

# Agenda





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| Arrival – light refreshments available   |                                   |
|--|-----------------------------------|
| Welcome  | Linton Pike                       |
| Meeting Purpose and Context  | Linton Pike                       |
| Project Update  Northern & Central Sections  Delivery Planning Bussell Highway Interchange Options | Dominic Boyle /<br>Chris Mitchell |
| Southern Section Local Access  | Chris Mitchell                    |
| Southern Section Environmental Impacts   | Fionnuala Hannon                  |
| Environmental Approval Process   | Martine Scheltema                 |
| Community and Stakeholder Engagement Update  | Gemma Bertrand                    |
| CRG Member Round Table Discussion  | CRG Members                       |
| Next Steps   | Dominic Boyle                     |
| Close  | Linton Pike                       |









### **Northern & Central Sections**

- Level of Environmental Assessment decided by EPA: Assess on Referral Information with additional information to be provided
- First round of land acquisition meetings complete process underway

### **Southern Section**

- Targeting referral late August more information this evening
- Land acquisition meetings commenced
- Concept design progressing





## **Delivery Planning**

- Early Tender Advice posted on Tenders WA last week
- Alerts Industry to Upcoming Project
- Proposing single delivery contract for all sections Alliance
- c12 month procurement process
- Expressions of Interest September 2019
- Request for Proposals from Shortlist March 2020
- Award late 2020
- Construction subject to approvals (incl. environmental & heritage)

# Bussell Highway Interchange Options

**Chris Mitchell** 





# **Design Considerations**

- Future SW Freeway free flow BORR to Bussell and vice versa
- Provide continued free flow access onto Bussell Highway towards Bunbury
- Land remain within Greater Bunbury Region Scheme road corridor
- Safety / geometric design
- Aesthetics
- Cost





# **Option 1 – Y Interchange**

- Freeflow access to and from the south
- Significant bridge over BORR for Bussell Highway southbound
- Poor aesthetics
- Significant cost







# Option 2 – Y Interchange (right hand merge)

- Freeflow access to and from the south
- Reduced bridge extents compared to Option 1
- Traffic required to "weave" across Bussell Highway to access to Calinup Road
- Right hand merge is less safe than left hand merge

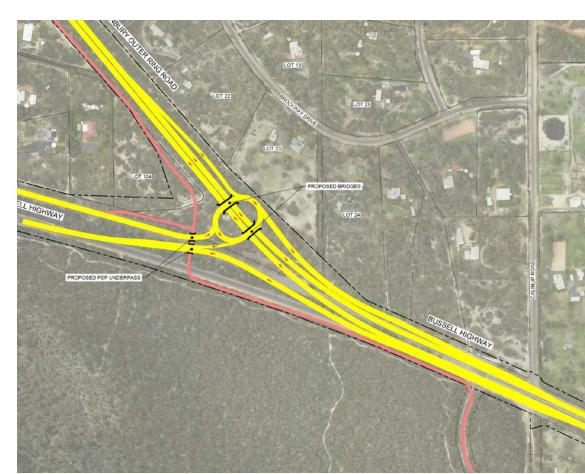






# **Option 3 – Grade Separated Roundabout**

- Freeflow access from the south to BORR and to Bunbury (Bussell Highway)
- Increased connectivity between BORR and Bussell Highway
- Reduced bridge requirements
- Improved aesthetics and operation and maintenance





