

Rural Development Strategy

Reverse Sensitivity: Issues and Options

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1 Introduction

Reverse sensitivity can arise where sensitive activities are introduced to an environment where existing effects-intensive activities take place. Reverse sensitivity, as a term, was not used before the Resource Management Act 1991 (RMA). More direct and allocative land use control, such as that promoted through Sustainable Futures 30/50 seeks to avoid reverse sensitivity. Nevertheless, reverse sensitivity is recognised as an issue under the effects-based planning regime of the RMA and needs to be considered when reviewing District Plan objectives and policies.

The rural area is particularly to reverse sensitivity effects. Many activities such as quarrying, horticultural activities (e.g. spraying and bird scaring devices), state highways and critical energy networks are located in rural areas. In the Whangarei District, the sporadic nature of past subdivision, and future residents of the rural area who will fill the vacant sections have the potential to create new reverse sensitivity problems. Reverse sensitivity has the potential to compromise productive land uses, such as farming and quarrying that legitimately exist in the rural environment. The District Plan can provide objectives and policies to address reverse sensitivity issues for future subdivision and development, and more directive zoning can direct residential areas, away from incompatible activities, past subdivision patterns are more difficult to remedy. Methods outside the District Plan in combination with some control over building location can be considered to address this issue and secure the productive future of Whangarei's rural environment.

2 Policy Framework

2.1 National Policy

2.1.1 Resource Management Act 1991

In February 2000, the Ministry for the Environment published "Managing Rural Amenity Conflicts". This provided a useful guide to Councils on how the Act includes the need to consider rural amenity conflicts and how this could be implemented through District Plans following various options for community consultation.

The guidelines discussed how amenity values were defined in the Act:

"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". (Section 2).

The Act includes amenity values within its definition of "environment" and thereby it is encompassed in its purpose of sustainable management, particularly through section 5 (d):

"Avoiding, remedying, or mitigating any adverse effects of activities on the environment."

In addition to this, section 7 of the Act requires Council to have regard to *maintaining and enhancing* amenity values when preparing its District Plan to manage use, development and protection of natural and physical resources.

With regards to reverse sensitivity issues, it is also worth considering how they could compromise the ability for *people and communities to provide for their social, economic and cultural wellbeing*, under the sustainable management purpose of the Act. This includes:

"Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations". (Section 5 (2)(a)).

2.1.2 National Policy Statements

A recent National Policy Statement has highlighted the need for Councils to consider reverse sensitivity effects on infrastructure and economic activities. The District Plan must give effect to any national policy statements under Section 75 (3) (a) of the Act.

National Policy Statement on Electricity Transmission (13 March 2008)

Policy 10

In achieving the purpose of the Act, decision-makers must to the extent reasonably possible manage activities to avoid reverse sensitivity effects on the electricity transmission network and to ensure that operation, maintenance, upgrading, and development of the electricity transmission network is not compromised.

2.3 Regional Policy

2.3.1 Regional Policy Statement

Under Section 75 (3) (c) of the RMA, the District Plan must give effect to the regional policy statement. The Northland Regional Policy Statement (RPS) was adopted in 1999. Whilst it identifies an extensive list of issues for the Northland Region, reverse sensitivity is not mentioned. This may be in part due to the age of the RPS, and a lot of the discussion and case law around reverse sensitivity, including the Ministry for the Environment Report (2000) on 'Managing Rural Amenity Conflicts', has only come about from 1999 onwards. The current RPS does, however, have a policy under the 'Air Quality' section which provides some guidance:

Avoiding nuisance effects

"To avoid contaminant discharges to air creating a nuisance or detracting from the amenities of areas by either:

Encouraging and when appropriate, requiring separation of incompatible land uses;..." (Page 81)

In addition to this, the Minerals section includes objectives and policies to protect mineral resources from activities which may compromise their future use. These are discussed in the mineral and aggregate resources issues and options paper.

