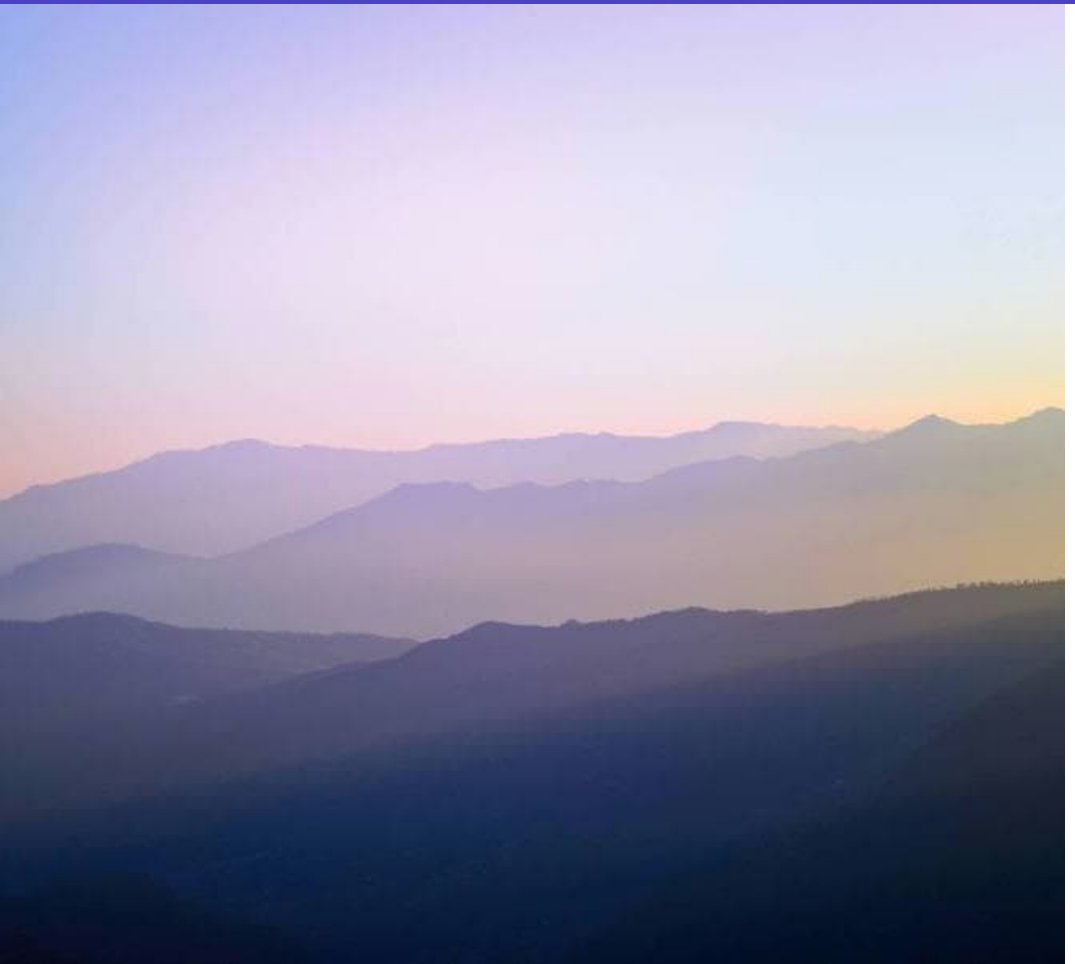
Plan Change 14 and impact to Residential Hills

Ian Rose on behalf of a group of Mount Pleasant Residents

Content

- Introduction
- Safety concerns of MDRS in Residential Hills
- Infrastructure limitations of MDRS in Residential Hills
- Christchurch Housing needs & Precinct Approach
- Summary

Introduction



We are a group of Mount Pleasant Residents who would be affected by intensification in our area. We represent a cross section of society ranging from young families to retired / semi-retired.

Mount Pleasant, and other Residential Hills areas, have unique characteristics that mean increasing population density as would occur under MDRS would have significant adverse safety, financial and environmental impacts.

