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BUNBURY OUTER RING ROAD | PLANNING AND DEVELOPMENT

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Bunbury Outer Ring Road Southern Community Reference Group

25 June 2019



Agenda



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5:15	Arrival – light refreshments available	
5:30	Welcome	Linton Pike
5:35	Meeting Purpose and Context	Linton Pike
5:40	<p>Project Update</p> <ul style="list-style-type: none"> • Western Ringtail Possum – Regional Surveys • Southern Section Alignment Selection • Avoidance of Tuart Tree • Bussell Highway Duplication • Northern & Central Sections 	Dominic Boyle / Martine Scheltema
6:30	<p>Southern Section Local Access Arrangements</p> <ul style="list-style-type: none"> • Centenary Road - Preferred Alignment & Form of Interchange • Gelorup Local Access Arrangements • Calinup Road Service Road 	Padraic Murphy
6:50	Environmental Approval Process	Martine Scheltema
7:10	Community & Stakeholder Engagement Update	Tammy Mitchell
7:20	CRG Member Round Table Discussion	CRG Members
8:20	Next Steps	Dominic Boyle
8.30	Close	Linton Pike



Meeting Purpose and Context

Linton Pike



Project Update

Dominic Boyle / Martine Scheltema

Western Ringtail Possum: Regional Population Surveys

Martine Scheltema

Western Ringtail Possum

- Species elevated to Critically Endangered in May 2018
- Due to uncertainty as to actual population size, Main Roads commissioned surveys over entire WRP possum range to assess size of key populations
- Methodology developed in consultation with WRP Recovery Team and DBCA
- Most of the areas sampled under DBCA control
- Did not sample small areas of vegetation, or peri-urban areas

Survey Sites - 813 km of transect across 771 transects (March 2019)

Southern Swan Coastal Plain

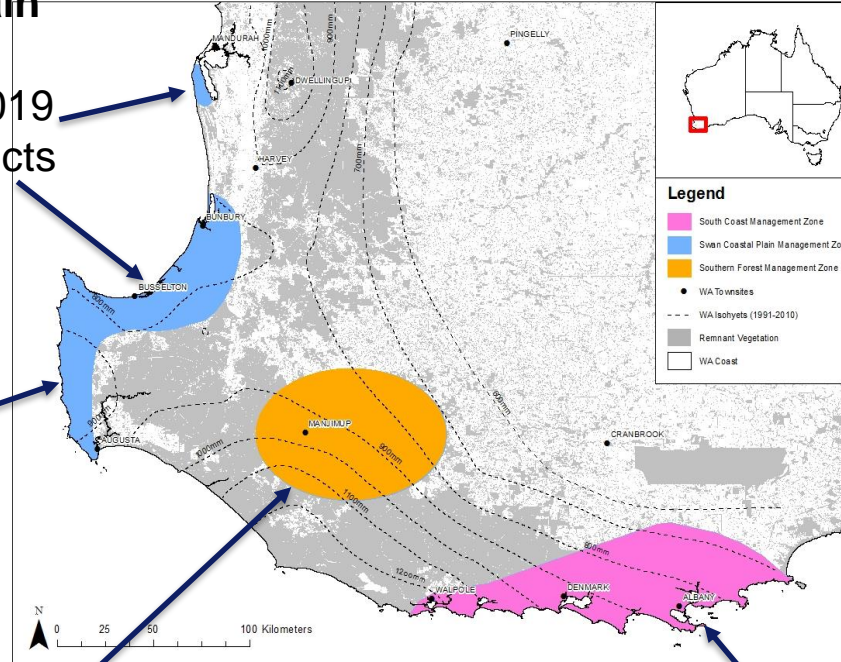
- 5 sites Feb – Aug 2018
- 9 sites Dec 18 – March 2019
- 231 km across 310 transects

Cape to Cape

- 8 sites
- Jan – March 2019
- 159 km across 220 transects

Upper Warren

- One single large area 50 x 30 km (95,000 ha)
- Transect spacing 2.5 km
- 356 km of mapped transects
- 256 km surveyed (due to fire)



Other Forest Rivers

- Not surveyed

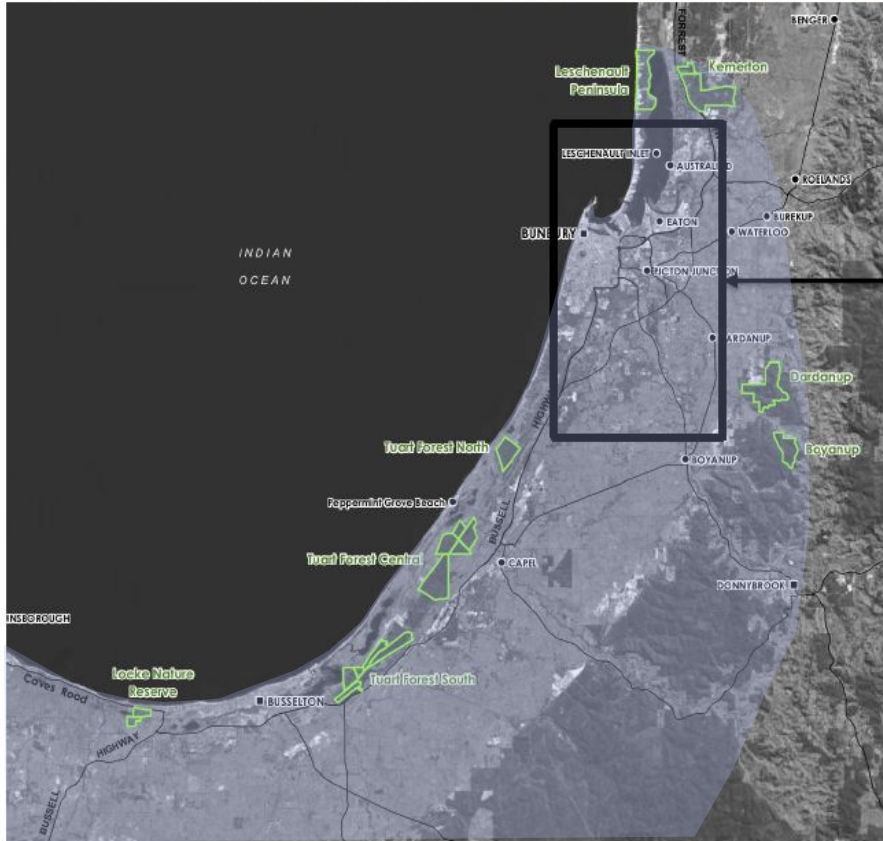
Urban, peri-urban and agricultural areas

