Speaking PC78

Submitter No. 976, FS 266

Gayleen Mackereth.

MA (Hons) Dip ELT Member Auckland Geology Club/Society.

Speaking text

The NBE Act is one of the most iniquitous pieces of legislation ever introduced with the public being unable to submit on legislation .The expensive and lengthy planning undertaken for the AUP is being bulldozed by the "Densification at all costs" mantra.

Christchurch Council is pushing against this insane unplanned densification

I'm pleased to see that Auckland Council is making at least some attempt to modify the disastrous consequences of the slack planning rules introduced

The forced densification doesn't take into account topography and geology with respect to landscape It does not give sufficient consideration to Auckland's lineal form, or volcanic origin with respect to where urban intensification and Greenfield development of varying scales should be located, including supporting infrastructure and business activities.
There is no attempt to apply agreed principles of urban design in determining where development is to be focused and how it is to be managed which will be left to co-governed Spatial Planning entities with more focus on ethnicity than planning expertise.

I ask the Council to:

976.7 Amend the plan to ensure development only occurs where there is capacity for buildings to be adequately serviced by water, stormwater and sewage reticulation.

976.2 Amend the plan to provide zoning for new hospitals, schools, libraries (media centres), parks, recreation facilities, sports, commercial centres and necessities that make up communities.

NBE legislation leaves planning to future Spatial Planning entities. The Council must act now.

Intensification should be a planned process Recent disasters reinforce the need for a structured, planned city development plan related to a medium to long term development and investment plan for the city. It must take into account that our budgets are limited. This would prioritize development first in city and metropolitan centres; then town centres; then in other areas with adequate infrastructure capacity.
It must take into account the value of existing suburban neighbourhoods in terms of their contribution to local identity, diversity of housing choice, character and ecology; and their ability to act as 'green lungs' for the city.
The 3x3 or unconsented approval for all sections is gobbling up precious arable land, and enabling unplanned densification anywhere from Warkworth to the bottom of the Bombay hills. This must

be stopped by the Council and development limited to areas which can provide the above facilities.

976.11 Amend the plan to provide for Universal Design standards, for an aging society, and for disabled access

At the last census, Auckland's aging population totaled 280,000. Future planning must insist that the principals of Universal design are applied to all buildings and that a proportion of single level dwellings are built to provide for this population.

Similarly, walkable catchments need to be realistic as most of the aging population and disabled people cannot walk the distances to be imposed.

976.9 Amend the plan to address climate change adequately. Intensity and frequency of rain is increasing

The listing of more Notable Trees is a minimum step in addressing climate change. The urban forest once protected, is now in the process of being obliterated at the rate of 1000 trees a week in Auckland under the 3x3 apartment block legislation regardless of location, terrain and risk.

Research has shown that

"Runoff generally does not exceed 10 to 20 percent of the rainfall received on small watersheds covered with trees or grass. Without vegetation, however, this could be as high as 60 to 70 percent."

Reduced permeable land areas attributable to housing intensification will create major risks of stream degradation, erosion, and flooding intensity.

While the Unitary Plan prescribed 40% permeable area in MHS and MHU areas, this is totally ignored by developers and the new set of rules leaves such things to future planning entities while we "fiddle while Rome burns"

Sponge cities are the new Buzzword. Auckland with its suburban neighbourhoods was judged the world's top Sponge City relatively recently. The NBE is set to destroy this advantage. This is disastrous and this Council must do all in its power to limit densification to all but the largest city centres. The legislation must be altered to change all new planning along the Sponge City rules BEFORE IT IS TOO LATE

Recent events have shown us the dire consequences of slack planning rules. I live on a section halfway down the hill in the water pours down the drive when it rains. My land is extremely steep, and without all my large trees all the neighbours below would have had dire flooding. Currently, under the new no garage rules, the large section next door could have 20 three storey blocks developed with a driveway only 2.5 metres wide for service vehicles. The potential for flooding due to resultant removal of trees and the creation of large impervious areas, resulting in

water accelerating down the steep slopes to my property and all the homes below in the Valley will is a disaster waiting to happen.