In October 2010, the Northland Regional Council produced a Discussion Document and background papers to inform the development of a new RPS. This included a paper and section on "land management and rural productivity". The paper and subsequent discussion document mention reverse sensitivity as a potential issue which "may further constrain the practicality or viability of some rural/productive activities if too many residential dwellings are established in rural production locations" (NRC, 2010). Whilst this is only the very initial phase of consultation on what the content of the new RPS could be, any District Plan provisions relating to reverse sensitivity will need to give effect to the operative RPS and therefore the way this issue takes develops during the drafting of the RPS should be monitored.

2.3.2 Regional Plans

Under Section 75 (4) (b) of the RMA, the District Plan must not be inconsistent with a regional plan. Of the three operative Regional Plans, only one specifically mentions reverse sensitivity. The Regional Air Quality Plan (2005) has the following specific policy for Marsden Point:

"When considering new land use activities regard shall be had to avoiding reverse sensitivity effects from incompatible and potential sensitive land uses on any other land use, including lawfully established industries, in the area.

Explanation. *There are areas in which industrial development is allowed to occur in the District Plan. Therefore it is important that reverse sensitivity effects on any other land use, including lawfully established industries, in the area be avoided when considering applications for new incompatible and potentially sensitive land uses." (p.43, NRC, 2005).*

This reflects the nature of the activities at Marsden Point, particularly the oil refinery, which is unable to internalise all of its effects and as a result some form of consideration needs to be given as to what activities locate around it. Whilst this particular policy won't have a significant bearing on the Rural Development Strategy, it does highlight the importance of reverse sensitivity as an issue in the Whangarei District.

2.4 District Policy

2.4.1 Whangarei District Plan

Chapters 5 (Amenity Values) and 8 (Subdivision and Development) of the Operative Whangarei District Plan contain issues, objectives and policies relating to reverse sensitivity. In particular the following are relevant:

5 Amenity Values

5.4 Policies

5.4.5 Countryside Environments

To ensure rural amenity values in the Countryside Environments are protected from subdivision, use or development that is sporadic or otherwise inappropriate in character, intensity, scale or location.

Explanation and Reasons: The rural environment possesses distinctive amenity values that are enjoyed by both rural and non-rural dwellers. However, conflict over amenity values often occurs when

*new residences locate in the rural environment. This conflict includes both the effects of newly locating activities on existing activities and the effects of existing activities on newly locating activities (**reverse sensitivity**). These issues need to be managed both to avoid conflict and protect rural amenity values.*

5.4.7 Intensity and Design of Subdivision and Development

To ensure that subdivision and development do not unduly compromise the outlook and privacy of adjoining properties, and should be compatible with the character and amenity of the surrounding environment. Particular regard should be given to:

- The layout and intensity of subdivision;
- The location, design and siting of buildings and structures except, where such buildings and structures provide a specific service for the surrounding environment. In the latter case, any building or structure shall be designed, laid out and located, so as to avoid, remedy or mitigate any adverse effects on the environment.

Restrictions on density of development and subdivision size may be required to ensure new development does not increase population concentration in noise-sensitive areas.

Explanation and Reasons: The intensity, scale and design of subdivision, and buildings within subdivisions, have the potential to cause adverse environmental effects. Reverse sensitivity issues are relevant in determining appropriate density of development and subdivision. The layout, design and density of subdivision should be appropriate to the environment where it is located. New buildings should also be of a similar character to the buildings that exist in that particular environment. The scale, height and setbacks of new buildings also have the potential to adversely affect outlook and privacy of neighbouring activities.

5.4.16 Future Environments (Overlying Environments)

To ensure that when the nominated Overlying Environments of Future Environments come into effect, by way of resource consents related to a Comprehensive Development Plan, the proposed land uses meet the relevant requirements of the nominated Overlying Environment by:

- Using appropriate measures to avoid, remedy or mitigate reverse sensitivity effects i.e. from noise, dust, visual obstruction or other effects generated from any existing (or potential) adjoining land uses;...

5.4.17 Activities Demanding High Amenity Values

To ensure that activities are not permitted or acknowledged in areas where they may be adversely affected by existing land uses; or have adverse effects on (including compromising and restricting) existing land uses.

Explanation and reasons: As competition for land increases, and as land uses evolve, issues of reverse sensitivity become increasingly important. Allowing subsequent sensitive activities to be located next to established or new industrial activities or important physical infrastructure like airports, can result in significant adverse environmental effects, and is not consistent with the overriding need to promote the sustainable management of natural and physical resources.