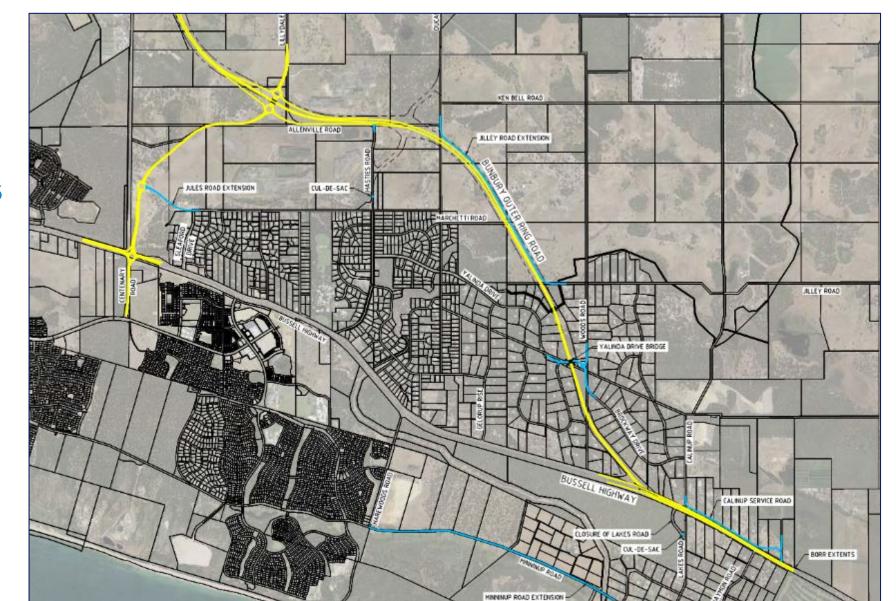




# **Local Access Workshop Overview**

- Workshop held on the 23<sup>rd</sup> July
- 45 participants attended, these include community representatives,
   Shire of Capel, City of Bunbury, Holcim, Hanson, Main Roads and BORR Team
- Overview of local access through the whole southern section of BORR
- Primary focus on local (day-to-day access)
- Emergency access is being addressed through consultation with DFES, Shire of Capel and local fire brigades

# BORR South Access Plan



# **Centenary Road**



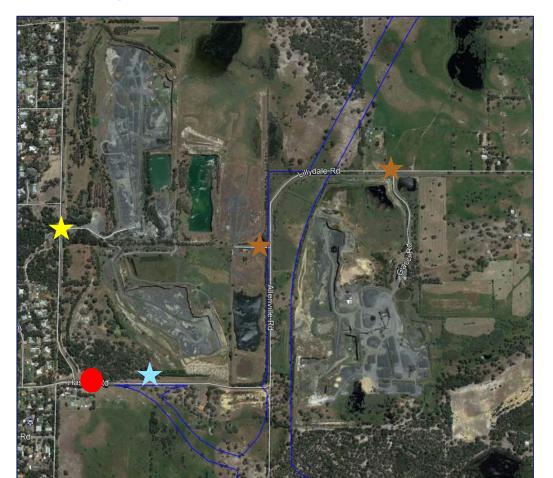


- Centenary Road connection will be provided.
- Dumbbell interchange
- Alignment of Centenary Road is being refined.





### **Quarry Access**





Holcim access onto Jules
 Road will be light vehicles only



 New heavy vehicle only access from Holcim to Hasties Road



 Hasties Road cul-de-sac immediately east of Jules Road



 Hanson Access remains as per existing





### **Jules Road Extension – Community Feedback**

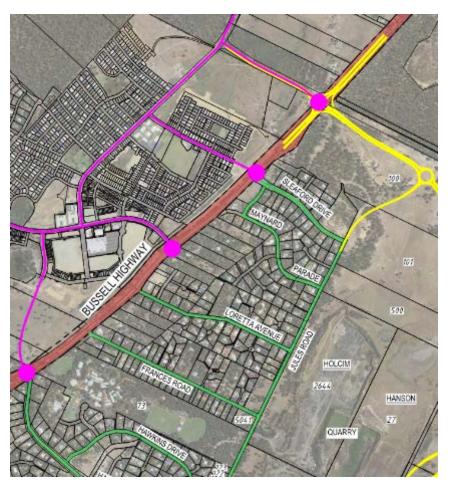


- Is this connection to Centenary Road required?
- Concern over additional traffic on Jules Road.
- Jules Road connection provides safe access northbound to Bunbury.
- Traffic on Bussell Highway will be less with BORR so leave as is.
- Acceptance if Jules Road is not connected that all journeys will require the use of Bussell Highway.
- Additional egress point and access to BORR is a benefit to the broader community but not to those directly adjacent.





