

Northern Rivers Resilient Lands Strategy – Summary Report

Draft for Consultation

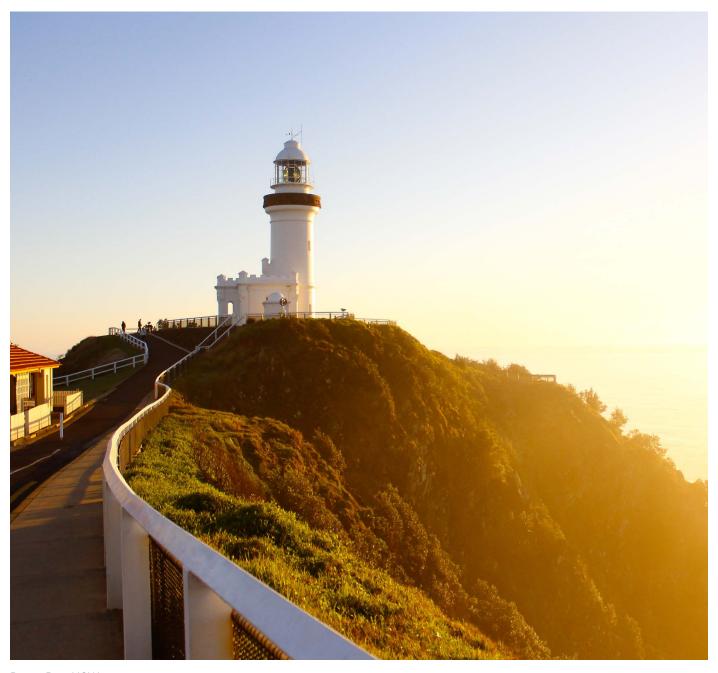
Helping provide a safer, more sustainable and more resilient Northern Rivers

Acknowledgement of Country

Planning for the Northern Rivers acknowledges the continuous Aboriginal connection to the land, water, sea and skies in the region.

We recognise the area covered by the Northern Rivers Resilient Lands Strategy is cared for by the Bundjalung, Githabul, Yaegl and Gumbaynggir Nations. Native Title holders and Local Aboriginal Land Councils also have local land holdings and responsibilities towards Aboriginal peoples living in the area.

We acknowledge the traditional custodians of the land on which the Northern Rivers Resilient Lands Strategy applies, and we pay respect to their Elders past and present. We acknowledge their commitment to the culture and community of this special place.



Byron Bay, NSW

Published by the Department of Regional NSW

Title: Northern Rivers Resilient Lands Strategy | First published: May 2023

Cover photo: Lennox Head, Australia

© State of New South Wales through Regional NSW 2023. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Regional NSW as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

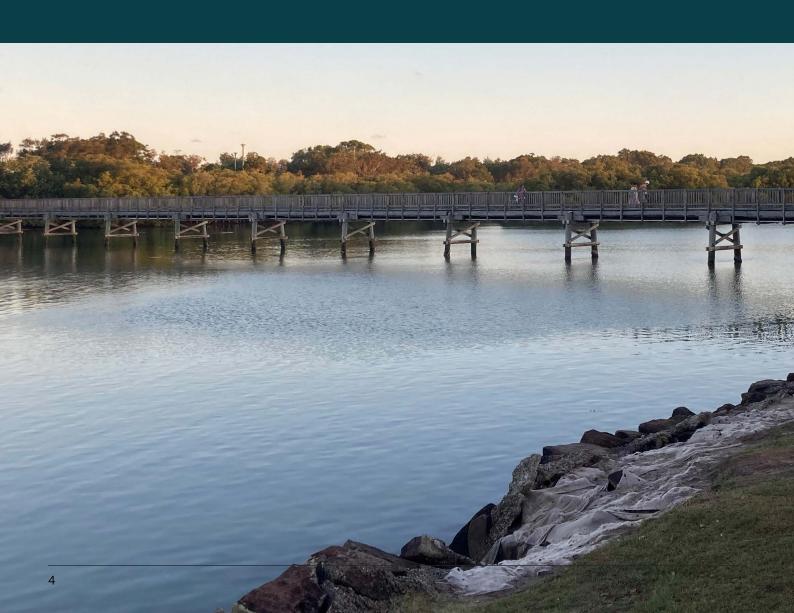
Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (May 2023) and may not be accurate, current or complete. The State of New South Wales (including the Regional NSW), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

The Northern Rivers Resilient Lands Strategy is part of the Northern Rivers Reconstruction Corporation's (NRRC's) \$100 million Resilient Lands Program.

The Resilient Lands Program is part of a suite of measures the NRRC is coordinating to deliver a sustainable supply of land and housing for flood impacted residents in high risk areas in the Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed Local Government Areas.

The Resilient Lands Program has been designed to complement, not replace, business-as-usual land release and housing development in the region. The Resilient Land Strategy identifies land that will be accelerated for delivery with funding support provided under the Program.

The Resilient Lands Program is being delivered in conjunction with the NRRC's \$700 million Resilient Homes Program that focuses on raising, retrofitting and voluntary purchase of homes impacted by the 2022 floods.



Foreword

Statement from the Resilient Lands Expert Panel Chair

The 2022 floods were one of the worst and most devastating natural disasters in Australia's history. The resilience, strength and fortitude shown by the people of the Northern Rivers through the flood event and its aftermath warrants support at every level.

These events have been one of the most significant challenges faced by the region to date, and requires action to move residents out of harm's way. However, reconstruction and recovery are also an opportunity to plan for a more resilient Northern Rivers whilst recognising and retaining the region's character and cohesion.

This document, the Northern Rivers Resilient Lands Strategy, sets out to develop a strategy for land and housing that can support people and their homes and places by providing a framework for the reconstruction of the area that will also be able to withstand other events should they occur.

Critically, land identified in this Strategy has, where possible, prioritised the opportunities for impacted residents to maintain links with their existing communities including access to existing services and facilities, healthcare and schools. The Resilient Lands Strategy respects the cultural and spatial connectedness of the region's communities, and in particular the deep and abiding connection that

Aboriginal people have with Country. The Strategy draws upon local values while applying principles of climate resilient development to options for flood recovery.

The Strategy identifies 22 sites that could support climate resilient residential development across each of the Northern Rivers Local Government Areas. Fifteen sites have been earmarked for immediate on-ground investigations, to enable flood impacted residents to move out of areas severely impacted by the 2022 floods.

The Strategy also identifies a further seven sites of strategic significance for long-term resilience. These sites that are identified as potentially suitable for development in the longer term may help reduce the need to undertake a similar region-wide land suitability assessment should future natural disasters occur in the Northern Rivers.

The Resilient Lands Expert Panel, who has assisted in the preparation of the document, is thankful that our skills and professional expertise have been able to contribute to the recovery initiative but humbled by the experience of people who lived through the flood event, many of whom remain impacted. We hope that this document will assist in ensuring that safe and secure accommodation can be made available for all affected going forward.



Abigail Goldberg FAICD FPIA

A message from our Resilient Lands Reference Group

The Resilient Lands Reference Group (RLRG) is made up of a cross-section of representatives from across the Northern Rivers region. The RLRG works to help provide the NRRC with insights on community views and needs to help improve the outcomes of the Resilient Lands Program and long-term benefits for Northern Rivers communities.