8 Subdivision and Development

8.1 Significant Issues

Conflict between incompatible land use activities, including reverse sensitivity effects, can arise where new subdivision and developments occur.

8.3 Objectives

8.3.7

Subdivision and development that provides for comprehensive development of land with a range of allotment sizes and is appropriate to the character of the Environment in which it is located.

Explanation and Reasons: Overall environmental quality can be compromised by inappropriate subdivision and development. Such effects include reverse sensitivity effects where closer subdivision and development compromises existing activities such as roads, sewage treatment plants, airports, and a range of farming or business activities. Subdivision and development that is sensitive to the surrounding environment is an important means of achieving sustainable management. Ongoing and subsequent subdivision and development of land, can potentially result in cumulative adverse effects

as the volume of development exceeds the carrying capacity of the environment to absorb these effects. Higher density subdivision can potentially result in conflict between existing and potential land uses. Adverse effects generated by inappropriate subdivision and development can undermine Airport operations and the primary function of the state highway network to provide for a safe and efficient state highway system throughout the District. Provision of onsite mitigation between such activities, particularly through larger lot sizes, is therefore desirable. It is important in achieving sustainable management that subdivision and development is serviced in an efficient and environmentally sensitive manner. Council has a responsibility, under section 106 of the Resource Management Act 1991, to decline consent to any subdivision in areas where hazards exist, unless they can be adequately mitigated.

8.3.9

Subdivision and development that recognises industrial and economic activity in enabling people and communities of the district to provide for their social, economic and cultural well-being.

*Explanation and Reasons: Overall environmental quality can be compromised by inappropriate subdivision and development. Such effects include **reverse sensitivity effects** where closer subdivision and development compromise existing activities such as roads, sewage treatment plants, airports and a range of farming or business activities. Subdivision and development that is sensitive to the surrounding environment is an important means of achieving sustainable management. Ongoing and subsequent subdivision and development of land can potentially result in cumulative adverse effects, as the volume of development exceeds the carrying capacity of the environment to absorb these effects. Higher density subdivision can potentially result in conflict between existing and potential land uses. Adverse effects generated by inappropriate subdivision and development can undermine Airport operations and the primary function of the state highway network to provide for a safe and efficient state highway system throughout the District. Provision of onsite mitigation between such activities, particularly through larger lot sizes, is therefore desirable.*

8.4 Policies

8.4.5 Reverse Sensitivity

To ensure that subdivision and development in, or adjacent to:

- rural areas
- existing commercial, industrial and mineral extraction activities
- land zoned for commercial, industrial, or mineral extraction activities
- existing infrastructure, including the state highway network and airport.

is designed and located to avoid, remedy or mitigate reverse sensitivity effects on existing or permitted activities. Such effects can include noise, odour, spray drift and dust, vibration and traffic.

Explanation and Reasons: The location of some land uses, such as rural-residential living, or residential development near to existing commercial, industrial or mining activities, or existing infrastructure, can result in actual or perceived nuisances to those activities from the effects of existing rural, commercial, industrial and mining activities, or existing infrastructure including the state highway network and Airport. The same principle applies to those areas of land which are not currently developed but are identified for future business growth within the Business Environments. This can lead to pressure being placed on these latter activities to reduce or eliminate such effects, which in many instances is impossible or impracticable and could potentially constrain both present and future operations.

Methods in the District Plan to give effect to the policies include the relevant Environment subdivision and land use rules, conditions on resource consents, liaison with NRC and the Department of Conservation, educating the informing resource users of the effects of activities on amenity values and providing guidelines on the design and location of buildings and suitable locations for activities.

2.4.2 Rolling Review of the Operative District Plan

Council is required to review the entire District Plan within a ten-year period. It has resolved to achieve this through a rolling review programme which incorporates the priorities set out in Council's various business plans, asset management plans, and the Long Term Council Community Plan (LTCCP). As a result of changes to the Resource Management Act, more emphasis has been placed upon policy, therefore, the rolling review will aim to focus primarily on policy formulation over the next three years.