The attached photo shows the view from my place in 1981 .The topography broken by streams is clear .This area is now a valley, streams are covered by modern single housing infrastructure but linked to the 100 year old original Howick pipes Modern thinking is to expose streams and let them do their work (see---

76.20 Amend the plan to place more attention on other risk matters of intensification e.g. volcanic threat, earthquake and Tsunami

This drive for intensification is a disaster waiting to happen as geologists now know that the threat of volcanic explosion in Auckland is 10 times more likely than previously thought with Magma much ,much closer to the surface than believed at 50 metres and warning times less than 5 days for the evacuation of 450,000 people. How will emergency services address this problem It cannot be ignored in a densified city?

Qualifying matters

976.13 Amend the plan to adequately identify areas with insufficient drainage, likelihood of slips and problems with infrastructure and make these Qualifying Matters. E.g. Cockle Bay, Howick.

The areas zoned Single Housing in Howick with a poor drainage overlay in the AUP were correct but the government legislation has laid waste to any common sense (See Cockle Bay Residents and Ratepayers Assn submission for an excellent analysis) Extensive geological and marine evidence for the need to restrict densification in the Cockle Bay area is attached in Appendix 2

976.16 Retain and enforce Special Character and height restrictions and associated planning limitations for Howick

As chairperson of the Howick Ratepayers and Residents Association throughout the AUP hearings we fought extremely hard to get recognition of Special Character for Howick business district. A whole page in the report on the AUP was devoted to Howick yet this new government legislation wishes to destroy special character leaving a faceless, boring city . We demand that the special character of Howick business district be recognised as a qualifying matter.

976.18 Reinforce and embed Howick's status as a "Qualifying Matter".

AUP E 3.1.9.In the case of Howick Special Character Business overlay, particular attention is to be given to the intimate scale of buildings in Picton Street, the views to and from Stockade Hill and from the Ridge Road entry to Howick.

Require development and change within the special character area to retain and maintain those features, qualities and attributes that contribute to the special character, such as:

A number of heritage buildings and sites dot the business area A

1. "All Saints" Church 9 Selwyn Road, Howick
2. "All Saints" Graveyard 9 Selwyn Road, Howick
3. 'Star of the Sea' Graveyard 28 Picton Street, Howick
4. Prospect Of Howick" Hotel Tavern 78 Picton Street, Howick
5. Howick
6. Mc Inness Building 127 Picton Street, Howick
7. Old Presbyterian church 35 Uxbridge Road
8. Fencible Court Well 35 Cook Street, Howick
9. Rice's Bakery building 67 Picton St (behind Baker's Delight)
10. Information Centre -WW11 Memorial building
11. Road names leading from the township are all named after Fencible Officers for British military heroes or battles.. Wellington St, Moore St, Fencible Drive
12. Remnants of Spanish Mission style façade in the apartments next to the McInnes building

976.19 Retain Stockade Hill as Qualifying Matter.

Stockade Hill, the landmark hill and listed Category 2 Historic Monument, was recognised for its historical and local significance in the AUP in subsection D20A with the Stockade Hill Viewshaft and this must be enshrined in the new PCs 78.

Existing viewshafts and views permitted by AUP height restrictions, including views from Stockade Hill and down to and across the Howick Village, must be preserved in any revised zoning.

976.17 Amend rules for the THAB zoning behind the business district of Howick which threatens the integrity of the village heights by allowing 3-5 storeys .

The historical Selwyn Church at the apex of the Howick Village is a focal point which gives unique character to the sweeping views as one enters Howick. This must not be obscured or dominated by the towering "Blokhaus" buildings of non discriminate densification with boring sameness for every corner of NZ. Height must be limited and not exceed the height of the church spire as in European planning. Howick is part of the historical context of this nation.

It is essential that the Council takes control of PLANNING

976.6 Amend the plan to apply more stringent regulations to ensure the safety and longevity of the housing built and to ensure the amenity value of the living environment is preserved

Intensification has lead to poorly located and poor quality developments often with limited privacy and amenities, which lack diversity in design and in unit size

Amenity values and Quality of living are both swept conveniently away in the blunderbuss approach. These are the values residents value and must be retained, if necessary as Qualifying Matters .

