

Tabled 12/4/23
PC56/084

Submission to Housing Intensification Hearing

Housing Intensification in the Coastal Hazard Zones

Andrew Edgar, 12 April 2023



Lowry Bay 2023



Sea Level Rise, Cyclonic Storms and Tsunamis

DPC56 proposal permits housing intensification in high and medium hazard coastal zones

- Medium Coastal Hazard Zone Amendment 433 14H 2.8: New residential units are permitted where the total number of residential units on a site is no more than two, with discretion for more.
- High Coastal Hazard Zone Amendment 433 14H 2.9: New residential units are permitted where the total number of residential units on a site is no more than two.
- Council Officers propose no substantive change, rather they suggest postponing consideration until the 10 year District Plan process to give affected property owners some input. **BUT**.
- Only a small number of affected property owners could contemplate a second dwelling.
- Would they ever willingly surrender "property rights"?
- Hazards affect not just them but all subsequent occupiers

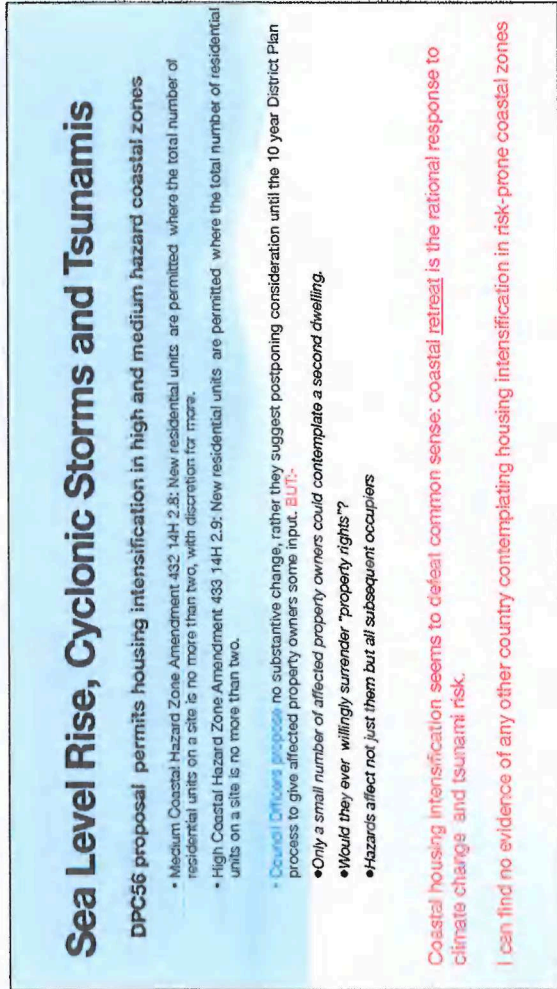
Coastal housing intensification seems to defeat common sense: coastal retreat is the rational response to climate change and tsunami risk.

I can find no evidence of any other country contemplating housing intensification in risk-prone coastal zones

Who can Assess the Hazard Risks?

- Geoscientists excuse themselves from town planning implications - not their field.
- DPC56 team lacks in-house expertise to critically assess and interpret out-sourced geoscience.
- Where are the GNS and NIWA submissions on coastal housing intensification?
- Is there a stakeholder with an independent overview?

THE INSURANCE INDUSTRY?



Insurance

• The Insurance Council's Ten Demands:

- "It makes no sense to cover low-risk homeowners at a level of risk far above what the premium and insurance would actually pay. For example, a property worth \$100,000 would be covered for the amount of \$150,000 because of flood damage."

• "High-risk areas will have a high..."

- "Stop making matters worse through the continued concealing of liability in high-risk areas"

- "If you have properties frequently damaged by events, insurers respond by increasing premiums and excesses or, ultimately, not offering insurance cover at all."

- "Losses from sea-level rise are irreversible and inevitable, and therefore un-insurable."

• Hutt City Council:

- "suggests home owners in the suburb at the northern tip of Wellington Harbour could find their homes un-insurable in as little as 30 years".

- **Climate Sigma:** "By 2050 most homes in these locations are likely to have experienced full insurance retreat - million-dollar properties on Wellington's Petone foreshore could cost as much as \$100,000 to insure within two decades".

if houses in the hazard zones will become uninsurable within 10-25 years, why are we contemplating their construction?

In the event of disaster, who pays, who suffers?

Who Pays for Reinstatement, or Relocation?

- EOC, in part
- Insurance, but when that is withdrawn,
- The property owner?
- HCC, ie the ratepayers, voluntarily, or via court proceedings, (given that the hazards are well known through HCC's own documentation)?
- Central government, ditto?
- Relocation - The Climate Change Adaptation Act?

The Human Aspect - Who Suffers?

- In the worst case, citizens will have 7 minutes from feeling a Tsunami-inducing earthquake to evacuate to safe ground
- Parts of Petone / Seaview are kms away from safe ground.

The situation is bad for existing residents, but why add more potential victims?

Two Kinds of Disaster

- Storm inundation accentuated by sea level rise, tides, cyclones etc will develop over hours/days, with warnings, and so there may be extensive property damage but little loss of life.
- Large Tsunami inundation will occur with virtually no warning and will lead to both large scale loss of life and property damage.

The Tsunami Risk

- The major risk to Lower Hutt is an off-shore earthquake on the Hikurangi trench south east of Wellington generating a large Tsunami.
- The latest GNS science estimate is that there is a 25% chance of a major earthquake (magnitude >8) on the southern Hikurangi trench in the next 50 years, with associated Tsunami.
- The probability is not high, but the consequences of a large Tsunami in Petone will be absolutely catastrophic.

Tohoku, Japan 2011



Excellent Japanese Geoscience, extensive Tsunami mitigation, 20,000 dead
The only guarantee is if people don't live in a tsunami hazard zone

My Suggestion

- High Coastal Hazard Zone Amendment 432 14H 2.9: New residential units are not permitted. Replacement of existing units should be required to mitigate the risk to people and property.
- Medium Coastal Hazard Zone Amendment 432 14H 2.8: New residential units are permitted where the total number of residential units on a site is no more than two and any development should be required to mitigate the risk to people and property.