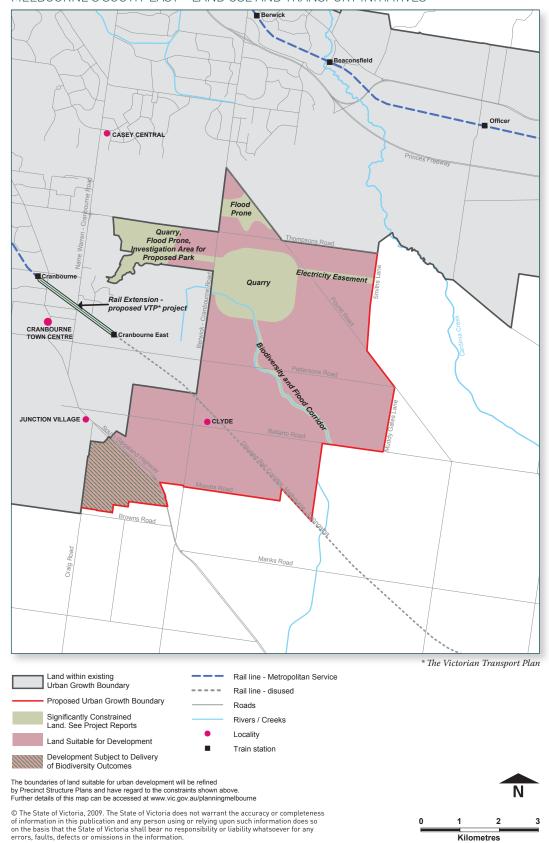
8. MELBOURNE SOUTH-EAST INVESTIGATION AREA (CASEY-CARDINIA GROWTH AREA)

MELBOURNE'S SOUTH-EAST - LAND USE AND TRANSPORT INITIATIVES



8.1 UNDERSTANDING THE AREA

The Melbourne South-East Investigation Area (Casey-Cardinia Growth Area) extends east from the existing urban areas of Cranbourne and Langwarrin and includes Cranbourne East, Clyde North, Clyde and part of Devon Meadows.

Land use in the area is predominantly rural with market gardens and industries including the Ingham Feed Mill and Wagstaff Abattoir, and three existing extractive industry operations.

Key natural and built features that have been considered in determining land suitable for development within this Investigation Area are described in this section. Background Technical Reports are available for further information.

Biodiversity

There are pockets of land across the Investigation Area that contain significant flora or fauna, including two threatened fauna species under the *Environment Protection and Biodiversity Conservation Act*, 1999 – Growling Grass Frog and Southern Brown Bandicoot. There are also corridors containing remnant habitat, the most significant being the Cardinia Creek corridor and the railway corridor.

Urbanisation is likely to threaten some species of fauna unless local habitat and habitat corridors between larger sites are retained and enhanced.

Western Port is a declared Ramsar site and is within close proximity to the South-East Investigation Area.

Heritage

There are no Commonwealth Heritage Places or sites listed on the Register of the National Estate within the Investigation Area. There are two locally identified heritage sites within the Investigation Area – 'Mayfield' and 'Fernlea'. Development of these sites must occur in accordance with the heritage controls set out in the *Casey Planning Scheme*.

Wildfire

The South-East Investigation Area contains a significant number of existing houses and cultivated market gardens. These highly modified landscapes are rated as having low wildfire risk. The remainder of the area is largely grazing and cropping land and with areas of trees that are small and scattered. Any development bordering native vegetation, trees or grassland is at some risk from wildfire.

The presence of grassland areas and scattered trees indicates that consideration needs to be given to wildfire protection when preparing Precinct Structure Plans and designing developments.

Drainage Issues

Drainage from the Investigation Area flows into the Western Port Ramsar wetland.

Land in the south-east of the Investigation Area is drained by Clyde Creek and mostly artificial waterways. These waterways drain south-easterly to the existing Western Contour Drain, and then to Western Port at Blind Bight. Drainage lines which exist across the southern boundary of the Investigation Area are the cause of flooding concerns in downstream rural areas under existing conditions. A levee bank on the east side of the Western Contour Drain protects agricultural areas in the Koo Wee Rup Flood Protection District, both within and downstream of the Investigation Area from the flooding sourced from these catchments.

In the northern section, sub catchments immediately to the north of the Clyde Creek catchment drain run parallel to, and eventually flow into Cardinia Creek. Large areas of this land are currently mapped as subject to inundation from Cardinia Creek. The Clyde North Precinct Structure Plan (currently being prepared) north of Thompsons Road includes a drainage strategy that can maintain rural flows entering the Investigation Area at Thompsons Road.

Cardinia Creek and Clyde Creek present a constraint to urban development in terms of flooding, waterway management, and protection of environmental values. The Koo Wee Rup Flood Protection District is a particularly sensitive area in regard to flooding and water quality.

