Commercial	-	-	5.26
	Haumoana-Te Awanga Suburban Commercial	-	-	1.6
	Waimārama Suburban Commercial	-	-	0.13
	Central Residential Commercial	6	4	-
	Residential Commercial	-	-	5.62
	Havelock North Village Centre	-	18	-
	Flaxmere Village Centre	-	10	3.98
	Total Commercial	148	128	161.62
ndustrial	Industrial 1	35	25	-
	Industrial 2	410	410	-
	Deferred Industrial 2	8	71	-

Regional Sport sports park,na	s/lakes, Hawke's Bay s Park, deferred regional atural preservation, egional Hospital, and			
TOTAL		507,703	508,654	522,639
To	otal Industrial	600	688	803.4
W	/hirinaki Industrial	-	-	95.3
To	omoana Food Industry	-	-	17.1
Li	ght Industry	-	-	40.7
	avelock North Centre Idustrial	-	-	4.4
G	eneral Industry	-	-	642.6
D	eferred General Industry	-	-	3.0
_	eferred Industrial 7 – ōmoana	-	8	
In	dustrial 7	-	8	
In	dustrial 6	54	72	
In	dustrial 5	1	1	
In	dustrial 4	88	88	
In	idustrial 3	4	4	

Source: Hastings District Council

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /38

Figure 8: Change in Land Use Zones - 2014 to 2019:



Source: Hastings District Council

The Rural Zone and the Plains Production Zone remain the largest zones in the Hastings District in 2019, but have not altered significantly in area from the 2014 State of the Environment Report.

The Industrial, Commercial, Residential and Rural Residential Zones indicate change since the pervious State of the Environment Report. However as the change is small, with the exception of Residential.

An increase in the number of hectares of industrial zoned land between 2014 and 2019 reflects the introduction of new industrially zoned areas at Irongate, Ōmāhu Road (north side and Tōmoana).

Since publication of the first State of the Environment Report, Hastings District Council has undertaken its District Plan Review, and notified a Proposed District Plan in November 2013. Decisions on submissions to the Proposed Plan were notified in September 2015. The following table compares the land use zone areas in the Proposed Plan, with those contained in the Proposed Plan as a result of decisions.

The District Plan review took a more place-based approach to zoning, and introduced a significant number of new zones including a Regional Hospital Zone (previously zoned General Residential under the 2003 District Plan), Open Space Zone covering parks and reserves (parks and reserves which previously had the zoning of the area in which it was located in the Operative District Plan), a Nature Preservation Zone (covering Cape Kidnappers and Ocean Beach) currently zoned Rural in the 2003 District Plan, and introduced numerous place-specific Residential Zones.

The data has grouped the land use zones similarly to allow some comparison to be made. However, it should be noted that there has been changes to the way zones are mapped. For example, roads and lakes/rivers were previously excluded from zone analysis as they were not zoned in the 2003 District Plan. In the Proposed Hastings District Plan these features have been made part of District Plan Zones and cannot be excluded from the total area of the District. This has resulted in some zones showing an apparent increase, when in fact there has been little change.

Table 5: Proposed and Proposed as amended by decisions District Plan Zones

Zones	Area in hectares (Proposed District Plan)	Area in hectares (As amended by decisions District Plan)
Rural	481,268	481,673
Plains	31,326	31,114
Rural Residential Zones	2,301	2,370.17
Residential Zones	2,416	2,347.24
Commercial Zones	162	161.62
Industrial Zones	688	803.40
Other	4,120	4,120

Source: Hastings District Council

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /39

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

#### Rural Zone

- Cape Kidnappers Ocean Beach Nature Preservation
- Rural

#### **Plains Zones**

• Plains Production

#### **Rural Residential Zones**

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

#### **Residential Zones**

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

- Havelock North General Residential
- Iona Special Character
- Plains Settlement
- Waimārama Coastal Settlement

#### Commercial Zones

- Bridge Pa Suburban Commercial
- Clive Suburban Commercial
- Clive Whakatū Suburban Commercial
- Flaxmere Commercial
- Flaxmere Commercial Service
- · Hastings Central Commercial
- Hastings Commercial Service
- Hastings Large Format Retail
- Hastings Residential Commercial
- Hastings Suburban Commercial
- Haumoana Te Awanga Suburban Commercial
- Havelock North Village Centre Business
- Havelock North Village Centre Mixed
- Havelock North Village Centre Retail
- Haumoana-Te Awanga Suburban Commercial
- Waimārama Suburban Commercial

#### **Industrial Zones**

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

#### Other Zones

- Deferred Hawke's Bay Regional Sports Park
- Hawke's Bay Regional Sports Park
- Open Space
- · Regional Hospital

Hastings District comprises approximately 98% vegetated land cover, and approximately 98.9% of the District is zoned Rural or Plains Production Zone. 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 Plains Production Zone areas

Land cover and zoning allocation continues to reflect a rural provincial area in New Zealand.

Comparisons suggest there has not been any significant change in land cover or land use patterns within the District since the previous State of the Environment Report.

#### Responses

#### For Council

 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 Kaunihera ā-Rohe o Heretaunga /41

## 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

The price, infrastructure potential and close proximity of the Heretaunga Plains to the urban centres of Hastings City, Havelock North and Flaxmere generates 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 expansion. Indicators in this section illustrate whether development is sustainable. There is presently an ongoing process to replace the Resource Management Act. The Act 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 review of the RMA. It is not clear at this stage what difference in indicators for sustainable urban development will result from this process.



Photo credit: Peter Scott, Above Hawke's Bay

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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.

#### INDICATORS FOR SUSTAINABLE URBAN DEVELOPMENT

INDICATO	R	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW IT INFORMS THESE OUTCOMES	RELEVANT DISTRICT PLAN OUTCOMES
			<ul> <li>An environment that is appreciated protected and sustained for future generations.</li> <li>Safe and secure communities.</li> <li>A lifetime of good health and wellbeing.</li> <li>Development in Hawke's Bay is sensitive to the need to protect and promote         <ul> <li>Environmental wellbeing.</li> </ul> </li> </ul>	Proposed Hastings District Plan (2015) (As amended by decisions)  Section 2.3.2.2 (The Role of the District Plan in Delivering the Vision):the resources of the District that support land based primary production need to be carefully managed to ensure that they remain available for future generationsthe 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):  • UDA02 Increased intensification of the existing urban environments, while maintaining acceptable levels of residential amenity.  • UDA04 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.  Section 2.8.3 Anticipated Outcomes (Rural Resource Strategy):  • RRSA01 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		ides a good indication of demand for residential development and can knowing where development pressure is occurring enables better strategic re compact urban form.
SD2	Infill Subdivision in the Residential Zones	Pressure		t encroaching on currently undeveloped land. The higher the rate of infill District's land resource, as well as enabling efficient provision of services

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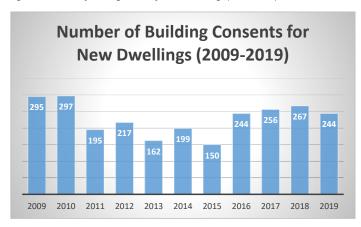
INDICATO	R	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW RELEVANT DISTRICT PLAN OUTCOMES IT INFORMS THESE OUTCOMES
SD3	Plan Change Requests for Rezoning from Rural to Urban	Pressure	Rezoning of rural land for urban development can directly impact on the potential of the District's land and soil 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.

#### **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 9: 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 10:Map of Rural Census Area Units in Hastings District



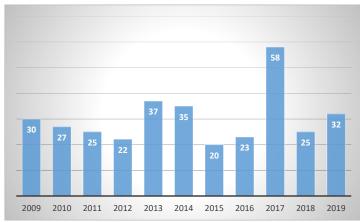
#### Indicator SD2: Infill Subdivision in the Residential Zones

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.

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /45

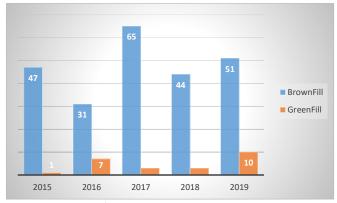
Apart from the 2017 peak, low levels of subdivision have continued through the current reporting period.

Figure 11:Number of Infill Subdivisions Granted in the Residential Zones (2009 - 2019)



Source: Hastings District Council

Figure 12:Brownfield and Greenfield lots created in residential zones



Source: Hastings District Council

The Heretaunga Plains Urban Development Strategy (HPUDS<sup>8</sup>) 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).

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

In 2018, 55 hectares of land zoned Havelock North Rural Residential and Character Residential was rezoned to Iona Residential in Havelock North while Whirinaki had 7000m<sup>2</sup> rezoned from Rural 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

<sup>8</sup> Heretaunga Plains Urban Development Strategy, 2010, Hastings District Council, Napier City Council & Hawke's Bay Regional Council.

review of the policy framework, methods and rules in the District Plan that guide

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.

#### 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.



### 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 rural areas 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 sustainable managed.



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#### **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.

#### INDICATORS FOR PROTECTION OF VERSATILE SOIL

INDICATO	OR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW IT INFORMS THESE OUTCOMES	RELEVANT DISTRICT PLAN OUTCOMES
			<ul> <li>An environment that is appreciated, protected and sustained for future generations.</li> <li>Development in Hawke's Bay is sensitive to the need to protect and promote environmental wellbeing.</li> </ul>	Proposed Hastings District Plan (2015) (As amended by decisions)  Section 2.3.2.2 (The Role of the District Plan in Delivering the Vision):the resources of the District that support land based primary production need to be carefully managed to ensure that they remain available for future generationsthe 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):  UDA02 Increased intensification of the existing urban environments, while maintaining acceptable levels of residential amenity.  UDA04 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.  Section 2.8.3 Anticipated Outcomes (Rural Resource Strategy):  RRSA01 The continued availability, development and utilisation of the life supporting capacity of the Hastings District's productive land resources for a range of activities.
VS1	Versatile Soils in the District	State		t indicates the state of the soil resource, and assists in understanding the rarity of the finite soil resources both for present and future generations.
VS2	New Dwellings in the Rural/Plains Production Zones	Pressure	The number of new dwellings in the rural	area gives a good indication of the pressure for residential development in the rural area.
VS3	Subdivision in the Rural/Plains Production Zones	Pressure		tional sites, including lifestyle lots, in the rural area gives a good indication of the nd an understanding of this enables informed response towards protecting this resource.
VS4	'Farm Park' Subdivision in the Rural Zone	Pressure		or low density residential demand with less impact on the life supporting capacity of the created can inform ongoing attempts to achieve balance between use, development and
VS5	Rezoning of Rural/Plains Production Zone Land	Pressure	Rezoning of the Plains Production Zone is finite soil resource of the Heretaunga Plain	a good indicator of the impact of urban expansion and development on the extent of the as. $\frac{1}{2}$

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /49

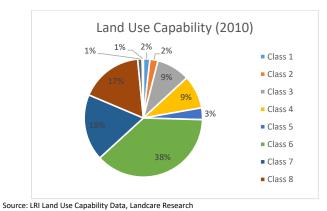
INDIC	ATOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND HOW IT INFORMS RELEVANT DISTRICT PLAN OUTCOMES THESE OUTCOMES
VS	Land Use Consents Granted in the Plains Production Zone	Pressure	The types of land use consents that are granted in the Plains Production Zone provides an indication of what activities 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.

#### **Monitoring information**

#### Indicator VS1: 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 68,514hectares (or 13.11%) of the District comprising class I, II or III soils.

Figure 13: Land Area by Land Use Capability (2010)



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 VS2: 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 environments<sup>9</sup>.

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.

<sup>&</sup>lt;sup>9</sup> Heretaunga Plains Urban Development Strategy, 2010, Hastings District Council, Napier City Council & Hawke's Bay Regional Council.