- Not surveyed

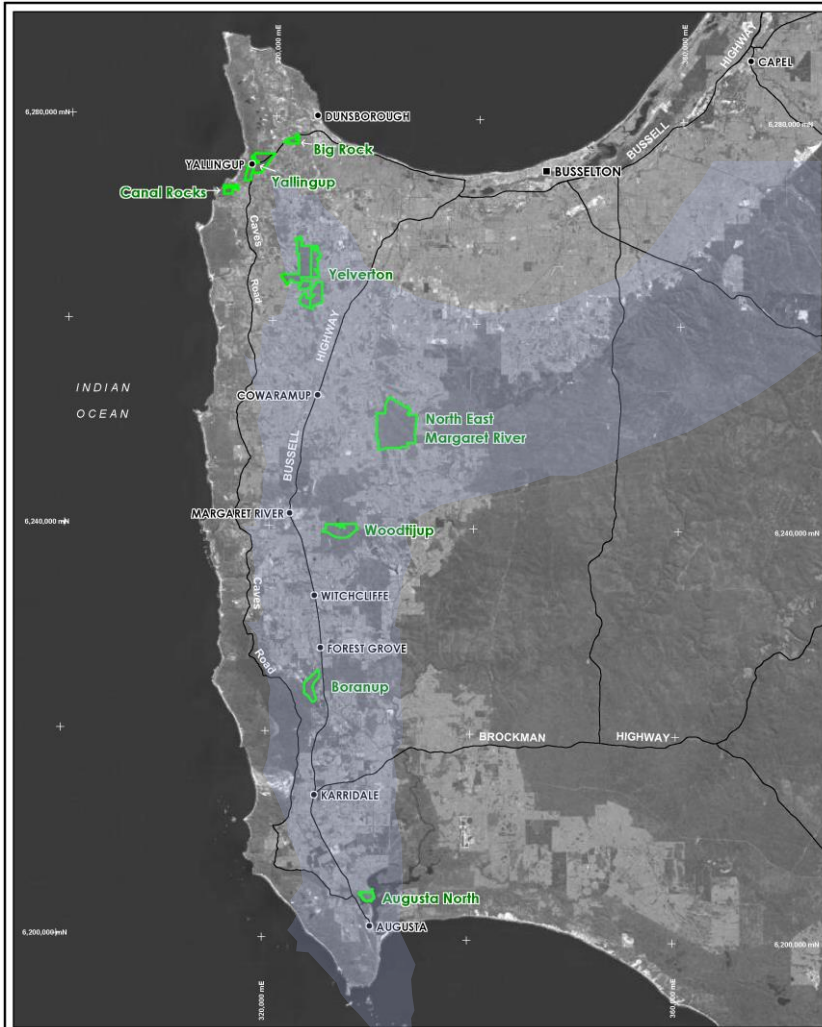
Around Albany

- 2 sites in July 2018
- 5 sites in March 2019
- 172 km across 150 transects

Survey Sites - Southern Swan Coastal Plain



Bunbury Sites



Survey Sites

Cape to Cape Region

(Southern Swan Coastal Plain Management Zone)

Location Map

Study Areas

0 10 20 kilometres

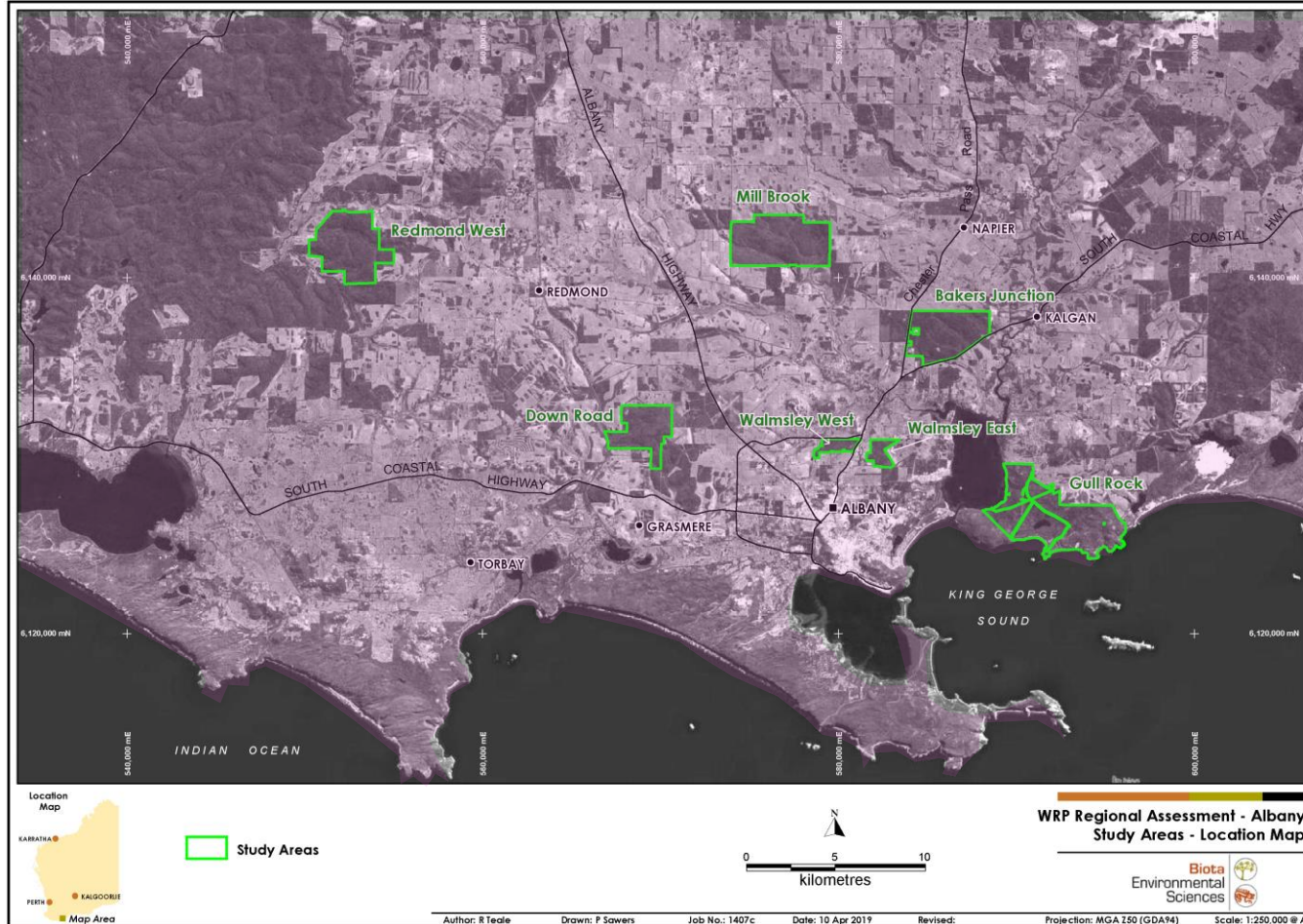
WRP Regional Assessment
Cape to Cape
Study Areas - Location Map