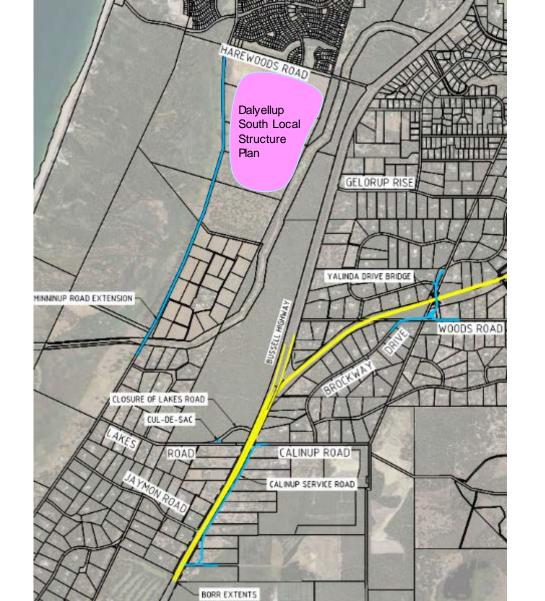
### Jules Road Extension – Where to from here?



- Consultation with Shire of Capel, Main Roads and DPLH will continue.
- Continue consultation with DFES.
- Consider impacts if no connection.
- Consider ultimate plan versus project case.
- Provide feedback to this group and wider community.

# **Minninup Road**

- Minninup Road to be extended to Harewoods Road per approved local structure plans.
- This connection is proposed due to Lakes Road being closed at Bussell Highway to maintain access.







# **Calinup Road Design**



# Taranto Road Example



## **Yalinda Drive Bridge**







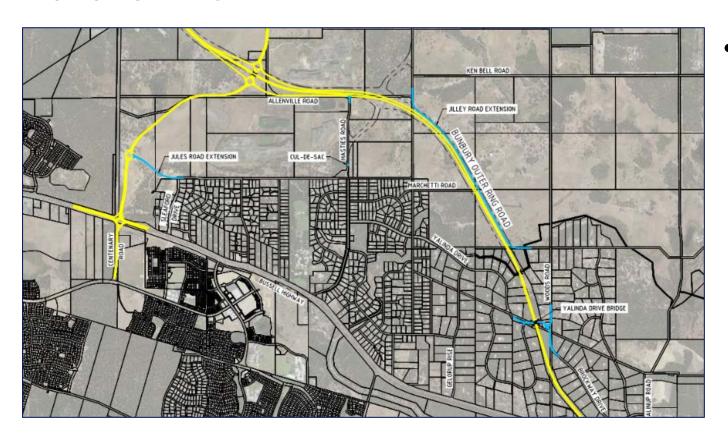
### Yalinda Drive bridge:

- Maintains existing connectivity
- Community access





### **Further work**



Assessment of a connection between Ducane Road and Lillydale Road





# **Summary**

- Differing views on connecting Jules Road to Centenary Road
- Yalinda Drive crossing of BORR recommended
- Support for cul-de-sac of Hasties and relocation Holcim Quarry access
- Investigate connection of Ducane to Lillydale
- Further discussion (BORR Team / Main Roads SW Region / Shire of Capel)



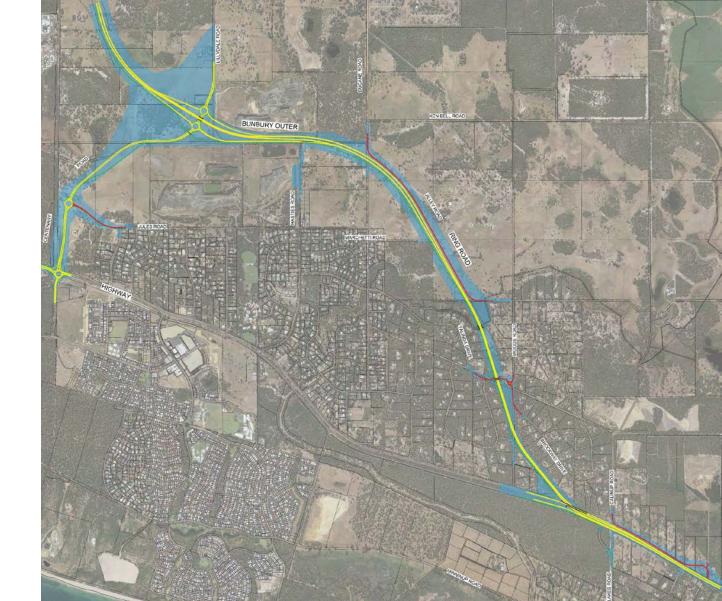




# Why is the referral boundary bigger than land acquisition boundary?

- Identified corridor allows for local roads and access modifications
- Allowance for accommodation works on private properties
- Provides a level of conservatism for the referral (worst case impact)
- Consultation with individual landowners regarding individual impacts
- Refinement of land acquisition boundary based on consultation