Figure 14:Comparison of Building Consents for New Dwellings by Zone for 2009 - 2014

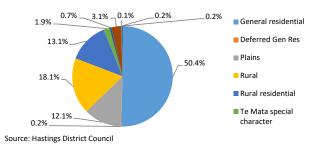
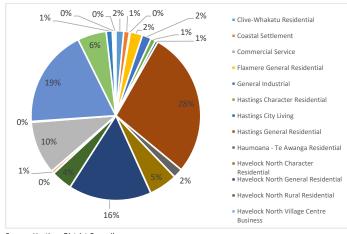


Figure 15: Total Building Consents by Zone (2015 - 2019)



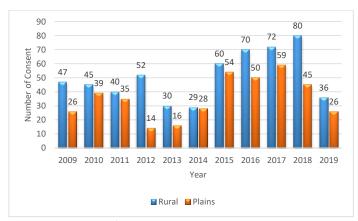
Source: Hastings District Council

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 Residential Zones which accounted for 44%, with a further 3.1% in the Coastal Residential Zone.

Building Consents comprised 10% of new dwellings in the Plains Production and 19% of new dwellings in the Rural Zone. In the previous reporting period, these figures were 12.1% and 18.1% respectively. Given the additional diversity of Zones as a result of the District Plan review, findings vary compared with the previous reporting period. This was expected given the place base planning approach to the District's planning provisions.

Figure 16: Building Consents for New Dwellings in the Rural and 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 for the State of the Environment period in 2019, just 26 dwellings consented. However, overall since 2015, the number of new dwellings in the Plains Production Zone has increased 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.

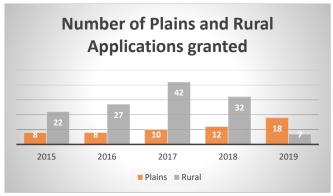
#### Indicator VS3: Subdivision in the Rural/Plains Production Zones

Subdivision can lead to land fragmentation and an increased and accelerated supply of smaller sites which may not safeguard the life-supporting capacity of the finite rural land resource. Fragmentation creates expectation of higher land value, making land aggregation and larger rural properties 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.

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<sup>10</sup>.

Figure 17: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.

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

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

applications have decreased. This may be a result of the reduction in lifestyle lots size from 1.5-2.5 hectares to 4000m<sup>2</sup>-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 18: 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 35% of 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 19:Subdivision Applications in the Plains Production Zone (2009 - 2019)

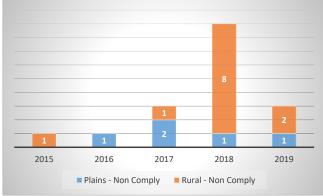


Source: Hastings District Council

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.

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Figure 20: Non-Complying Subdivision Applications Granted in the Rural and Plains Production Zones (2015 - 2019)



Source: Hastings District Council

Figure 21:Non-Complying Lots Established in the Rural and Plains Production Zones (2015 - 2019)



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.

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 VS4: '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

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subdivisions are not specifically provided for in the Plains Production Zone, reflecting the strong emphasis away from fragmentation of the Plains soil resource.

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:

- RMA20150341 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 (Matarua Trustee Company Ltd).
- RMA20180323 –21 residential farm park Öhiti Road, Crownthorpe.
- 11-lot subdivision (Matangi Road), applied for in 2013, granted in 2015 Non-complying;

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.

#### Indicator VS5: Rezoning of Rural/Plains Production Zone Land

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.

Two areas of Plains Production zoned land on the outskirts of Hastings (Ōmāhu 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.

In 2018, 55 hectares of land zoned Havelock North Rural Residential and Character Residential was rezoned to Iona Residential in Havelock North.

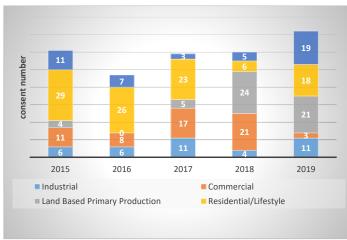
At Haumoana, 3.6 hectares of Plains Production zoned land was rezoned to Deferred Residential, whilst at Te Awanga 8.3 hectares were rezoned Residential and 4.2 hectares rezoned Deferred Residential. Whirinaki had 7000m2 rezoned from Rural Zone to Coastal Settlement Zone.

# Indicator VS6: Types of Land Use Consents Granted in the Plains Production Zone

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 Heretaunga Plains.

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Figure 22:Types of Land Use Consents Applied for in the Plains Production Zones (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 20 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 felling 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 2015 onwards, to an average of around 2.6 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 6-16 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 2019.

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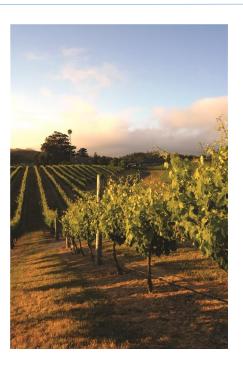
#### Responses

#### For the Community

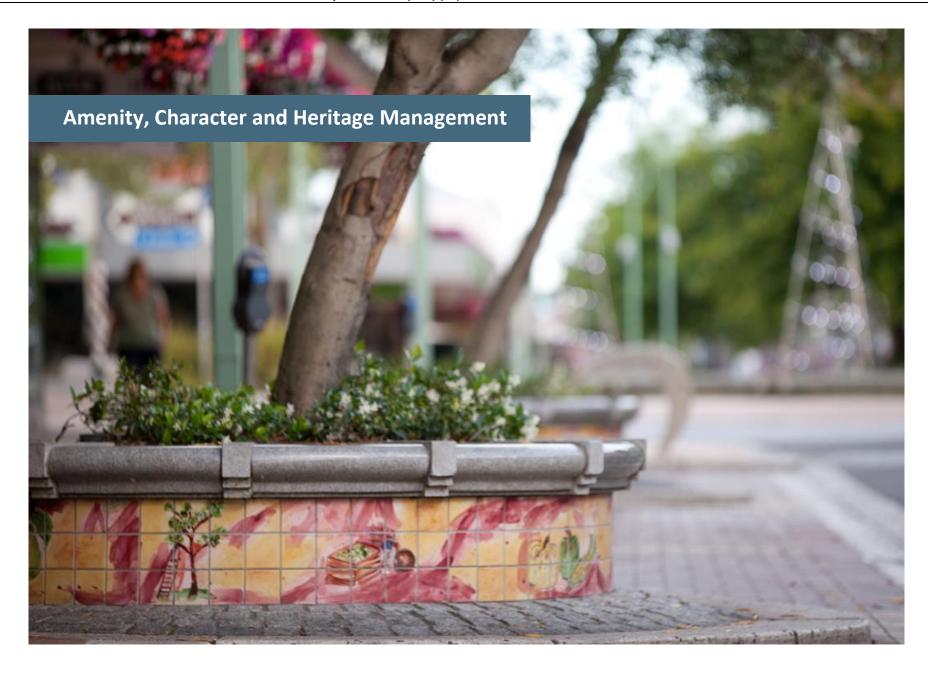
 If you wish to live in the country, consider buying properties in the established Rural Residential and Lifestyle Character Zones.

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



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# Amenity, Character and Heritage Management

### The issues at a glance

INDICA	TOR	STATE 2009 - 2014	STATE 2015 – 2019	SUMMARY
Reside	ntial Amenity			
A1	Non-residential activities in residential zones	*		Top 3 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.
А3	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 2015 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 considered it a safe place to live.
А7	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.
A8	Residents' satisfaction with parks and reserves			Remained high at 93% surveyed being satisfied, compared with 94% in 2014
А9	Residents' satisfaction with accessibility of recreational facilities			Remained high at 90% surveyed being satisfied compared with 91% in 2014.
A10	Residents' rating of quality of life			High with 80% surveyed perceiving high quality of life. This is down from the 2014 report.

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INDICA	TOR	STATE 2009 - 2014	STATE 2015 – 2019	SUMMARY
A11	Residents' rating of sense of pride in the way their city looks and feels	-	(A)	Relatively high, with only 5% 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 Waimārama and Te Awanga settlements.
CA2	Demand for new coastal residential areas	(X)		With the exception of the District Plan review, there were no applications to rezone land for coastal residential purposes. Rezonir requests as part of the District Plan review are still being considered.
latura	Heritage/Landscape Ch	naracter		
NC1	Subdivision and development in Significant Landscape Character Areas (SLCAs) or Outstanding Natural Features and Landscapes (ONFLs)			In the Proposed District Plan, there were 2 CLCAs 5 ONFLs, 8 ONLAs, 8 SALs, 7 RLCAs 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 Feature and Landscapes (ONFL) Areas	•	•	One building was built within an identified ONFL area. Building activity concentrated on SLCA4 (Heretaunga Hills), but also SLCA2, SLCA3 and SLCA5.
NC3	Resource consents relating to areas of significant indigenous vegetation and significant habitats of indigenous fauna	-		Between 2015 and 2019, there were 14 land use consents and 21 subdivision consents relating to land located within a 'Recommended Area for Protection'
NC4	Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna			Land is covered by QE2 covenants

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INDICATOR		STATE STATE 2009 - 2014 2015 – 2019		SUMMARY		
Cultural & Historic Heritage						
Н1	Residents' perception of public art and cultural opportunities			High with 88% surveyed being satisfied		
H2	Council spending on heritage and culture	-	(K)	Council spending on Arts & Heritage, murals, Façade Enhancement, Council Heritage Buildings, urban parks, and the streetscape has 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 process to Toitoi (Hastings Opera House) \$16,717,584 was spent between 2014 and 2019. Over the same period, spending on Public Art has reduced.		
Н3	Consents to modify/destroy Heritage Items and Wāhi Taonga			The Proposed District Plan lists 148 outstanding trees, 18 significant trees, 85 heritage items, 4 heritage areas, 4 heritage buildings (in Te Mata Special Character Area), and 103 wāhi taonga sites. There were just 13 resource consents relating to registered heritage or wāhi taonga items between 2015 and 2019.		
Н4	Archaeological sites and Authorities to modify/destroy Archaeological Sites			According to NZAA files, there are currently 1397 recorded archaeological sites in the Hastings District. In total, 25 of the 31 authorities were granted between 2015 and 2019.		

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".

## **Residential Amenity**

Hastings is the primary urban area of the District, with several smaller urban areas including Havelock North, Flaxmere, Clive and Whakatū, 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, as well as being 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.



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#### **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
		Safe and secure communities.     Development in Hawke's Bay is sensitive to the need to protect and promote environmental wellbeing.     Supportive caring and inclusive communities.     Safe and accessible recreational facilities.     Enhanced provision of a variety of safe physical recreational opportunities.	<ul> <li>Proposed Hastings District Plan (2015) (As amended by decisions):</li> <li>Section 2.4 (Urban Strategy):</li> <li>A well-functioning residential market that is able to cater for and respond to demand for residential housing with the focus on compact development.</li> <li>Increased intensification of the existing urban environments, while maintain acceptable levels of residential amenity.</li> <li>The completion of the HPUS implementation programme.</li> <li>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.</li> <li>Increased Papakainga development on Māori land and on land close to marae.</li> <li>Tangata Whenua values and aspirations related to urban development are recognised and provided for.</li> </ul>
A1 Non-Residential Activities in Residential Zones	Pressure	Non-residential activities can positively or adversely a the scale and nature of the activities.	ffect the amenity values of surrounding residential areas depending on
A2 Complaints about Non Residential Activities in Residential Zones	Pressure	0 /1	activities occurring in residential areas and monitoring complaints arising fficiency of the District Plan provisions and to assess the impact of, and
A3 Background Noise Levels	State	Monitoring background noise levels within residential uses, may indicate changes in amenity values over time	environments and changes to those levels resulting from changes in land ne.
A4 Noise Complaints	Pressure	Monitoring noise complaints in residential areas indic changing land uses or tolerance of noise by residents.	ates the impact of changing housing styles and densities or impacts of

Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /64

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.		
A8	Residents' Satisfaction with State Parks and Reserves		89% of those surveyed were satisfied with the District's parks and reserves.		
А9	Residents' Satisfaction with Accessibility of Recreational Facilities	State	Remained high at 90% surveyed compared with 91% 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 State Life		Rating the quality of life provides a good overall indicator of amenity, reflecting people's overall appreciation of their environment and lifestyle opportunities.		