The main drainage catchments of Cardinia Creek and Clyde Creek occupy broad flat floodplains and present an opportunity to create a recreational feature and focus for new communities. Given the potential urban development of this area, there is potential to create a wetland treatment area (based on revamped drainage patterns) in the southeast corner of the Investigation Area.

Existing Quarries

Working quarries pose a constraint to urban development in some locations. These activities require sufficient buffers to ensure that they cannot impact on future urban development. The buffers for these activities are generally all within the Investigation Area.

Market Gardens

The market gardens in the area are valuable economic assets based on the quality of soil that can be cropped all year round over the majority of the Investigation Area. The area has a climate conducive to agriculture and is close to distribution networks, wholesale markets, retailers, airports and freight terminal. The limited availability and high cost of land in the area restricts farm expansion.

Proposed Railway Extension

A critical issue for the Investigation Area is the provision of a high capacity public transport service. A rail extension from Cranbourne to Cranbourne East is identified in *The Victorian Transport Plan* as a long term priority and brings rail services closer to this area. During the Growth Area Framework planning stage resolving the options for the provision of high capacity public transport to the area will be an important outcome.

Other transport issues

The South Gippsland Highway transects the Investigation Area in the south-west corner providing good access to Cranbourne. This Investigation Area has a limited existing internal road network but a road grid pattern does exist that can be built upon and upgraded to serve new development. In particular, the Berwick-Cranbourne Road provides excellent access to other parts of the growth area.

Thompsons Road along the northern boundary of the Investigation Area is planned to be a major east west connector linking the future employment in Cardinia with the South Gippsland Highway, Western Port Highway and EastLink.

Trunk Services

While there is a lack of existing trunk services (such as water, sewerage and electricity) in the Investigation Area, infrastructure companies advise that this is not a long term constraint to development. These services can be provided when needed. Further investigation will be required to locate water supply tanks and electricity terminal sub stations to best serve future communities having regard to local landscape issues.

An existing major east-west electricity transmission line transects the Investigation Area in the north. This line may require additional buffers and could pose some constraint to development.

Landscape issues

The Investigation Area is undulating in the north and west close to Cranbourne and graduates to flatter land closer to Western Port. The wooded hilltop on Thompsons

Road west; the hills near Tucker and Grice's Road; the hill at the Patterson and Clyde Road intersection; and the western higher areas of Cranbourne including the Botanic Ridge area provide some contrast with the prevailing landscape features.

8.2 ISSUES RAISED IN PUBLIC SUBMISSIONS

Most of the submissions received for the South-East Investigation area are within the proposed Urban Growth Boundary. A number of these submissions raised detailed land use and development planning issues that will be further considered and refined through the preparation of a Growth Area Framework Plan and Precinct Structure Plans.

A small number of submissions were received from landowners outside the Investigation Area. These properties have not been considered for inclusion in the Investigation Area.

Other issues raised by submitters that have been considered in determining the location of the revised Urban Growth Boundary include:

- > Proximity to existing and anticipated residential development;
- > Opportunity to build on access to the South Gippsland Highway and Monash Freeway and major arterial roads including Thompsons Road;
- > Protection of existing extractive industry operations, including buffers, and the longer-term plans of the quarries including rehabilitation works;
- > Protection of transport corridors for the movement of industry related vehicles:
- > Protection of areas of high biodiversity value;
- > Protection of important landscape features including the creek corridors; and
- > Protection of agricultural land.

A summary of the submissions received during the first round of consultation and a response to these submissions is provided in the Urban Growth Boundary Review - Summary and Response to Submissions Report, June 2009.

8.3 ASSESSMENT

The Investigation Area chosen in the south-east is the last large area that can be sustainably developed in the region. There are major constraints beyond this area because of the low lying and flood prone nature of land in the Koo Wee Rup swamp.

While there are a range of local issues to be addressed during more detailed planning processes, such as soil capability and areas of valued biodiversity, the majority of the area is physically suitable for development.

Cranbourne activity centre provides a good range of community services that could support the area particularly in the early years of its development.

If fully developed the area is large enough to sustain a range of community services including a major activity centre.

Agriculture

An important issue is the existing and potential high agricultural productivity of much of the land in this Investigation Area. The presence of good soils, access to water and markets provides a competitive advantage for agricultural production, particularly high value market gardening. Other locations outside the Investigation Area also support a range of agricultural products including land in the vicinity of the Koo Wee Rup Swamp and on the Mornington Peninsula.

The agricultural and economic advantages of this relatively limited area must be weighed up against the advantages of extending urban development into this area.