Biota Environmental Sciences

Author: B Teale Drawn: P Sawers Job No.: 1407c Date: 10 April 2017 Revised: Projection: MGA 150 Scale: 1:370,000 @ A4

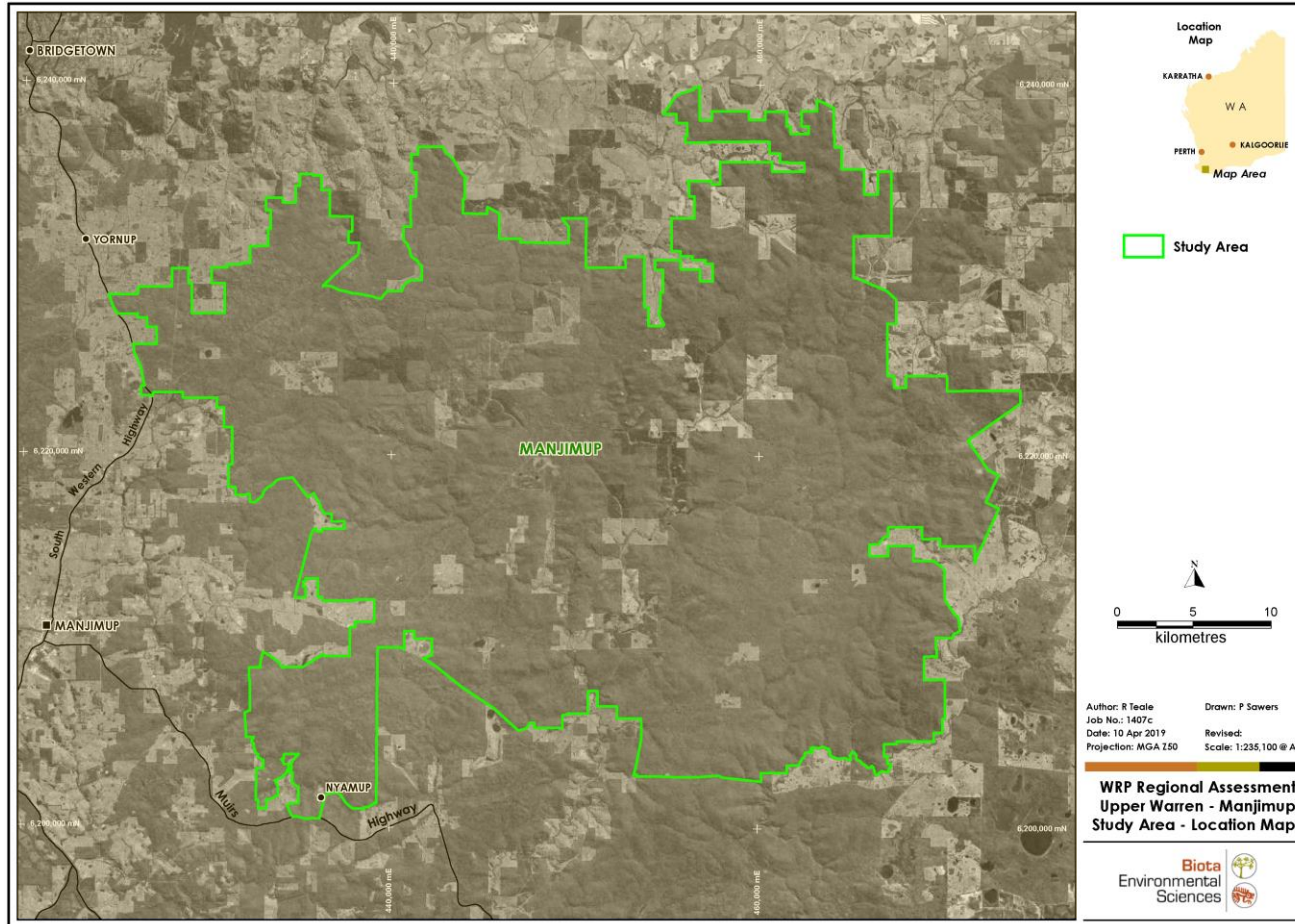


Survey Sites - Around Albany (South Coast Management Zone)





Survey Site - Upper Warren (Southern Forest Management Zone)



Results - Ludlow Tuart Forest



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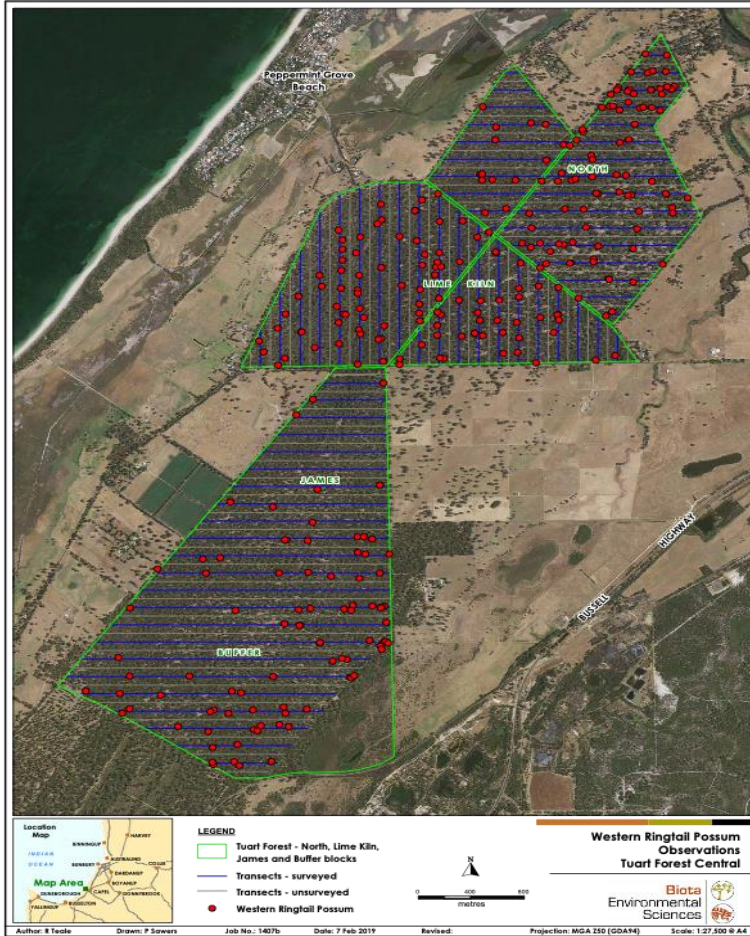