In the raft of changes under the NBE Act removing Amenity Value or quality of life –will have iniquitous effects on the populations living in the new Densification world.

There is a huge bank of evidence on the effects of the new order on mental health, wellbeing, connectedness, biodiversity and the next generation's connection with nature and understanding of natural world.

976.10 Amend the plan to provide for liveability for families.

The NBE Act and associated legislation does not recognise the value of existing suburban neighbourhoods in terms of their contribution to local identity, diversity of housing choice, character and ecology and flood prevention and their ability to act as 'green lungs' for the city.

There is no planning, just greed. The housing built is non durable, dark with tiny windows, too small for families being 1-2 bedroom units in general and with no area at all for children to play or exercise.

We are breeding huge future problems with children unable to cope with life as all they will know is the internet and online gaming or worse, pornography. More families will be split by the results of these issues.

976.14 Amend the plan change to manage dominance over neighbours in walkable catchments.

Thank you for listening

Gayleen Mackereth

Appendices:

A) Evidence for treating Howick as a Qualifying Matter

and for retaining the Special Character status for the Business District.

The most important thing about Howick is that is different from almost all other areas retaining their Historic Character status. It is the actual history of the area Maori and Settlers, and the listed Historic A buildings and the recognized historic status which is ingrained in the history of the area. It is that unique view of the strategically placed oldest Selwyn church in NZ dominating the streetscape which draws the eye and defines the town as historic.

A number of heritage buildings and sites dot the business area

13. Stockade Hill (Site of defence and shelter from Maori invasion/retribution)
14. "All Saints" Church 9 Selwyn Road/Cook St Howick.
15. "All Saints" Graveyard 9 Selwyn Road/Cook St, Howick
16. Site: Our Lady Star of the Sea catholic church (1960) replacing original building 1854
17. 'Star of the Sea' Graveyard 28 Picton Street, Howick
18. Prospect Of Howick" Hotel Tavern 78 Picton Street, Howick
19. McInness Building 127 Picton Street, Howick
20. Old Presbyterian church 35 Uxbridge Road
21. Fencible Court Well 35 Cook Street, Howick
22. Rice's Bakery building 67 Picton St (behind Baker's Delight) 1920 (Intergenerational business)
23. Bells Butchery (1922) an intergenerational business
24. Back part of present Post Office, Picton St
25. Road names leading from the township are all named after Fencible Officers or British military heroes or battles.. Wellington St, Moore St, Waterloo St, Fencible Drive and so on
26. Howick Coat of Arms (bus shelter Picton St)
27. Old Concrete road to Stockade Hill.
28. Bluestone kerbs

Evidence of Historic sites, buildings and Places of Significance to residents.

The Eastern slopes of the "Village' leading down to the sea have the following historic sites and buildings of note plus large areas of pre1944 buildings. This area is also an area of significance to Maori.

1. 'Shamrock Cottage' 73R Selwyn Road, Howick
2. 'Shamrock Cottage' Well 73R Selwyn Road, Howick
3. Uxbridge old Presbyterian church 35 Uxbridge Road
4. Howick Wharf Steps, Howick Beach 110R Beach Road, /4R Granger Road Howick
5. Star of the Sea Convent and Chapel 129 Granger Road, Howick
6. World War II Gun Emplacements 181R Mellons Bay Road