We are pleased to be included in the process to support opportunities for flood impacted Northern Rivers residents to stay and prosper in our community. As part of this work, we have reviewed the draft Resilient Lands Strategy and provided feedback.

We would like to recognise the work that has contributed to this draft Strategy by not only the NRRC but also a range of multi-discipline experts, and of course the community groups that have promoted the needs of the Northern Rivers in recovery following the floods.

We see the post-flood recovery and reconstruction as a unique opportunity to identify and support innovative solutions to address the need for new housing that meets the distinctive, various and changing needs of our communities. While the draft Resilient Lands Strategy takes the first steps towards achieving this, we believe that there is more that should be explored in the next stages of reconstruction. This group is particularly interested in the design and implementation of diverse and affordable housing types including medium-density infill sites out of flood reach, opportunities to incorporate innovation in market access and ownership, and support and guidance for the relocation of homes off the floodplain.

The people of the Northern Rivers are what makes this region such a special place to live. We hope the Resilient Lands Strategy helps residents impacted by the 2022 flood events to envision a future within the region, and that community involvement in recovery remains a key focus in the recovery of the Northern Rivers.

- Resilient Lands Reference Group



Lennox Head, NSW

Northern Rivers Resilient Lands Strategy

The 2022 floods have had devastating impacts across the community, with lives lost, homes and businesses destroyed and critical infrastructure damaged. The impacts are far-reaching, with the entire Northern Rivers community affected in some way, and have compounded existing, regionwide housing challenges across the Northern Rivers.

The Northern Rivers Resilient Lands Strategy (the Strategy) has been developed to identify and accelerate delivery of land suitable for residential development. The Strategy's principal aim is to provide flood affected residents with housing options to support their relocation.

The Strategy will also help alleviate some, but not all, of the underlying housing pressures in the region. Action will continue to be needed to address these complex housing issues.

Development of the sites identified within the Strategy will now begin, supported by funding available under the \$100 million Resilient Lands Program. This funding will be used for:

- 1. Financial support for project feasibility
- 2. Delivery of enabling infrastructure to unlock site development
- 3. Innovative housing pilot programs
- 4. Financial support for social and affordable housing development
- 5. Acquisition of land and government-led residential development

The Strategy follows a robust strategic assessment of 322 expressions of interest received by the NRRC, in addition to council-identified and Crown Land. Each land parcel was rigorously assessed using the best available evidence and underpinned by a set of resilient growth principles to confirm its development suitability, including exposure to natural hazard risk.

Land identified in the Strategy was also reviewed by the Resilient Lands Expert Panel (the Panel), an independent panel of experts with backgrounds in urban planning, environmental management, community development, Indigenous knowledge and climate resilience.

The Panel's recommendations identified 22 short, medium and long-term development sites across the seven Local Government Areas (LGAs) of Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed with potential capacity for up to 10,300 dwellings.

Work has now commenced on the planning and delivery of the 15 short-term sites identified within the Strategy. This will ensure residents impacted by the 2022 floods can relocate to new housing as soon as possible.

The Strategy also identifies a further seven medium and long-term sites for broader regional planning efforts to support longer term community resilience.

What does the Resilient Lands Strategy mean for residents impacted by the floods?

The Strategy identifies a total of **22 potential development sites** across the Northern Rivers on both private and public land. **Fifteen** sites are for immediate investigation for flood impacted residents with capacity for approximately 7,800 dwellings. **Seven** further sites with capacity for approximately 2,500 dwellings have been identified as sites of strategic significance for longer term resilience.

The NRRC will now commence detailed investigations and feasibility studies for each of these 15 sites to support housing for residents impacted by the 2022 floods. This includes consideration of the dwelling types required to provide housing diversity including affordable rental, key worker and social housing.

Funding available under the \$100 million Resilient Lands Program will be used to support the development of these sites. Where this funding is used to support development, it will be conditional on providing priority and support to flood affected residents and those participating in the Resilient Homes Program.

This work will be supported by case workers currently assisting residents through the Resilient Homes Program. Once residents have finalised buyback offers they will have access to continued support to help identify the relocation options that best suit their needs.

Why doesn't the NRRC just acquire and develop land?

In some instances, acquisition and development of land by government will have a role to play under the Program. However, using a range of approaches that aim to remove barriers and encourage the delivery of land and housing by the development sector and government will maximise housing supply outcomes across the region.

For example, using the entire \$100 million available under the Resilient Lands Program to acquire land and develop housing could be expected to deliver approximately 200–300 dwellings to the market over the next three to four years.

On the other hand, a modest, up-front investment by government to deliver important water and sewer infrastructure upgrades that are preventing the release of land can unlock significant housing supply and better support the feasibility and delivery of residential development areas.

Taking an approach that is tailored to the characteristics of each individual site will ensure the Program delivers the most housing in the right locations as possible.

Where any financial support is provided to the development sector through the Resilient Lands Program, it will be conditional on prioritising access to any new housing for flood affected residents.

What the Strategy does

- Describes the land and housing need post-flood for impacted residents and reconstruction activities
- Supports existing regional and local plans and strategies and considers multiple hazards, not just flood
- Examines suitability of both private and publicly owned lands for their potential to support immediate and longer term supply needs
- Helps direct investment to maximise the benefits of public investment
- Identifies resilient growth principles and housing models to help advance climate resilient development
- Sets a forward pipeline of land supply to support flood recovery and resilience

What the Strategy doesn't do

- Act as a flood risk management, mitigation or disaster adaptation plan
- Issue directions to change the use or zoning of existing land that is flood affected
- Focus solely on immediate measures and ignore longer term adaptation needs
- Override the existing statutory planning framework
- Commit government to purchase land identified in the Strategy
- Replace 'business as usual' development in the region supported by government and development industry
- Establish a response to address all preflood housing constraints across the Northern Rivers

What are we doing?

Identifying climate resilient land to provide for:

- Immediate housing needs of flood impacted residents
- Longer term adaptive capacity to future natural hazard events

Why are we doing it?

The region needs safe, resilient growth options – both for flood recovery and to enable adaptation to future natural hazard events

How are we doing it?

Using climate resilient development principles to advance local housing supply

Drawing on resilient growth models to guide strategic planning and decision making

Undertaking a land suitability assessment process to inform the identification of suitable areas of land to support flood recovery and ongoing climate resilience

Figure 1: Summary of Northern Rivers Resilient Lands Strategy - what, why and how

The flood recovery process for the Northern Rivers will take time, but it provides a unique opportunity to make a step change towards climate resilient development that reflects the shared characteristics and values of the region and its people.



Connecting with Country

In collaboration with key stakeholders and advisory experts, the Government Architect NSW has developed the *Connecting with Country Framework*.

The Framework contains a set of pathways and principles to help inform the design and delivery of built environment projects from an Aboriginal perspective of strengthening cultural understanding and connections.

Connecting with Country aims to:

- reduce the impacts of natural events such as fire, drought, and flooding through sustainable land and water use practices,
- value and respect Aboriginal cultural knowledge with Aboriginal people co-leading design and development of all NSW infrastructure projects, and
- ensure Country is cared for appropriately and sensitive sites are protected by Aboriginal people having access to their homelands to continue their cultural practices.

The 2022 floods had significant impacts on Aboriginal communities and reiterates the need for the planning, design and delivery of residential land to be guided by the diverse relationships to Country and ensure connections can be maintained with respect to potential impacts from future natural hazard events.