Safety concerns of MDRS in Residential Hills

Emergency Egress

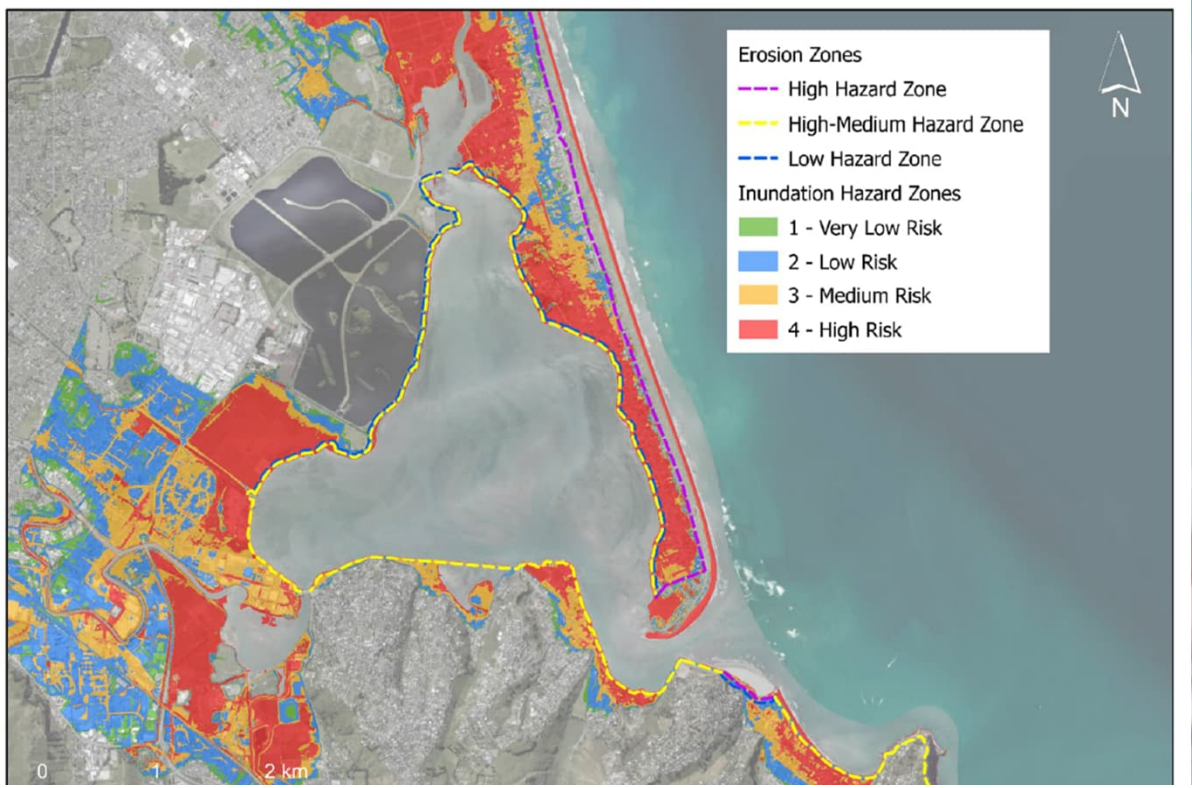


Figure 1: Sample extract of mapping of the recommended erosion and inundation zones

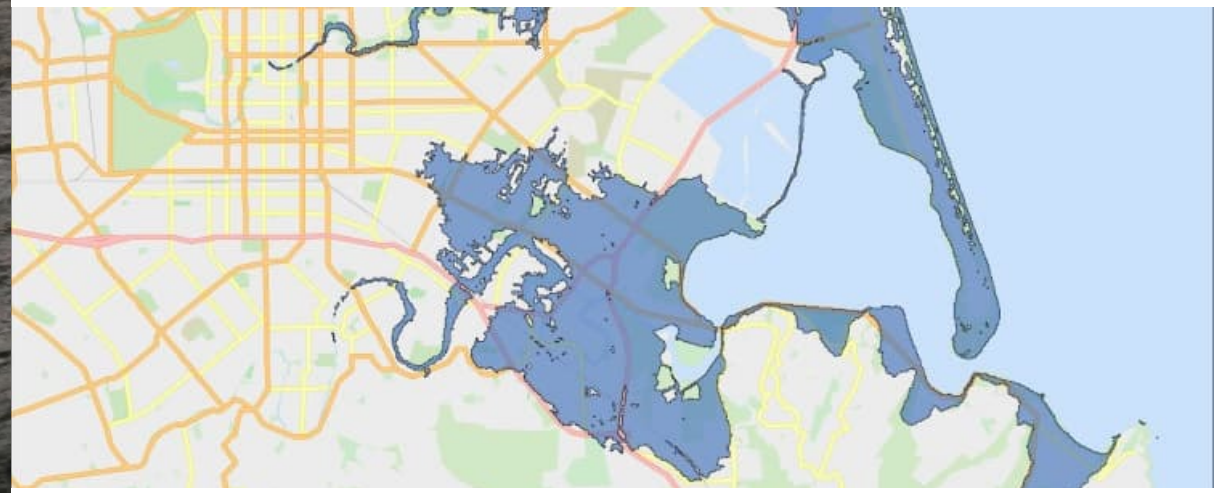


Figure 2: Full extent of 1:500-year tsunami hazard with 1.06-metre sea-level rise applied.