#### **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 shows 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:

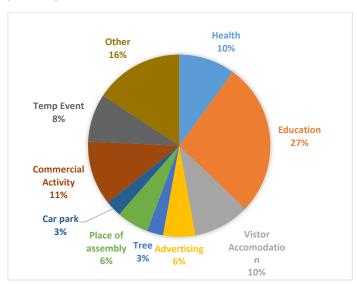
- 1) Education Facilities (19 resource consents granted)
- 2) Other (11 resource consents granted)
- 3) Commercial Activity (8 resource consents granted).

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)

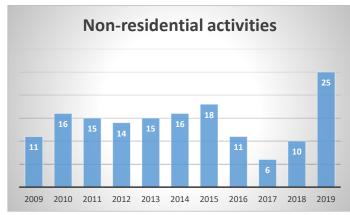


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This shows that education facilities, commercial activities, and other activities were the most common non-residential activities granted resource consent in residential zones. Compared with the previous reporting period, education facilities, temporary events and offices were the three most required non-residential consents.

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



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 and 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.

#### 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.

#### **Indicator A4: Noise Complaints**

The following table below shows the total number of noise complaints and monitoring resource consents between 2015 and 2019.

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Table 6: 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	695	465
Resource consents monitored	309	243	415	923	465

Apart from 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 residents' 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.

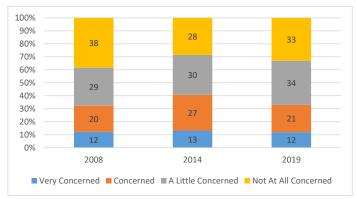
The following graph shows the results of Council's 'Public Voice Survey' and the Public Voice survey which replaced Communitrak in 2014. Many of the survey questions in the Public Voice survey replicated the Communitrak survey in order to produce results that could be compared with previous years.

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 25: 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.

Therefore, the age group of survey respondents may have contributed to the level of reported concern about noise pollution. In the 2019 survey, 66% of respondents stated they were aged 60 or over. This is compared with 58% in 2014 and 35% in 2008. Therefore, a possible reason for the increase in concern

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about noise pollution in 2019 is that the over 60 age group accounted for a much larger proportion of survey respondents. Data about the length of time people had lived in the District, or the number of people in the survey respondents' households was collected. 64% of those surveyed have lived in the Hastings district for more than 20 years while 77% lived in a household of two or less people. Because respondents were mature in age and living in households with less than two people this could be an indicator of the stage in life that respondents felt more sensitive to noise related issues.

#### Indicator A6: Perception of the District as a Safe Place to Live

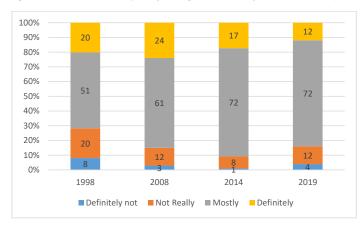
People's perception of general amenity values is usefully indicated by their awareness of safety and the extent to which social crimes are perceived as a problem.

When asked 84% of respondents to the Council's Public Voice Survey (2019) believed the Hastings District is a safe place to live, and the following graph indicates there has been a significant improvement in perception since 1998.

In 1998, 71% of respondents agreed 'Yes, Definitely' or 'Yes, Mostly' with the statement that Hastings District was a safe place to live. While the number of 'Yes, definitely' responses dropped over the entire reporting period, the perception of the District as a safe place to live improved generally. The number of people who answered either 'Yes, Definitely' or 'Yes, Mostly' increased steadily to 85% in 2008 and 89% in 2014.

The number of people who did not believe the District is a safe place to live, answering 'No, definitely not' and 'Not really' increased to 16% in 2019 compared to just 9% in 2014. Furthermore, 73% of those surveyed indicated that they believed Hastings was 'mostly' a safe place to live.

Figure 26:Panel Members Perception of Hastings District as a Safe Place to Live (2019)



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

#### 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 area 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.

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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:

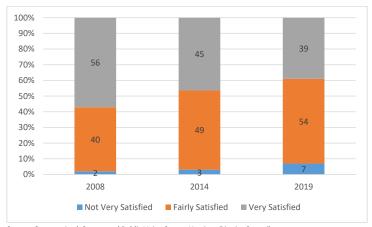
- Properties within 500m of a playground Hastings 53%
- Properties within 500m of a playground Flaxmere 88.7%
- Properties within 500m of a playground Havelock North 58.2%
- Total properties within 500m of a playground 59.8%

#### 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.

The following graph shows residents' satisfaction with parks and reserves over the monitoring period.

Figure 27:Residents' Satisfaction with Parks and Reserves (2008-2019)



Source: Communitrak Survey and Public Voice Survey Hastings District Council

This indicator shows a very strong level of satisfaction has reduced over time between 2008 and 2019 with an increase with those fairly satisfied and not very satisfied. In 2019, 93% of the 292 residents surveyed were very/fairly satisfied with their parks and reserves facilities. This is relatively stable compared with 94% and 96% in 2012 and 2008 respectively.

# Indicator A9: Residents' Satisfaction with Accessibility of Recreational Facilities

Accessibility of recreational facilities also factors into people's appreciation of amenity. This following graph shows a high level of satisfaction with accessibility of recreational facilities in Hastings District.

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Figure 27: Residents' Satisfaction with Accessibility of Recreation Facilities (2008-2019)



Source: Communitrak Survey and Public Voice Survey Hastings District Council

This indicator shows that community satisfaction with the accessibility of recreational facilities within the District remains relatively high (when asked, 90% of the 285 respondents were 'fairly' or 'very' satisfied with accessibility in 2019, compared with 91% in 2014).

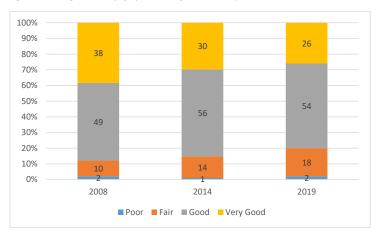
### Indicator A10: Residents' Rating of Quality of Life

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 80% 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 28: Rating the Quality of Life in Hastings District Comparison 2008-2019



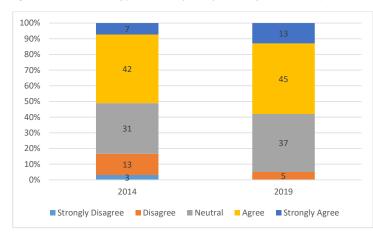
Source: Hastings District Council Communitrak Survey and Public Voice Survey

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

Sense of pride in the way the city looks and feels is a broad measure of indicating satisfied residents' are with urban amenity.

Figure 29: Residents' sense of pride in the way the city looks and feels (2014-2019)



Source: Hastings District Council Survey and Public Voice Survey

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 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.

There were 70 resource consents to undertake new or existing non-residential activities in the residential zones of the District between 2014 and 2019. Educational facilities were the most prevalent, followed by education facilities, commercial activities and others. With controls, these are appropriate in residential environments and do not pose a threat to residential amenity.

On average, resident surveys in 2005, 2008, and 2014 indicated the community is concerned about noise pollution.

The total number of noise complaints has gradually reduced over the last 4-year period to 2019.

It is important to note 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.

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.

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### Responses

### For Community

- 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.

### For Council

- 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.
- 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.
- To implement a system for monitoring and tracking complaints received by year. This will enable easier data collection for future reference.

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Ітем 4

### **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, 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, Waimārama, Haumoana, Te Awanga, Waipātiki and Tangoio.

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 (carving), raranga (weaving) and the making of tools and weapons. The coast contains numerous urupa and sites of significance for mana whenua.



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### **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.

### INDICATORS FOR COASTAL AMENITY

INDICA'	TOR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
			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):  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.  Iwi and Hapū 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	adjacent rural zones. This will assist in under	tor trends for urban development particularly in coastal residential settlements and standing if and where there are any pressures, in pursuing long term sustainable
CA2	Demand for New Coastal Residential Areas	Pressure	development strategies for the District's coa	stal communities, and ensuring the coastal environment is managed and protected.

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### **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 30: Number of Subdivisions Granted in the Coastal Residential Zone (2009-2019)



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 Waimārama 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:

Table 7:Coastal Residential Lots Created (excludes East Road development)

	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	
Waimārama Coastal		1	
Coastal Residential	10		16

Over the reporting period, Whirinaki and Waipātiki (coastal settlement) have grown the most over recent years. Haumoana, Te Awanga, and Waimārama 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.

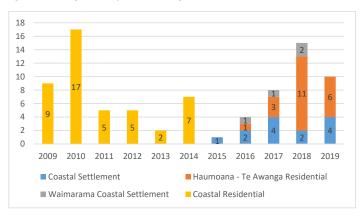
The number of building consents for new dwellings in the various coastal areas can provide a further picture of development over time.

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

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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.

Figure 31: Building Consents for New Dwellings in the Coastal Residential Zone



Source: Hastings District Council

Building consents for new dwellings over all the Coastal areas in the 5-year period from 2015 to 2019 comprised just 3.25% of all new dwellings for the whole District over that period (39 of the total 1,200 building consents for new dwellings).

### Indicator CA2: Demand for New Coastal Residential Areas

There has been little demand for new coastal residential areas over the reporting period, with the only rezoning applications received as part of the District Plan review. At the time this report was prepared, re-zoning requests received as part of the District Plan review where still being considered and undecided, some of which relate to request to re-zone land for coastal residential purposes.

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### 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 hapū 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' (SAL's) and 'Outstanding Natural Features and Landscapes' (ONFLs), being significant landscapes and landscape features identified throughout the District. The Outstanding Landscapes also include Cultural Landscapes



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### **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.

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
	Relevant Outcome Statements:	Proposed District Plan (2015) (As amended by decisions)
	An environment that is appreciated,	Section 17.1 (Natural Features and Landscapes)
	protected and sustained for future generations	<ul> <li>The values of important natural features and landscapes are not compromised by inappropriate building development, earthworks and the siting of building development or plantations.</li> </ul>
		<ul> <li>A range of contrasting landscape types continues to provide a rich mixture of landscape amenity throughout the District.</li> </ul>
		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 contributes to the significance off those landscape areas.
		<ul> <li>Buildings do not visually intrude on the natural form of rural and coastal ridgelines and spurs.</li> </ul>
		<ul> <li>Large scale earthworks do not visually intrude on the natural form of rural and coastal ridgelines, spurs, and hill faces.</li> </ul>
		<ul> <li>Plantations are visually integrated with underlying landforms and the surrounding landscape.</li> </ul>
		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.

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		<ul> <li>Section 20.1 (Indigenous Vegetation and Landscapes)</li> <li>Improved protection of areas of significant indigenous vegetation, significant habitats of indigenous fauna.</li> <li>Maintenance and enhancement of the biodiversity of indigenous plant and animal species within Hastings District and the natural habitats and ecosystems that support them.</li> <li>A greater public awareness of the type, location, significance and vulnerability of indigenous vegetation, habitats and geological sites and available methods of protection.</li> <li>Practical recognition of areas of significant indigenous vegetation and significant habitats of indigenous fauna and their importance to the community.</li> </ul>
NC1	Subdivision and Development within Significant Amenity Landscape (SAL) & Outstanding Natural Features and Landscapes (ONFL)	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.
NC2	Building Activity within Significant Pressure Amenity Landscape (SAL) or Outstanding Natural Feature Landscape (ONFL) Areas	(refer above)
NC3	Significant Indigenous Vegetation State and Significant Habitats of Indigenous Fauna	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	

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### **Monitoring Information**

Indicator NC1: Subdivision and Development Activity within Significant Amenity Landscape (SAL), Coastal Character Landscapes (CCL), Rural Character Landscape (RCL) and Affecting Outstanding Natural Features and Landscapes (ONFL)

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.