Our place on Country

The Department of Regional New South Wales and Department of Planning and Environment released an *Our Place on Country – Aboriginal Outcomes Strategy* in 2020 that outlines the strategies to embed Aboriginal cultural knowledge across these two departments to advocate for and advance outcomes for Aboriginal communities. A priority principle of the strategy is to recognise appropriate engagement and connection with Aboriginal people and Country as core to our service delivery.

Housing in the Northern Rivers pre-and post-flood

"Housing is a critical need providing both shelter and stability. Access to safe, secure housing has a profound impact on the health, wellbeing, and overall quality of life of the people of NSW. Beyond meeting individual needs, the provision of the right type of housing in the right place and at the right time is critical to the economic and social wellbeing of the whole community."

- Gary Fielding, Regional Housing Taskforce Chair¹

Housing stress is a widespread issue in the region, impacting the sustainability of communities and their capacity to grow and provide equitable social outcomes. Declining affordability also affects the ability to attract younger people and key workers and enable longer-term residents to remain within their local communities.

Prior to the 2022 floods, there was an acute shortage of housing across the region exacerbated by a range of interrelated factors, including:

- interregional migration in response to the COVID-19 pandemic, particularly from Sydney and Melbourne,
- existing environmental constraints in high demand locations.
- the rise in popularity and access to work from home arrangements,
- the conversion of properties from the long-term rental market into short-stay accommodation.
- supply chain disruptions and labour shortages impacting on building costs, and
- limited capacity of councils to process development approvals.

Drivers of housing need in the Northern Rivers

- 1. Loss of housing stock from the 2022 floods
- 2. Intra and interstate migration from larger urban centres, principally driven by the COVID-19 pandemic and broader lifestyle trends
- 3. Within-region migration from the coast to the hinterland
- 4. Reduction in household size per dwelling
- 5. Prevalence of informal housing / insecure tenures increase vulnerability to extreme weather events
- 6. Lack of housing diversity (75% of the region's housing stock is 3+ bedroom detached dwellings)

The shortfall in formal housing has been coupled with significant informal or improvised housing which has been filling part of the housing gap. For the Northern Rivers, housing stress and homelessness remains high, with more than 16,000 households paying more than 30% of their gross income on housing².

¹NSW Department of Planning, Industry and Environment. (2021). Regional Housing Taskforce Findings Report.

² Social Futures. (2022). Housing and Homelessness in Northern Rivers.

In 2021, there were more than 2,000 applicants for social housing in the Northern Rivers with some LGAs recording wait times of more than 10 years³, and in the NSW Government's 2022 Street Count (number of people experiencing homelessness), 30% of the state's total count occurred in the Northern Rivers⁴.

On the supply-side, over the past five years, the number of dwelling approvals in the Northern Rivers has declined from approximately 1,450 approvals in 2018FY, to approximately 1,200 approvals from 2020–2022FYs. There has been a similar decline in the rate of addition to housing stock in the Northern Rivers with around 1,400 dwellings added in 2017FY, and 1,200 dwellings added in 2020–2022FYs (decrease of approximately 28%)⁵.

The combination of supply constraints and broader socioeconomic factors has led to declining affordability across the region. In some parts of northern NSW, regional house prices increased by as much as 60% in a year⁶. In the Northern Rivers, rental vacancy rates remain less than 1% forcing many to make the difficult choice of living on flood prone land where rent and housing prices are relatively affordable⁷.

House prices growth in northern NSW has far outpaced income growth, while the availability and affordability of rental housing has also declined. The average weekly personal income across the Northern Rivers LGAs is \$650 per week (the NSW state average is \$813 per week)⁸ whilst the average rental price in the north coast region varies from \$480 to \$610 per week for a unit and house, respectively⁹.

The Resilient Land Program will support flood affected residents and contribute to overcoming regional housing issues, but the scale of these challenges means that the Resilient Lands Program alone will not solve them.

The challenges:



Pre-existing unmet demand



Loss of housing stock from flood events



High building costs



Unaffordable housing options



Lower income levels compared to state average

Strategy focus:



Identifying suitable areas for development



Ensuring growth opportunities link to resilient planning



Providing safe, secure and affordable housing



Improving diversity of housing types



Strengthening community character and cohesion

³ Van den Nouwelent, R., & Cibin, A. (2022). The impact of housing vulnerability on climate disaster recovery: The 2022 Northern Rivers Floods. University of New South Wales: City Futures Research Centre.

⁴NSW Department of Communities & Justice. (2022). 2022 NSW Statewide Street Count Technical Paper.

⁵ Australian Bureau of Statistics, Building Approvals; Estimated dwelling stock, June Quarter 2022.

⁶ https://www.afr.com/companies/financial-services/regional-house-prices-soar-40pc-as-covid-19-accelerates-boom-20210113-p56trb; https://www.smh.com.au/national/nsw/housing-crisis-worsens-as-locals-turn-to-cars-floors-to-sleep-20220311-p5a3um.html See also: https://www.abc.net.au/news/2022-02-07/expensive-northern-rivers-housing-market-lock-out-young-buyers/100810438

⁷O'Kane, M., & Fuller, M. (2022). Final Report of the 2022 NSW Flood Inquiry.

⁸Australian Bureau of Statistics. (2021). Median weekly income – Personal (b), Census All persons QuickStats (per LGA).

⁹ CoreLogic. (2022). Sales and rent data to June 2022.

Identification of Resilient Lands Strategy Sites

The North Coast Regional Plan 2041 sets a very clear direction to provide new housing in existing centres and future urban release areas, and this is reflected in this Strategy. This reinforces the provision of safe housing in these existing places that already provide important employment, community and commercial services, and social and community networks for residents.

As part of this, the Strategy supports delivering climate resilient development – both in the short term to help flood impacted residents, but also in the longer term to ensure the region and its communities can withstand future disaster events and be out of harm's way.

The following pages provide an overview of the sites recommended for progression under this Strategy for each LGA. This includes how each of these align with existing local and regional growth management plans, and key considerations for the site-based investigations, due diligence and development which will now commence.

13 of the **15** identified short-term sites are within the existing urban growth area boundary of the North Coast Regional Plan 2041 – ensuring places for resilient growth are consistent with the growth intent for the region.

The remaining sites can meet the urban growth variation principles set by the North Coast Regional Plan 2041.

The largest number of sites identified within the Strategy for immediate progression is within Lismore. This ensures large amounts of housing will be provided in the locations with the most significant impacts from the flood, and aligns with existing regional and local growth management planning.

Past flood risk management planning in Lismore has identified the need for flood-free areas to support long-term relocation, which links with the existing plans for growth in Wollongbar within Ballina Shire along the Bruxner Highway. The Strategy supports this outcome by identifying two sites in this area.

The Strategy identifies significant opportunities for development within the coastal areas. These areas are where housing supply and affordability challenges are most acute. Development of these sites will assist with relieving some of these pressures.

Finally, the strategy identifies development opportunities in the regional councils that will significantly increase housing supply in each area. This will provide housing choice across the region in a range of locations and contribute to long-term supply needed to support flood affected community as well as long-term employment growth in these areas.

The land sites identified by this Strategy are not the only suitable sites in the region to accommodate housing growth into the future, nor will the Resilient Lands Program itself overcome the existing challenges in the housing sector in the Northern Rivers.