Emergency Egress

- If there is the need to evacuate the Residential Hills areas e.g. in another earthquake, egress is only possible through medium and high-risk inundation zones, or rock fall zones. Ref: latest tsunami hazard identified by NIWA.
- Sea level rise due to climate change is estimated to be around 0.4 metre over the next 60 years, and the base of the Port Hills is prone to coastal flooding which could cover most of the flat land between the hills and the sea (Tonkin & Taylor, 2021).
- Increasing intensification in Port Hills areas such as Mount Pleasant increases the number of people stranded and/or navigating hazardous egress routes in the event of an earthquake or tsunami.

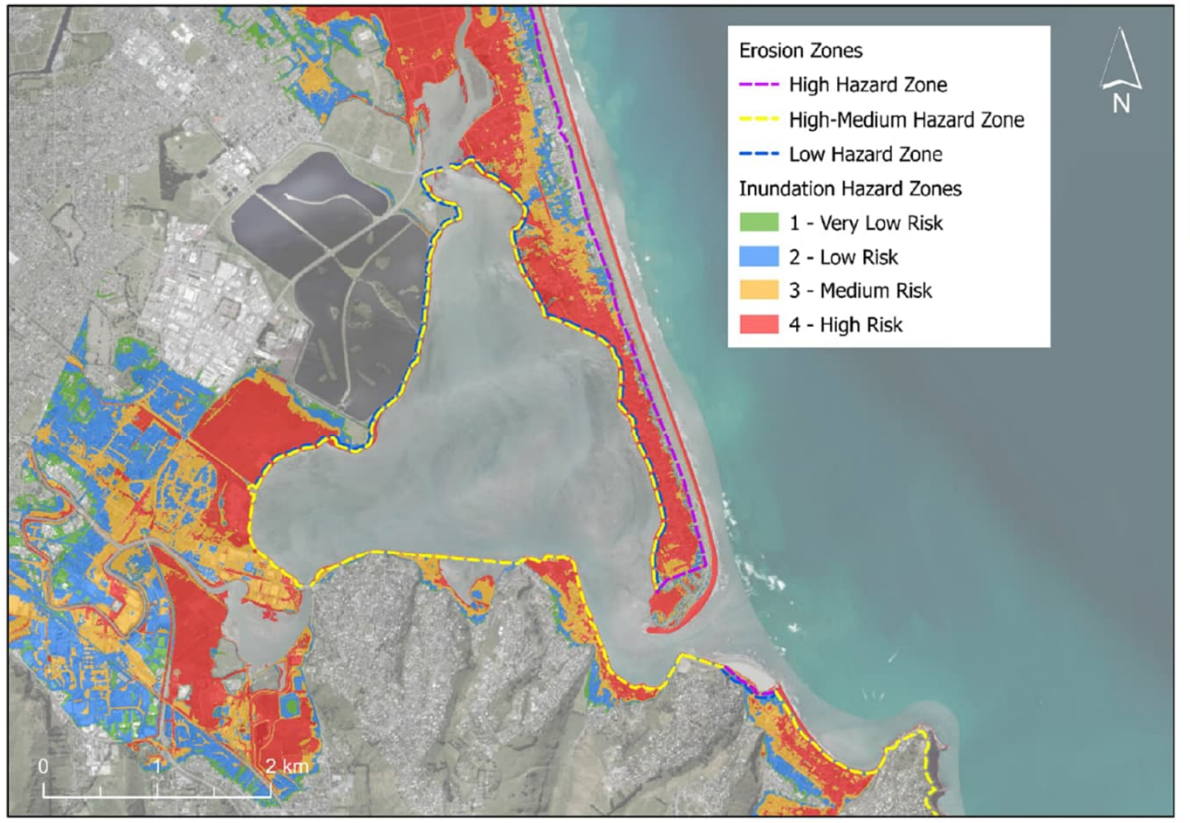


Figure 1-1. Sample extract of mapping of the recommended erosion and inundation zones

- *Figure 2: Full extent of 1:500-year tsunami hazard with 1.06-metre sea-level rise applied.*

Safety concerns of MDRS in Residential Hills

Emergency Service Access

Above: Major Hornbrook Road ~ Fire engine is held up behind the bin lorry.

Emergency Services Access

- The windy, narrow Residential Hills roads:
  - often have cars parked on both sides of the road
  - emergency vehicles already have difficulty driving up the hill roads
  - Densification would increase the number of cars parked, but also number of cars driving on the road, making emergency access more difficult
  - Result:
    - longer response time;
    - increase the risk of fire spread;
    - someone doesn't get medical help in time.

Major Hornbrook Road:
Above: bus mounts pavement and is static whilst vehicle the size of a fire engine inches past.
Below: Fire engine is held up behind the bin lorry.