# **Environmental Referral Boundary**









### **BORR Southern Section**

Total Area referred: 300 ha

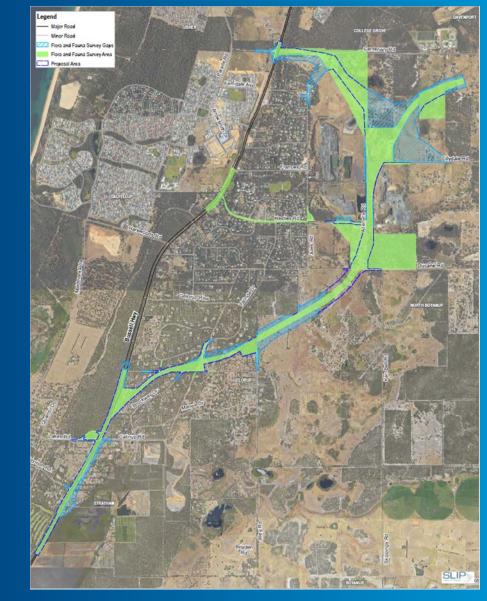
Referral presents actual and potential impacts to:

- Flora and Vegetation Terrestrial Fauna
- **Terrestrial Environmental Qualities**
- **Inland waters**
- Air quality Social Surrounds



# Flora and Vegetation

- 300 ha Proposal Area
  - 187 ha surveyed (62 %)
    - 76 ha native veg (including scattered native veg and reveg)
    - 111 ha cleared / highly disturbed
  - 113 ha unsurveyed (38 %)
    - 22 ha native veg extent)
    - 91 ha cleared / highly modified



# Flora and Vegetation

Priority Ecological Communities (DBCA)

and

Threatened Ecological Communities (EPBC Act)

#### Within the 187 ha Surveyed -

**36.5** ha (019%) is the total extent of the Banksia Woodlands PEC (P3)

- 20.8 ha of the Banksia PEC is representative of the Banksia Woodlands TEC (Endangered)
- **20.7** ha of the Banksia Woodlands TEC/PEC is representative of the **Tuart Woodlands PEC** (P3)

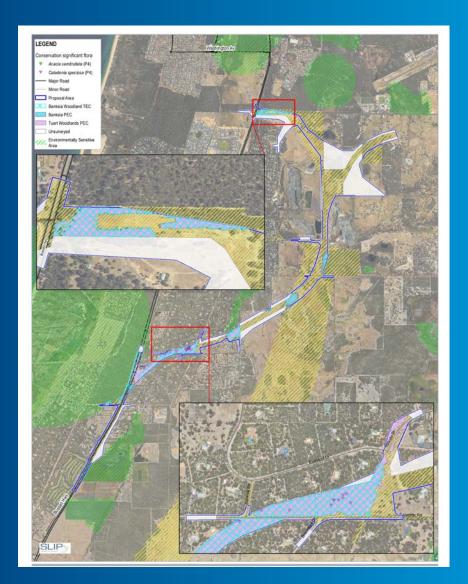
**28.6** ha is the total extent of the Tuart Woodlands PEC (P3) (including vegetation representative of the Southern SCP Tuart–Peppermint Woodlands PEC (P3))

**Note:** The extent of the recently listed **Tuart Woodlands TEC** (Critically Endangered) within the Proposal Area has not been quantified. This will be addressed through re-assessment of data collected to date and forthcoming, targeted field surveys.

# Conservation significant flora

#### Known or likely to occur within the 187 ha Surveyed-

- Caladenia speciosa (P4) recorded
- Acacia semitrullata (P4) not recorded in surveyed area
- Aponogeton hexatepalus (P4) not recorded in surveyed area
- D. drummondii (MNES) not recorded in surveyed area
- D elastica (Endangered MNES) not recorded in surveyed area
- D. micrantha (Vulnerable MNES) not recorded in surveyed area