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.

Outstanding Natural Features and Landscapes (ONFLs) include:

- Te Mata Peak and Te Mata East Face (ONFL1)
- Kahurānaki (ONLF2)
- Mount Erin Kohinerakau (ONFL3)
- Cape Kidnappers and Rangaiika Coast (ONFL4)
- Whakaari Headland Tāngoio Bluff (ONFL5)
- Maungaharuru Range, Titiokura, and Te Waka (ONFL6)
- Kaweka and Ruahine Ranges (within Forest Park boundaries) (ONFL7)
- Motu O Kura Bare Island and Waimārama Coast (ONFL8).

Together these features cover approximately **81,357 hectares** in the District.

Rural Character Landscapes (RCLs), Coastal Character Landscapes (CCLs) and Significant Amenity Landscapes (SALs) are listed by their general location, including:

- Maungaharuru Te Waka (RCL1)
- Eskdale Valley (RCL2)
- Tutaekuri Valley (RCL3)
- Hills surrounding Heretaunga Plains (Korokipo, Swamp Road Hills, Matapiro Hills, Ngaruroro Valley, North Eastern Raukawa Hills and Puketapu Hills) (RLC4)
- Raukawa Kaokaoroa (RCL5)
- Havelock Foothills (RCL6)
- TukiTuki Valley (Mid and Upper Valley) (RCL7)
- Cape Kidnappers Headland (SAL1)
- Lake Tūtira Basin (SAL2)
- Maungaharuru Range, Titiokura, and Te Waka (SAL3)
- Roy's Hill Hills surrounding Heretaunga Plains (SAL4)
- Te Aute Valley including Lake Poukawa, Te Aute Hill, Raukawa Range and Kaokaoroa Range (SAL5)
- Te Mata Peak Surrounds (SAL6)
- Mount Erin Kohinerakau Surrounds (SAL7)
- Waitangi (SAL8)
- Clifton (CCL1)
- Tāngoio Beach Settlement (CCL2)
- Ocean Beach Settlement (CCL3)
- Waimārama and Peach Gully (CCL4)
- Waipātiki Beach (CCL5)

Together these features cover approximately 138,291 hectares in the District.

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Te Mata Peak (ONFL1) and Cape Kidnappers (ONFL4) are nationally and internationally recognised landscape features. The remaining areas and features have either regional or local significance.

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.

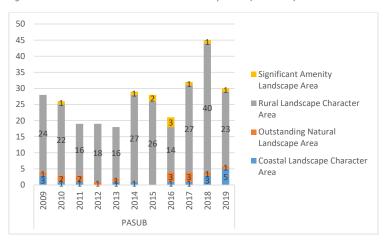
The District Plan has specific rules for some ONFLs. In SALs, earthworks, plantations and most non-residential buildings do not trigger consent under the Landscape provisions unless they lie in the Rural Residential Zone.

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.

Figure 32: 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 2015-19 year period.

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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.

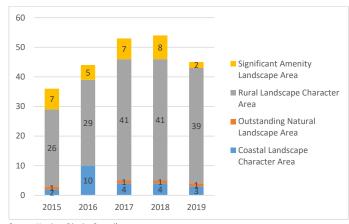
# Indicator NC3: Building Activity within Significant Amenity Landscape Areas (SALs) or Outstanding Natural Features and Landscapes (ONFL) Areas

Another relative measure of development pressure in the Landscape Areas is actual building activity. The following graph shows the number of building consents granted within the respective SALs, RLC, ONFLs and CLCs between 2015 and 2019. As a result of recent environmental case law regarding the use and classification of identified landscape areas, Council viewed 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.

Figure 33: Building Consents by ONFL/SAL/CLC and RLC Area (2015-2019)



Source: Hastings District Council

As shown above, building within the ONFL is 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  $50m^2$  required.

Building is not as constrained in the RCL 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, Ngaruroro Valley, North Eastern Raukawa Hills and Puketapu Hills)),

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- RCL5 (Raukawa Kaokaoroa 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.

Over the reporting period, building consents for new dwellings in RCLs accounted for 14.6 % of the total number of building consents in the District.

# Indicator NC4: Significant Indigenous Vegetation and Significant Habitats of Indigenous Fauna

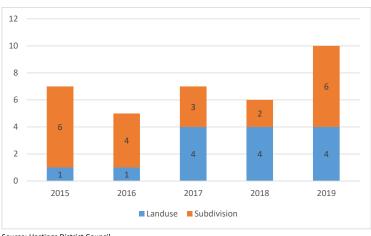
Human habitation and land development have resulted in most of the District's natural landscape being modified. Today there are very few areas of remnant indigenous vegetation remaining. This increases the importance of protecting those remaining areas of native forest and wetlands. The majority of remnant forest and wetlands areas are not formally protected to ensure their continued existence and enhancement.

The Proposed District Plan recorded 67 areas of 'Significant Vegetation, Habitats & Geological Sites', comprising 58 Recommended Areas for Protection (RAPs) and 9 Geo-preservation sites. Together these represent approximately 8,335 hectares of land identified as containing significant indigenous vegetation, significant habitats or indigenous fauna and significant geological sites. This represents 1.64% of the District's total land resource.

As a result of the 2004-2008 State of the Environment Report, Council began recording the number of resource consent applications involving an RAP or Geopreservation site between 2015 and 2019.

#### These are outlined below:

Table 9: Resource Consents Relating to Recommended Areas for Protection (RAP)



Source: Hastings District Council

In addition to those areas identified in the Proposed District Plan, there are other methods of protecting natural areas that may provide some indication of the state of the District's remaining natural areas, such as QEII Open Space covenants which protect special open space features on private land in perpetuity, and Nga Whenua Rahui which are areas of native forest on Māori-owned land voluntarily set aside for protection.

Data from the Queen Elizabeth II National Trust confirms there are 257 open space covenants within the Hawke's Bay Region, as at end 2018. The number of covenants approved each year has decreased from 15 in 2014 to 6 in 2018. However as covenants protect land in perpetuity this still represents an increase in land protected by QEII covenants.

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The average covenant size for Hawke's Bay Region is 43ha, slightly above the average covenant size for New Zealand (38.6ha).



Approximately 138,291ha (26.4%) 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.
- A Cultural Landscapes Assessment was undertaken in 2012 and adopted by Council as part of its Landscape Review. The cultural lens will be further refined through the cultural mapping of the District.

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### 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.

The built heritage of hapū whenua are the marae of which there are 23 in the Hastings District. The District has 99 sites of significance registered as wāhi taonga 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 tangata whenua with mana whenua, 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, wāhi taonga 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 their preservation. Some items in the District Plan are also listed as Historic Places Trust registered items.



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### **Indicators**

The table below shows the indicators that are used to monitor the state of cultural and historic heritage 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 CULTURAL AND HISTORIC HERITAGE

INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES  Relevant Outcome Statements:  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.	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES  Operative District Plan Section 12.5.6 (Waahi Tapu):  Recognition of the cultural importance of Waahi Tapu sites to Tangata Whenua.  Protection of notified Waahi 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.  Proposed District Plan (2015) (As amended by decisions) Section 16.1 (Wāhi Taonga and Sites of Significance)  Recognition of and provision for Tangata Whenua cultural relationships associated with Wāhi Taonga, Wāhi Taonga and sites of significance  Protection of listed Wāhi Taonga and Wāhi Taonga sites from the effects of land use activities.  Active participation of Tangata Whenua in the management of their ancestral land and resources Section 18.1 (Heritage Items and Notable Trees)  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
		· · · · · · · · · · · · · · · · · · ·

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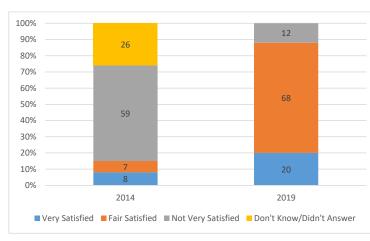
Н1	Residents' Perception of Public Art and Cultural Opportunities	State	Public perception and awareness of public art and cultural opportunities gives an indication of people's appreciation of their culture, and reflects respect for and strengthening of the identities of all cultures within the District.
H2	Council spending on heritage and culture	State	Monitoring Council spending on heritage and culture enables the identification of trends in investment in heritage and culture.
Н3	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.
Н4	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.

### **Monitoring Information**

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

To achieve community support for protection and promotion of Hastings' unique culture and heritage, residents must first understand what the resource is and why it is important and valuable to their community and to the nation.

Figure 34: Residents' Satisfaction with Public Art and Cultural Opportunities in the Hastings District



Source: Communitrak Survey and Public Voice Survey

Of the 331 respondents to Council's Communitrak Survey in 2014, when asked about their level of satisfaction with arts and cultural opportunities within the District, 86% were 'satisfied' or 'very satisfied'.

The same question was asked as part of the Public Voice Survey. Of the 292 respondents, 88% of respondents reported being either 'fair satisfied' or 'very satisfied' with public art and cultural opportunities in the District. This is a good improvement and may be the result of spending on public art. However, it should be noted that the two sets of data were obtained using different surveys and there could be variation in survey parameters.

### Indicator H2: Council spending on heritage and culture

Table 10: Heritage and Culture Spending

Indicator H2: Council spending on heritage and culture								
Parks area only								
ELEMENT	 2014-15	2015-16	- 2	2016-17	2	017-18	- 2	2018-19
Arts and heritage spend								
Public Art	\$ 94,288	\$	\$	70,000	\$	8,696	\$	5,622
Façade Enhancement	\$ 30,937	\$ 14,830	\$	16,700	\$	16,098	\$	14,83
Council Heritage Buildings:								
Hastings Town Clock	\$ -	\$ -	\$	-	\$	-	\$	3,256
Duart House	\$ -	\$ 21,717	\$	5,688	\$	27,558	\$	30,760
Opera House/Toitoi	\$ 356,665	\$ 127,917	\$	510,943	\$6	,127,572	\$ 9	,594,48
Stoneycroft	\$ -	\$ -	\$	-	\$	-	\$	38,568
Art Gallery	\$ 408,106	\$ 8,486	\$	-	\$	6,816	\$	-
Urban Design - Consultancy Estimate								
CBD, urban parks, streetscapes	\$ 76,895	\$ 128,989	\$	95,261	\$	110,570	\$	161,395

Hastings District Council

Council spending on Arts & Heritage, murals, Façade Enhancement, Council heritage buildings, urban parks, and the streetscape has generally increased over the reporting period. Council has invested funds into the Opera House/Toitoi to ensure the facility is consistent with the Earthquake Prone Building Act 2016 requiring buildings to be earthquake strengthened. There is a noticeable reduction in spending for the Art Gallery and Public Art.

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# Indicator H3: Consents to Modify/Destroy Heritage Items and Wāhi Taonga

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 94 heritage items, 4 historic areas, 300 notable trees, and 99 Wāhi Taonga sites recorded in the Proposed District Plan.

Table 11: Heritage Items in the Proposed District Plan

Heritage Items	Number
Outstanding and Significant Trees	300
Historic Areas	4
Heritage Buildings/Features (Te Mata Special Character Area)	94
Wāhi Taonga sites	99
Total	497

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 (HB14).
- Earthquake strengthening the Havelock North Transformer House and Shelter (HB80) in 2017.
- Fire safety works, decorative screen and glazer canopy for opera house and municipal building in 2019 (HB14 and HB13).

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 urupa).

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

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

According to NZ Archaeological Association (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 requests, the vast majority of the District has not been subject to detailed archaeological survey.