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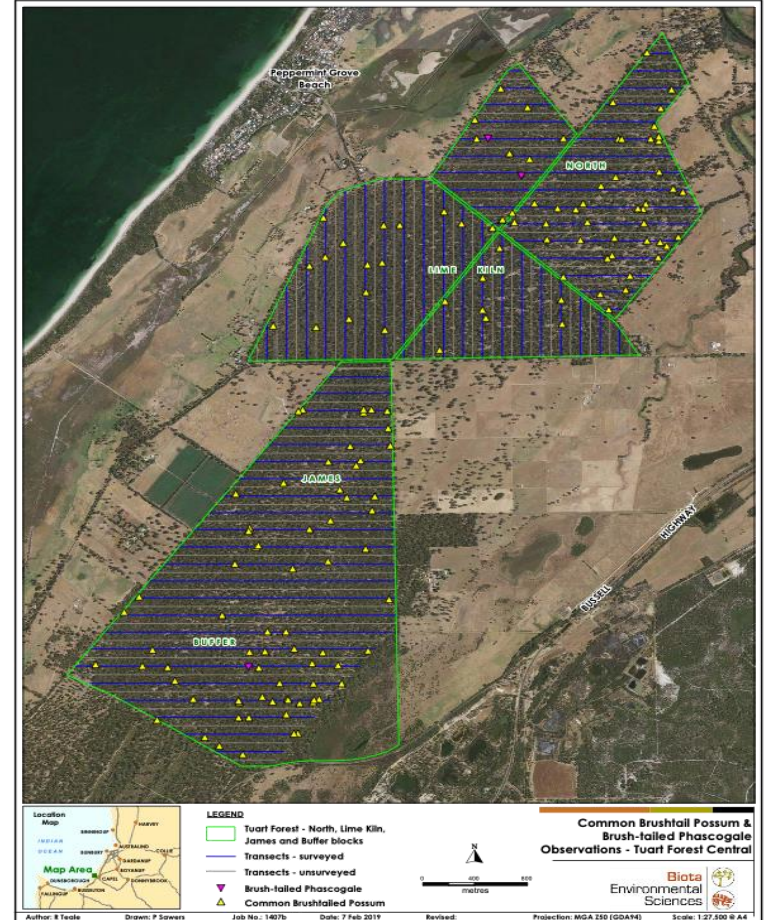
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Western Ringtail Possum



Common Brushtail Possum and Brush tailed Phascogale

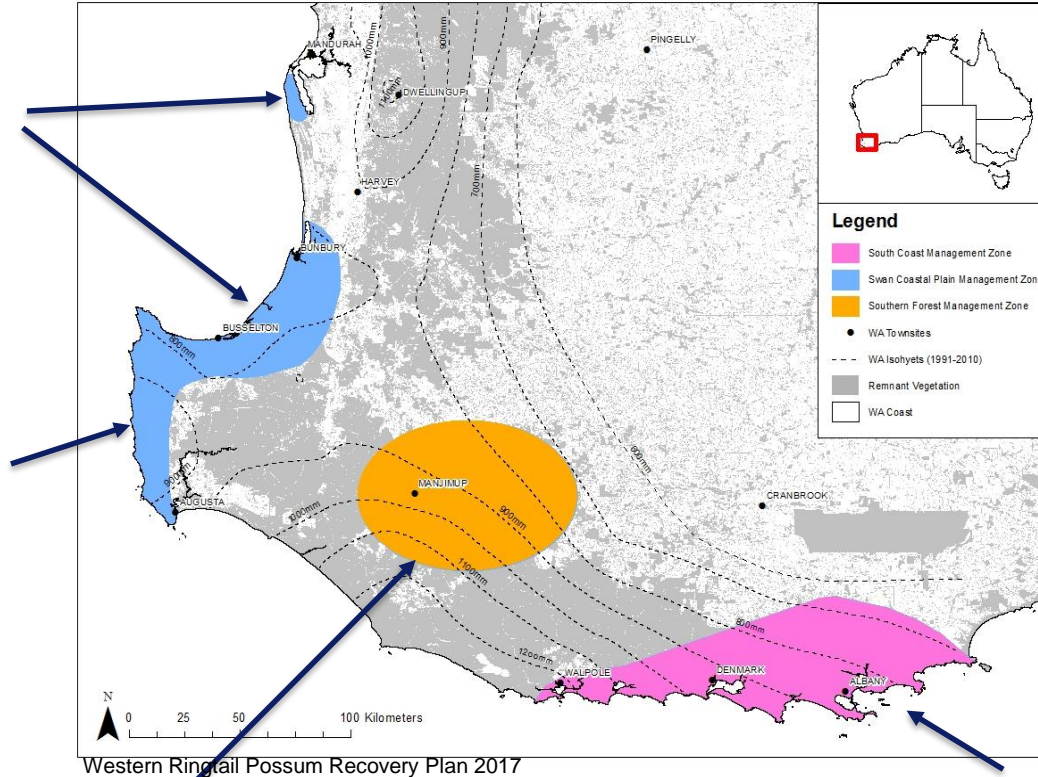


Survey Results - April 2019

Southern Swan Coastal Plain:
 population **5,704**
 (CI 5,156 – 6,310)
 2015 estimate 2,000

Cape to Cape:
 population **2,262**
 (CI 1,924 – 2,661)
 2015 estimate 500

Upper Warren: population **7,680**
 (CI 4,891 – 12,059)
 2015 estimate 100



Other Forest Rivers:
 population ???
 2015 estimate 300

Urban, peri-urban
 and agricultural:
 population ???

