Whitianga Waterways - Resource Consent Application SUB/2017/26

Introduction

I wish to make some observations and express some concerns about this Resource Consent Application, especially regarding the absence of any consideration of the effects of potentially intolerable natural hazards arising from climate change and sea level rise.

Apart from a brief mention of an allowance for climate change in respect of storm water flows in the Engineer's Report, and an unsupported statement that "Lot levels are clear of coastal flooding risks" no regard has been given to the potential effects of climate change, sea-level rise, and associated natural hazards in the documentation filed in support of the application. There is therefore a very large gap in the assessment of potential effects which the Council should require the applicant to address.

Further, there is a dubious statement in the supporting documentation that "the NZCPS (New Zealand Coastal Policy Statement) is not applicable to this application". This statement appears to be based on the District Plan maps which purport to define the "coastal environment". The DP map excludes from the coastal environment the land on which the applicant is seeking a resource consent. So, presumably the argument goes, - the NZCPS is not applicable because the land under application is not part of the coastal environment. And presumably the argument is further advanced by suggesting that the relevant, highly directive Government Policies in the NZCPS which relate to climate change, sea-level rise, and natural hazards need not be taken into account in assessing this resource consent, again because the land in question is arbitrarily deemed not part of the coastal environment.





Contrarily, the earlier stages of the Waterways canal development, which have now been opened to the sea are now deemed by the DP maps to be within the coastal environment. At this point the logic of the argument for exclusion of the NZCPS is lost in a maze of contradictions. Somehow, it is argued the coastal environment does not include the subject land which is low lying, adjacent to the estuary/harbour, and at risk from coastal hazards. (refer maps of potential inundation from various sea rise scenarios below). The subject land is only magically included in the coastal environment when the canals are opened to the sea. It is only when the canals are opened to the sea that the DP suddenly recognizes the land's status as being part of the coastal environment and by extension the Policies in the NZCPS become applicable to the development. The artifice of this charade is "don't have regard to the NZCPS when the resource consent is being assessed, but yes you can have regard to the NZCPS once the development is consented and the sea is allowed to flow into it."

It is as if the drawing of a line on a DP map purportedly excluding this land from the coastal environment will somehow protect that land from the potentially intolerable risks posed by the natural forces of climate change, sea-level rise and coastal hazards. Of course, these natural forces do not care where the line is drawn on the DP map.

Coastal Environment Line Subject to Appeal

The "NZCPS is not applicable to this application' statement also fails to acknowledge that coastal environment line drawn on the District Plan maps has been appealed by the Waikato Regional Council to the Environment Court. That appeal has not yet been resolved. Therefore, there remains the very strong possibility that the coastal environment line in the DP will be amended to include the land the subject of this application as being within the coastal environment.

In any event, the Waikato Regional Council (WRC) has produced its own map in its Regional Policy Statement (RPS) indicatively defining the landward extent of the coastal environment and this clearly includes the applicants land.

Waikato Regional Council Indicative Map of Coastal Environment



In its appeal WRC considers that the extent of the coastal environment should accurately reflect all the characteristics identified in Policy 1 of the NZCPS, and seeks to have all of Whitianga town included within the coastal environment.

The WRC appeal also relies on RPS method 4.1.8(b) (Identifying extent of the coastal environment. This method requires that District Plans shall map or otherwise identify the landward extent of the coastal environment as the area identified in the indicative maps provided in Section 4A of the RPS or as determined by further detailed investigation.

The WRC appeal also refers to Method 4.1.8 (c) which states that any detailed investigation undertaken under Method 4.1.8 (b) must recognise and include assessment and

consideration of all of the elements of the coastal environment (as defined in the RPS Glossary).

The RPS Glossary has the flowing definition of the coastal environment (which is almost the exact same wording as the definition in Policy 1 of the NZCPS): -

Coastal environment — the environment where the coast is a significant part or element, comprising at least:

- a) the coastal marine area;
- b) islands within the coastal marine area;
- c) areas where coastal processes, qualities or influences are significant, including coastal lakes, lagoons, tidal estuaries, salt marshes, coastal wetlands, and the margins of these;
- d) areas at risk from coastal hazards;
- e) coastal vegetation and the habitat of indigenous coastal species, including migratory birds;
- f) elements and features that contribute to natural character, visual qualities or amenity values;
- g) items of cultural and historic heritage in the coastal marine area or on the coast;
- h) inter-related coastal marine and terrestrial systems, including the intertidal zone; and
- i) physical resources and built facilities, including infrastructure, that have modified the coastal environment.

