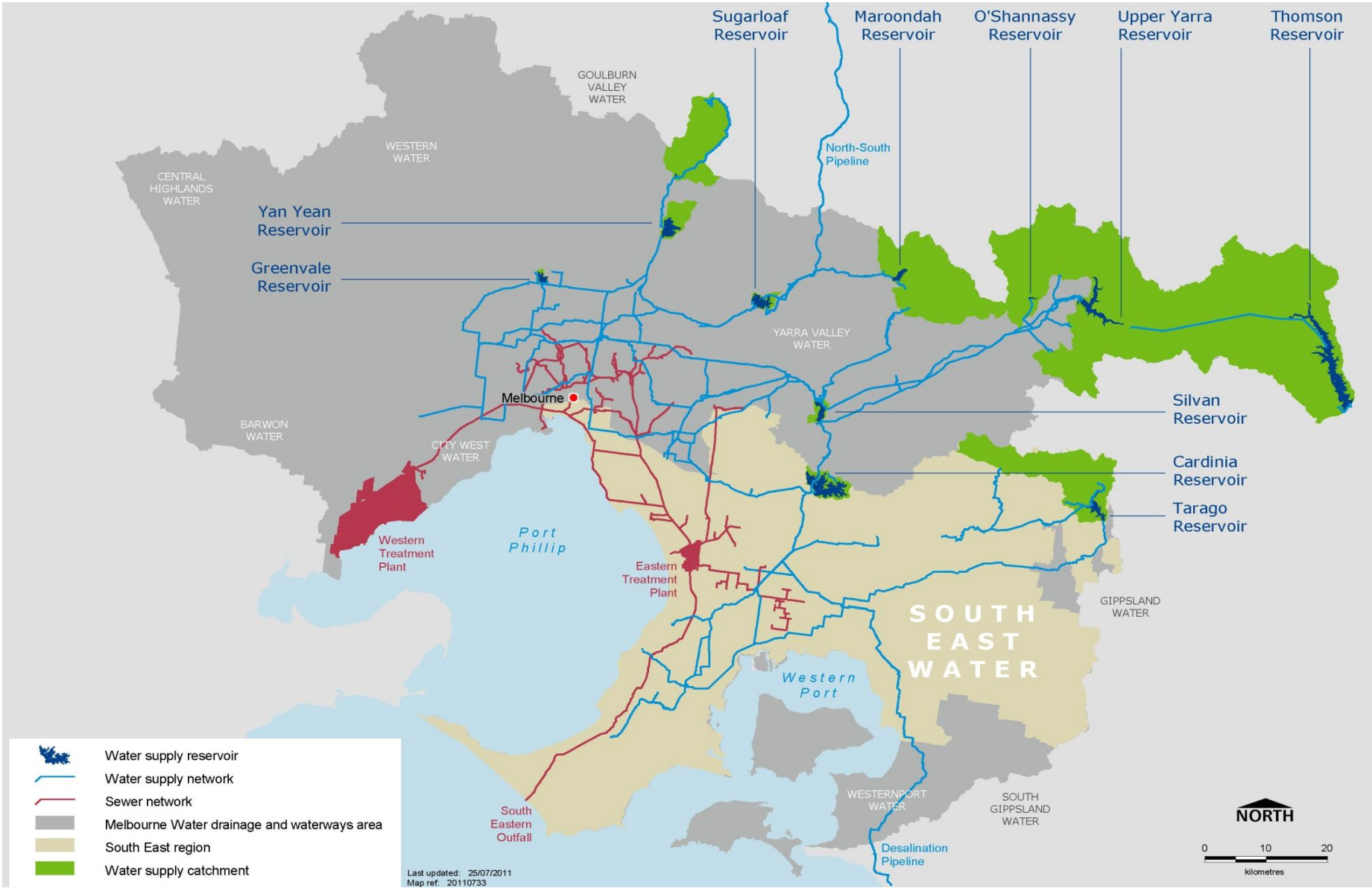


# SE Water Service Area