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Heritage New Zealand Pouhere Taonga 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 and 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 of 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.



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

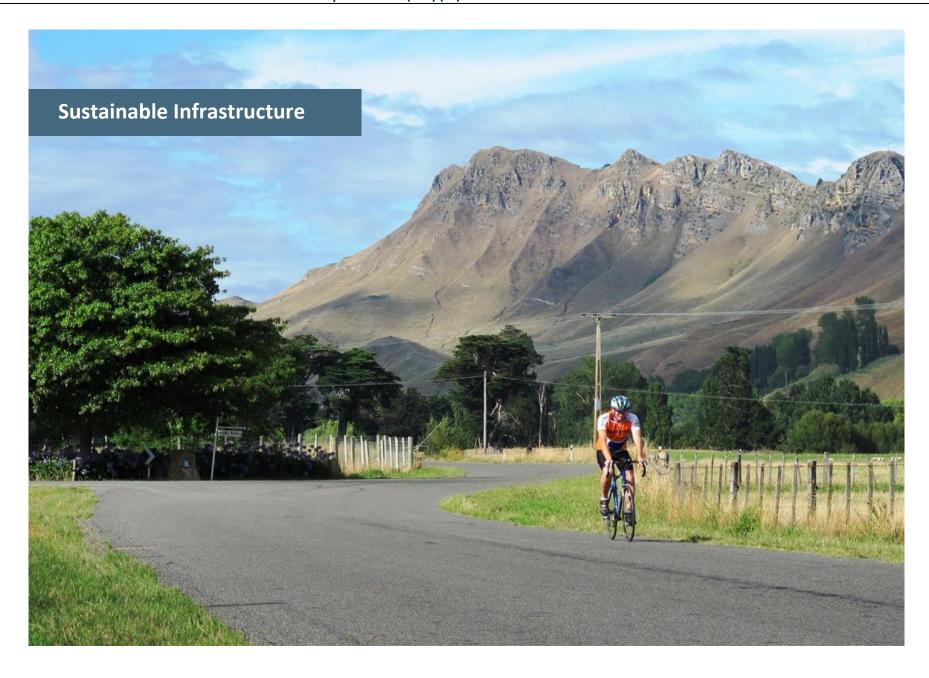
- Alert Council or the NZAA when potential archaeological sites are uncovered
- Find out about the stories that relate to major heritage sites, and get to know the history of your District and local area
- Treasure the memories of kaumātua and elders in our community.

#### 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

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 Ensure effects on archaeology are assessed in the processing of subdivision applications.



### Sustainable Infrastructure

### The issues at a glance

INDICAT	OR	STATE 2009 - 2014	STATE 2015 - 2019	SUMMARY
Transpo	rtation			
Т8	Residents' satisfaction with Council roads			Significant reduction, with 63% surveyed being satisfied. This is compared with 86% in 2014.
Т9	Residents' satisfaction with cycling facilities in the District.	-	(F)	High satisfaction, with 85% satisfied compared with 91% in 2014.
T10	Residents' feeling of safety for pedestrians and cyclists	樂		High satisfaction with footpaths with, 85% satisfied, compared with 81% 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 2019.
Water N	/lanagement			
WS1	Consented water takes held by HDC for water supply purposes	( )		12 resource consents held by HDC for community supplies, providing for abstraction of 928, 470m <sup>3</sup> of water in any 7-day average. This is compared with 15 resource consents held by HDC for community supplies, providing for abstraction of 940, 000m <sup>3</sup> 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 380 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			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. HDCs water supplies are currently ungraded.
WS5	Compliance with drinking water standards			Hastings District Council manages 11 Water Supplies, comprising 26 abstraction sources, 15 treatment plants and 17 distribution zones. The remaining supplies in the District are privately owned and managed.
				All of the Hastings District Councils 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).

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INDICAT	OR	STATE 2009 - 2014	STATE 2015 - 2019	SUMMARY
				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.
WS6	Residents' rating of water quality			Continued high satisfaction with the water supply with 51% surveyed being satisfied.
Wastew	ater Treatment			
WW1	Consented wastewater discharges held by HDC	*		Two consents are held by HDC for community wastewater schemes – (1) East Clive Ocean Outfall Consent and (2) Waipātiki 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 Waipātiki Wastewater Scheme results show that the scheme has met technical compliance in 20013/14 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 <sup>3</sup> . This is compared with 48,500m <sup>3</sup> 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.
Trade W	aste 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-complying discharges of trade waste	•		There were five trade waste consent warning notice issued.

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.

### 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 sector<sup>11</sup>.

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 are resulting in 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.

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.

<sup>11</sup> Section 2.5.6 of the Operative Hastings District Plan.

- · Increase community wellbeing.
- Increase uptake of active travel and public transport.

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. This 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.



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### **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.

### INDICATORS FOR TRANSPORTATION

INDICAT	OR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
			Relevant Outcome Statements:	Proposed District Plan (2015) (As amended by decisions) Section 26.1 (Transportation)  A transportation network that actively encourages alternative transport modes  A safe and efficient District Transport Network
Т7	Residents' Satisfaction with Counci Roads	l State		
Т8	Residents' satisfaction with cycling/walkway infrastructure in the District	State		
Т9	Residents' Feeling of Safety for Pedestrians and Cyclists	State		

### **Monitoring Information**

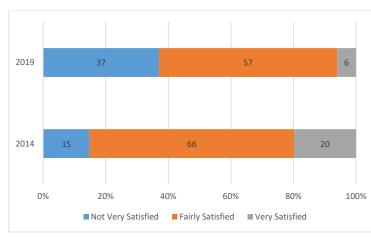
### Indicator T7: Residents' Satisfaction with Council Roads

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 35: Residents' Satisfaction with Council Roads (2014-2019)



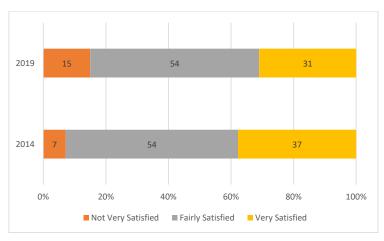
Source: Hastings District Council Communitrak Survey and Public Voice Survey

### Indicator T8: 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.

Figure 36: Residents' Satisfaction with Cycling Facilities (2014-2019)



Source: Hastings District Council Communitrak Survey and Public Voice Survey

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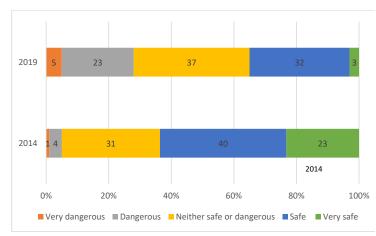
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# Indicator T9: Residents' Feeling of Safety for Pedestrians and Cyclists

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



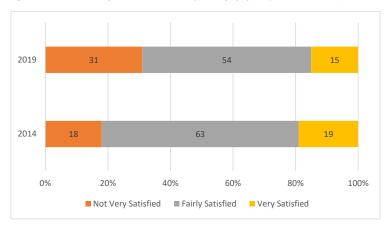
Source: Hastings District Council Public Voice Survey

The graph shows that in 2014, 63% of the respondents to the survey felt safe or felt very safe. 31% felt it was neither safe nor dangerous. 5% of respondents felt riding a bike in the District was dangerous or very dangerous.

In 2019, there was significant change. Only 35% of respondents considered riding a bike either safe or very safe. However 28% of respondents considered riding a bike dangerous or very dangerous. A further 37% stated riding a bike was neither safe nor dangerous.

This contrasts with the fact that 69% of those surveyed in 2019 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

Figure 38: 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 2014, 82% of those surveyed being 'fairly' or 'very satisfied'. By 2019, 69% of those surveyed reported being fairly or very satisfied with the quality of footpaths in the District.

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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.

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 the on-going publicity around healthy living and sustainable modes of transportation
- 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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### Water Management

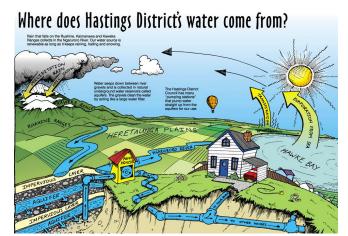
Water management refers to all aspects of providing freshwater for residential, commercial and industrial activities within the District

The Heretaunga Plains Unconfined Aquifer is the main ground water resource for the Heretaunga Plains, Hastings and Napier communities, providing 85% of their water requirements<sup>12</sup>. 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 Waimārama 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. In addition, there are a number of smaller, privately-managed water supplies throughout the District (managed by schools, marae, local communities etc).



Source: Hastings District Council

<sup>12</sup> Section 2.2.2.5 of the Operative Hastings District Plan 2003.

### **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

INDICATO	OR	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	Proposed District Plan (2015) (As amended by decisions) Section 30.1 (Subdivision and Land Development)  Maintenance of public health and safety  Provision 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 infrastru 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				

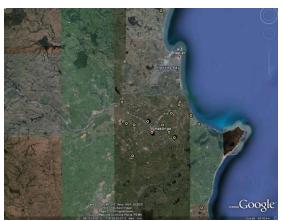
Hastings District Council – Te Kaunihera ā-Rohe o Heretaunga /104

### **Monitoring Information**

# Indicator WS1: Consented Water Takes Held by Council for Water Supply Purposes

Hastings District Council manages 11 separate water supplies comprising 24 individual supply bores and two springs. The majority of these are located on the Heretaunga Plains (their location is shown below).

Figure 39: Hastings Water Supply – Distribution of Bores<sup>13</sup>



Source: Google Maps

Hastings District Council holds 12 operative resource consents from Hawke's Bay Regional Council for water take. These are detailed in the following table.

Table 12: Hastings District Council Water Supply Consents

			Maximum Peak Flow and Abstraction Rates	
Supply	HBRC Consent Number	Consent Expiry Date	Litres per Second	m³ in any 7- day Period
Hastings	WP120036Tb	31/05/2047	1,240	749,952
Brookvale Rd Bores	WP070080Ta	31/05/2018	200	101,281
Haumoana and Te Awanga	WP050193Td	31/05/2025	50	21,773
Clive	WP050195Tb and WP050191Tb	31/05/2025	50	17,310
Whirinaki & Esk	WP110126T	31/05/2040	49	23,794
Esk Vineyard	WP110127T	31/05/2040	N/A	1,544
Waimārama	WP120016Ta	31/05/2033	20	5,180
Whakatū	WP050192Tb	31/05/2025	50	3,810
Ōmāhu	WP010478T	31/05/2026	14	1000
Parkhill	WP080570T	31/05/2025	8	1740
Waipatu	WP080486Tb	31/05/2023	10	176
Waipātiki	WP000084Ta	31/05/2020	2.5	910
			TOTAL	928,470

Source: Hastings District Council

### Indicator WS2: Domestic Water Consumption

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

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<sup>&</sup>lt;sup>13</sup> Note: the Waipātiki bore is also managed by Hastings District Council but is beyond the area shown in this figure

Demand in some supplies is also influenced by seasonal population growth, for example Waimārama, where the summer population growth sees a three to 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. This outlines 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 40: Hastings Urban Water Supply – Consent allocation vs actual usage

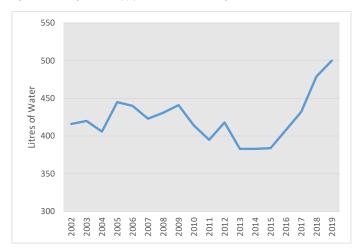


Source: Hastings District Council

As shown in the Figure below, since 2016 the averaged consumption per capita across all supplies has climbed. There was also a change 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.

Figure 41: Hastings Water Supply - Domestic Water Usage<sup>14</sup>



Source: Hastings District Council

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<sup>14</sup> The figures on water usage for Hastings District Council water supplies include fire hydrant testing, routine system flushing, tanker filling and fire usage, some unmetered parks and garden usage, system leakage, and unmetered industrial and commercial usage.