Thus, both the maps of, and the definition of the coastal environment in the RPS include the subject land.

The District Council must therefore process and consider this application on the basis that the policies in the NZCPS apply.

The New Zealand Coastal Policy Statement (NZCPS)

Consent authorities must have regard to the NZCPS when considering an application for a resource consent - Section 104(1)(b)(iv) Resource Management Act 1991

The New Zealand Coastal Policy Statement (NZCPS) provides national policy direction for coastal management in New Zealand. It is the only policy statement at the national level that is required under the RMA, and it applies to all regional and district RMA planning and decision-making in the coastal environment.

Objective 5

"To ensure that coastal hazard risks taking account of climate change, are managed by: locating new development away from areas prone to such risks;"

The wording of Objective 5 is **very directive** – "to ensure" that coastal hazard management is undertaken in this way. It requires a carefully deliberated and supportable response from Council.

Policy 3 Precautionary approach

- "(1) Adopt a **precautionary approach towards proposed activities** whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.
- (2) In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:
- (a) avoidable social and economic loss and harm to communities does not occur;
- (b) natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and
- (c) the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations."

Policy 3 requires a precautionary approach towards activities where their effects on the coastal environment are unclear, not yet known or little understood, but are potentially significantly harmful. The effects of climate change on coastal resources are especially underlined as demanding a precautionary approach, particularly so that avoidable social and economic loss and harm does not occur.

Decisions such as this Resource Consent for a major new greenfield subdivision, greater intensification of the built environment, and infrastructure which results in large scale and permanent change and considerable financial and social investment must consider the long-term likely impacts of climate change for at least a 100-150-year time frame. Decisions of this type must also adopt a cautious (precautionary) approach due to more uncertainty over that longer timeframe about the speed and extent of the changes.

Policy 24 Identification of coastal hazards

- "(1) Identify areas in the coastal environment that are **potentially affected by coastal hazards** (including tsunami), giving priority to the identification of areas at high risk of being affected. **Hazard risks, over at least 100 years, are to be assessed having regard to**:
- (a) physical drivers and processes that cause coastal change including sea level rise;

- (b) short-term and long-term natural dynamic fluctuations of erosion and accretion;
- (c) geomorphological character;
- (d) the potential for inundation of the coastal environment, taking into account potential sources, inundation pathways and overland extent;
- (e) cumulative effects of sea level rise, storm surge and wave height under storm conditions;
- (f) influences that humans have had or are having on the coast;
- (g) the extent and permanence of built development; and
- (h) the effects of climate change on:
- (i) matters (a) to (g) above;
- (ii) storm frequency, intensity and surges; and
- (iii) coastal sediment dynamics;

taking into account national guidance and the best available information on the likely effects of climate change on the region or district."

Policy 25 Subdivision, use, and development in areas of coastal hazard risk

"In areas potentially affected by coastal hazards over at least the next 100 years:

- (a) avoid increasing the risk of social, environmental and economic harm from coastal hazards;
- (b) avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards;
- (c) encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;
- (d) encourage the location of infrastructure away from areas of hazard risk where practicable;
- (e) **discourage hard protection structures** and promote the use of alternatives to them, including natural defences; and

(f) consider the potential effects of tsunami and how to avoid or mitigate them."

The term 'avoid' in sub clauses (a) and (b) is a compelling edict for local authorities – especially when pressure is mounted, as it is in this current application for new subdivision (greenfields development) and intensification.

Policies 6 and & 7

The NZCPS 2010 mandates a strategic approach to use, development and protection in the coastal environment through policies 6 and 7. **Policy 6** sets considerations relating to activities in the coastal environment. Policy 7 sets out a strategic planning framework for settlement and for identifying situations where subdivision, use and development will be, or may be, inappropriate.

There is also a climate change relevance in **Policy 7(2)**, which relates to cumulative threats and significant risks,

Reasonably foreseeable needs of future generations - Section 5 RMA

The phrase "reasonably foreseeable needs of future generations" means taking into account the interests of future communities and the direct and indirect costs that future generations may bear as a result of decisions made in the present. See also the paragraph on Risk Transfer to future generations.