7. World War II Gun Emplacements World War II Gun Emplacements (two - one north and one south end Howick Beach 110 Beach Road and 1 Marine Parade, Howick
8. World War II Gun Emplacements World War II Gun Emplacements (two - one north and one south end Cockle Bay Beach , Cockle Bay)
9. Hawthornden reserve (now called "Green Gables"reserve) Cook St site of original Fencible captain's home
10. Mellons Bay Beach 181R Mellons Bay Road, Mellons Bay
11. House - 'The Cliffs' 13 Rangitoto View Road, Howick
12. Howick Beach (site of 804 Fencible Soldiers' landing to protect the fledgling Auckland and site of 2 year occupation by pioneer families awaiting own houses.
13. Old Presbyterian Church (Uxbridge Creative Centre)
14. Stevens Homestead - Well and Barn 185 Bleakhouse Road, Howick
15. McMillan Homestead 159 Bleakhouse Road, Howick
16. Fowrey Lodge 215 Bleakhouse Road
17. Captain Irvines Homestead 40 Ridge Road Howick
18. Brickell Homestead 174 Ridge Road
19. Owhanga House 47R Shelly Beach Parade, Cockle Bay
20. Keppoch Lodge Well 1 Tanglewood Place, Howick
21. Policeman's Lodge 44 Uxbridge Road
22. Webster's Store (the "Beach Store "- rare example of this typical architecture) 96 Selwyn Road
23. Page Cottage 18 Page Point Mellons Bay
24. Howick Beach 1896 Wharf Piles
25. Emelia Maud Nixon's Home and "Retreat" 37 Uxbridge Road &Garden of Memories-a tribute to Maori and Pioneering history
26. Te Raukoheke -Heritage Museum, Garden of Memories 37 Uxbridge Road
27. Selwyn Road "The Pilgrims ' Way" the route of the early settlers after months in raupo huts on the beach. Past Shamrock Cottage and on to "All Saints" Selwyn Church
28. Sacred Pohutukawa at the eastern end of Cockle Bay
29. Old PA site Cockle Bay at eastern end of Cockle Bay. (significance to Maori)

Historical trees Howick

- Poplars plated by Rev Lush 1850-60
- Cypress trees 1857 All Saints Church 18 50
- Gum trees Stevenson Reserve 1930s
- Pohutukawa trees Howick Beach 1938
- Totara trees planted Howick Cemetery Reserve 1934
- Pohutukawa trees Howick Paparoa Cemetery 1936
- 2 xPohutukawa Granger Road
- Puriri Tress Stevenson Reserve planted by (later)Prime Minister William Massey 1934
- Coronation Oak, Stockade Hill (Coronation George 6th)

- Plane tree in front of the Prospect of Howick 1940
- Totara Trees Howick Cemetery Reserve 1936
- Camelia commemorating famous aviator Jean Batten's successful flight (31 Uxbridge Rd)
- Coronation Canadian Oaks, (Queen Elizabeth's coronation) 1953
- Washington Palm tree Keppoch Lodge 1 Tanglewood Place (1853)
- Totara Tree in front of Kelsey's house -formerly a general store Ridge Road Howick

It is that unique view of the strategically placed oldest Selwyn church in NZ dominating the streetscape which draws the eye and defines the town as historic.

It is paramount that we keep ALL buildings under the height of the Selwyn church spire. This is the benchmark for retaining the unique streetscape of the Village and a semblance of Village atmosphere - church, pub, village green etc

Above: SPIRE HEIGHT and dominating 3 level apartments to the right seen in streetscape.

If highrise appartments and buildings areallowed on the northern side of the village, the whole streetscape will be lost and the historic buildings overwhelmed by incongruous multistorey developments

B) Evidence for Cockle Bay's status and NON Densification

Geographical, geological and topographic reasons for limiting intensification in Cockle Bay area

The area in question is steeply hilly, possesses radically bad drainage and infrastructure and is totally unsuitable for further intensification

Underlying Landscape Context

Characteristics of area to the east of red line below.

- **Steep-ampitheatre structure in a series of steep ridges**
- **Terrain broken by many streams or dry stream beds**
- **Poor drainage**
- **Heavily wooded**
- **Outstanding visual landscape seen from the sea**
- **Pah sites**
- **Defensive position of streets leading to Stockade Hill**

The steep, heavily contoured land forms a series of ampitheatres round each of the four beaches - Mellons Bay, Howick Beach, Cockle Bay and Shelly Beach in this historic area and abuts Eastern Beach on one side and the MaungaMaungaroa estuary on the other.

to East of red line

Designated single housing area

We consulted the experts

According **to Mr Graeme Mansergh former chief engineering geologist and Head of the DSIR (geology division),** the ridgelines of the areas are covered by layers of **volcanic ash**. This ash has a particular characteristic It is thixotropic meaning that is will liquefy (as in Christchurch) under vibration and lead to **liquefaction** and the associated problems (those areas of liquefaction are now all red zone areas in Christchurch)

The whole area is clearly uplifted and the violent history of the area can be clearly seen in the contorted up thrust strata and anticlines of the weathered cliffs near the beaches

" The geology of the area can be summarized as consisting generally of old basement greywackes overlain by much younger predominantly marine sediments (Waitemata group rock) and sub-aerial and submarine volcanic, with some very young basaltic volcanic."