In parallel to the Resilient Lands Program, councils will progress their existing local growth management efforts to bring housing to market in line with normal development processes. This includes:

- business as usual land release and development supported by local and state government and the development industry
- new social and affordable housing through government and non-government partners
- Commonwealth-sponsored affordable housing initiatives

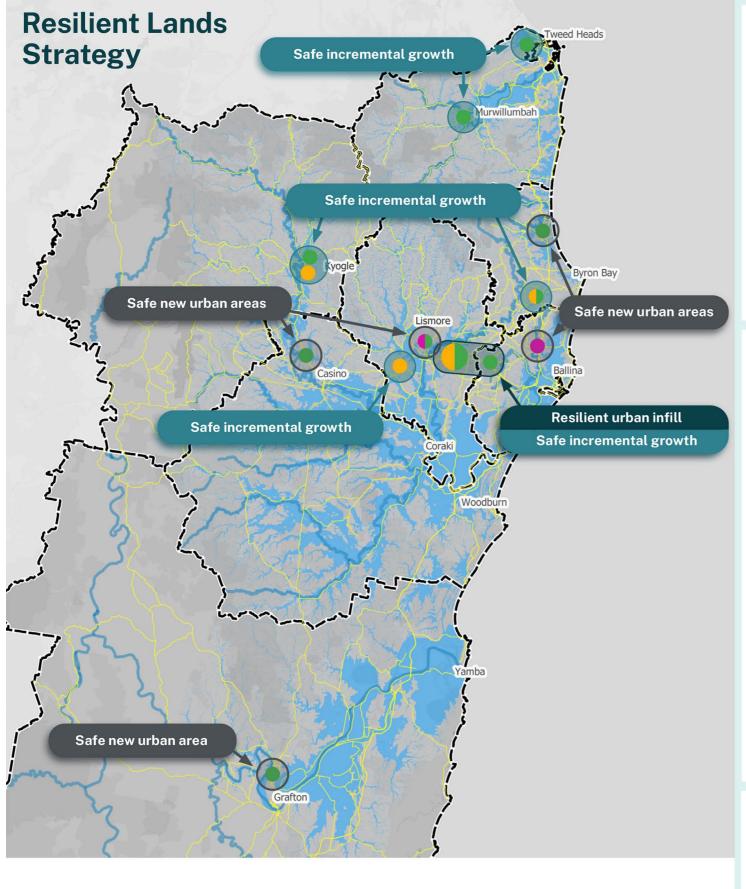
Key themes that the Resilient Lands Expert Panel members brought to their reviews of candidates sites included:

- Need, speed and ease of deliverability

 focusing on advancing existing zoned
 or approved development
- The contribution of the site to community fabric, and for catalysing new community services
- 'Treading lightly' ensuring biodiversity values are retained and enhanced
- Enabling diversity in housing stock and access to active/public transport
- Incorporation of Aboriginal placebased planning and design principles
- Ability to withstand extreme natural hazard events



Murwillumbah, NSW



Legend

Short-term Sites

Long-term Sites

Major Rivers

Major Roads

Medium-term Sites

2022 Flood Event

50 km

Printed at: A2

Creation Date: 30/03/2023

Coordinate System: GDA 94 MGA Zone 56

Credits: Earthstar Geographics | Esri, FAO, NOAA, USGS

Resilient growth pathways

Resilient urban infill

Resilience pathway Maintain

Circumstances for use

In lower risk urban areas, close to existing services, where built form and design can mitigate risks

Safe incremental growth

Resilience pathway Modify

Circumstances for use

In areas adjacent to or on the outskirts of existing urban areas that are free from natural hazards and provide incremental expansion

Safe new urban area

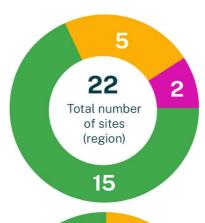
Resilience pathway

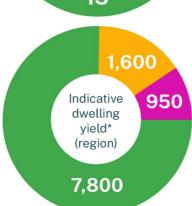
Transform

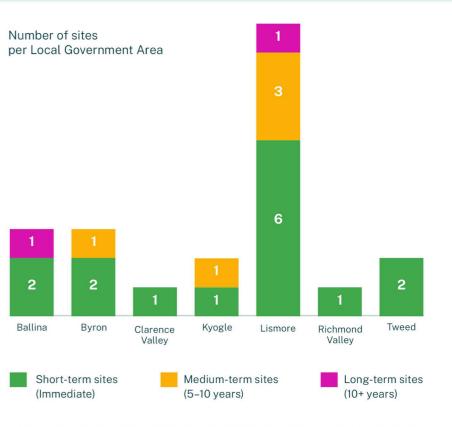
Circumstances for use

In areas outside an existing town or city that provide safe relocation or adaptation options away from risk areas

Snapshot of sites







*Indicative dwelling yield — to be confirmed following detailed site investigations



13 out of 15

short-term sites are located within the North Coast Regional Plan 2041 urban growth area boundary



Percentage of sites within or adjacent to existing urban area



Short-term sites — planning characteristics

14

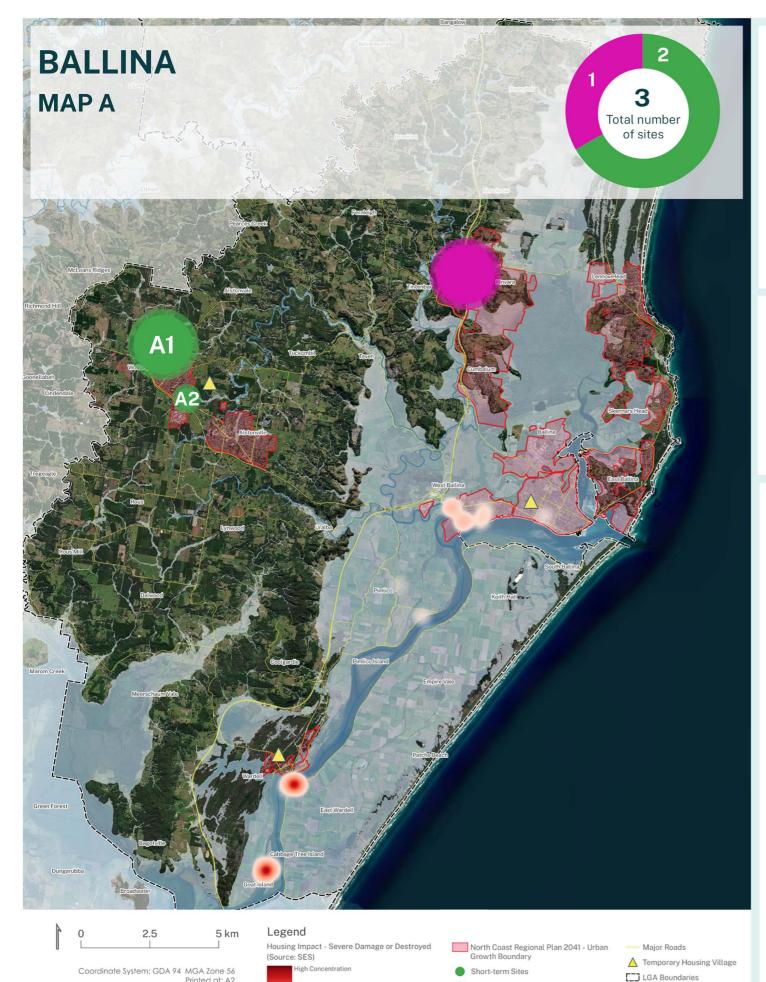
Number of sites currently zoned residential



9

Number of sites with development approval in place

15



Long-term Sites

2022 Flood Event

Local flooding impact

East Wardell, Cabbage Tree Island, and West Ballina were the main areas of severe damage to homes from the 2022 flood event. In addition to local flooding of smaller catchments throughout the LGA caused by extreme local rainfall, the region experienced the extreme flooding of the Richmond River as it made its way down from the Lismore LGA out to the ocean.