Safety concerns of MDRS in Residential Hills

Pedestrian Safety

Mount Pleasant Road: multiple instances of vehicles parked on the single sided pavement

Pedestrian Safety

- Many people who live in the Residential Hills will walk from their homes into the surrounding nature areas or to a local school.
- Most roads only have a footpath on one side of the road (and some roads have no footpath), making crossing the street to another footpath, or walking on the road, necessary.
- Densification would bring increased foot traffic, as well as car traffic, making road crossings more hazardous, especially in vicinity of the blind corners created by the tight bends.
- On some streets, cars are often parked on the footpath, requiring pedestrians to go into the street to pass.
- Cars parked on the footpath is also a hazard for those with mobility issues, or those with pushchairs, who need a clear footpath.
    - A frequent example of this is parents dropping children at Mount Pleasant School who often have a younger sibling in a pushchair.
- Therefore, pedestrian access on Mount Pleasant would not cope well with the increased foot and vehicle traffic that would result from MRDS.

Major Hornbrook Road: imagine being a pedestrian trying to navigate the single sided pavement containing the bus!

Safety concerns of MDRS in Residential Hills

Cyclist Safety

Major Hornbrook Road: imagine being a cyclist trying to navigate this!

Cyclist on Port Hills Road

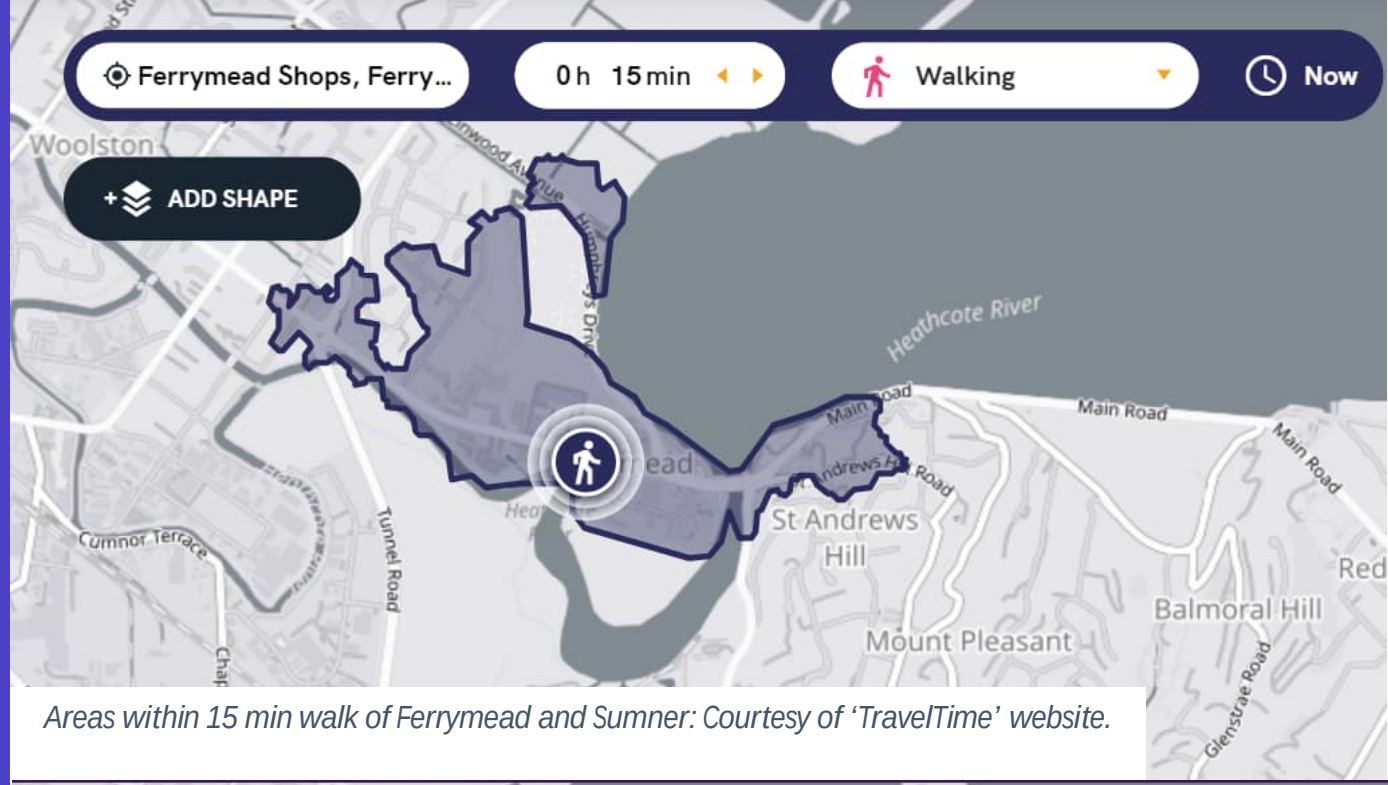
Cyclist Safety

- The Residential Hills are areas that are enjoyed on bicycle by many, Hill residents and non-residents alike.
- Existing hazards on the narrow, windy hills roads of parked cars and moving vehicles would significantly increase under MDRS.
- MDRS would result in increased risk to cyclists, and likely a higher accident and incident rate.