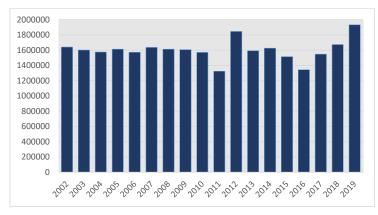
#### Since the last report:

- 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 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 the 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 2017. 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.

Figure 28: 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 Wattie's and McCains who obtain their own processing water from private bores consented by the HBRC. 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.

HDCs water supplies are currently ungraded.

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#### Indicator WS5: Compliance with Drinking Water Standards

Hastings District Council manages 11 Water Supplies, comprising 26 abstraction sources, 15 treatment plants and 17 distribution zones. The remaining supplies in the District are privately owned and managed.

All of the Hastings District Councils 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 (DWSNZ) (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.

Protozoa compliance has not been achieved for some of the HDC supplies due to the current WSP 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.

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.

The below table summarises the compliance status of the HDC supplies from compliance years July 2015 to June 2019.

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Table 13: Compliance with status of the HDC supplies

Supply name	2015-2016		2016-2017		2017-2018		2018-2019		Comment
	Bacterial	Protozoal	Bacterial	Protozoal	Bacterial	Protozoal	Bacterial	Protozoal	
Brookvale	No	Yes**	Yes	No	Yes	Yes	Yes	Yes	5-log WTP installed in March 2017 which meets the protozoa criteria of the DWSNZ.
Eastbourne	Yes	Yes**	Yes	Yes**	Yes	No	Yes	No	Bore field lost security status in March 2018, which affects protozoa compliance against the DWSNZ. Subsequent testing showed no presence of protozoa.
Frimley	Yes	Yes**	Yes	No	Yes	No	Yes	No	Bore field lost security status in 2017, which affects protozoa compliance against the DWSNZ. Subsequent testing showed no presence of protozoa.
Portsmouth	Yes	Yes**	Yes	Yes**	Yes	Yes**	Yes	Yes**	Bore has secure bore status, which complies with protozoa criteria of the DWSNZ.
Wilson	Yes	Yes**	Yes	No	Yes	No	Yes	No	Bore field lost security status in 2016, which affects protozoa compliance against the DWSNZ. Subsequent testing showed no presence of protozoa. A 3-log WTP installed in October 2018 which complies with protozoa criteria of the DWSNZ.
Clive-Ferry	No	Yes**	Yes	Yes**	Yes	Yes**	Yes	Yes**	Bore has secure bore status, which complies with protozoa criteria of the DWSNZ.
Clive-Tucker	Yes	Yes**	Yes	Yes**	Yes	Yes**	Yes	Yes**	Bore has secure bore status, which complies with protozoa criteria of the DWSNZ.
Whakatū	Yes	Yes**	Yes	Yes**	Yes	Yes**	Yes	Yes**	Bore has secure bore status, which complies with protozoa criteria of the DWSNZ.
Haumoana	No	Yes**	No	No	Yes	Yes**	Yes	Yes**	Secure bore status lost in 2016 due to single transgression.  Provisional security achieved and full security re-instated  2019 which complies with protozoa criteria of the DWSNZ.
Waimārama	Yes	No	Yes	No	Yes	No	Yes	No	WTP including Cartridge filtration, U.V and chlorination, however does not meet the validation requirements of the DWSNZ.
Ōmāhu	Yes	No	Yes	No	Yes	No	Yes	No	5-log WTP installed in September 2017 which meets the protozoa criteria of the DWSNZ.
Esk	Yes	No	Yes	No	Yes	No	Yes	No	WTP including Cartridge filtration, U.V and chlorination, however does not meet the validation requirements of the DWSNZ.
Whirinaki	Yes	No	Yes	No	Yes	No	Yes	No	WTP including Cartridge filtration, U.V and chlorination, however does not meet the validation requirements of the DWSNZ.
Waipātiki	Yes	No	Yes	No	Yes	No	Yes	No	Chlorination only. No Protozoal treatment.
Parkhill	Yes	No	Yes	No	Yes	No	Yes	No	Chlorination only. No Protozoal treatment.
Waipatu	Yes	Yes**	Yes	Yes**	Yes	No	Yes	No	Bore lost security status in December 2017. UV and chlorination installed which achieves protozoa removal, but does not currently fully meet the protozoa criteria of the DWSNZ.

<sup>\*\*</sup> Source has secure bore status

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#### Indicator WS6: 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 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 districts water supply to ensure safe drinking water.

Figure 43: Residents Rating of Drinking Water Quality 2008-2019



Source: Hastings District Council Communitrak 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 Waimārama 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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### 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, Whakatū and Clive. This 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:

 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 using Biological Tricking 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.

After passing through a grit removal unit the combined wastewater is then discharged through the offshore ocean outfall.

There is also a small wastewater system in Waipātiki this was established in the mid-2000s in response to environmental concerns around water quality in the local catchment.

Households in rural areas outside the service area rely on on-site wastewater treatment systems to treat and dispose of household wastewater. Properly installed and maintained, this is a hygienic, economical and environmentally safe way of disposing of household wastewater.

Council has looked at the feasibility of community schemes for Waimārama and Te Awanga/Haumoana and. In both locations, a scheme is feasible at reasonable cost. However, at this time there are no environmental or public health imperatives that necessitate this investment.

The Council's Engineering Code of Practice also stipulates the manner in which new Wastewater schemes should be designed as part of land use development.

This section covers the Wastewater Services provided by the Council for the urban environment and certain communities around the District.

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#### **Indicators**

The table below shows the indicators that are used to monitor wastewater treatment in the District. These indicators are also used to inform other Council performance monitoring programmes.

INDICATORS FOR WASTEWATER TREATMENT AND DISPOSAL

INDICAT		INDICATOR TYPE	AND COUNCIL OBJECTIVES  Relevant Outcome Statements:  • An environment that is appreciated, protected and sustained for future generations	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES  Proposed District Plan (2015) (As amended by decisions)  Section 30.1 (Subdivision & Land Development)  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		tor trends around the security and integrity of delivery of the District's community , 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 monit	tor trends around the safety and efficiency of trade waste disposal in the District.
TW2	Number of Industries Connected to the Separated	Pressure		

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INDICATOR		INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES AND HOW IT INFORMS THESE OUTCOMES
	Trade Waste Conveyance System			
TW3	Number of warning notices issued	Pressure		

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#### **Monitoring Information**

#### Indicator WW1: Consented Wastewater Discharges Held by Council

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:

- 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
  - Consent granted on the 25th June 2014 with a consent expiry date on 31 May 2049 (35 year term); and
  - The consented maximum discharge rate is for 2800 litres per second.

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.

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.

- Waipātiki Wastewater Scheme the consent (DP050397L) is for discharge of wastewater to land
  - 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.

The Waipātiki Wastewater Scheme has been designed to cater for the established properties within the Waipātiki coastal settlement, as well as the 29-lot subdivision granted in 2003.

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.

# Indicator WW2: Compliance with Consent Conditions for Wastewater Discharges

#### East Clive Wastewater Treatment Plant

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.

#### Waipātiki Wastewater Scheme

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 not-compliance relates to the nitrate limit being exceeded. The annual compliance report for 18/19 is still being processed.

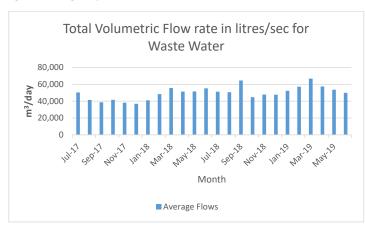
#### Indicator WW3: Volume of Wastewater Produced

#### Wastewater Treatment Plant East Clive

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.

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Figure 44: Average Daily Flow



Source: Hastings District Council 2017/19 Compliance Reporting Section 4.3

Due to equipment changes, only data between July 2017 – May 2019 was able to 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 form these industries form a large proportion of the industrial flow during these periods.

#### Waipātiki Wastewater Scheme

There have been no Waipātiki 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

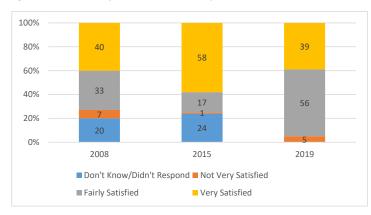
Year	Customer Satisfaction (NPR)	Serviced Properties (NPR)	Total Complaints
2015/16	15.90	22,896	364
2016/17	27.70	23.068	639
2017/18	21.69 (Updated)	23,422 (Updated)	508
2018/19	24.03	23,973	576
2019/20	18.73	24,135	452

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

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The Public Voice survey included a question asking residents' about their satisfaction with the wastewater system. This has been fairly consistent with only 5% reporting they were 'not very satisfied' in 2019. This is compared with 1% in 2015 and 7% in 2008.

Figure 46: Residents' Satisfaction with Wastewater System



Source: Communitrak and Public Voice Surveys

# Indicator TW1: Amount of Trade Waste Discharged through the Separated Trade Waste Conveyance System

We do not appear to have the trade waste flow data available due to equipment issues.

Looking at individual discharges it would appear that the total volume of trade waste over the period from 2015-2019 has continued on a slight downward trend.

Only two industries have increased the discharge volume (increase production) over the period but most have been stationary or reduced volume.

The biggest reduction is due to reduced processing, some are due to the industries employing smarter technology reducing water use in the processing.

# Indicator TW2: Number of Industries Connected to the Separated Trade Waste Conveyance System

Currently there are 30 industries connected to the separated industrial sewer. This number is slowly rising as new industries start up. All tend to stay connected once they are "hooked on".

#### Indicator TW3: Number of warning notices issued

The graph below summarises the number of trade waste warning notices issued:

Figure 47: Number of warning notices issued



Source: Hastings District Council Consent Trade Waste Records

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The table shows there have been very few issues with trade waste disposal noncompliance with an average of 1 warning notice per year.

There has been an improvement in the public satisfaction with the wastewater system. The trend in the volume of tradewaste discharged to the system has been fairly consistent. The number of industries connected to the separate tradewaste system has slowly risen as new industries start up. The number of warning notices issued has remained low.

#### Responses

#### For Community

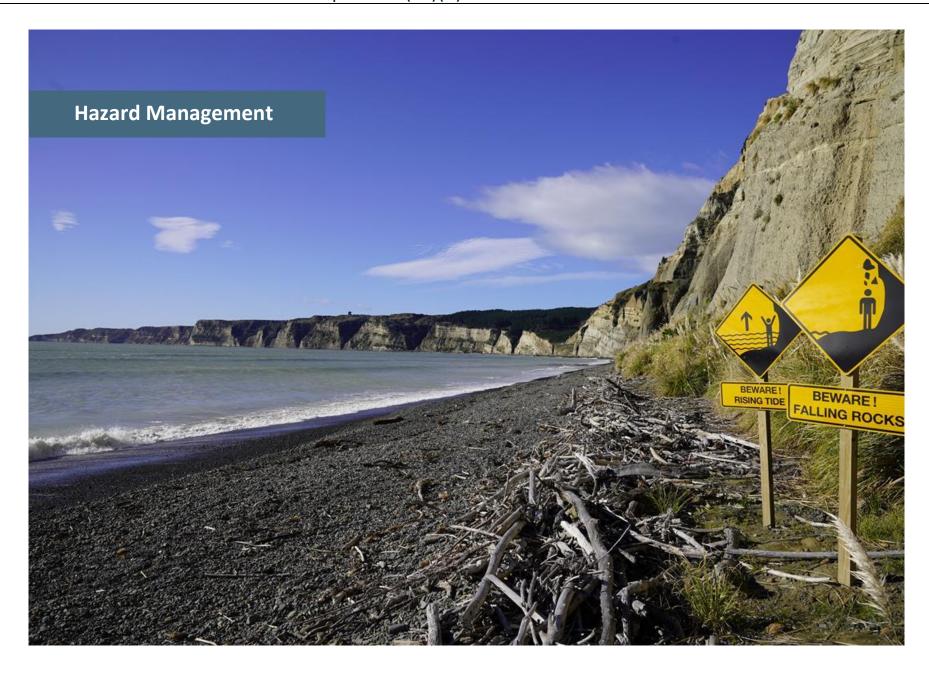
- Do not pour chemicals, paints or thinners (or the like) down any drain
- For the wider community, notify Council compliance staff if you observe unsafe trade waste disposal practices
- For users of trade waste services, ensure compliance with trade waste guidelines so as to minimise the likelihood of non-complying discharges and resulting potential for adverse environmental effects.