Liability

Councils could open themselves up to wider liabilities if they approve of new greenfield developments which is clearly contrary to NZCPS 2010's Objective 5, Policy 7 and Policy 25(a). Individual property owners as well as financial/insurance agencies, may potentially sue for recovery of direct costs and lost property value -the leaky homes issues being a recent example of this liability. Thomas Everth's submission – which I endorse, raises these issues in the context of the **existing** canal development, as well as the present application.

Risk Transfer

There is a danger that the unwise decisions taken today can transfer risk from current individuals and the wider community to future generations. The impact of decisions taken today, for example, on the location of a subdivision such as this on the coast is unlikely to be felt by those making the decisions or current property owners. Communities could potentially bear the cost of the future response (e.g., higher and insurance premiums, or loss of insurance

cover). There is also the potential for the burden being shifted onto future taxpayers and or the welfare state

National Guidance

Policy 24 in the NZCPS requires the Council to "take into account national guidance and the best available information on the likely effects of climate change on the region or district"

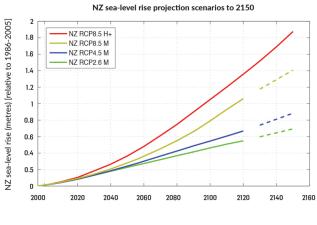
An update to the Ministry for the Environment's Guidance to Local Authorities 2008 has been drafted and is awaiting final sign off from the relevant Minister. An <u>official Ministry PowerPoint presentation</u> has revealed key elements of the latest guidance including projections for sea level rise. Whilst these projections and guidance details have not yet been officially published, the accuracy of the information in the Ministry's Power Point presentation should be readily confirmable with the Ministry for the Environment. The information has been revealed to WRC hazard staff and was published on a WRC website.

The Ministry has produced 4 scenarios based on the Ministry's projections out to 2120 for New Zealand sea-level rise. These coincide with 3 IPPC climate change based scenarios plus an additional H+ scenario said to be at the upper end of projections.

MfE Slide from PowerPoint Presentation



Four scenarios based on global SLR



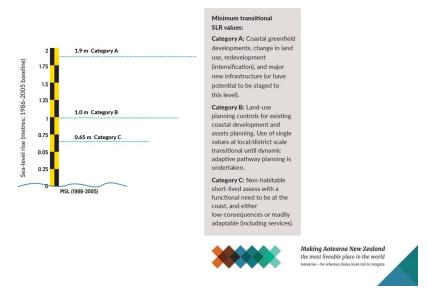


The Ministry PowerPoint has also set out single sea-level rise values derived from the scenarios relating to 3 broad categories of development which are assigned 3 different sea-level rise allowances. These "minimum transitional sea-level values" are provided to assist councils in the short term.

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Appropriate allowances for SLR



The scenario which is relevant to the current subdivision resource consent application is Category A which is given a *minimum transitional sea-level value* of 1.9m above the baseline of mean sea level 1996-2005.

Category A is described as "coastal greenfield developments, change in land use, redevelopment (intensification), and major new infrastructure (or have potential to be staged to this level)". As can be seen from the following graphic, the minimum transitional sea-level values which need to be applied to coastal greenfield development such as that proposed in this current application is 1.9 m above the baseline of mean sea level 1996 – 2005.

The notes accompanying the Ministry Power Point presentation (slide 12) state: -

"Major new developments or intensification of existing development (Category A) need to consider a high sea-level rise value (1.9 metres) For the upper range value of 1.9 metres, a longer planning timeframe to 2150 and beyond applies. This is based

on the highest sea-level rise scenario. This value is included for stress testing the future climate sensitivity and adaptive capacity of major new development or intensification, and testing adaptation pathways for existing development. "

The Waikato Regional Council Coastal Inundation Tool

This tool provides a ballpark indication the effect of sea level rise on Thames-Coromandel coastal communities. For Whitianga Wharf, the Regional Council has provided a predefined level of for existing MHWS sea-level of 0.98m. If 1.9m of sea level rise as per the latest draft Ministry Guidance is applied in the inundation tool above this existing MHWS level a total level of 2.88 m is indicated. The approximate areas which would be inundated in Whitianga from 2.88 m are shown in the following graphic. Note: The storm tide range as defined by the Regional Council for Whitianga is 0.71m but this additional storm tide range has not been included in this attached graphic. Nor have wave affects been included. The following warning is given by WRC in coastal hazard inundation assessments using the inundation tool —