2.5 Iwi Management Plans

The three iwi management plans that apply within the Whangarei District are largely silent on reverse sensitivity issues. This is largely because the focus is on environmental resources and tangata whenua relationship with them. The avoidance of adverse effects, or their internalisation, is the general approach taken by the three iwi management plans, rather than protecting productive land uses.

3 Current Issues

3.2 Stakeholder consultation

Consultation was undertaken with Fonterra during the preparation of the issues and options papers. Fonterra raised the issue of subdivision in relation to two parts of their operations – milk tanker pick-ups and the potential for reverse sensitivity issues to compromise their existing Kauri factory site. With regards to the latter, Fonterra is concerned that subdivision and subsequent residential development is increasing around their Kauri site which could lead to complaints from effects, such as noise, that they are not able to internalise. Fonterra's own assessment of the impact had established that there were approximately 60 'lifestylers' living within 1km of the Kauri site. Fonterra discussed how other Councils, where their factories are located, have dealt with this issue. This is either by identifying a noise contour around the factory, and thereby placing some onus, through a rule, on the 'incoming' new owner or resident to address the issue, or by securing existing use rights for the noise environment around the factory. The preference of Fonterra, with regards to the Kauri site, would be to establish a noise contour, a similar approach to that which is currently used in the District Plan for the large quarrying sites owned by Winstones and Golden Bay Cement, whereby a 'buffer' area is in place around the operational site.

Fonterra's other key issue in relation to reverse sensitivity, was the impact of subdivision on milk tanker routes. Fonterra is particularly interested in the location of future 'rural-dwellers' due to the impact of their expectations of rural living. Fonterra discussed how some farms could have several pick-ups a day, or as an example, five farms on a small road could have eight pick-ups a day. If this example occurred on an unsealed road that became populated with 'lifestylers', complaints about dust and noise from tanker movements from the remaining farms, could be directed either at Fonterra, Council or both. As an outcome of the consultation with Fonterra, information on recent subdivisions across the Whangarei District was provided so that they could identify any future 'pinch points' in their key route network. It should be noted that many of the subdivisions may not be large, but rather a cumulative impact of small subdivisions (i.e. one or two lots at a time).

A separate paper for the Rural Development Strategy has identified issues relating specifically to minerals and aggregates. It is relevant however, to reflect on the reverse sensitivity issues discussed by quarry operators, as this has been identified as a significant contributing sector to the Whangarei District economy and one which can become the subject of reverse sensitivity issues due to difficulties associated with 'internalising' its effects during consultation. Winstones raised the need to consider how the District Plan currently addresses reverse sensitivity issues. They felt that there was a need to consider the difference between incompatible land uses and reverse sensitivity. Winstones were, however, generally comfortable with the use of Mineral Extractions Resource Areas (MEAs) as a tool to partly address reverse sensitivity effects of existing quarrying operation. Within MEAs, residential dwellings and subdivision are assessed as discretionary activities and can be considered against the objectives and policies in the District Plan, which includes avoiding, remedying or mitigating reverse sensitivity effects (Objective 8.3.9 & Policy 8.4.5).

3.3 Environment Monitoring

Environmental monitoring data collated by Northland Regional Council and Whangarei District Council, is aggregated in such a way, that it is not possible to identify issues specific to reverse sensitivity. Consultation with WDC monitoring staff undertaken during the preparation of this report indicated that reverse sensitivity issues in the rural area are not the cause of frequent complaints or monitoring issues. They have become involved in recent times with several existing quarry operations increasing or changing the duration of their activities. The issues have arisen largely because people have moved into the area after the quarry lawfully established its operations.

This further emphasises the need to consider what activities contribute to the District economy and are legitimately part of the productive rural environment. Increased awareness of new rural residents, along with further consideration of how to identify and protect productive rural land uses, could assist in minimising the potential for reverse sensitivity issues to arise.