As indicated in *Melbourne @ 5 million*, there is demand for more developable land to manage Melbourne's outward growth. In the south-east the range of constraints are such that the land in this Investigation Area provides the most sustainable outcome for urban development; being relatively close to public transport, community services and jobs.

On balance this review favours extending urban development into this Investigation Area because of the metropolitan-wide settlement advantages this brings.

Biodiversity

Actions associated with the proposed changes to the Urban Growth Boundary are likely to have a significant impact on biodiversity values within the Investigation Area. Loss of the extent of biodiversity as a result of direct clearing for housing, roads and other infrastructure is the primary impact. Two threatened fauna species listed on the *Environment Protection and Biodiversity Conservation Act, 1999* that are likely to be significantly impacted through loss of habitat are the Southern Brown Bandicoot and the Growling Grass Frog.

To minimise the impact on the Southern Brown Bandicoot, a major area of suitable habitat in the south-west of the Investigation Area has been identified. Although this area is proposed to be included in the revised Urban Growth Boundary, the primary objective is the retention of habitat to assist with the long-term conservation of the species. A comprehensive plan to manage this habitat and to create linkages on land within and outside the proposed Urban Growth Boundary will need to be developed as part of the precinct structure planning process. Areas of native vegetation can be preserved in places like parks or along waterways. These areas can also be determined through more detailed planning.

For the Growling Grass Frog, the two largest areas of potential habitat in the south-west and north-east corners of the Investigation Area have been excluded from the proposed Urban Growth Boundary. Reserving these areas can provide for the conservation and secure management of viable populations of these species.

In addition to this, a major area of former wetlands is proposed to be established outside the Investigation Area, abutting the boundary on the south and east. This area can provide stormwater quality and quantity benefits, and can contribute to the restoration of representative scrub habitat which once covered the Western Port basin. A significant proportion of the site can be designated specifically for biodiversity conservation.

Public transport access and urban development

The proposed extension of the rail line to Cranbourne East in the longer term can provide high capacity public transport near to the Investigation Area. While *The Victorian Transport Plan* plans to preserve options for a rail extension to Clyde the best options for delivering high capacity public transport to this area should be assessed through the preparation of the Growth Area Framework Plan.

Junction Village

Additional development is proposed south-east of Junction Village across Craig Road. This locality currently contains a sand quarry, some market gardens and rural residential lots. The primary purpose of this development should be the delivery of an improved biodiversity outcome, especially the creation of habitat links to the Royal Botanic Gardens-Cranbourne and more specifically to provide habitat for the Southern Brown Bandicoot. Major environmental outcomes can focus on improving and protecting the riparian habitat.

Employment

The future development of Thompsons Road as a major east-west arterial presents an opportunity to create an employment area on its south side with good access to a major freight route. Thompsons Road is planned to provide an opportunity to link the Cardinia employment precinct to the Western Port Highway and EastLink. The extent of this employment area will need to be assessed through preparing a Growth Area Framework Plan.

Drainage benefits

The development of the area for urban uses may also bring other benefits. *Background Technical Report 3: Drainage* notes that development in this Investigation Area creates the opportunity to create a very significant wetland (in excess of 250 ha) to manage stormwater from the Investigation Area. This proposal would also deliver major water quality improvements in Western Port. The proposed location, form and extent of this

facility is subject to more detailed study but is likely to be located west of Muddy Gates Road and north of Lynes Road Tooradin.

Urban Growth Boundary

Defining a settlement pattern in the south is principally linked to the creation of a high capacity public transport corridor that builds off the Cranbourne rail line.

In defining the boundary consideration has been given to:

- > The future extension of the Cranbourne rail line;
- > Generally keeping development to within three kilometres of a potential high capacity public transport corridor;
- > A combination of soils, proximity and agricultural activities south of Moores Road;
- > A recognition of the major transport role of Thompsons Road including its long term link to Cardinia and the potential for employment activity along its length;
- > The development of land south-east of Junction Village to foster habitat links; and
- > Water quality improvements.

8.4 CONCLUSIONS

It is proposed that:

- > The Urban Growth Boundary in the south-east be based on:
 - The creation of a high capacity public transport corridor;
 - The development of land generally within three kilometres of a potential high capacity public transport corridor;
 - The preservation and provision of appropriate habitat linkage to support the Southern Brown bandicoot.
- > Landscape and cultural heritage values be embodied in Growth Area Framework Plans and Precinct Structure Plans including:
 - The main catchments including those of the Cardinia Creek, Clyde Creek and the Hallam Main Drain (north);
 - Views to the principal hills, ridgelines and places like Western Port;
 - Views from arterial roads and transport corridors; and
 - Smaller landscape elements eg. scattered bushland, wind breaks and heritage sites.

Refer to Background Technical Report 4: Landscape Values for more detailed examples.