As cited in http://rsnz.natlib.govt.nz/volume/rsnz_61/rsnz_61_01_000480.html

"These rocks sit uncomfortably on top of the maturely dissected greywacke terrain which invariably exhibits close-textured insequent drainage developed as a result of its remarkably uniform lithological nature and its **heavy cover of impervious residual clay." This points to the drainage problems of this area,**

Of particular note round the beaches mentioned are "**the abruptly-rising hills of Tertiary sandstones**, which characterize the central topographic unit, but much of the geological evidence is unfortunately obscured by faults, threaded by interbedded tufaceous sandstones and mudstones. There is an outcrop
of normal Parnell Grit exposed in and west of Mellon's and then this grades laterally into typical Turanga Greensand. For further groups a 2 ft. band of typical grit is exposed near Cockle Bay with his "Tamaki tuff," mainly by reason of its thinness."

"As a general rule, the Tertiary sandstone terrain presents readily recognisable features. In major detail it invariably displays comparatively coarse-textured topography, which is often accompanied by distinct stepping (*See maps above*) as a result of slight variations of hardness in the sub-horizontal strata, **and by mammillary contours due to large-scale slips with sharp scarps at their upper margins, at times prominent near the crests of divides**."

The propensity for slope failure and coastal erosion of cliff faces in the Cockle Bay Mellons Bay zone has been documented in a number of the Council's own publications eg

http**://www.aucklandcity.govt.nz/council/documents/technicalpublications/TR2009009%20Regional%20assessment%20of%20areas%20susceptible%20to%20coastal%20erosion%20appendices_A-J.pdf**

" Waitemata group rocks were deposited in the early Miocene Period (between 16 and 24 million years ago). Sediment deposition in the Waitemata Basin produced interbedded sandstone and siltstone. These rocks are easily recognised around the central Auckland shoreline by their well-defined shore platforms and their distinctive erosion characteristics (Photograph H 3). **The thinly bedded siltstone is much more susceptible to weathering and erodes back at a much faster rate than the more massively bedded sandstone. This tends to lead to differentially eroded cliffs prone to large block failures.** Weathering occurs to a depth of 4 – 5m and residual soils are typically soft silty clays prone to failure when saturated**.**

Oversteepening and failure of residual soils due to erosion of underlying rock is common"

In 1996 as a result of slope failure a geotechnical report was prepared for Colleen Court Cockle Bay by
BECA.

"Report: **1.1.4 Cliffs around Cockle Bay**

Cliff Top Failure at 5 Colleen CourtCockle Bay Geotechnical report prepared by BECA. Slip occurred after extended period of heavy rain

- Shallow depth of topsoil/fill overlying weathered Waitemata soils and a thin silt layer
- Cliff below property is over 35m high inc weathered soil profile.

- Steep cliff faces are prone to weathering and frittering due to wetting and drying
- Also subject to wave undercutting
- Rockfalls up to 1-2m thick may therefore occur with recent rockfalls evident at the cliff base.

Experience indicates Auckland Harbour cliffs retreat by 3-5m/100yrs on average with higher rates in some areas"

- " Upper soils also prone to slumping and failure"

Further evidence of the susceptibility of the Cockle Bay zone area to erosion is set out in this Council publication *Regional Assessment of Areas Susceptible to Coastal Erosion Volume 2: Appendices A - J February TR 2009/009*

This publication contains photos and specific data on slumping and slope failure in the area.

As a result of this substrata not only is slope failure common but the whole area suffers from radically poor drainage resulting in excessive flooding to lower properties during periods of heavy rain in both the Uxbridge and Liston catchment areas.