4 National Direction & NZ Best Practice

4.1 Case law

The concept of reverse sensitivity was first defined in *Auckland Regional Council v Auckland City Council (A10/97)* to mean “the effects of the existence of sensitive activities on other activities in their vicinity, particularly by leading to restraints in the carrying out of those activities.” (Ministry for the Environment, 2000). Many cases have varied this definition, however, the 1999 definition by Pardy and Kerr in “*The Common Law Giveth, and the RMA Taketh Away*” has been referred to, including by Judge Thompson in *Affco NZ Ltd v Napier City Council (W082/04)*:

Reverse sensitivity is the legal vulnerability of an established activity to complaint from a new land use. It arises when an established use is causing adverse environmental impact to nearby land, and a new, benign activity is proposed for that land. The “sensitivity” is this: if the new use is permitted, the established use may be required to restrict its operations or mitigate its effects so as to not adversely affect the new activity.”

Legally, reverse sensitivity has arisen in two broadly different contexts; one-off instances of opposition to individual resource consent applications, and blanket defences against all future activity. For the purposes of the District Plan review the latter is of more significance as it will assist in identifying what tools or methods can be used to protect rural industries. Blanket defences are generally in the form of buffers around existing activities to prevent or minimise complaint or opposition from future activity seeking to locate in that buffer. The court has established the principle that a council could include within a plan provisions that provide for reverse sensitivity to protect a polluter both within a zone and between zones (Ministry for the Environment, 2000). The key consideration in implementing such buffer measures, however, is that all reasonable measures have first been implemented by the polluter to avoid, remedy or mitigate adverse effects. This was more recently emphasised in *Winstone Aggregates v Matamata-Piako District Council (W55/04)*, where the internalisation of effects and the economic and social significance of the industry was considered to be determining factors.

Resource consent applications will be assessed against the objectives and policies in the District Plan and it is therefore important to consider what is included in the Plan to protect existing industries versus constraining or enabling new development. In this context, Batistich (2010) provided a useful summary of more recent case law which includes the following key cases.

Environmental Defence Society Inc v Taupo District Council (A/084/09)

This case sought a strengthening of the activity status in relation to houses being built following ‘cluster’ subdivisions close to the Wairakei-Tauhara Geothermal area. The Regional Policy Statement provided strong direction to avoid the establishment of incompatible land uses, over, or in proximity to the geothermal area. The court concluded this direction needed to be provided for in the rules, as cluster style subdivision close to the geothermal area, had the potential to exacerbate reverse sensitivity effects when compared to conventional subdivision.

Ngatarawa Development Trust Limited v Hastings District Council (W017/08)

This case involved a subdivision on land owned by the Hawkes Bay Golf Club. Users of an aerodrome in the area and Gourmet Blueberries Ltd were concerned that the noise effects generated from their activities, such as the noise from aeroplanes and the noise from orchard operations, such as bird scaring devices and machinery, would result in their operations being unduly restricted with the introduction of the new residential subdivision. The *Ngatarawa* decision is important because it introduced an additional factor to those previously considered:

...where there is a low-impact effects scenario existing beyond the emitting site boundary it is usually better to incur occasional relatively minor adverse effects than to impose controls on adjoining sites owned by others. It is inevitable that some lawful activities will at times be unable to totally internalise their effects and the law does not require that. This is generally understood by those who choose to bring themselves within range of an effect emitting activity. But residential occupiers in particular may have a different view and it is they who have the greatest potential to generate reverse sensitivity effects. (Paragraph 25).

The court concluded in this case that reverse sensitivity alone would not have resulted in a successful appeal, but looked at the round with all other adverse effects, and determined that the resource consents should be declined (Batistich, 2010).

4.2 Best practice

Managing Rural Amenity Conflicts – Ministry for the Environment, February 2000

The Ministry for the Environment published a guideline in 2000 “to provide practical and theoretical assistance to councils and practitioners on possible approaches to managing rural amenity issues in district plans”. The guideline states the following in relation to communicating issues around rural amenity conflicts:

Managing rural amenity conflict is as much as anything about managing people’s perceptions and expectations about rural amenity. (Ministry for the Environment, 2000, Page 47).

In this regard, the guidelines promote the need for councils to influence people’s expectations of rural amenity, by providing information that describes the amenity characteristics of the rural environment, and the types of activities and (sometimes unpleasant) environmental effects that will be experienced in the rural environment. This could be achieved through information sheets, codes of rural practice, land information memorandums (LIMs) and the media.