"Coastal inundation levels given here do not take into account wave impacts. In most storm events, total inundation will be the predicted storm surge level PLUS the wave impacts". ¶

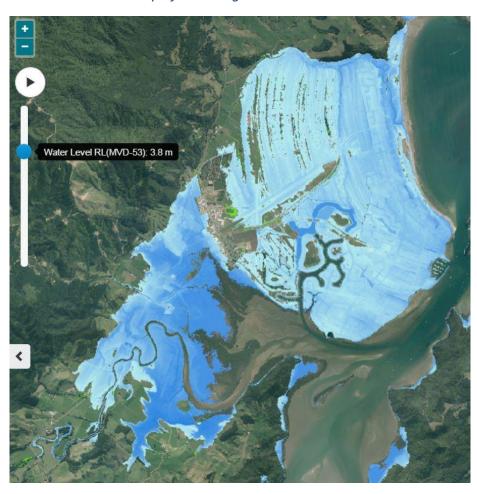


1Inundation Map of Whitianga with 2.8m SLR - no storm tide

Storm Tide Effects

The Parliamentary Commissioner for the Environment has concluded that even a modest 40cm -50 cm of sea level rise will result in current "1-in-100-year" severe storm tides becoming an annual or six-monthly event. 1 m of sea level rise will result in the equivalent of current "1-in-100 year" severe storm tide happening every day. Severe storms may of themselves not be more frequent, or only marginally so. But the effect of sea level rise will be to make a storm tide equivalent in force and intensity to todays 1-in-100-year event - a daily event. A "stress test" for 1.9m SLR as required by the new draft Ministry guidelines for Category A development such as this proposal must therefore include the effect of exceedances of 1-in-100-year storm tides for 1.9m SLR using the same methodology carried out in the PCE Report.

If the upper range of a Whitianga storm tide is added into the inundation tool the total level indicated is 3.89m resulting in approximate "bathtub" inundation shown in the following graphic. Again, wave effects which the WRC acknowledge can exacerbate the risk level are not included.



Inundation Map of Whitianga 3.8m with Max Storm Tide

The result from either scenario outlined is that the future viability of Whitianga as a functioning town would be seriously called into question. A large area of the town would be inundated under the first scenario and almost the entire town would be submerged under the second scenario. As well, several kilometers of the State Highway access from the west would be inundated. A "stress test" considering this very high/extreme/intolerable level of potential hazard would emphatically suggest that new development such as this current application, considered out to 2150 - should be avoided.

The H+ Scenario Should be Used for Category A Development

The NZCPS 2010 (Objective 5, Policy 25) treats greenfields development, intensification or change in land use in a different way from existing development. The emphasis is on locating this type of development away from areas subject to coastal hazard risks including from climate change, and avoiding any escalation in the risk

To satisfy the NZCPS 2010 requirement to assess hazard risks over at least 100 years (e.g., to 2120 and beyond), SLR projections need to be extended using the very latest research and consider potentially significant polar ice sheet melting/instability beyond 2100.

This underpins the Ministry for the Environment's higher H+ scenario in the graphic from the Power Point information. For the upper range H+ value of 1.9 m for Category A, a much more extended planning timeframe to 2150 and beyond is necessary.

Taking into account the expected longevity of new development under Category A, plus sea level continuing to rise for several centuries, the latest Ministry guidance very clearly indicates that such developments as this Whitianga subdivision application should be assessed and analyzed against a sea level rise of at least 1.9 m.

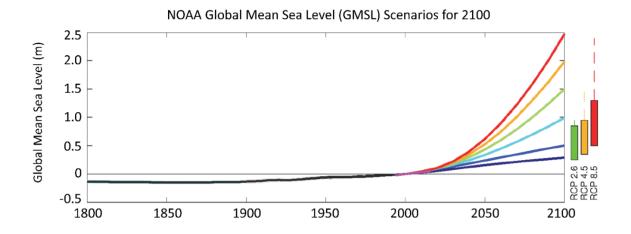
The H+ scenario seems to have a similar purpose to other high-end scenarios produced for example by the US National Oceanographic Atmosphere Administration (NOOA) and the California Ocean Protection Council (COPC) – i.e. to "torture or "stress" test new greenfield land use plans such as this current application, where the risk allowance is low and where the conceivable future risk is to be avoided (Objective 5 and Policy 25(a–b), NZCPS 2010)

This approach has been widely used in Europe, the UK and the US to provide checks on planning for long-term or essential infrastructure and to informs decisions on avoiding risk for new developments in coastal areas.