Beach devastation:

Construction of **housing** results in large **impervious areas** on land which when covered in vegetation absorbed most of the rainfall falling naturally on it. Once these absorptive surfaces disappear **runoff occurs and the steeper the land** the faster the runoff cascading downs the hillsides. The consequences will be **total devastation of the beaches** leaving nothing. Not only will the shallow area of beach sand be washed out to sea but **the marine life** the essence of Cockle Bay will be wiped out.

Ecological consequences:

1) The importance of retaining the wooded nature of the area on both public and private land to absorb water , hold back run off and stabilize the soils

2) further intensification and greater impervious areas would exacerbate the speed of runoff with disastrous consequences.

" Large impervious areas significantly increase storm water runoff and volumes. Contaminants picked up from our urban areas are carried in storm water runoff and deposited in streams, groundwater and coastal areas. These processes can have a significant effect on the quality, health and functioning of our freshwater and marine environments." Unitary Plan fact sheet.

In the Cockle Bay SHZ:

3) Run off already is a problem, if accelerated by development **would erode the beaches which are already at a delicate balance having required resanding this year**

4) silting as a result of soil disturbance would result in the destruction of marine life of the beaches so that
Cockle Bay would be a dead devastated area known only by its curious name devoid of cockles.

This is an area of great ecological significance so

We consulted a Marine expert:

Proof of the above has been given to us by the late ***Margaret Morley Associate Emerita*** of Auckland Museum who has made extensive studies of the marine life of this area.

She explained that the fine silt runoff chokes filter feeders and kills them,so that not only do the **cockles, pipis and other molluscs die so do crabs and other invertebrates. She has documented devastation of the coralian turf and microscopic life of the Howick Beaches already as a result of silt drifting from developments in Pine Harbor** .The thought of **intensification** and further silting and runoff from soil disturbance in this area appalls her and she said she feels it **must be prevented at all costs.**

Not only is the complex food chain of the beaches in the area significant, but the area has unique value for the following reasons

Other ecological criteria

This is an area of great ecological significance

Fauna and Flora

This area is home to a unique NZ beetle according to

Ecological regions of NZ http://www.doc.govt.nz/documents/science-and- technical/Ecoregions1.pdf

"INSECTS: the Anthribid beetle Notochoragus fungicola (Broun) n.comb.is found only in Howick and the Waitakere Ranges from sea level to loom. "

Wildlife corridors

The latice work of streams and dry stream beds coverd in significant trees form very important wildlife corridors to assit the breeding of and movement of species in the area.

There is very clear movement of species along the axes from this are a to LARoche bush to Cook st gardens the to the Maungamaungaroa estuary thence to Whitford and the Hunuas.This area is one of the only areas with such clear connections

England even build bridges over motorways to assist the ***Dormouse t****o cross, Australia does it for* ***Kangaroos*** *why would we deliberately destroy known corridors which we do not even have to spend huge money on creating?*

> Overseas visitors marvel at the high level of **plant diversity in our combined native and exotic species,- which reflect our entwined Maori and Pakeha roots**

The area at present has the wildlife corridors, contiguity of green spaces and an abundant mature treescape.This has taken 70-150 years of planting to reach this stage. **It is home to diverse native wildlife.** This is a huge advantage for all and MUST NOT BE ALLOWED TO BE DESTROYED IN THE PURSUIT OF THEORIES OF THE COMPACT CITY . **The judges in our view have the total responsibility to ensure the preservation of native species and the biodiversity of our area.** We have at present in Howick a perfect balance with European and Native species happily surviving together the ground dwellers the tree top dwellers and the in between seed spreaders-

Research: **Making space for biodiversity in urban areas E. O. Wilson (Harvard professor)**

http://www.uep.ie/pdfs/guidelines_CH2.pdf

"--biodiversity can be higher in cities than surrounding rural areas providing rich and diverse ranges of plants and animals, *which often occur as unusual or unique communities (Angold et al.,*
2006). ---

Masterplans should seek to identify potential connecting corridors and to enhance the--- ecologically coherent network of green spaces"

The map below shows the required matrix of connections which makes this and ecologically significant area.

Map showing clear Wildlife corridors and contiguous green nodes amongst housing

Howick is a leafy treed suburb. The clear existence of wildlife corridors shown in the map in our submission enable citizens to wake to the Tui and go to bed with the Morepork, but the Unitary Plan's rezoning will completely eliminate many of our native birds and animals within in a decade in our area.