Around Albany: population **1,781**
 (CI 1,470 – 2,158)
 2015 estimate 500

Key Points

- April 2019 population estimate is **17,427** (range 13,441 – 23,188)
- Fivefold increase on 2015 population estimate (3,400)
- Conservative population estimate
 - 2019 population estimate does not include Forest Rivers, urban, peri-urban or agricultural populations
- Additional areas currently being surveyed in all 3 management zones
 - Areas selected based on input from DBCA, Recovery Team members and community groups
 - will be completed by 30 June 2019

Additional Surveys

- **Southern Coastal Plain Management Zone**
 - Lake Clifton and Yalgorup National Park (only partially surveyed in 2019)
 - Crooked Brook Forest and Whicher Scarp (part surveyed in 2018)
- **Southern Forest Management Zone**
 - Faunadale Nature Reserve
 - Alco Nature Reserve
 - Muirs Highway
 - Diamond Tree
- **South Coast Management Zone**
 - Mt Clarence
 - Mount Lindsay
 - Torbay Inlet
 - Walmsley South
 - Marbelup Nature Reserve
 - Bonacord Road
 - Gull Rock

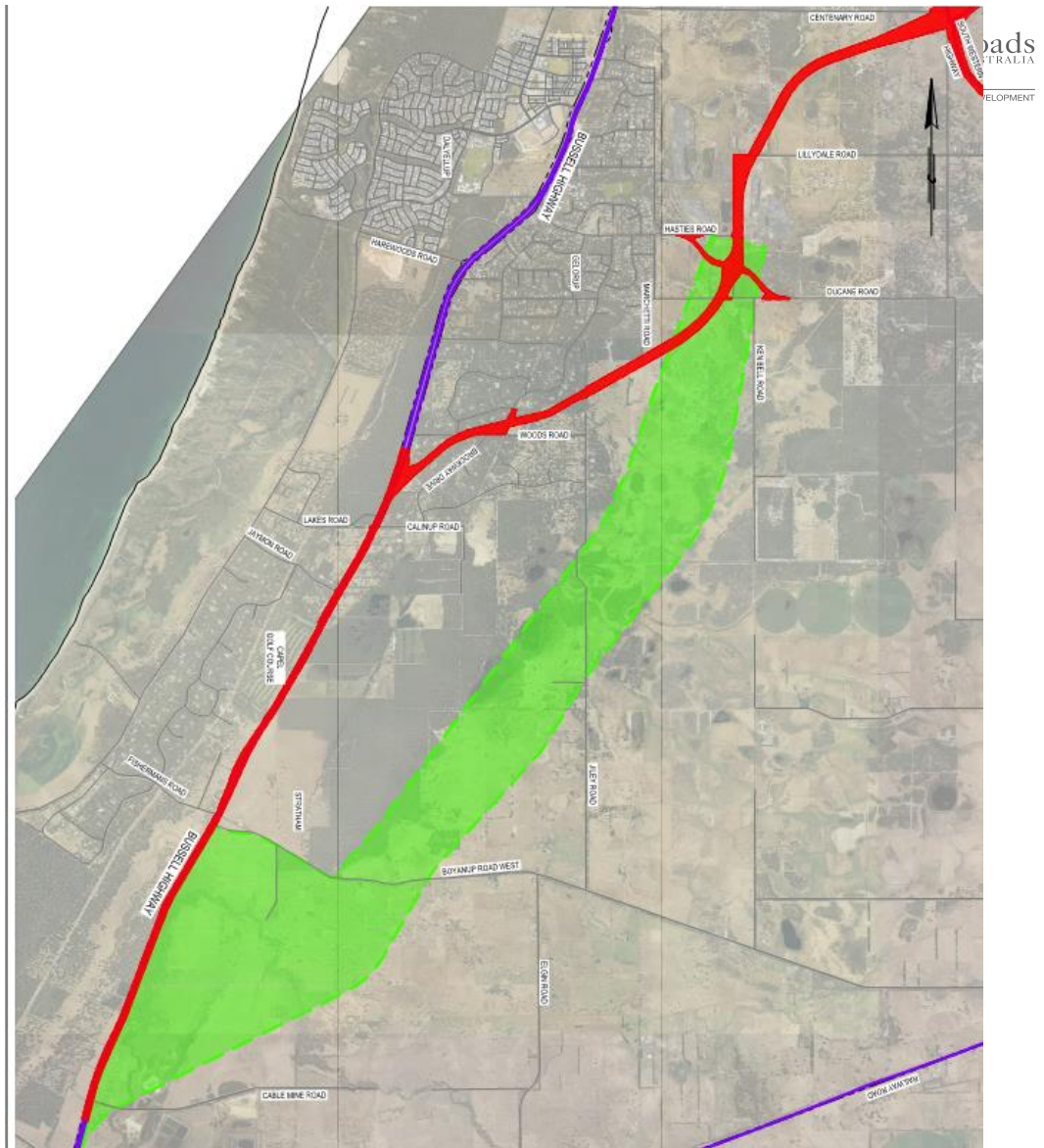
Southern Section Alignment Selection

Dominic Boyle

Background – why an alternative alignment was considered















- Previous EPBC (Federal) referral for GBRS alignment was withdrawn in July 2017 due to likely project scope changes / impacts upon Matters of National Environmental Significance.
- Escalation of Western Ringtail Possum status to Critically Endangered in May 2018.
- Uncertainty regarding total size of population .
- Need to consider alternatives - historical options assessments would not stand up in the current environmental context.
- Alignment also impacts other Federally listed values – Black Cockatoo, Banksia Woodland TEC.