Best available information – Other Latest Sea-level Projections.

Policy 24 in the NZCPS requires the Council to "consider national guidance and the best available information" on the likely effects of climate change on the region or district"

The latest Ministry Draft Guidelines have included the H + scenario for Category A development in which a sea-level rise of 1.9m should be considered. However, these guidelines are already conservative when compared to <u>recently published guidance from the US National Oceanic and Atmospheric Administration</u> (NOOA January 2017), and the <u>California Ocean Protection Council</u> (COPC) (April 2017). NOOA is the equivalent institution to our NIWA. These reports meet the test of "the best available information", and therefore should be considered by Council.



As stated earlier the latest Draft Ministry guidance requires that "for the upper range value of 1.9 metres, a longer planning timeframe to 2150 and beyond applies". The following table from the NOOA Report shows projected sea-level rise at 2150 with the Intermediate, Intermediate/High, High, and Extreme scenarios highlighted at 1.8m, 3.1 m, 4.3 m and 5.5 m respectively.

NOOA Global SLR Scenario Heights

Table 5. GMSL rise scenario heights in meters for 19-year averages centered on decade through 2200 (showing only a subset after 2100) initiating in year 2000. Only median values are shown.

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GMSL Scenario (meters)	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2120	2150	2200
Low	0.03	0.06	0.09	0.13	0.16	0.19	0.22	0.25	0.28	0.30	0.34	0.37	0.39
Intermediate- Low	0.04	0.08	0.13	0.18	0.24	0.29	0.35	0.4	0.45	0.50	0.60	0.73	0.95
Intermediate	0.04	0.10	0.16	0.25	0.34	0.45	0.57	0.71	0.85	1.0	1.3	1.8	2.8
Intermediate- High	0.05	0.10	0.19	0.30	0.44	0.60	0.79	1.0	1.2	1.5	2.0	3.1	5.1
High	0.05	0.11	0.21	0.36	0.54	0.77	1.0	1.3	1.7	2.0	2.8	4.3	7.5
Extreme	0.04	0.11	0.24	0.41	0.63	0.90	1.2	1.6	2.0	2.5	3.6	5.5	9.7

Both NOOA and COPC have reviewed the latest peer reviewed literature and have both concluded that a H++ scenario of 2.5m of SLR <u>by 2100</u> is plausible and should be used to "stress test" Category A type development.

The NOOA Report states -

"we assessed the most up-to-date scientific literature on scientifically supported upper-end GMSL projections, including recent observational and modeling literature related to the potential for rapid ice melt in Greenland and Antarctica. The projections and results presented in several peer-reviewed publications provide evidence to support a physically plausible GMSL rise in the range of 2.0 meters (m) to 2.7 m, and recent results regarding Antarctic ice sheet instability indicate that such outcomes may be more likely than previously thought. To ensure consistency with these recent updates to the peer-reviewed scientific literature, we recommend a revised 'extreme' upper-bound scenario for GMSL rise of 2.5 m by the year 2100

NOAA's conclusion is: -

"The growing evidence of accelerated ice loss from Antarctica and Greenland only strengthens an argument for considering worst-case scenarios in coastal risk management"

"In very general terms, synthesis and assessment of the best-available science to most effectively support risk assessment should not only aim to address the question, "What is most likely to occur?" but also "How bad could things get?"

"Decisionmakers charged with planning for upgrades to existing long-life critical infrastructure, or building new infrastructure, need to consider the risks across a broad range of possible outcomes, including those associated with high-consequence, low-probability situations."

"Determining a potential upper limit of GMSL rise by 2100 (and beyond) is considered an important target for critical and long-lived infrastructure decisions and a primary objective of this report"

The COPC report came to almost identical conclusions: -

"these projections may underestimate the probability of extreme Antarctic ice loss, an outcome that is highly uncertain but, given recent observations and model results, cannot be ignored. Accordingly, we have also included an extreme sea-level rise scenario, which we call the H++ scenario. This is an unknown probability, high consequence scenario such as would occur if high rates of Antarctic ice loss were to develop in the last half of this century. When decisions involve consequential infrastructure, facilities or assets, we advise that extra consideration be given to this upper end of potential sea-level rise outcomes".