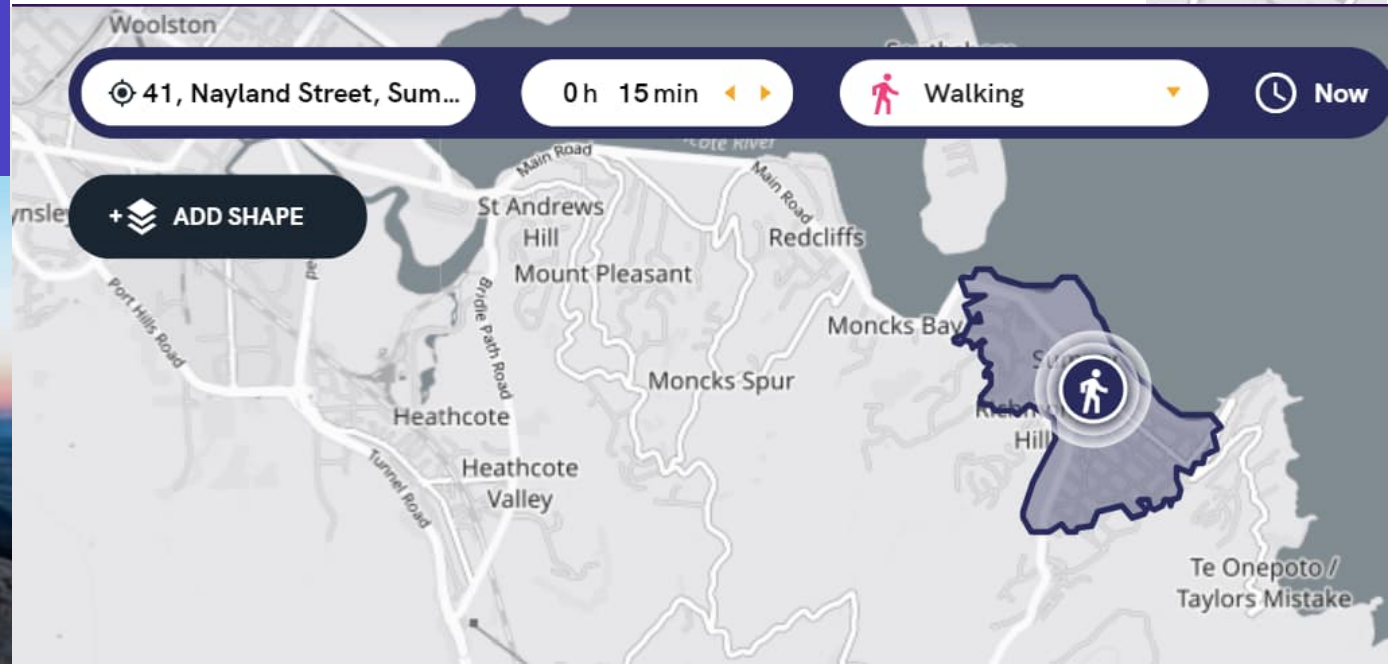
Cyclist on Port Hills Road

Infrastructure limitations of MDRS in Residential Hills

Lack of Amenities

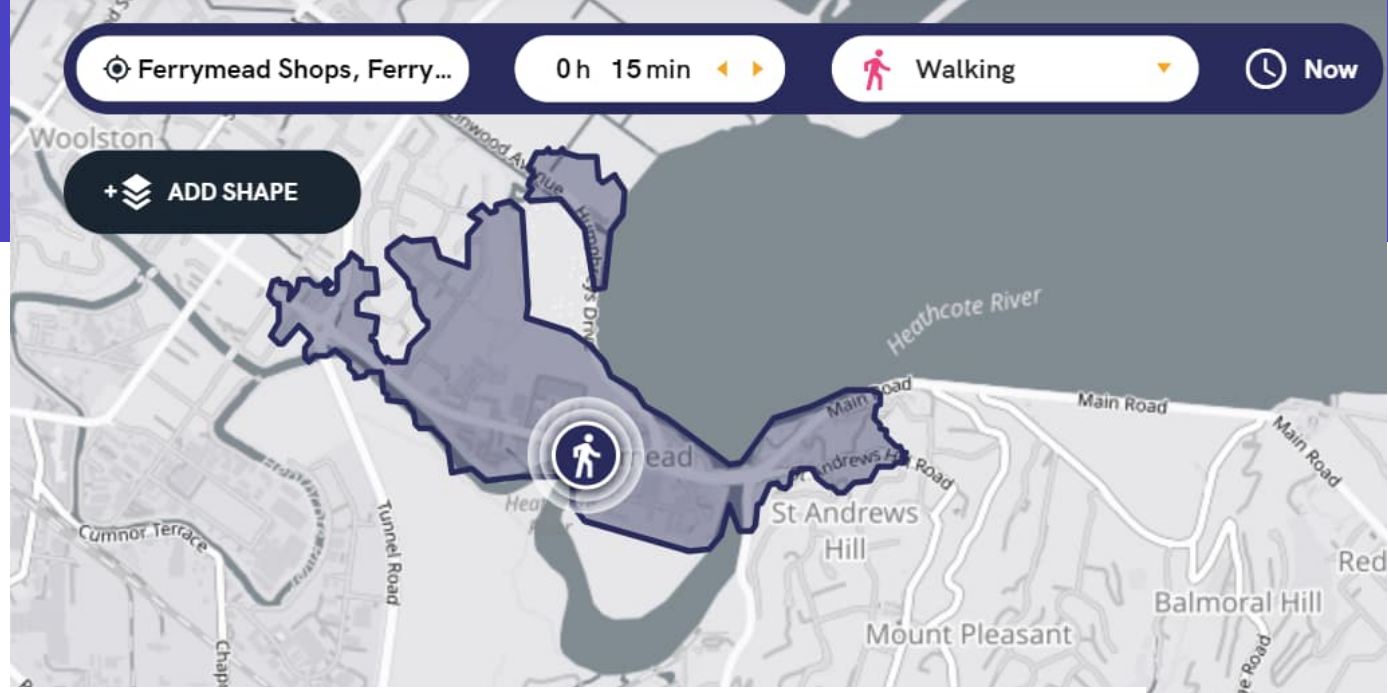


Areas within 15 min walk of Ferrymead and Sumner: Courtesy of 'TravelTime' website.



Lack of Amenities

- The Residential Hills areas, such as Mount Pleasant, have no local amenities within walking distance, nor easy biking distance.
- In the recent survey (2021: Life in Christchurch Transport and Housing) 