- ***According to Research done in 2002 on The Importance of backyard habitat in a Comprehensive Biodiversity strategy Rudd et al.***
- **"Without connections between [backyards], isolation and loss of genetic diversity is imminent (Hobbs & Saunders 1990). Green corridors, utility rights-of-way, and backyard habitat are important parts of urban planning, because they increase biodiversity in cities and improve the quality of life for all residents."**

- *According to researcher* ***Dr Sarah Bekessy,***

ARC COE FOR ENVIRONMENTAL DECISIONS (CEED)

TUESDAY, 30 APRIL 2013

When it comes to urban planning, protecting wildlife is often overlooked – but the loss of natural ecosystems in cities poses risks to public health and the quality of life of urban citizens," says Dr Sarah Bekessy, of CEED and RMIT University
"Over half of Australia's threatened species and ecosystems occur within the urban fringe and accelerating urbanisation is now a key threat to their survival."

The famous biologist EO Wilson of Harvard University warns

" Backyard habitat can be an invaluable food and habitat source for a wide range of urban species and is essential in developing the matrix (ONLY GREEN SPACES LESS THAN 0.02 KM apart) that supports the large numbers of corridors (375) required for connectivity and species survival."

Vegetation characteristics of the Cockle Bay area

- **Large number of historically significant trees**
- **Heritage fruit trees in most older gardens**
- **Large number of puhutukawa and native trees**
- **Large patches of original vegetation**
- **Significant private plantings**
- **Many Norfolk pine and considerable age**
- **Huge range of diversity of European trees**
- **Significance of size of trees especially in view of the fact it is difficult today to obtain full size trees as there is a preference for dwarf and semi dwarf trees in the nurseries**
- **We cannot offard to destroy the mature trees we have.**

The area contains many original and notable trees (sadly not "listed" because of the roadblocks to listing deliberately put in by the Council, such as costs to residents in hiring arborists, measuring the tree, photographing it and giving "evidence' on its uniqueness.)

It seems that the list of such notable trees given to the Council some time ago by the renowned
Howick Historian Alan La Roche has been
ignored.

The area is home to significant numbers of native birds. I personally have watched kingfishser, blue heron, fantail, pigeon, waxeye and yellowhammer and tui breed in my garden. I suspect the morepork also breeds here but I have been unable to see this at night. The significance of the area for bird and invertebrae life is very clear to all who live here.

Maintaining the wildlife corridors takes on greater significance when one realises that

the endangered North Island parrot the Kaka comes regularly to visit.
(I have a 45 minute video of the Kaka foraging for insects and food on the tree outside my window,)

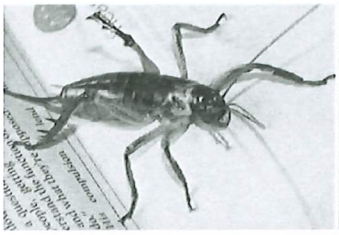
The area is populated by a wide range of native and exotic birds as well as the native skinks wetas and beetles and the monarch butterfly.
(see my attached photo of a kingfisher eating a skink)

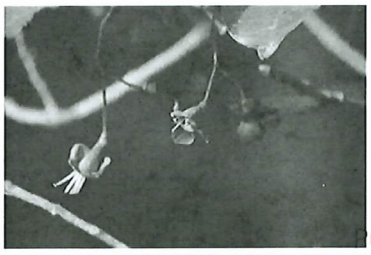
It would be unthinkable to allow intensive housing in the area thus devastating this remaining strong pockets of wildlife corridors enabling the survival of our precious native wildlife.

The Tui eats a variety of food

Kingfisher eating  native skink. Always nests in Weeping Willow
each year and raises up to 5 young

Morepork: (no photo but he is constantly here at night and we must presume he nests here.)





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Fanta **Infrastructure:**

The area is known for poor infrastructure with stormwater outlets on the each often contaminating the beach with sewage.

The UP targeted the area for stormwater management, due to obvious problems and it remains an area **unsuitable for intensive housing**.