-80

HOMES
DESTROYED
OR SEVERELY
DAMAGED

Around 25 homes were severely damaged or destroyed in the East Wardell area, while West Ballina was the main part of the city proper to be impacted with around 20 homes severely damaged.

Other moderate damage was experienced throughout the LGA, particularly to farming and lifestyle homes along the riverfront.



2 out of 3

sites allow for the efficient delivery of infrastructure



2 out of 3

sites provide connectivity to **transport**



2 out of 3

sites have reasonable access to **community facilities**



2 out of 3

sites can support diverse housing options

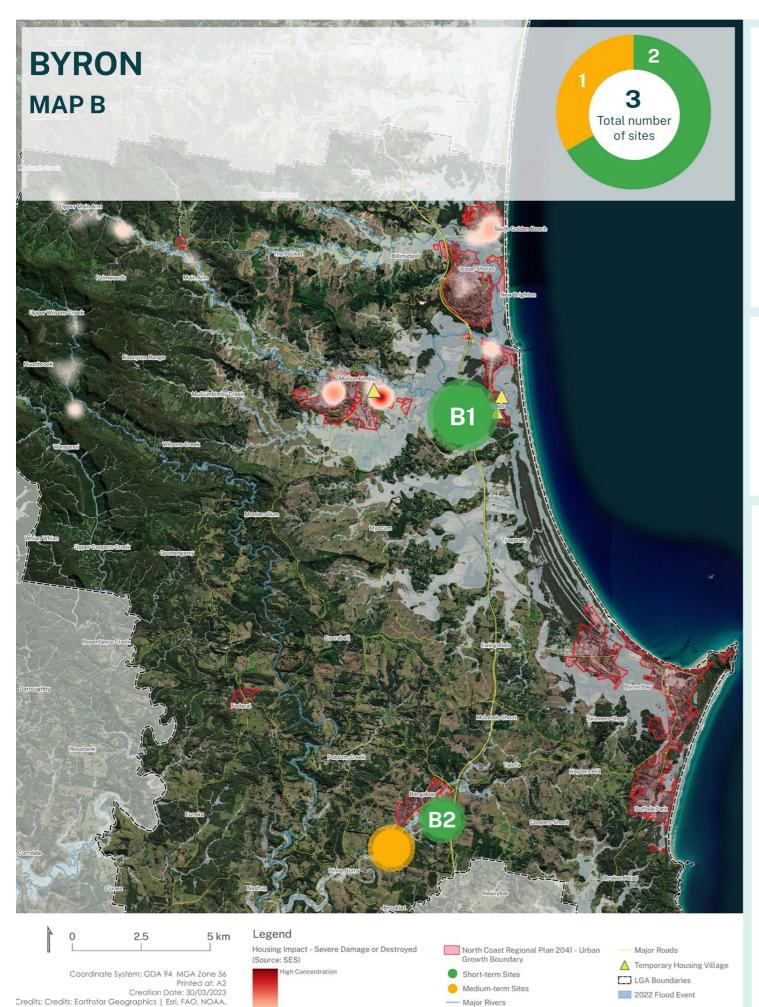
Overview of short-term sites





Site characteristics		
Developable land outside flood risk area	✓	✓
Zoned residential	✓	✓
Within (fully/partially) North Coast Regional Plan 2041	✓	✓
Infrastructure serviceability level	Good	Good
Proximity to flood affected (displaced) residents	5–10 km	5–10 km
Indicative development yield* (*to be confirmed following detailed site investigations)	470–700 dwellings	10–20 dwellings
Resilient growth model	MAINTAIN Resilient urban infill	MAINTAIN Resilient urban infill
Delivery type	Advance existing development approval and/or new site approval process	Undertake new site approval process

Credits: Credits: Earthstar Geographics | Esri, FAO, NOAA,



Local flooding impact

Most towns, villages and rural properties across Byron Shire were impacted heavily. Severe damage and destruction of houses occurred along and near the Brunswick River throughout central Mullumbimby, while Brunswick Heads itself also suffered inundation of properties.



~60

HOMES
DESTROYED
OR SEVERELY
DAMAGED

Marshalls Creek impacted Ocean Shores, South Golden Beach and New Brighton. Homes high in the Byron hinterland in localities such as Main Arm and Upper Wilsons Creek along the tributaries of the Brunswick River and Wilsons Creek were particularly impacted, with more than a dozen severely damaged or destroyed properties in these localities alone.

Byron Bay itself and surrounding areas such as Suffolk Park suffered from overland flow and stormwater drainage capacity issues as a result of the significant rainfall that fell directly on those localities.



3 out of 3

sites allow for the efficient delivery of infrastructure



3 out of 3

sites provide connectivity to **transport**



3 out of 3

sites have reasonable access to community facilities



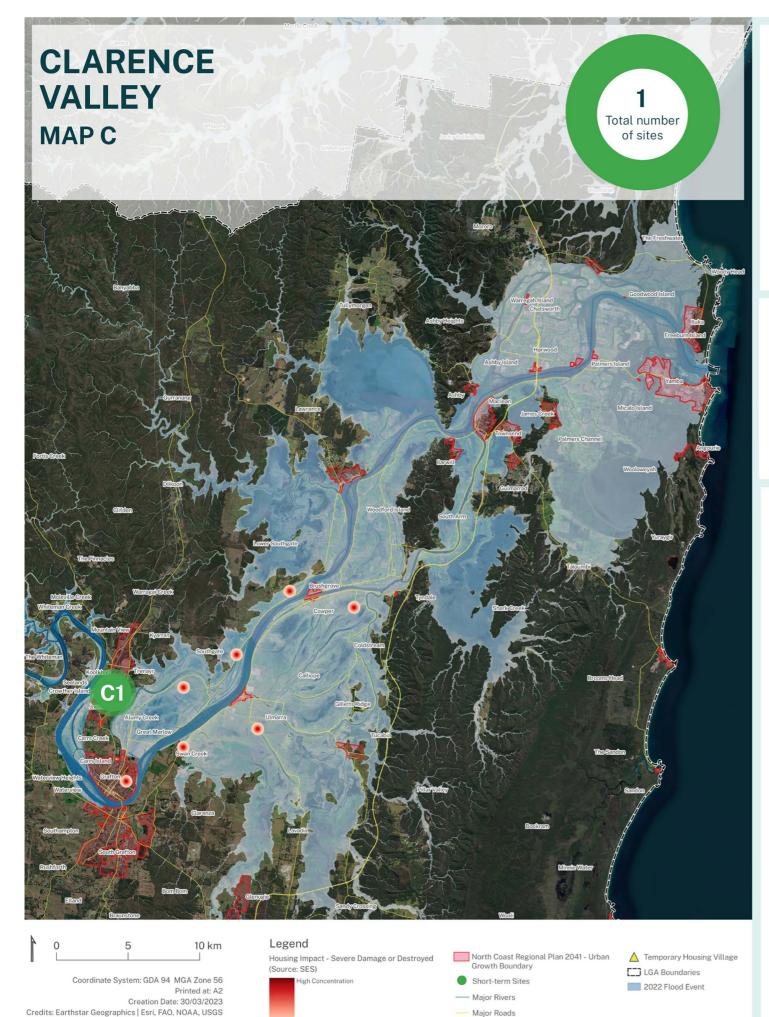
2 out of 3

sites can support diverse housing options





Site characteristics		
Developable land outside flood risk area	✓	✓
Zoned residential		
Within (fully/partially) North Coast Regional Plan 2041	✓	
Infrastructure serviceability level	Fair	Good
Proximity to flood affected (displaced) residents	<5 km	10-15 km
Indicative development yield* (*to be confirmed following detailed site investigations)	530–800 dwellings	340–500 dwellings
Resilient growth model	TRANSFORM Safe new urban area	MODIFY Safe incremental growth
Delivery type	Undertake master / structure planning process	Undertake new site approval process