59% of respondents could reach a supermarket within a 15-minute walk. This is not possible for vast majority of Residential Hills making other areas more suitable for MDRS.
- A significant increase in hill-based population, as would result from MDRS designation, would result in increased vehicle traffic for access to jobs, food & other shopping, doctors & other medical support, secondary schools etc.



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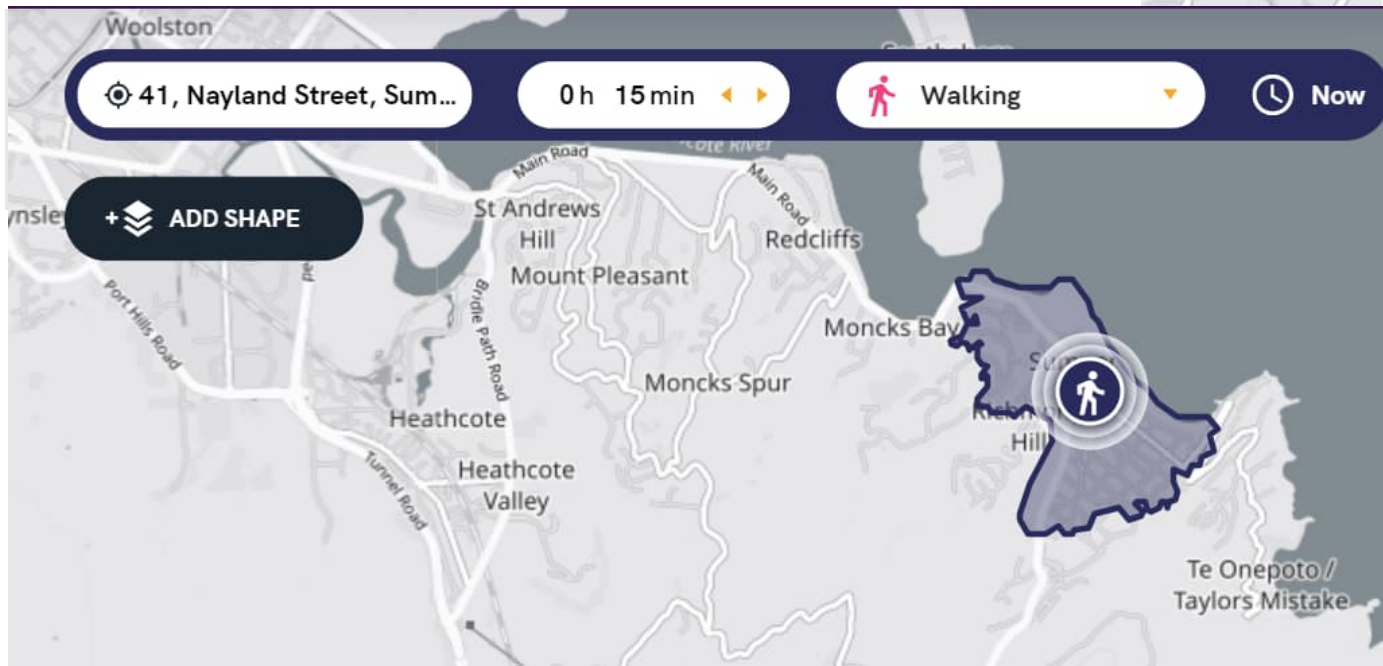