In terms of policy development, the guidelines also suggest that conflicts in rural amenity arise from changes in the attributes that make up the rural environment and in people’s perceptions and tolerances of those changes. Successful management of rural amenity conflicts needs to target both the attributes and the perceptions. Critical to this are:

- Providing a clear definition of the quality of the rural amenity to be expected in different parts of the rural environment
- Establishing amenity standards that are clear, reasonable, measurable and enforceable
- Management of people’s expectations of rural amenity
- Management of the effects of activities within agreed standards

In order to achieve these goals the guidelines state that the following is necessary:

- Understanding the natural, physical and economic resources of the rural environment, and of the people who live there and their social values
- Understanding the attributes that make up the amenity of the rural environment
- Understanding the economic, physical and social processes which drive change in the rural environment
- Understanding the effects of different rural activities on the environment
- Dialogue with key stakeholders, Maori and sector groups in the rural community, and with rural resource users, to understand their perspectives
- Ongoing monitoring of change in the rural environment and in rural amenity
- Integrating rural amenity management measures with other territorial authority policies affecting the rural environment and with regional council initiatives

The guidelines state that there are three broad strategies available to councils for managing rural amenity:

- Effects-driven intervention – managing the effects of activities using effects-based standards to avoid, remedy or mitigate conflicts over effects
- Indirect intervention – using standards such as controls on the location of activities or controls on the intensity of subdivision to avoid, remedy or mitigate conflicts over effects
- Conflict resolution – pursuing dialogue to resolve conflicts once they have occurred

The guidelines then detail a range of techniques that can be used to manage rural amenity conflicts based on the three broad strategies. For effects driven techniques, this can include differentiated zones with environmental standards, such as those for noise, odour, light traffics safety, dust and vibration, codes of practice and guidelines. Indirect intervention can be achieved by using separation distances (such as the Mineral Extraction Areas currently in use in the Whangarei District Plan) that establish minimum distances separating buildings and activities from boundaries, special features and other activities. Separation distances usually require resource consent for lesser distances, or they can also be imposed as conditions of consent.

Franklin District Plan – Plan Change 14

In November 2010, Plan Change 14 (Rural) of Franklin District Plan became partly operative. It specifically identified the issue of reverse sensitivity and included the following examples of effects subject to Reverse Sensitivity:

- Odour associated with normal farming activities, such as from dairy sheds, silage pits, onions drying, and intensive farming operations;
- The use of chemical sprays;
- Noise from dogs, farm machinery, bird scaring devices, hay making and other farming related activities; and
- Dust, noise and traffic from mineral extraction activities.

It then included the following objective for Rural Growth Management:

- 13 To manage rural land use conflicts that balance the expectations of new residents with the need to recognise and protect existing rural activities and their typical effects and characteristics to ensure conflicts and reverse sensitivity issues are avoided, remedied or mitigated.

In the Coastal Zone, Plan Change 14 identified the following objective and policy:

Coastal Zone Objectives & Policies

Objective

To avoid, remedy or mitigate the adverse effects of reverse sensitivity between agriculture and horticulture activities, mineral extraction sites, rural industry, major industrial activities and countryside living opportunities.

Policy - Reverse sensitivity

Manage reverse sensitivity conflicts between countryside living and rural activities by controlling design and layout of subdivisions and locations of house sites.

Plan Change 14 identified nine Management Areas (three coastal and six rural) to achieve the key rural and coastal objectives and recognise the diversity of the District. Some of the Management Areas include the need to manage reverse sensitivity issues through controls over the design and layout of lots, location and house sites and restricting the creation of additional lots.

Aggregate and Quarry Industry Guidance Note – Local Government NZ & Ministry for the Environment, 2010

In March 2010 a guidance note was published by the Ministry for the Environment and Local Government New Zealand on the Quality Planning website (www.qualityplanning.org.nz). The guidance note was initiated by the Aggregate and Quarry Association of New Zealand (AQANZ) in partnership with MfE & LGNZ, as a way of promoting best practice to deal with the complex range and scale of resource management issues associated with the aggregate and quarry industry.

The guidance note provides a list of effects associated with the aggregate and quarry industry that require off-site reverse sensitivity methods to manage. These effects include noise, vibration and traffic. The guidance note provides a useful example of reverse sensitivity issues as they apply to a particular industry.