Local impacts from recent events

Clarence Valley's rural landholders bore the brunt of flood impact from the 2022 event, with moderate and severely damaged properties spread along the Clarence River banks.



~10

OR SEVERELY

DAMAGED

HOMES DESTROYED

Approximately 10 homes were severely damaged along the floodplain, while minor to moderate damage also occurred to 90 properties in the region, including in towns such as Ulmarra, Brushgrove, Maclean, and Iluka.

The 2019/20 bushfire season had a comparatively greater impact on the Clarence Valley community than the recent flood event. 168 homes were destroyed and many more properties and homes were damaged. 59% of the entire LGA was within the

fire-impacted envelope.



1 out of 1

sites allow for the efficient delivery of infrastructure



1 out of 1

sites provide connectivity to transport



1 out of 1

sites have reasonable access to community facilities

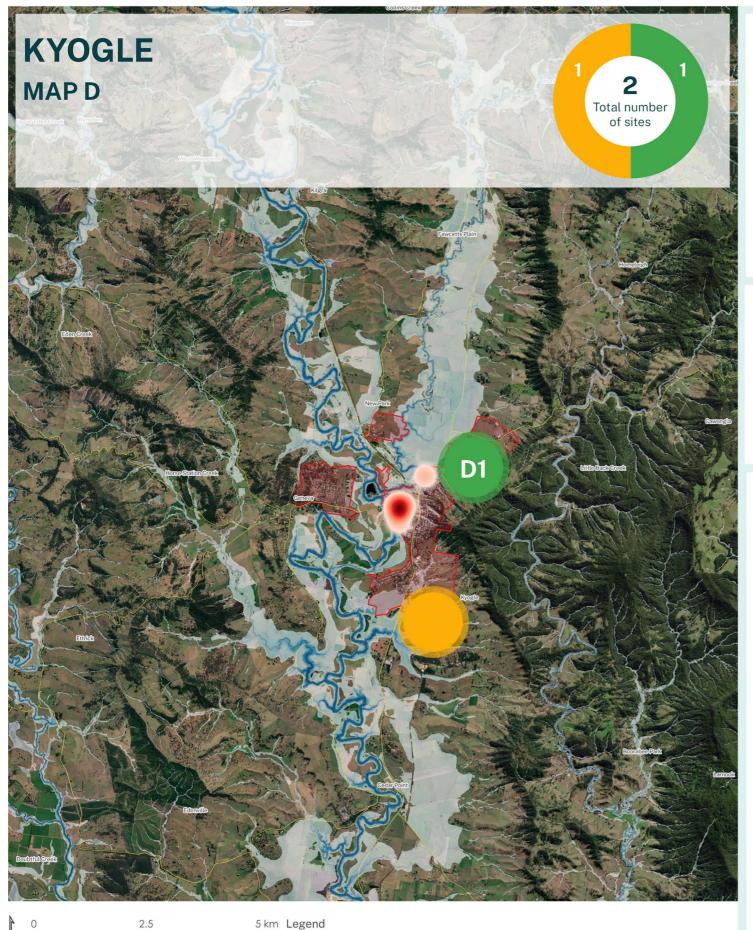


1 out of 1

sites can support diverse housing options



Site characteristics			
Developable land outside flood risk area	✓		
Zoned residential	✓		
Within (fully/partially) North Coast Regional Plan 2041	✓		
Infrastructure serviceability level	Good		
Proximity to flood affected (displaced) residents	<5 km		
Indicative development yield* (*to be confirmed following detailed site investigations)	850–1,270 dwellings		
Resilient growth model	TRANSFORM Safe new urban area		
Delivery type	Advance existing development approval		



(Source: SES)

Coordinate System: GDA 94 MGA Zone 56

Credits: Credits: Earthstar Geographics | Esri, FAO, NOAA,

Printed at: A2

Creation Date: 30/03/2023

Housing Impact - Severe Damage or Destroyed North Coast Regional Plan 2041 - Urban Major Roads
(Source: SES)

Short-term Sites

Temporary Housing Village

[] LGA Boundaries

2022 Flood Event

Local impacts from recent events

The town area of Kyogle was the primary location of flood impact from the 2022 event within the Shire. Two properties were destroyed, while four others were severely damaged. A further 33 properties suffered moderate or minor damage in the



HOMES DESTROYED OR SEVERELY DAMAGED

Beyond residential impacts, impacts to primary producers in the Shire were significant, while also causing an estimated \$160 to \$200 million worth of damage to infrastructure.

The 2019/2020 bushfires also affected 7% of the LGA, destroying six homes, damaging 126 square kilometres of primary production land, burning 75 square kilometres of bushland, and causing \$5.7 million of damage to the local economy.