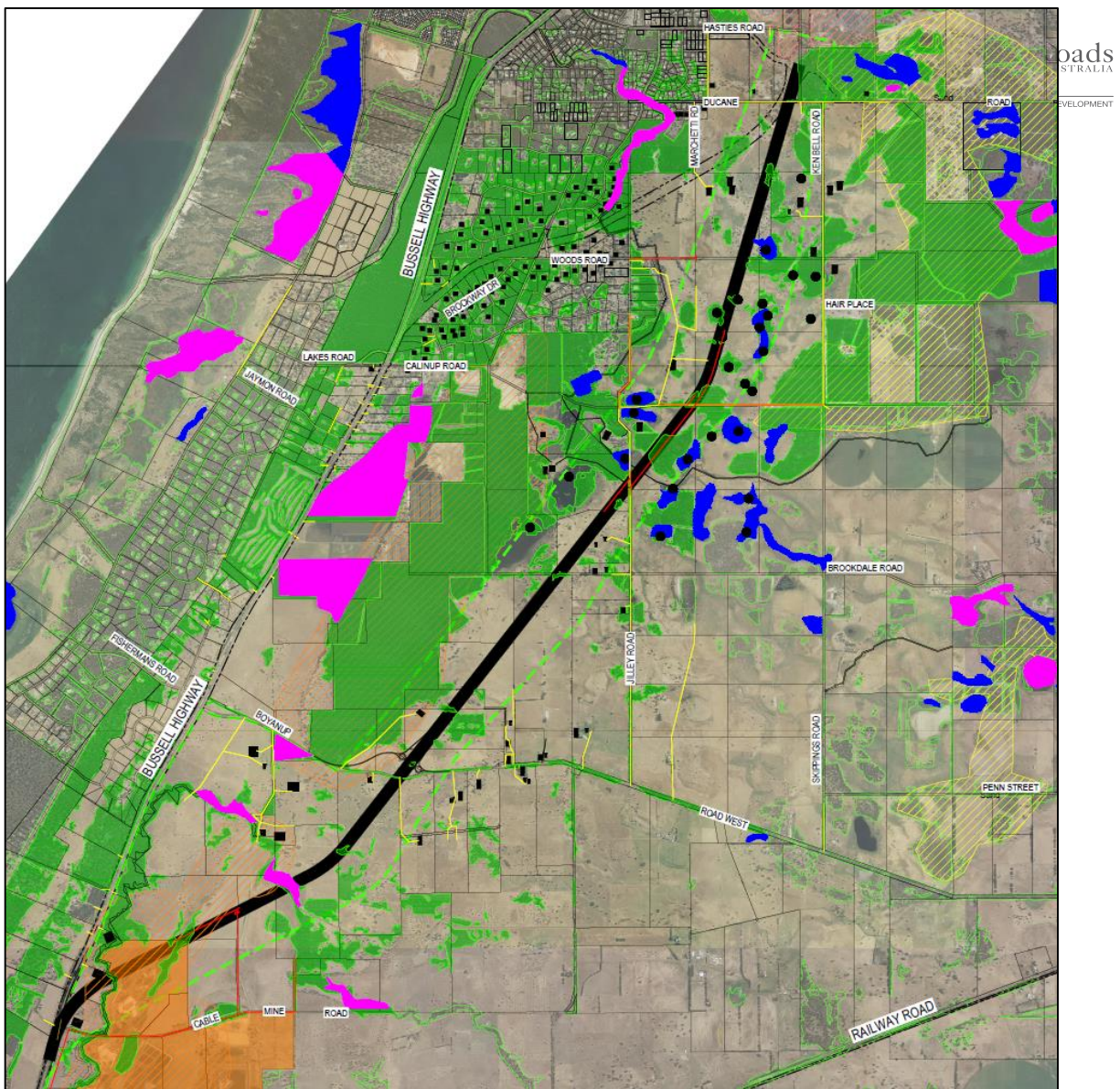
BORR South Alternative “Green” Corridor



Alignment assessed (within green corridor)

LEGEND:

	(100m CORRIDOR)
	GBRS BOUNDARY
	EXISTING ACCESS
	PROPOSED ACCESS
	ALTERNATIVE SOUTHERN CORRIDOR
	WETLANDS - RESOURCE ENHANCEMENT
	WETLANDS - CONSERVATION
	RESOURCE - TITANIUM
	RESOURCE - SAND
	RESOURCE - ROCK AGGREGATE
	NATIVE VEGETATION
	CONTAMINATED SITES
	EXISTING STRUCTURES
	OBSERVATION WETLANDS



Environment

- Existing GBRS road reserve has higher impact upon Western Ringtail Possum and Threatened Ecological Communities (TECs) / Priority Ecological Communities (PECs)
- Alternative alignment has a higher impact upon wetlands and endangered aquatic fauna
- ***GBRS alignment has higher impact upon Matters of National Environmental Significance, alternative has higher impact upon State issues.***

Aboriginal and European Heritage

- Both alignments impact upon same registered site (ID 5813).
- Alternative alignment has higher impact upon European Heritage (sites on Municipal Inventory, families on land since 19th Century)
- ***Alternative Alignment has higher impact upon European Heritage***

Social Impacts

- GBRS (red) alignment has higher noise and visual impact than the green
- Green alignment has higher impact on property severance, land acquisition and land use (agricultural)
- ***Overall worst impact on green alignment***

CRITERIA	GBRS RED	ALT GREEN
Severance	Green	Red
Landuse	Green	Red
Land Acquisition	Green	Red
Noise Impacts	Red	Green
Visual Impacts	Red	Green

Engineering Constraints

- Green alignment has higher impact on hydrogeology
- Majority of green corridor passes through unfavourable ground conditions
- Red more difficult from a constructability perspective, will involve more interaction with the public, landowners and staging on Bussell Highway will involve more interaction with live traffic
- ***Overall worst impact on green alignment***

CRITERIA	GBRS RED	ALT GREEN
Hydrogeology	Green	Red
Ground Conditions (Geology, Acid Sulphate Soils & Contaminated Sites).	Green	Red
Rivers, Streams & Waterways	Green	Yellow
Road Safety	Green	Green
Constructability	Red	Green

Economic Assessment

- Alignment in green corridor almost double the cost of the red (based on bulk earthworks and indicative interchange bridge structures)
- Alignment in green corridor has a significantly greater impact on agricultural areas and basic raw materials (titanium)
- ***Overall worst impact on green alignment***

CRITERIA	GBRS RED	ALT GREEN
Construction Costs	Green	Yellow
Operation Costs	Yellow	Yellow
Network Performance	Green	Yellow
Travel Time Saving	Green	Green
Strategic Agricultural Resources	Green	Red
Basic Raw Materials & Mining Tenements	Green	Red

Conclusion

- Both alignment options have environmental impacts, these being of differing scale and nature.
- GBRS (red) has a higher impact upon the Western Ringtail Possum and TECs / PECs
- Alternative alignment (green) has a higher impact upon wetlands and endangered aquatic fauna.
- Alternative alignment inconsistent with land use planning, impacts upon strategic agricultural resources, basic raw materials and mining tenements
- Alternative alignment impacts upon European Heritage, network efficiency and project cost
- Environmental context changed by Western Ringtail Possum Regional Surveys
- **Confirmed existing road reserve (GBRS) selected.**

Avoidance of Tuart Tree

Community Concern at potential loss of Significant Tuart Tree



- Tree estimated to be well in excess of 100 years old
- Arborist confirms this veteran tree is in good condition
- Tree cannot be avoided if BORR remains in road reserve

Land Required to Avoid Impact



Northern and Central Sections

Environmental Referrals

- Northern & Central Sections referred to Environmental Protection Authority (EPA) for level of environmental assessment (State).
- Public comment period on level of assessment (only) 14th to 20th June 2019 – stakeholders advised
- EPBC (Federal) referral submitted to Department of Environment and Energy (DotEE) 14th June 2019.
- As part of the process of determining the level of assessment under EPBC Act, public can comment for 10 business days (no extensions)

Amendment to referral boundary - Raymond Road North Facing Ramps

- Shire of Harvey / City of Bunbury feedback
- North facing ramps provide improved regional connectivity from Collie and surrounding catchments to BORR (Forrest Highway)
- Further access option for Bunbury
- Improved freight efficiency
- Improved outcome for local residents (Meadow Landing, Kingston) through diverted freight / regional traffic.



Raymond Road North Facing Ramps



**RAYMOND ROAD
INTERCHANGE**

BORR Northern Interchange Configuration

Design Objectives

- Provide free flow access to Bunbury
- Maintain connectivity from Paris Road to Clifton Road
- Not preclude future high speed rail.