"New ice-sheet projections suggest the rate of rise could accelerate sharply later in this century, with the potential for two meters or more of total sealevel rise by 2100. While the uncertainty in these projections remains high, the risk is not negligible given the stakes to future society, development, and infrastructure. Given the level of uncertainty but also the potential impacts, significant investment in any major new coastal development with long lifespans needs to be carefully assessed."

The very clear conclusion from both US reports is that major new coastal development such as proposed in this current resource consent application needs to be carefully assessed against a potential sea-level rise of 2.5 m by 2100.

If the latest draft Ministry Guidance is followed, including the requirement to consider **Category A development out to 2150 and beyond**, and the latest NOOA projections are used, then the

current resource consent application would need to be assessed against a potential sea-level rise of between 3.1 m and 5.5m

Waikato Regional Council Regional Policy Statement

The WRC RPS contains a comprehensive suite of Policies and Methods relating to new development on or near the coast and relating to natural hazards. A summary of some (but by no means all) of these Policies, Methods and Explanations which are relevant to the current application are: -

"Policy 6.10 Implementing the Coromandel Peninsula Blueprint

Growth in the Thames-Coromandel District should be managed in a way that: a) recognises that the Coromandel Peninsula Blueprint Framework for our Future (2009) provides for the management of future development in the Thames-Coromandel District. This should:

- i) ensure that development:
- iv) does not increase the risk from natural hazards;

Policy 6.2 Planning for development in the coastal environment

Development of the built environment in the **coastal environment** occurs in a way that: f) **allows for the potential effects of sea level rise**, including allowing for sufficient coastal habitat inland migration opportunities;

i) avoids increasing natural hazard risk associated with coastal erosion and inundation;

6.2.3 Coastal development setback (new development)

Regional and district plans shall require that, unless there is a functional need for it to be otherwise, **new development along the coast be sufficient distance from the coastal edge to allow for the following:**

b) avoiding natural hazards;

Explanation

The coastal environment often has a range of values such as landscape, seascape and recreational opportunities that create a particular demand for development. Development can compromise the very values that attract people.

The dynamic and often unstable nature of the coastal margins creates a range of hazards to

development, and coastal erosion and flooding risks are likely to increase in future with climate change. There can be particular infrastructure demands on coastal margins to link land and sea activities. The risk of effects on coastal values can be

particularly high when populations swell during holiday periods. For reasons such as these, there needs to be particular attention to managing the coastal environment as demonstrated in Policy 6.2 and its methods.

Policy 13.1 Natural hazard risk management approach

Natural hazard risks are managed using an integrated and holistic approach that:

- a) ensures the risk from natural hazards does not exceed an acceptable level;
- b) protects health and safety;
- c) avoids the creation of new intolerable risk;

13.1.1 Risk management framework

Regional and district plans shall incorporate a risk-based approach into the management of subdivision, use and development in relation to natural hazards. This should be in accordance with relevant standards, strategies and plans, and ensure that:
a) new development is managed so that natural hazard risks do not exceed acceptable levels;

- b) intolerable risk is reduced to tolerable or acceptable levels
- c) the creation of new intolerable risk is avoided;

For example, residential development in a high-risk flood zone is likely to exceed acceptable levels of risk due to the risk to life and property given the nature of the land use; however, the risk to other types of development in the same area, for example farming, may be acceptable. Intolerable risk is where the risk to people, property or the environment cannot be justified.

Policy 13.2 Manage activities to reduce the risks from natural hazards
Subdivision, use and development are managed to reduce the risks from natural
hazards to an acceptable or tolerable level including by:

- a) ensuring risk is assessed for proposed activities on land subject to natural hazards; c) avoiding intolerable risk in any new use or development in areas subject to natural hazards;
- d) minimising any increase in vulnerability due to residual risk;
- e) avoiding the need or demand for new structural protection works; and
- f) discouraging hard protection structures and promoting the use of alternatives to them, including natural defences in the coastal environment.