sites allow for the efficient delivery of infrastructure



2 out of 2

sites provide connectivity to transport



2 out of 2

sites have reasonable access to community facilities

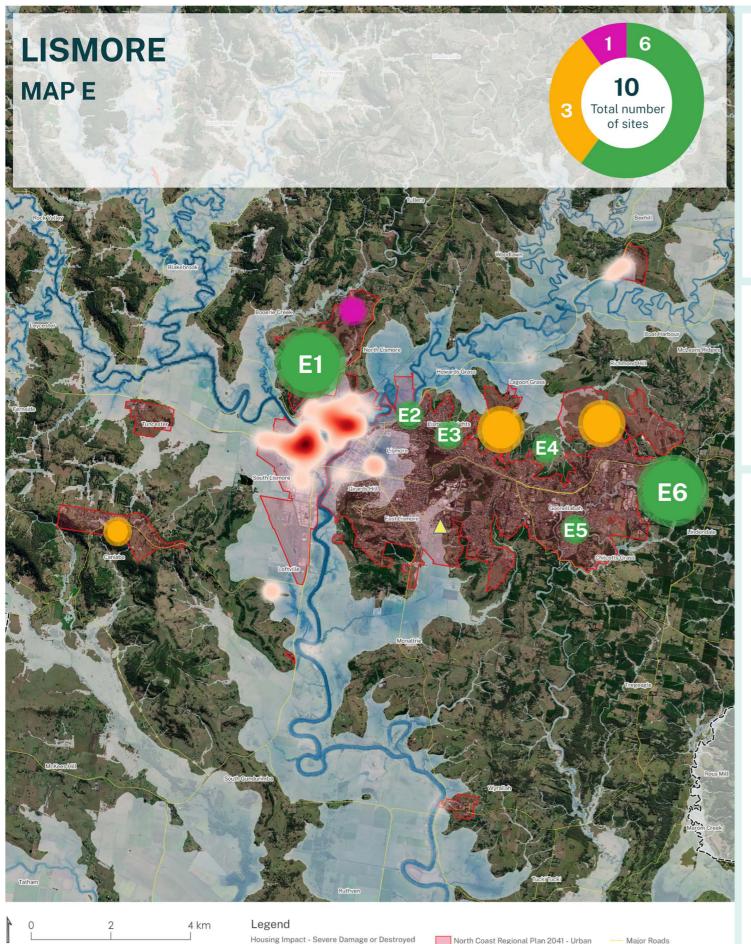


2 out of 2

sites can support diverse housing options



Site characteristics			
Developable land outside flood risk area	✓		
Zoned residential	✓		
Within (fully/partially) North Coast Regional Plan 2041	✓		
Infrastructure serviceability level	Good		
Proximity to flood affected (displaced) residents	<5 km		
Indicative development yield* (*to be confirmed following detailed site investigations)	350–530 dwellings		
Resilient growth model	MODIFY Safe incremental growth		
Delivery type	Undertake new site approval process		



(Source: SES)

Creation Date: 30/03/2023

Credits: Credits: Earthstar Geographics | Esri, FAO, NOAA, USGS

Local flooding impact

Lismore LGA experienced the most significant impact during the 2022 floods, with just over 600 dwellings severely damaged or destroyed. Impact was compounded by not only the extreme flooding in February, but the secondary flood event in March.

North and South Lismore bore the brunt of flood impact to homes, when the flood water draining from Leycester Creek added to the flood flows from already extreme rainfall in the Wilsons River catchment. As flood waters in Lismore city rose, homes south of Ballina Road and east of the CBD (beyond Dawson Street) also suffered severe damage.



~600

HOMES DESTROYED OR SEVERELY DAMAGED

Beyond the city itself, properties north and south along the rural floodplains of both the Wilsons and Leycester systems suffered impact while Bexhill and Monaltrie also had severely damage and destroyed properties.



9 out of 10

sites allow for the efficient delivery of infrastructure

▲ Temporary Housing Village LGA Boundaries

2022 Flood Event

- Major Rivers



10 out of 10

sites provide connectivity to transport



8 out of 10

sites have reasonable access to community facilities



9 out of 10

sites can support diverse housing options

Overview of short-term sites



approval











	E1	E2	E3	E4	E5	E6
Site characteristics						
Developable land outside flood risk area	✓	1	1	1	1	1
Zoned residential	1	1	1	1	1	
Within (fully/partially) North Coast Regional Plan 2041	1	1	1	1	1	
Infrastructure serviceability level	Very good	Good	Good	Fair	Very good	Fair
Proximity to flood affected (displaced) residents	<5 km	<5 km	<5 km	<5 km	<5 km	5–10 km
Indicative development yield* (*to be confirmed following detailed site investigations)	800–1,200 dwellings	10–20 dwellings	30–50 dwellings	90–130 dwellings	50–70 dwellings	770–1,150 dwellings
Resilient growth model	TRANSFORM Safe new urban area	MAINTAIN Resilient urban infill	MAINTAIN Resilient urban infill	MODIFY Safe incremental growth	MAINTAIN Resilient urban infill	MODIFY Safe incremental growth
Delivery type	Advance existing development	Undertake new site approval	Undertake new site approval	Advance existing development	Advance existing development	Undertake new site approval

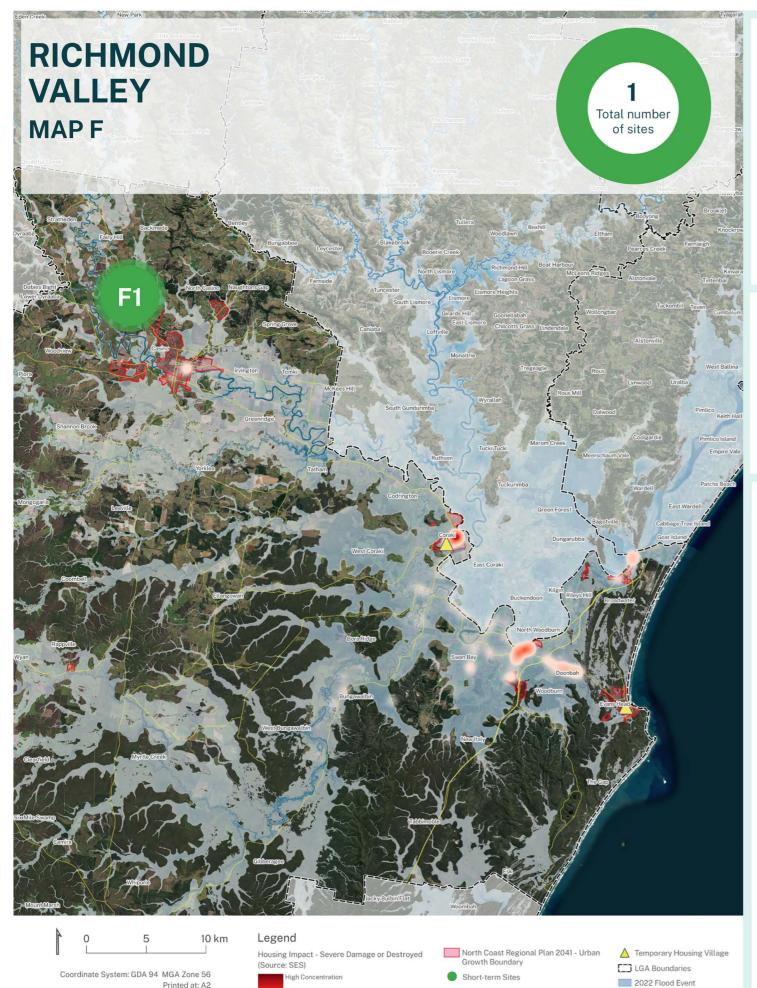
process

process

approval

approval

process



Major Roads

Local flooding impact

While Casino experienced around a dozen severely damaged properties along the Richmond River, it was the smaller townships of Coraki and Woodburn, and properties on the rural floodplain between towns, that were significantly inundated.

The rural residential lands at Doonbah along the Woodburn-Evans Head Road were also a hotspot for severe damage and destroyed homes.

The Richmond River downstream of Casino, where it is joined by the Wilsons River that also drains through Lismore, creates a very wide floodplain that is kilometres wide at various points along its length. This creates significant challenges for identifying suitable unconstrained lands near existing river communities.