Infrastructure limitations of MDRS in Residential Hills

Sewerage and Storm Water Drainage

Many sewers and storm water pipes on the Residential Hills run through private properties.

Sewerage and Storm Water Drainage

- Many sewers and storm water drains on the Residential Hills run through private properties.
- Maintenance can be highly disruptive and leaks difficult / impossible to find and remedy.
- Much of the pipework is still clay pipes where earthquake damage relating to drainage can take several years to appear (EQC).
- Increased density, as would result from MDRS, would increase the strain on the infrastructure, increase the likelihood and severity of sewer leaks on private properties where drainage is via easement.
- In Ms M MacDonald's statement of evidence as the team leader – asset planning water and wastewater at Christchurch City Council, she specifically notes that intensification in areas such as Mount Pleasant, Redcliffs, Clifton Hill, Sumner and Lyttelton "could increase the demand beyond the existing capacity and require the upgrade of these individual connections. Due to the cost and complexity to upgrade large individual connections progressive upgrades are neither feasible nor cost-effective."

Infrastructure limitations of MDRS in Residential Hills

Transport Infrastructure

Shows no room for a bus and car to comfortably pass, even with cars parked ½ on the single sided pavement.

On this tight bend the bus is stopped (note brake lights), waiting for the car to edge past

With cars parked both sides, even with the car on the left pulled ½ off the road, there is insufficient room for a car and bus to pass on this relatively straight section of road

Transport Infrastructure

- The tight bends on Residential Hills roads make it difficult for long vehicles such as buses and emergency vehicles to negotiate the drive.
- Residential Hills roads have several blind corners where cars must yield for longer vehicles (bus/truck/fire engine etc), both on straight sections, and when the bus/truck/fire engine must negotiate the turns.
- Maintaining roads on the hills presents increased logistical challenges than on the flat.
- MDRS = more cars would be parked on the street, and more cars would be driving at any one time, increasing the risk of accidents on the narrow, windy roads.
- In Mount Pleasant, the only bus route is not a core bus route; neither is it frequent nor fast enough to make it feasible to not have a car.
- More frequent buses coming through is not desirable due to the congestion on the roads already experienced without densification.

Infrastructure limitations of MDRS in Residential Hills

Pollution

MDRS will result in increased vehicle traffic, increasing pollution.

Environment Canterbury Land Information: Residential Hills feed the Heathcote Avon River Estuary or the sea.

Pollution

- Stormwater run-off from the Residential Hills flows into the Heathcote River and the Sea.
- Increased intensification will increase the % of roof catchment and impermeable surfaces like concrete and asphalt where rainwater cannot soak into the ground.
- MDRS in Residential Hills areas = more cars; hill driving results in more emissions per km than driving on the flat.
    - (In a study into Transport energy consumption in mountainous roads by Travesset-Baroa, Rosas-Casalsa and Joverb results show that road grades have a major impact on energy consumption and electric vehicle efficiency is reduced by 22-27%).
- Opawaho Heathcote River Network include the following as polluters of the river, all of which increase significantly with MDRS in the Residential Hills:
    - Brake pad dust and rubber from vehicle tyres (noting that hill driving has a higher % of braking than the equivalent distance on the flat).
    - Fine particles of chemicals from industrial processes or from vehicle exhausts, which drop out of polluted air or are washed out of polluted air when it rains.

Precinct Approach

In Ike Kleynbos's report he suggested replacing LPTAA QM with precincts thus permitting modified MDRS (i.e. still a significant level of intensification for the Residential Hills area) via resource consent with only 2 stipulations:

1. 400m from any public transport stop (Residential Hills)
   a) This is regardless of the level of service provided, despite Mr Kleynbos noting in his report *"Increases in housing in medium density areas that have poor access to public transport options is obviously likely to increase private vehicle use, and in doing so, increase greenhouse gas emissions."*
   b) Any observation of the consistently predominantly empty #140 buses that labour up Major Hornbrook Road demonstrates this route contributes little/nothing to encourage people out of their cars. Hence any intensification in the area will result in more cars, pollution & safety hazards.
2. Three waters servicing is confirmed to be achievable
   a) Ms MacDonald's report indicates that MDRS could increase demand in Mount Pleasant that drives infrastructure upgrades that are neither feasible nor cost-effective.