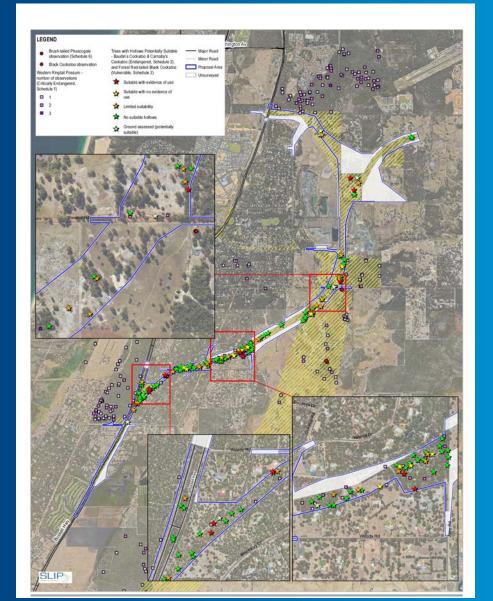


# Fauna

**Possum** 

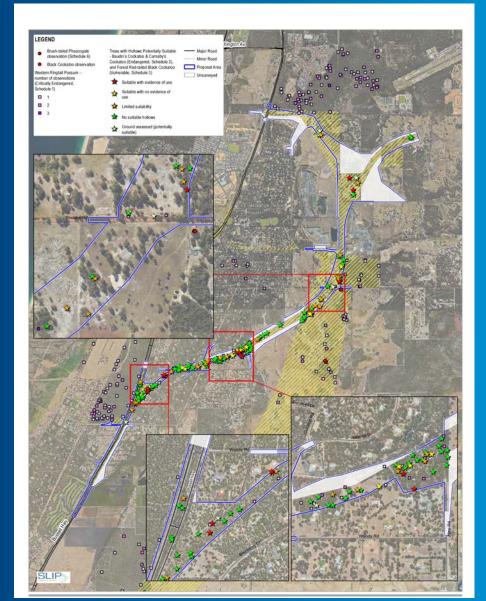
#### **CONSERVATION SIGNIFICANT FAUNA AND HABITAT** Fauna Six fauna habitat types were identified in the habitat **Survey Area** Majority of Proposal Area (67 %) is Cleared land and Highly modified land, including previously constructed roads. Within Proposal Area: 79.4 ha foraging habitat, Black **Cockatoos** i.e. 59.4 ha surveyed; 20 ha (estimate) in unsurveyed areas Within vegetated areas surveyed (76 ha), 538 potential breeding trees (DBH >500 mm) were recorded Western Within Proposal Area: 79.4 ha foraging and breeding habitat, i.e. 59.4 ha surveyed; 20 ha Ringtail

(estimate) in unsurveyed areas.



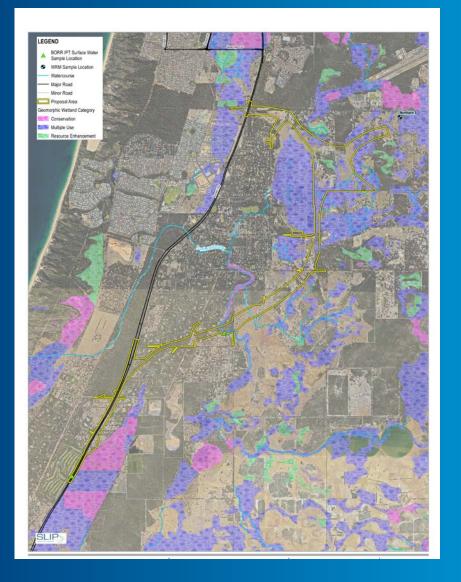
# **Fauna**

#### **CONSERVATION SIGNIFICANT FAUNA AND HABITAT** Southern Evidence of Quenda recorded, i.e. diggings **Brown** (76 ha in Survey Area; 22 ha (estimate) in unsurveyed Bandicoot, areas) Quenda South-No individuals observed in Survey Area (six were western recorded in close proximity) **Brush-tailed** (42.6 ha in within Survey Area; 20 ha (estimate) in Phascogale, unsurveyed areas) Wambenger **Black-stripe** None recorded within Proposal Area Minnow Recorded in wetland habitats within 5 km buffer of Proposal Area South-Recorded within Proposal Area Western Snakenecked **Turtle**