~330

HOMES
DESTROYED
OR SEVERELY
DAMAGED



1 out of 1

sites allow for the efficient delivery of infrastructure



1 out of 1

sites provide connectivity to **transport**



1 out of 1

sites have reasonable access to community facilities



1 out of 1

sites can support diverse housing options

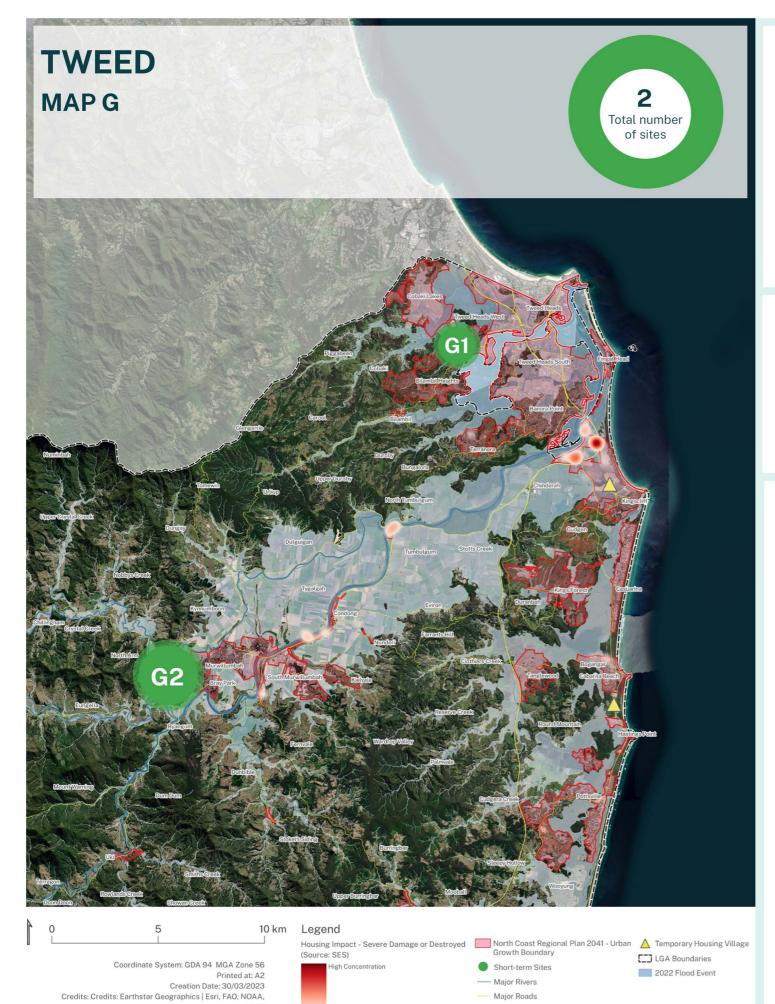
Overview of short-term sites



Site characteristics	
Developable land outside flood risk area	✓
Zoned residential	
Within (fully/partially) North Coast Regional Plan 2041	✓
Infrastructure serviceability level	Fair
Proximity to flood affected (displaced) residents	5–10 km
Indicative development yield* (*to be confirmed following detailed site investigations)	1,840–2,760 dwellings
Resilient growth model	TRANSFORM Safe new urban area
Delivery type	Undertake master / structure planning process

Creation Date: 30/03/2023

Credits: Earthstar Geographics | Esri, FAO, NOAA, USGS



Local flooding impact

Flooding across the Tweed Valley was extensive, consistent with the topography of the valley that results in a very wide floodplain that encompasses the significant impacted centres of Murwillumbah, Tumbulgum, Chinderah, and Tweeds Heads West. Hundreds of homes were severely damaged or destroyed in these places.



~250

HOMES
DESTROYED
OR SEVERELY
DAMAGED

Flooding of Tweed's creek catchments also impacted coastal and hinterland villages outside of the main Tweed River system. Clothiers Creek inundated Bogangar, while Burringbar Creek impacted the towns of Burringbar and Mooball, causing moderate damage to some properties before joining with Mooball Creek near Wooyung to impact properties in Pottsville. The locality of Wooyung itself on the Tweed Coast Road was particularly affected, with eight homes severely damaged and one destroyed.



2 out of 2

sites allow for the efficient delivery of infrastructure



2 out of 2

sites provide connectivity to **transport**



2 out of 2

sites have reasonable access to community facilities



2 out of 2

sites can support diverse housing options





		G/Z
Site characteristics		
Developable land outside flood risk area	\checkmark	✓
Zoned residential	\checkmark	✓
Within (fully/partially) North Coast Regional Plan 2041	✓	✓
Infrastructure serviceability level	Good	Good
Proximity to flood affected (displaced) residents	5–10 km	<5 km
Indicative development yield* (*to be confirmed following detailed site investigations)	530–800 dwellings	340–500 dwellings
Resilient growth model	MODIFY Safe incremental growth	MODIFY Safe incremental growth
Delivery type	Advance existing development approval	Advance existing development approval and/or new site approval process

Next Steps

The Resilient Lands Program has been allocated \$100m to help deliver flood-safe residential development. The Program funding will accelerate delivery of residential development on land identified in this Strategy through a range of approaches including:

- Financial support to ensure project feasibility
- 2. Delivery of enabling infrastructure to unlock site development
- 3. Innovative housing pilot programs
- 4. Financial support for social and affordable housing development
- 5. Acquisition of land and government-led residential development

The sites for immediate progression are at different stages of the development process, and therefore site-specific approaches to delivering housing suitable for affected residents will be required.

Where funding and financial support is provided to support the development sector deliver sites, this will be conditional on prioritising access to new housing opportunities for flood affected residents.

The next steps for short-term sites will include, where required:

- Financial and commercial due diligence
- Technical investigations
- Site design and planning approvals
- Delivery of infrastructure needed to support development
- Housing construction

In parallel, the NRRC is working with the NSW Reconstruction Authority to explore expedited planning pathways where appropriate to further accelerate delivery.

The NRRC will also commence investigations of planning and development requirements for medium and long-term sites.

As these individual site investigations progress, the NRRC will confirm and publish a development program that outlines the timing and milestones for delivery on a site-by-site basis as part of an Investment and Delivery Strategy. The Resilient Lands Strategy will also be reviewed on a six-monthly basis to report on progress of residential development across these sites through the NRRC website.

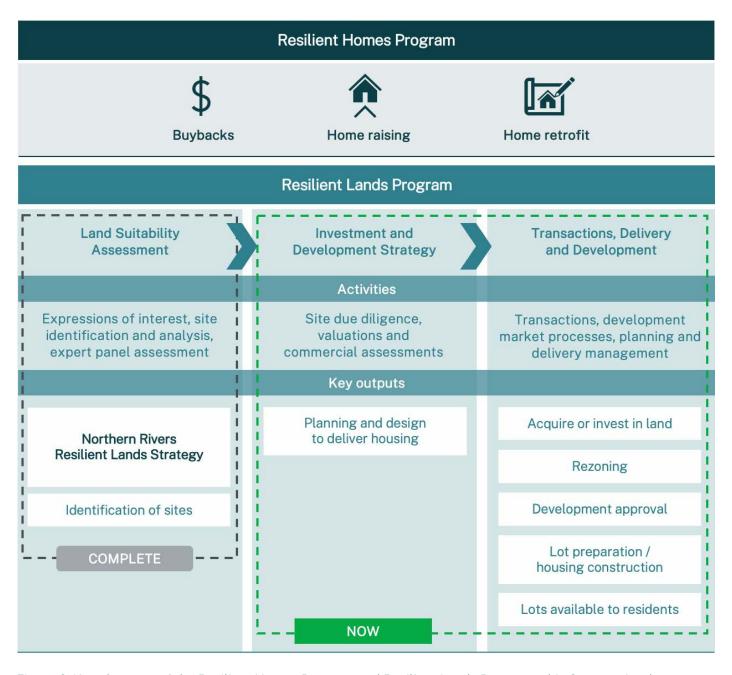


Figure 2: Key elements of the Resilient Homes Program and Resilient Lands Program – this Strategy is a key output