Key considerations

- Minimise environmental impacts
- Balanced connectivity to the primary road network without overloading existing roads
- Cost effective solution



BORR Northern Interchange Configuration



BORR Northern Interchange Configuration

Next Steps

- Develop enhanced directional signage
- Investigate a site on Forrest Highway for the provision of information sign to promote Greater Bunbury events and attractions
- Review (and upgrade as necessary) existing tourist signage
- Investigate the potential to provide tourist information at an existing rest area on Forrest Highway

A blurred high-speed train is shown in motion, passing under a concrete bridge structure. The train is white with blue and red accents. The bridge has several large concrete pillars. The background is a solid blue color.

Southern Section Local Access Arrangements

Padraic Murphy



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Preferred alignment of
Centenary Road

Preferred form of
interchange

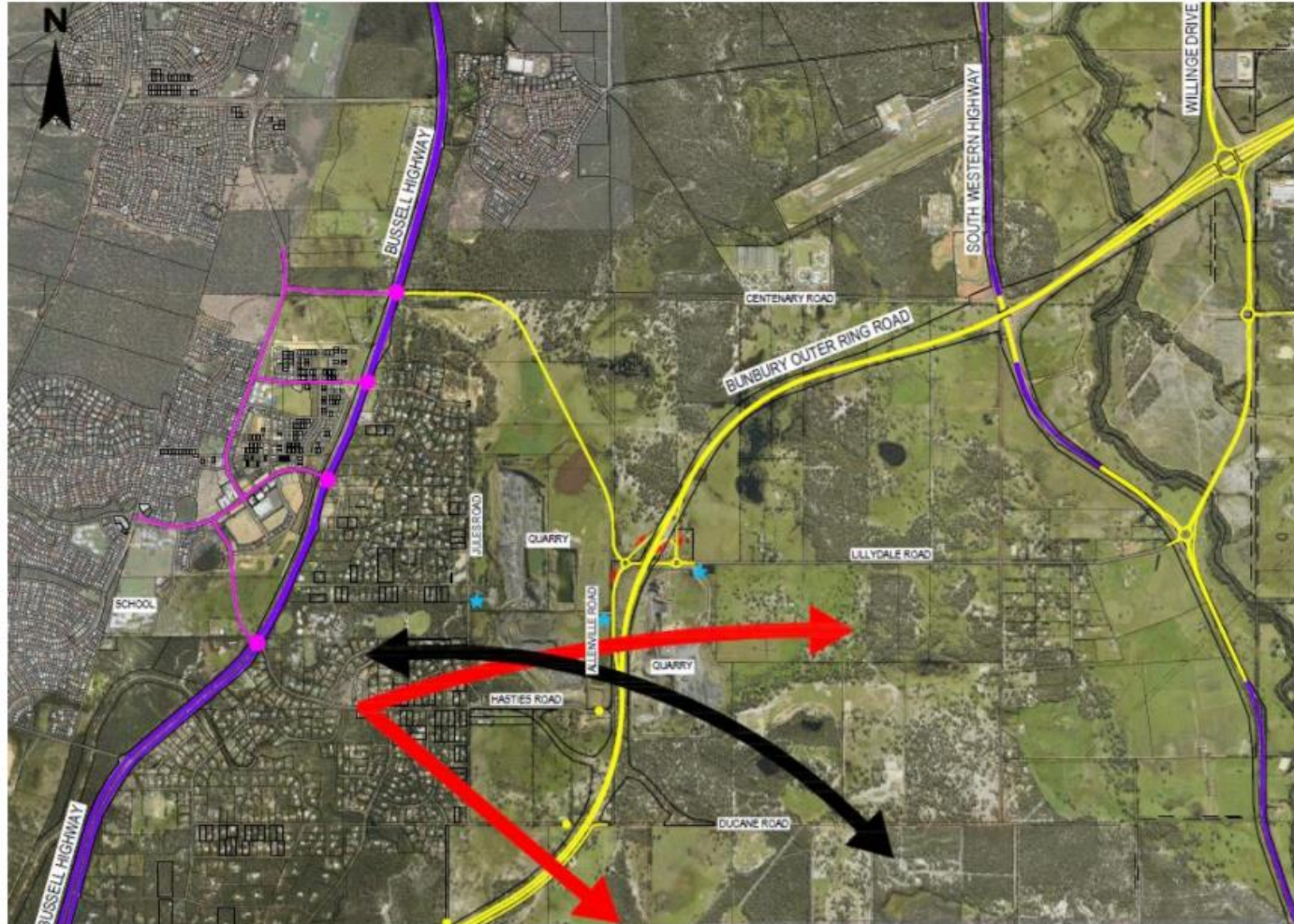
Local access
arrangements to be
finalised










Local Access Requirements

What we have heard to date:

- Fire and Emergency
- Community Linkages
- Quarry Access



LEGEND

	DESIGN OPTION
	DALYELLUP EAST STRUCTURE PLAN SIGNIFICANT ROADS
	CUL-DE-SAC
	TRAVEL DIRECTION
	QUARRY ACCESS POINTS
	COMMUNITY LINKAGES
	FIRE ACCESS REQUIREMENT

Calinup Road Service Road

Calinup Road Preferred Design



Finalisation of Local Access Arrangements

- Facilitated workshop to be held during July
- Invitees:
 - Shire of Capel
 - City of Bunbury
 - Hanson and Holcim Quarries
 - CRG member(s): 4 nominations sought
 - Residents representatives from across Gelorup