Implementation methods

13.2.1 Control of subdivision within areas of intolerable risk

District plans shall control subdivision to avoid creating demand for new structures within identified high risk flood zones and identified primary hazard zones, and areas at high risk of coastal hazard.

13.2.2 Identification of areas of coastal hazard risk and high-risk flood zones District plans shall identify the location of areas:

a) potentially affected by coastal hazards, prioritising the identification of those areas at high risk; and affected by high risk flood hazard.

13.2.5 Control of use and development (high risk flood zones and areas of high coastal hazard risk)

Regional and district plans shall ensure that use and development within high risk flood

zones and areas of high coastal hazard risk is appropriate, including by avoiding the placement of structures or development where these would be vulnerable to a natural hazard event or would place a community at intolerable risk. These include:

- a) habitable structures;
- 13.2.6 Control of development within a floodplain or coastal hazard area Regional and district plans shall ensure that:
- a) Subdivision, use and development can only occurin an identified potential coastal hazard area (not being a High Risk Coastal Hazard) area where:
- i) appropriate assessment of the risks has been undertaken and these risks will not exceed acceptable levels;
- ii) **appropriate assessment of the likely effects has been undertaken**, including the effects of any new structure or fill on the diversion of overland flows or any consequential increased runoff volumes;
- iii) the creation of a new, or exacerbation of an existing hazard, including those off site, and any adverse effects are avoided, remedied or mitigated;
- iv) any adverse effects of a 1% annual exceedance probability flood event on habitable buildings are avoided or mitigated;
- v) has been designed and located to minimise the level of coastal hazard risk over its intended lifetime; and
- b) it is essential infrastructure, and:
- i) it cannot be located elsewhere; or
- ii) it will not increase the risk of or from natural hazard.

Explanation

The intention is to reduce the risks to the regional community from natural hazards, recognising that different tools and approaches are required and appropriate in different situations — for example, for greenfield sites versus developed sites, for areas facing immediate risk versus those facing medium— to long-term risk, or depending on the particular natural hazard(s) faced in an area. It also recognises that natural hazards are essentially natural events which only pose a hazard because development has occurred within their range and it will generally always be easier and cheaper to avoid development in these areas than manage the risk afterwards. This is especially true given the expected effects of climate change which will change the frequency, intensity and occurrence of weather— and sea level—related natural hazards.

Areas of intolerable risk are those areas that have been classified as a High-Risk Flood Zone or a Primary Hazard Zone. These are areas where modelling the risks to people and property are likely to be high. Development in these areas will be more tightly controlled in order to reduce the risk from hazards to an acceptable level. The methods of this policy are predominantly focused towards identified hazard areas, including Primary Hazard Zones, Flood Risk Zones, areas at high risk of coastal hazard and Residual Risk Zones. Method 13.2.8 recognises that there are other natural hazards that may be relevant in particular areas e.g. coastal erosion, coastal flooding or liquefaction risk, and that development in these areas needs to be managed to ensure that the risk from these natural hazards does not exceed an acceptable level."

This summary from the WRC RPS further reinforces the requirement for the applicant to consider and provide an assessment of effects arising from climate change, sea level rise and associated potential natural hazards.

Matters of National Importance - Recent changes to the RMA

The RMA has recently been amended to include "the management of significant risks from natural hazards" as a matter of national importance under section 6

"Section 6. Matters of national importance - In achieving the purpose of this Act, all persons exercising functions and powers under it,shall recognise and provide for the following matters of national importance:

(h) the management of significant risks from natural hazards."

The implications for this current application are obvious – the issues raised in this paper are now matters to be given primacy as matters of national significance.

Public Notification

The applicant has requested that its application proceed on a non-notified basis on the basis that any effects are less than minor. Having regard to the matters raised herein I would strongly suggest that the activity for which consent is sought will have or is likely to have adverse effects on the environment that are more than minor, and therefore must be publicly notified.

Conclusion

With respect, this paper has raised issues of great significant adverse effect on the environment, not only in respect of the matters affecting the application itself, but also far wider and weighty effects for the town of Whitianga and the whole District and Region. The

issues raised have not been given even cursory consideration in the documentation filed in support of the application.

The applicant must be required to provide further detailed information on the matters raised herein under section 92 (1) of the RMA and/or the Council must commission a report under section 92 (2).

Denis Tegg