5 Options for Whangarei District

5.1 Sustainable Futures 30/50 Growth Strategy

Sustainable Futures 30/50 was adopted by Council in September 2010. After assessing a number of different growth strategy options, a consolidated future development pattern was chosen and adopted by Council. This will guide future decision making on infrastructure and the spatial arrangement of development across the District. The District Plan will be one of the tools used to implement the growth strategy adopted through the Sustainable Futures project.

5.2 What are the Resource Management Issues?

Essentially there are three key resource management issues when considering the impact of reverse sensitivity in the rural area of Whangarei District:

- 1 The potential for reverse sensitivity to impact on site-specific or strategically located industries (eg. quarries, Fonterra Kauri site) that are considered to be key economic assets;
- 2 The potential for reverse sensitivity to impact on the efficient and effective provision and operation of key infrastructure networks required for the economic wellbeing of the Whangarei District and the wider region;
- 3 The potential for reverse sensitivity to impact on productive rural land uses and the character of a working rural environment.

1 Site-specific industries

Consultation undertaken during the preparation of the Rural Development Strategy issues and options papers suggest that reverse sensitivity is an issue which needs to be considered due to the potential for residential activities, in particular, to impact on productive rural land uses and significant industries located in the rural area. These industries, such as the Fonterra Kauri Factory, will be located partly due to the 'buffering' effect that a Countryside Environment zoning has afforded them in the past. When subdivision starts to encroach on this 'buffer' this results in a need to consider how reverse sensitivity issues, such as noise, can be addressed through layout and design of resulting houses, and how future subdivisions should consider such reverse sensitivity effects. Fonterra are clearly monitoring the level of residential development occurring around their Kauri factory, along with that which could occur along their key milk tanker routes, suggesting that it is an issue which warrants their continued attention. Winstones have indicated that the Mineral Extraction Area 'buffer areas' are working well to manage reverse sensitivity issues around their operational quarry sites. The significance of the industry should be considered if 'buffers' are proposed to protect particular sites and should also consider that all reasonable measures have first been implemented by the polluter to avoid, remedy or mitigate adverse effects.

2 Infrastructure networks

Recent submissions made to plan changes by infrastructure providers such as Transpower and the New Zealand Transport Agency (NZTA) suggest that reverse sensitivity is an issue which they believe needs to be addressed through the District Plan. A separate paper on transport issues has been prepared for the Rural Development Strategy, which suggests a range of options in relation to the provision of transportation networks. The implementation of some of these options may also go some way to avoiding future reverse sensitivity issues, such as limiting development along transport routes.

3 Productive rural land uses

It is more difficult to assess the significance of wider reverse sensitivity issues on productive rural activities, such as horticulture and farming. Further analysis and consultation with industries would be needed to identify if they are being compromised by reverse sensitivity issues or if this is just one of a range of environmental effects that are being considered. Fonterra indicated that their milk tanker routes could become compromised through increasing residents along key routes who then complain about tanker movements including dust and noise. Although they did not identify any particular problem areas in the District, the following photo of a dust nuisance sign, illustrating that symptoms of reverse sensitivity effects are apparent.



The importance of the rural productive economy as a whole should also be addressed, with regards to reverse sensitivity, when considering objectives, policies and methods. Perhaps the key question to consider is the degree to which the rural environment, and subsequently the Countryside and Coastal Countryside Environments (zones), is a 'living' environment versus a 'working' environment. This will assist in identifying the desired outcomes and supporting policies for the rural environment.

5.3 Objectives and Policies in the District Plan

Section 2.4.1 of this report discusses the objectives and policies currently in the District Plan relating to reverse sensitivity. More information gathered during the preparation of the Rural Development Strategy should assist in identifying whether there is a need for stronger policy direction on reverse sensitivity issues across the whole rural environment, or whether there are particular areas, sites, infrastructure corridors or industries that require the use of more specific policies, and therefore methods in the District Plan.