#### For Council

- 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.

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## **Hazard Management**

## The issues at a glance

INDICA.	TOR	STATE 2009 - 2014	STATE 2015 -2019	SUMMARY
Natural	Hazards			
NH1	Natural hazard events	(X)		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	(X)		It is expected that this may change as a result of the Hastings District Plan review as natural hazards which are already managed under other legislation, such as the Resource Management Act, Building Act and the Hawke's Bay Regional Coastal Environment Plan, have been removed from the Hastings District Plan to avoid unnecessary duplication.
NH3	Number of consents for subdivision/land development within Natural Hazard areas			Resource consents in Natural Hazard areas have increased considerably since the previous reporting period, primarily due to the inclusion of mapped liquefaction vulnerability areas. There were 1211 for land use consents and 47 for subdivision consents.
NH4	Monitoring and reporting on building consents granted within Natural Hazard areas	-		The number of building consents for both habitable and non-habitable buildings in Natural Hazards area fluctuated between 149 - 259 between 2015 and 2019.
Hazard	ous Substances			
HS1	Number of consents applying the hazardous facility screening procedure			Six 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			The number of spills reported to Hastings District Council involving hazardous substances have dropped. However, this could be the result of changes as to which agency is responsible and 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, is:

• The avoidance or mitigation of natural hazards; and

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• 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, through to events involving hazardous substances originating from our industrial and horticulture activities.

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## **Natural Hazards**

The Hastings District has the potential to suffer effects from various 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, the Resource Management Act 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.



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#### **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.

#### INDICATORS FOR NATURAL HAZARDS

INDIC	ATOR	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.  Safe and secure communities.  A lifetime of good health and wellbeing.	already within a hazard area, the reasonable risk of the hazard is reduced and/or mitigated by minimum floor
NH1	Natural Hazard Events	State	severity. Information on natu	ncil to monitor trends around the type and nature of natural hazards occurring in the Hastings District, and their ral hazard events (such as significant flood events, storm surge events, rural fire events, and coastal erosion trends) ne, 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 sta	ate 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	y 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 but to be identified.	ilding consents granted within areas identified in the District Plan as Natural Hazards enables pressure on these areas

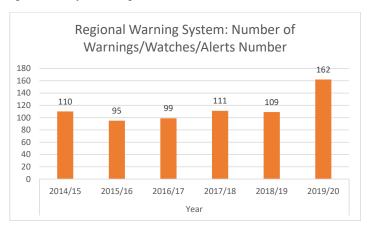
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#### **Monitoring Information**

#### 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 48: 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).

#### 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: Napier snow event, 2017 Source: J. Tuakana

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

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Table 14: 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 Māori, 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 Tutaekuri all overflowed their banks at several locations, causing extensive flooding.
1893	4 Dec	Heavy rain cause flooding in the Waipawa River, with the highest levels ever known. The Tutaekuri 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 Tutaekuri 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 Morere, 522mm fell in four days, of which 319mm fell in 24 hours.
1924	11-12 Mar	Rainfall at Rissington 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 Tütira, and a staggering 1,000mm at Puketītiri (with 390mm 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 Wairoa River catchment 307mm fell in three days at Onepoto, and 260mm at Tuai in the same period. The Wairoa River rose to a record height and flooded buildings in the Wairoa township.
1953	27-28 Jan	Exceptionally heavy rainfall over the Wanstead, Elsthorpe and Maraetōtara area. In the Mangarouhi Valley 349mm 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 Whanawhana was recorded at 157mm in 48 hours. The Ngaruroro River breached the stopbank at Twyford 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 Wairoa districts. The highest total rainfall for the three day period was 635mm recorded at Pukeorapa.
1997	2-3 Jun	Wairoa District declared a Civil Defence Emergency at 1900, terminated at 2100 next day. About 166 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 Shag 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.

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Year	Date	Event
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 epi-centre 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 Maraekākaho were evacuated. Army unimogs evacuated 200 students and staff marooned at Puketapu School. Maraekākaho 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 Waimārama when a local rain event flooded properties and closed roads.  Nine people at Waimārama and the Te Awanga Motor Camp were evacuated and six homes were flooded.
2017		Snow and flood event (Napier/Taupo road closed along with Taihape – Napier (Gentle Annie Road).
2018	Mar	Esk river floods and severe weather in June closing Napier-Taupo road after heavy rain caused slips and flooding.

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

#### **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, Waimārama, Haumoana and Te Awanga. The following table describes the two major coastal inundation events affecting Clive and Haumoana in recent history.

Table 15: 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 reoccurrence 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. The Maraekākaho community was flooded in July 2007. A few houses were evacuated, while others were accessible only to residents

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 Pub. Haumoana and Te Awanga homes sustained the most damage.
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. $ \\$
2015	Mar	Cyclone Pam causing inundation in Haumoana.
2019		Cape Coast landslide causing serious injuries to two tourist and resulting in the closure of the coast walk to Cape Kidnappers.

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

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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 Waimārama 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.

#### 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.

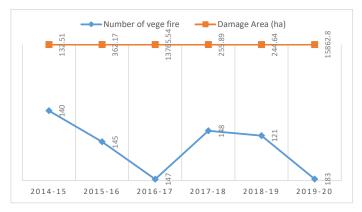
Hawke's Bay has the second highest annual average summer temperature in New Zealand, with a summer average of 24°C, with an annual rainfall of 780mm/year. During periods of general, strong, west to north-west flow over the North Island, the winds across lowlands can be warm, dry winds and in extreme 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 Forests 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 Waimārama fire event in 2017.

Figure 49: Vegetation Fire Statistics and Damage by Area (ha)



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.

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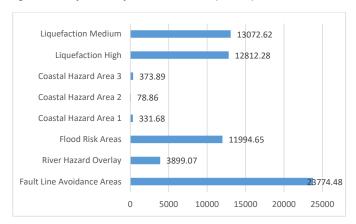
#### Indicator NH2: Area of Land Identified as Natural Hazards

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

Figure 50: Area of Land Identified as Natural Hazards (Hectares).



Source: Hastings District Council

In addition to the above areas, the Hawke's Bay Hazard Portal identifies all known hazards pertaining to Hawke's Bay, including:

- Property Hazards
- Fault Lines
- Liquefaction
- Amplification
- Coastal Hazards
- Floor Risk Areas
- Detention Dams, Tsunami Inundation
- Landslide Risk

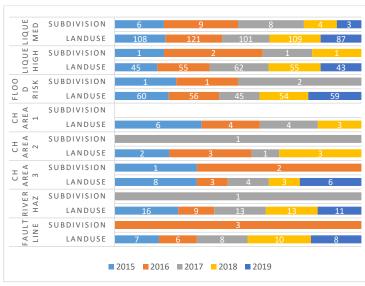
The Proposed Hastings District Plan no longer includes details of fault lines or flood risk, this is now kept current in the Portal. Previously they were identified in the District Plan as Hazard RMU's. Also the Hawke's Bay Civil Defence Emergency Management Group which is a partnership of local authorities, emergency services and other organisations is tasked with ensuring the effective delivery of civil defence emergency management in Hawke's Bay. They work together towards our vision of: 'A resilient Hawke's Bay community'. Resilience is how we adapt or keep going as usual following a disaster. The partnership Councils are Napier City Council, Wairoa District Council, Hastings District Council, Central Hawke's Bay District Council and Hawke's Bay Regional Council.

# Indicator NH3: Number of Consents for Subdivision/Land Development within the Natural Hazards RMU

However, the hazards previously contained in the District Plan generally align with the Portal hazards so as a matter of interest and the measure used at the time the following has been identified. Between 2015 and 2019, there have been a total of 1258 resource consents (1211 land use and 47 subdivision consents) within the various Natural Hazards categories under Figure 50.

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Figure 51: Number of Land Use & Subdivision Consents within Natural Hazards RMU (2015-2019)



Source: Hastings District Council

The number of resource consents within an identified Natural Hazard area is five times more than the number of consents received for the previous reporting period. A possible reason for this is changes to the classifications which now includes low, medium and high liquefaction vulnerability mapping. Generally, the Heretaunga Plains including Hastings urban area and lower lying parts of Havelock North are identified as having Medium Liquefaction Vulnerability. While Napier, Clive, parts of Whakatū and Haumoana are identified as having high liquefaction vulnerability. 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 applies for.

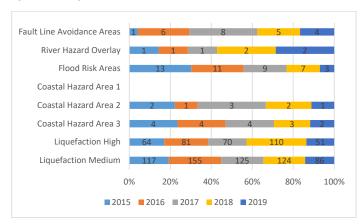
## Indicator NH4: Building consents granted within Natural Hazards RMUs

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.

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Figure 52: Building Consents in Natural Hazards (2015-2019)



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

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.

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.

Inundation of the coastal areas of Clifton and Te Awanga continues to be a significant risk or threat.

#### 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
- To monitor continued research and hazard modelling by Hawke's Bay Regional Council, identification of coastal hazard zones<sup>15</sup>, and further areas of land instability risk as they become known.

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

## **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.



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#### **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.

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:  • An environment that is appreciated, protected, and sustained for future generations.	Appropriate precaution is taken in the management of nazardous substances over the ricretaining rights
HS1 Number of Consents Involving Employment of the Hazardous Facility Screening Procedure	Pressure	manage and dispose of hazard Monitoring the number of act where and the volume of hazard	isk to the environment. To protect our environment and sustain it for future generations we need to minimise, dous substances in a safe manner. tivities requiring the employment of the hazardous facility screening procedure gives a good indication of what, ardous substances in the District. It also gives an indication of the potential risks posed to the environment, and present and future generations.
HS2 Number of Reported Incidents and Callouts to Hazardous Substances Spills	Pressure	The number of reported callo controls.	uts to hazardous substance spills again indicates the potential risks posed to the environment and the need for

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Ітем 4

#### **Monitoring Information**

# Indicator HS1: Number of Resource Consents Involving Use 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.

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.

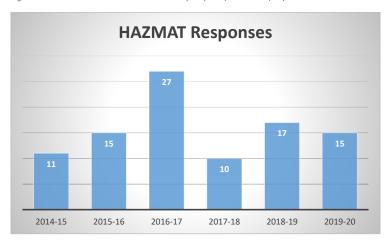
Groundwater in the Heretaunga Plains Unconfined Aquifer (the main groundwater resource for people living on and adjacent to the Heretaunga Plains) is vulnerable to contamination from the effects of activities on the surface. This is because there is no impermeable surface sediment which would prevent 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 HS2: Number of Reported Incidents and Callouts to Hazardous Substances Spills

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

Figure 53: 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.