# **Inland Waters**

| Aspect                   | Within Proposal Area  |  |
|--------------------------|---|--|
| Geomorphic Wetlands      |   |  |
| Conservation<br>Category | 0.1 ha (less than 0.05 %) (within proposal area)  |  |
| Resource<br>Enhancement  | 3.5 ha (1 %) (within proposal area)   |  |
| Multiple Use             | 60 ha (20 %) (within proposal area)   |  |
| Unassessed wetlands      | 0.5 ha (less than 0.2 %) (within proposal area)   |  |
| Waterways                |   |  |
| Rivers                   | <ul> <li>No rivers proclaimed under the RIWI Act</li> <li>Several minor drainage lines (not proclaimed under the RIWI Act) including Five Mile Brook</li> </ul> |  |

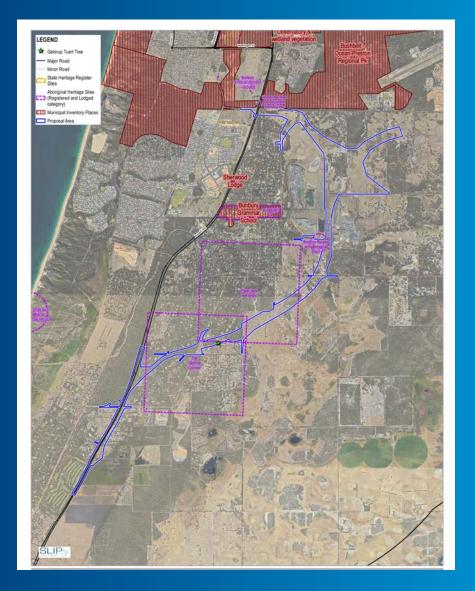


# **Social Surrounds**

### ABORIGINAL AND EUROPEAN HERITAGE ASPECTS

| Aboriginal Heritage      |  |  |
|--------------------------|--|--|
| ILUA                     | Proposal occurs within the GKB People ILUA area  |  |
| Registered Sites         | <ul> <li>No World Heritage Properties or<br/>Commonwealth Heritage Places within 10 km<br/>of Proposal Area</li> </ul>   |  |
| Other Heritage<br>Places | <ul> <li>Place ID 18884 Bunbury Bypass Archaeological<br/>Site 1 – Artefact Scatter</li> <li>Place ID 37869 Paper bark wetlands –<br/>Modified Tree, Birth Place, Hunting Place,<br/>Water Source</li> <li>Place ID 37870 The Gelorup Corridor –<br/>Artefacts / Scatter, Ceremonial, Skeletal<br/>Material, Burial</li> </ul> |  |
| European Heritage        |  |  |
| State Heritage Sites     | The Tuart Tree, Gelorup (adopted December 2018)  |  |
| Municipal Inventory      | There are no registered State Heritage sites located within the Proposal area (six are located   |  |

within 2 km)



# Studies planned for the assessment phase

### **Terrestrial Flora and Vegetation**

- Level 2 survey in untargeted areas
- Targeted species search
- MNES assessment (Banksia and Tuart TEC)
- Dieback assessment

#### Terrestrial and aquatic fauna

- •Level 1 fauna survey in unsurveyed areas
- Aquatic fauna surveys in wetlands (Black stripe minnow and Carters Freshwater mussel)
- Targeted survey for potentially active hollows
- •WRP survey in areas surveyed in 2018.

#### **Terrestrial Environmental Quality**

- ASS investigation and Management Plan
- Desktop assessment for contaminated sites risk assessment







# Studies planned for the assessment phase

#### **Inland waters**

- Wetland qualities and function to be assessed
- Groundwater and surface water quality
- Ground water and Surface Water interactions

#### Air quality

• Air quality modelling to be completed for the Proposal Area

#### **Social Surrounds**

- Noise monitoring underway
- Noise modelling
- Aboriginal heritage survey
- Visual Impact Amenity including light spill







### **Environmental Assessment Process**

- Step 1 of the environmental approval process.
- Target date for environmental referral is the end of August.
- Main Roads and the BORR team will inform CRG members when the project is referred.
- EPA and DotEE control when the public comment period opens, please watch out for this. Typically within 7 days of referral.
- Public comment period is for 7 days at the state level and 28 Days at the federal level, we do not control these.







# **Upcoming Activities**

- Community Reference Group Meeting (Northern and Central) 12<sup>th</sup> August
- Community Drop in Session 22<sup>nd</sup> August (Gelorup Hall)
  - 4.00pm to 7.30pm
- Notification on Southern environmental referral