Christchurch Housing Needs

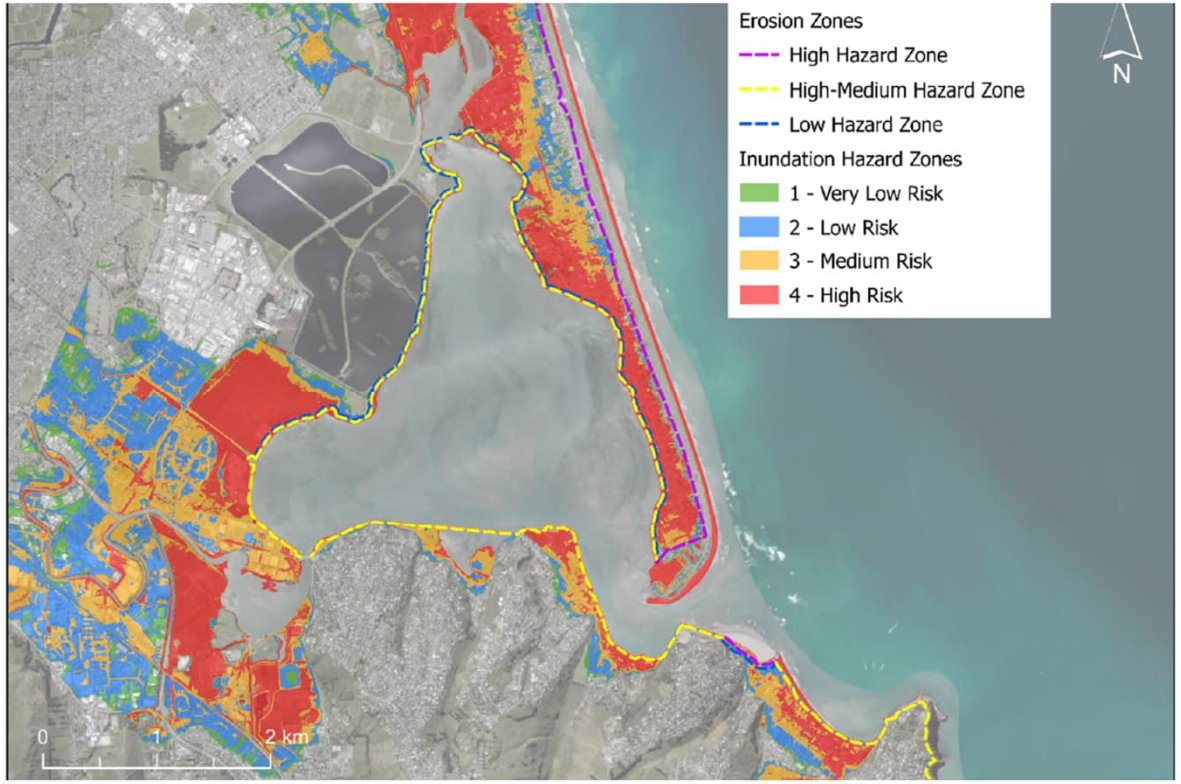
- In Ike Kleynbos's subsequent Planning Officer Report he noted that the original CCC Plan Change proposal, with the Low Public Transport Qualifying Matter, provided for some 800,000 Plan-enabled (theoretical) units and in the order of 100,000 commercially feasible units.
- He noted that when compared against population demand detailed in the 2021 HCA, the development capacity that PC14 is likely to deliver is between 50 to 100 years of development capacity.
- Therefore, there is no apparent need to allow MDRS style intensification in the Residential Hills areas. Indeed, from an environmental and safety conscious viewpoint, as well as considering cost-effective use of taxpayer's money regarding right-sizing of infrastructure highlighted by Ms MacDonald, the responsible approach seems to be to avoid MDRS in the Residential Hills.
- Whilst reviewing the other submissions, it seemed clear that the only entities advocating for MDRS in Residential Hills are developers, or their commissioned experts.

Summary

The poor transport infrastructure, prohibitive costs to enhance the drainage systems, increased safety risk to all road users (cars, pedestrians, cyclists), and increased safety risk for emergency egress and emergency services access all mean that the Residential Hills areas are not suitable for increased intensification.

Increased intensification in the Residential Hills is noted by CCC not to be required to meet the housing demands for ~50 - 100 yrs. The existing planning rules already allow for intensification at limits that are more easily manageable, without the increased risk to peoples' lives.

We respectfully propose that Mount Pleasant and comparable areas retains the existing Residential Hill controls.



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Thank you