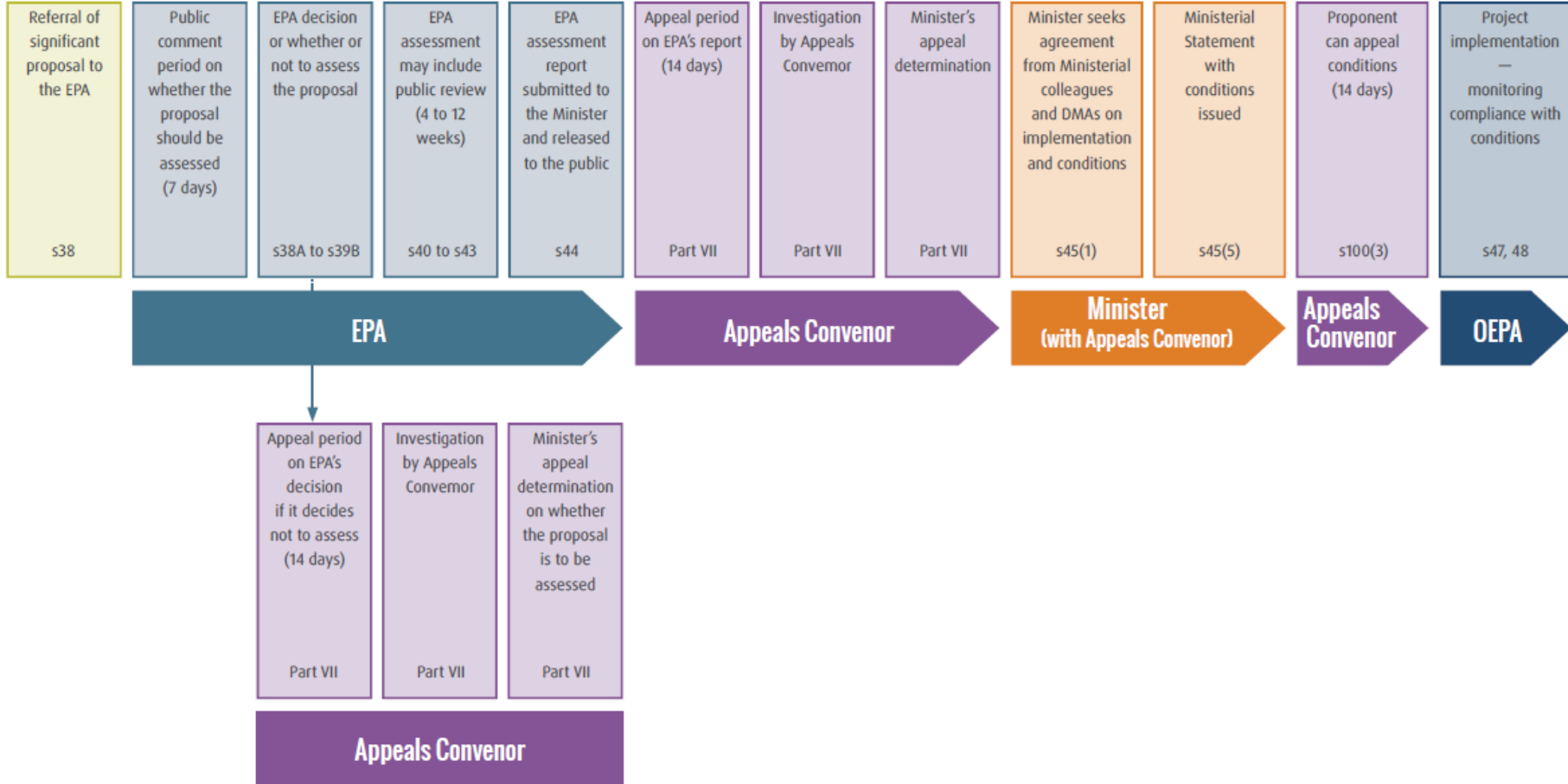


Environmental Approval Process

Martine Scheltema

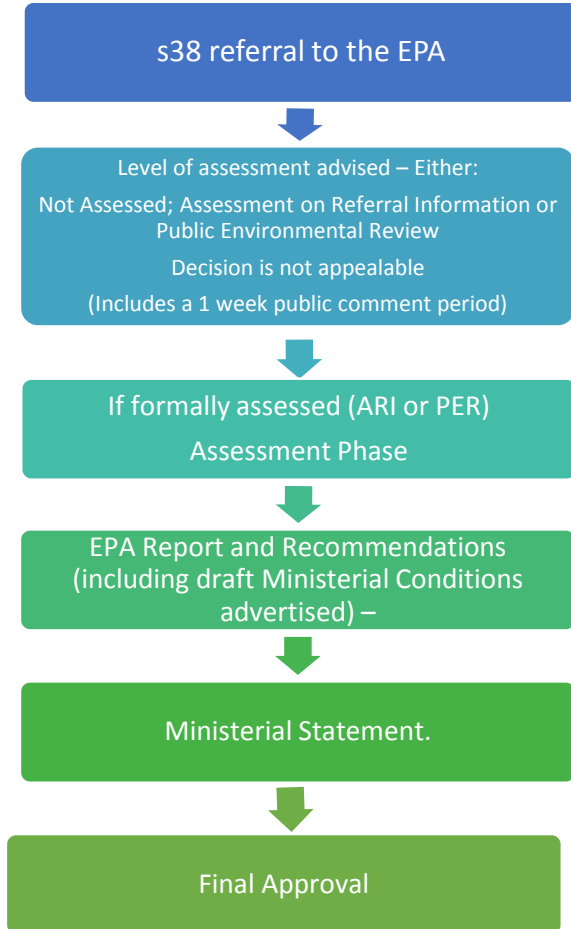


Environmental Assessment Process (State)

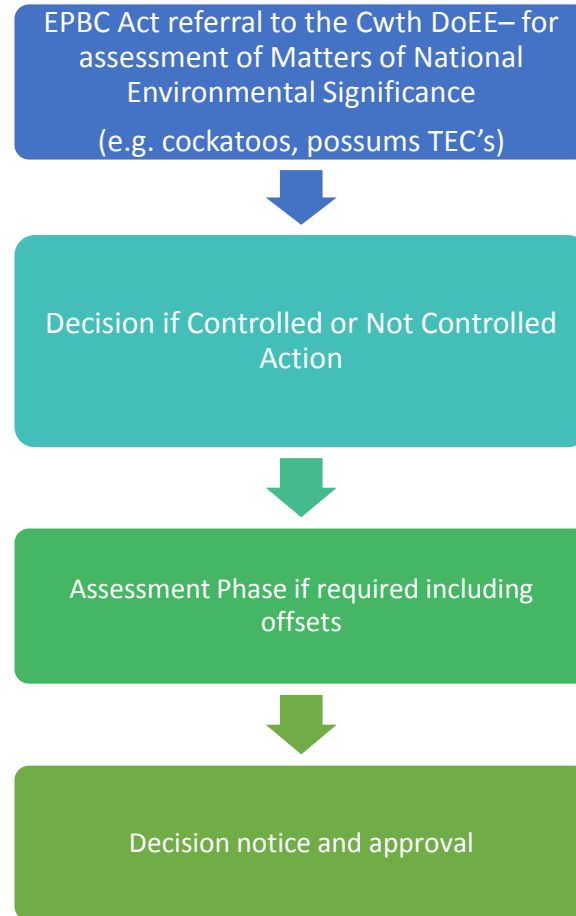


Approvals Pathway

Part IV EP Act (WA)



EPBC Act (Commonwealth)





Community and Stakeholder Engagement

Tammy Mitchell



**CRG Member
Round table**

A blurred image of a modern, futuristic train or tram moving through a tunnel or underpass. The train is white with blue and red accents and is moving from left to right. The background consists of concrete pillars and beams. A blue overlay is present on the right side of the image, containing the text "Next Steps" in white.

Next Steps