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

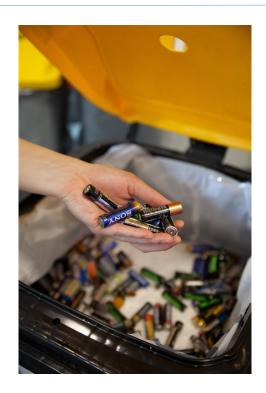
#### Responses

#### 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 issues at a glance

ATOR	STATE 2009 - 2014	STATE 2015-2019	SUMMARY
Waste			
Environmental performance of Ōmarunui Landfill			HBRC compliance monitoring reports indicated that the landfill generally complied with all its conditions of consent.
Volume of solid waste disposed			The volume of total solid waste disposed of to the landfill has increase over this period (2015-2019) by 22%, this is reflective of the economic growth in the region over the same period.
Composition of solid waste disposed to Landfill	K		While a large portion of material in the landfill is recyclable or compostable (40%), this has fluctuated but is an overall improvement since the last report.
Fly-tipping incidents in the District	( )		The number of illegal dumping in the rural and urban/plains has been increasing from a total of 354 in 2011-12 to 1760 for the 2019-20 period. 13.01% of complaints were in the rural area.
Volume of recycling			The volume of recycling collected via Council services has been steady over the current reporting period.
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. According to the public voice survey, 57% of the respondents were fairly or very satisfied with the District's recycling facilities.
dous Waste			
Volume of hazardous waste disposed	( )		HazMobile provided annually and collects on average 20 tonnes of hazardous waste. Volumes remain steady during the current reporting period.
	Environmental performance of Ōmarunui Landfill  Volume of solid waste disposed  Composition of solid waste disposed to Landfill  Fly-tipping incidents in the District  Volume of recycling  Residents' satisfaction with provision of recycling facilities  dous Waste  Volume of hazardous waste	ATOR  2009 - 2014  Waste  Environmental performance of Ömarunui Landfill  Volume of solid waste disposed  Composition of solid waste disposed to Landfill  Fly-tipping incidents in the District  Volume of recycling  Residents' satisfaction with provision of recycling facilities  dous Waste  Volume of hazardous waste	ATOR  2009 - 2014 2015-2019  Waste  Environmental performance of Ömarunui Landfill  Volume of solid waste disposed  Composition of solid waste disposed to Landfill  Fly-tipping incidents in the District  Volume of recycling  Residents' satisfaction with provision of recycling facilities  dous Waste  Volume of hazardous waste

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 and divert as much unnecessary waste as possible to prolong Ōmarunui 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 Ōmarunui Landfill, which is situated at Ōmarunui 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, Ōmarunui is constantly managing leachate and greenhouse gases and this will continue well after closure.

Ōmarunui Landfill has highly engineered and successful systems to capture liquids and gases produced by the waste. However, the Hastings District Council and the Napier City Council believe it is better to divert these materials from Ōmarunui 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.



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#### **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:     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 Ōmarunui 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 produces 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 contaminates 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	Fly-tipping incidents in the District	State	Fly-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 dispos	ed 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 faci this service.	lities is useful to identify whether there is a need to improve or expand

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#### **Monitoring Information**

#### Indicator SW1: Environmental Performance of Ōmarunui Landfill

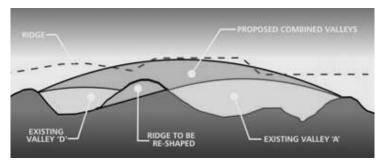
The Ōmarunui Landfill comprises of four valleys identified as suitable for refuse disposal. Area A received waste between 1988 and 2007 and is now closed. Area D has been operational from 2007 and has an estimated 4 years of capacity remaining. The remaining landfill space at Ōmarunui Landfill is expected to serve the Hastings and Napier communities for 50+ years beyond 2025.

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 and reducing the amount of pollutants produced.

The Ōmarunui 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.

Ōmarunui Landfill prescribes to best international practice and construction of Area D (the currently active part of the landfill) utilised a three liner system using; clay, Geosynthetic liner and HDPE plastic liner.

The following image shows the final layout of the Ōmarunui Landfill in 2025.



Source: Napier City Council

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 Ōmarunui Landfill:

- 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.

HBRC compliance monitoring reports for the 2014/15 year indicated that the landfill generally complied with all its conditions of consent.

#### Indicator SW2: Volume of Solid Waste Disposed

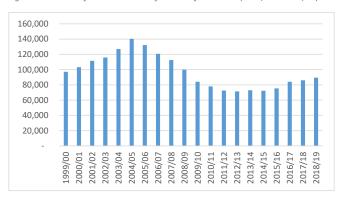
Most of the waste that comes to the landfill is from the commercial sector and the refuse transfer stations (RTSs). The two refuse transfer stations in the Hastings District are Blackbridge RTS on Mill Road, Clive, and Henderson Rd RTS in Hastings.

The following graph shows the total tonnage of solid waste received at the Ōmarunui Landfill (being the combined tonnage of waste from the refuse

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transfer stations, commercial waste operators and industrial waste sources from both Napier City and Hastings District).

Figure 54: 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 Ōmarunui Landfill and each refuse transfer station every third year.

The first SWAP survey was carried out in 2007 for Hastings District and Napier City Councils<sup>16</sup>. 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.

Figure 55: Composition of Overall Waste to Ōmarunui Landfill (2016-2019)



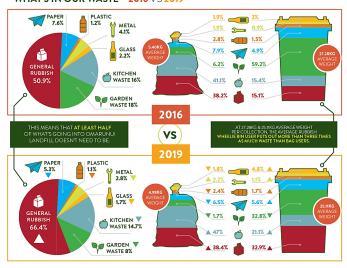
Source: Hastings District Council

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<sup>&</sup>lt;sup>16</sup> Survey of Solid Waste in Hawke's Bay, March 2012, Waste Not Consulting.

Figure 56: Composition comparison of waste streams to Ōmarunui Landfill, (2016 and 2019)

#### WHAT'S IN OUR WASTE - 2016 VS 2019



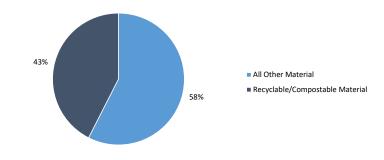
Source: Hastings District Council

In 2016, organic material was the largest single component of the overall waste stream being disposed of at Ōmarunui 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 Ōmarunui 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, comprising 19.3% of the total weight. 66% of the total was waste that could not have been easily diverted.

This information shows that there is still a large proportion of the waste being disposed of at the landfill that could potentially be composted, recycled or reused rather than sent to the landfill. The results of future surveys will assist with trend analysis for future reporting.



Source: Hastings District Council

#### Indicator SW4: Fly-tipping incidents in the District

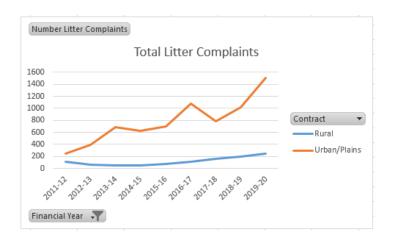
Fly tipping is the illegal dumping of rubbish. Reliable data about the incidence of fly tipping in the District has been recorded since 2014. Common forms of rubbish dumped included animal carcasses, household waste, and car parts.

The table below shows the numbers of incidents of fly-tipping, as opposed to the quantity or number of items dumped.

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Table 16: Number of fly-tipping incidents in Hastings District 2015-19

Number Litter Complaint	s Column Labels 🔻		
Row Labels	<b>,</b> ▼ Rural	<b>Urban/Plains</b>	<b>Grand Total</b>
2011-12	107	247	354
2012-13	63	389	452
2013-14	50	689	739
2014-15	50	628	678
2015-16	75	696	771
2016-17	109	1074	1183
2017-18	160	785	945
2018-19	192	1022	1214
2019-20	248	1512	1760
Grand Total	1054	7042	8096

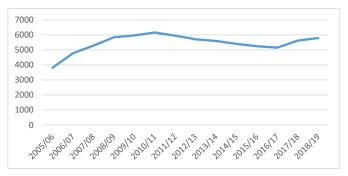


The total number of illegal dumpings has been classed into two areas. There are rural area and urban/plains and is based on the number of complaints where past reports were based on dumped item such as carcasses of beef or sheep. Fly tipping has been steadily increasing over time in comparison with the number of complaints from dumping in the Urban/Plains Production Zone. While record numbers for dumping in the urban/plains were twice as much in 2011. Over time this has seen urban/plains dumping being fives more than the level of rural numbers.

#### Indicator SW5: Volume of Recycling

Recycling facilities in the Hastings District include both kerbside collection and drop-off areas. Kerbside recycling is provided in the urban areas of Hastings, Flaxmere, Havelock North, Clive, Whakatū, Clifton, Te Awanga and Haumoana – serving almost 70% of the District's population. The volume of recycling has been steady over the reporting period.

Figure 57: Volume of Recycling (Tonnes)



Source: Hastings District Council

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In addition to kerbside recycling, there are recycling drop-off facilities at the two Refuse Transfer Stations (RTSs), and a dedicated recycling depot in Martin Place, Havelock North (which is open 24 hours a day/7 days a week).

Rural recycling has been at Tūtira, Waipātiki, Pukehamoamoa, Maraekākaho, Poukawa and Waimārama over the reporting period.

This shows that the community is regularly using these services to recycle materials that would otherwise have ended up in the landfill.

Figure 58: Rural Recycling

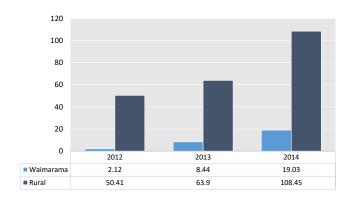
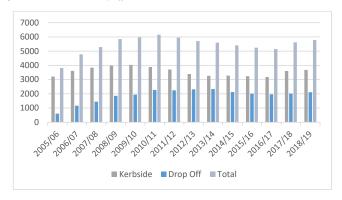


Figure 59: Kerbside and Drop off





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## 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.



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#### **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

INDICAT	OR	INDICATOR TYPE	RELEVANT COMMUNITY OUTCOMES AND COUNCIL OBJECTIVES	RELEVANT DISTRICT PLAN OUTCOMES
			Relevant Outcome Statements:     An environment that is appreciated, protected, and sustained for future generations.     Hawke's Bay is clean, green and pollution free	Proposed District Plan (2015) (As amended by decisions) NIL
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**

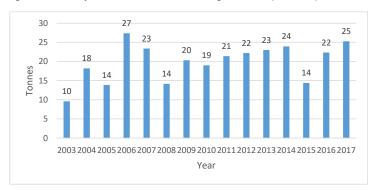
#### Indicator HW1: Volume of Hazardous Waste Disposed

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 is 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 60: Volume of Hazardous Waste Collected through HazMobile (2003-2017)



Source: Hastings District Council



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.

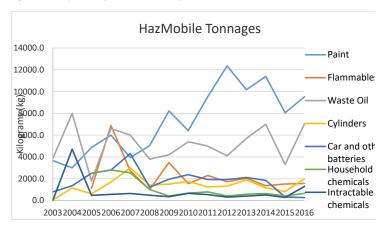
The steady participation of HazMobile suggests that Hastings residents are becoming increasingly aware of the service and making use of it to dispose of common household hazardous waste.

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 Hawke's Bay Regional Council's Agricultural Chemical collection which services the District's farms twice yearly.

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Figure 61: Composition of Waste Collected by HazMobile



It is difficult to determine the amount of hazardous waste disposal in the District as there are numerous avenues for its disposal.

Hastings District and Napier City Councils and Hawke's Bay Regional Council run a mobile collection service once a year (known as HazMobile) for residents to drop off household hazardous wastes. Utilisation of this service is steadily increasing. Industries and businesses are required to have other arrangements to dispose of their hazardous waste.

#### Responses

#### For the Community

 Ensure that any household hazardous waste is disposed of appropriately by taking it to HazMobile or contacting the Regional Council.

#### For Council

- Monitor the type and volume of hazardous wastes collected through the HazMobile
- Monitor changes in the frequencies of organisations collecting hazardous wastes
- Support education campaigns on how to store and dispose of hazardous wastes appropriately and safely.

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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 the proposed 2015 District Plan provisions and therefore, there has been no data collected.

#### 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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