The Operative District Plan objectives and policies, do seem to have considered the issue of reverse sensitivity and if the issue is not being adequately addressed, then it can only be concluded that the policies themselves are not directive enough, or the methods used in the Plan are not effectively achieving the desired objectives. This may not only be through rules in the Plan, but also information, such as descriptions of amenity values and 'rural character'. Consideration could also be given to managing the rural environment through one or two zones, or whether issues such as reverse sensitivity could be more effectively addressed within areas, once amenity values and social, economic and environmental objectives are established.

Sustainable Futures 30/50 adopted a controlled, consolidated future development path for the Whangarei District. In the first instance, the primary objective should be to avoid reverse sensitivity effects through the "spatial arrangement of land uses". Where the effects of subdivision and development need to be assessed, the inclusion in the District Plan of amenity values that require "maintaining and enhancing" (Section 7 (c) of the RMA) in respective areas or Environments will assist in the assessment of reverse sensitivity effects and protecting key industries and infrastructure. Where avoidance is not practicable, remediation and mitigation methods will need to be considered such as the use of 'buffer areas' around Mineral Extraction Areas, and corridors along major public infrastructure, such as that proposed through Plan Change 117 (Northpower Limited). The implementation of Sustainable Future 30/50 should be reflected in future plan changes including objectives, policies and methods.

5.4 Options for District Plan methods

- 1 Include a description of the 'rural environment' in the District Plan. Amenity values for the Countryside and Coastal Countryside are currently included in Chapter 5 of the District Plan, but no description of the types of activities that typically occur is included. This would assist in defining what activities are expected as part of the 'character' of the rural area, and what would require a more thorough assessment through a consent process.
- 2 Consider the identification of policy areas within the rural environment to further refine issues, such as reverse sensitivity, as they relate to the amenity values and character of a particular area.
- 3 Determine, with the community and industries, the key productive rural industries and infrastructure networks that require protection through buffers and other zoning methods in the District Plan.
- 4 Use District Plan zoning and rules to avoid, as far as practicable, incompatible subdivision and subsequently land uses locating in areas which may compromise productive rural land uses and industries.

5.5 Options for Whangarei District – Rural Development Strategy Implementation

Education

The sporadic nature of subdivision throughout the District in the past and the resulting number of sections means that legitimately established productive rural landuses could increasingly become compromised by new residents to the rural environment. Making new residents aware of what activities typically occur in 'the Countryside' could assist. Council could work with key rural industries, such as mineral and aggregate operators and Fonterra, to educate new rural dwellers about what to expect in terms of amenity such as traffic movements and noise. This could also include ensuring that when Council provides information to new residents such as through welcome packs or Land Information Memorandums (LIMs), the proximity of known quarries or productive industries which may impact on their future development plans or existing amenity.

Promoting ‘compatible’ productive land uses in the rural environment

Council could consider how important the rural environment, as a ‘working’ area, is to the future wellbeing of the District. Reverse sensitivity will arise through continued pressure to subdivide in areas which are productive which in turn could create further pressure as farming in effect becomes ‘squeezed’ out. The Council could become proactively involved in promoting alternatives to subdivision or options that subdivision only forms part of. This is likely to require a range of alternatives and options assessed on a farm by farm basis. Council may not have to be the lead agency in such an approach but could provide financial support to another agency or collaborative group who has expertise in land and financial management. This could also support the implementation of Sustainable Future 30/50 which promotes the use of ecosystem services and protection of highly productive/versatile land.

Monitoring

If reverse sensitivity is considered an important issue for the District, a monitoring programme needs to be put in place so that effective policy can be put in place to address the issue.

6 References

- Franklin District Council (2010). *Rural Plan Change (Plan Change 14)*. www.franklin.govt.nz . Version updated November 2010.
- Ministry for the Environment (2000). *Managing Rural Amenity Conflicts*. February 2000.
- Northland Regional Council (1999). *Regional Policy Statement for Northland*.
- Northland Regional Council (2010). *New Regional Policy Statement: Discussion Document 2010*.
- Patuharakeke Te Iwi Trust Board (2007). *Patuharakeke Environmental Plan*.
- St Clair, M., Wyeth, J., & Pinson, R. (2010). *Planning for the Aggregate and Quarry Industry*. Guidance note published by Local Government New Zealand and Ministry for the Environment. www.qualityplanning.org.nz