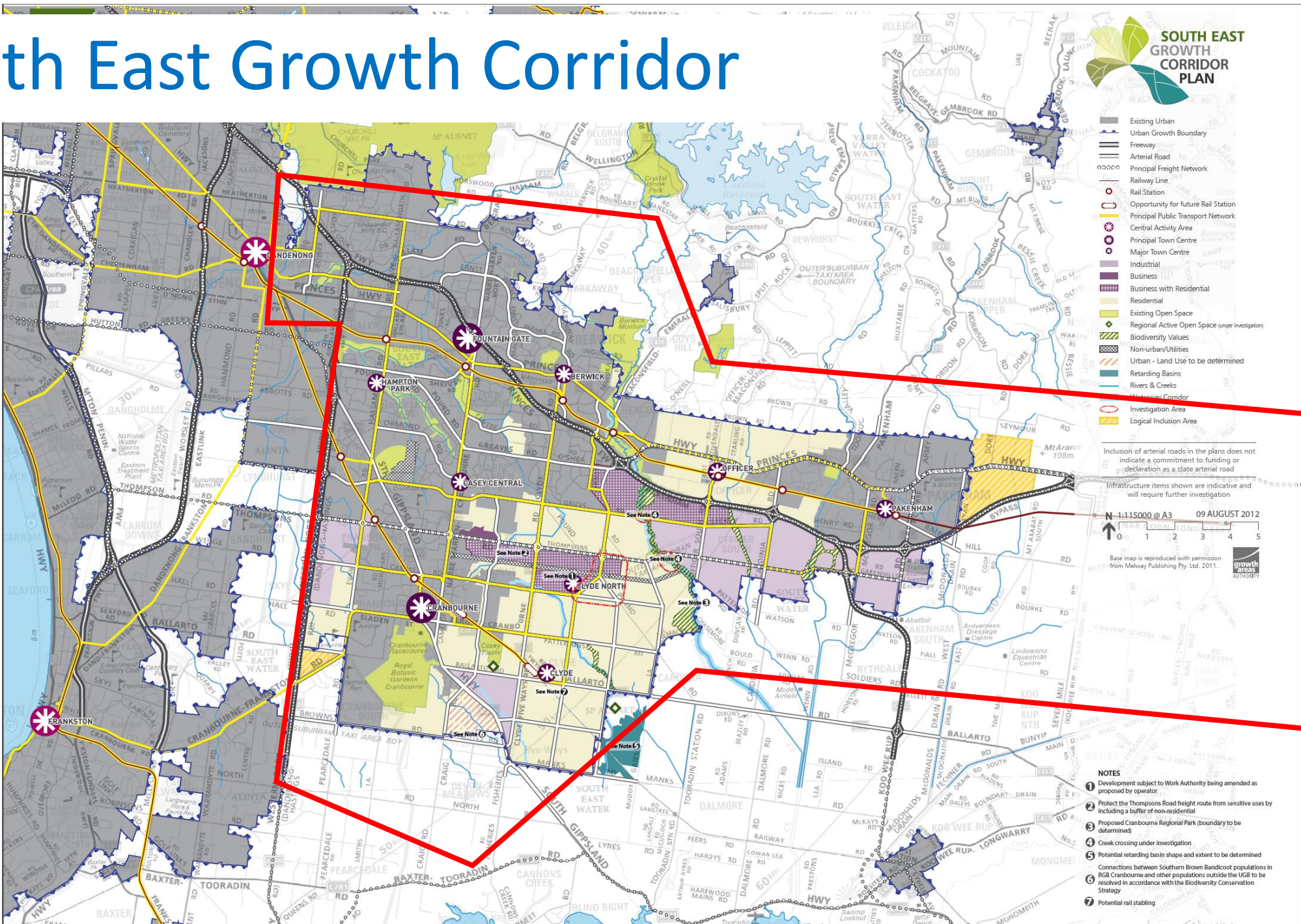


Photo: CRC for Water Sensitive Cities/Realm Studios



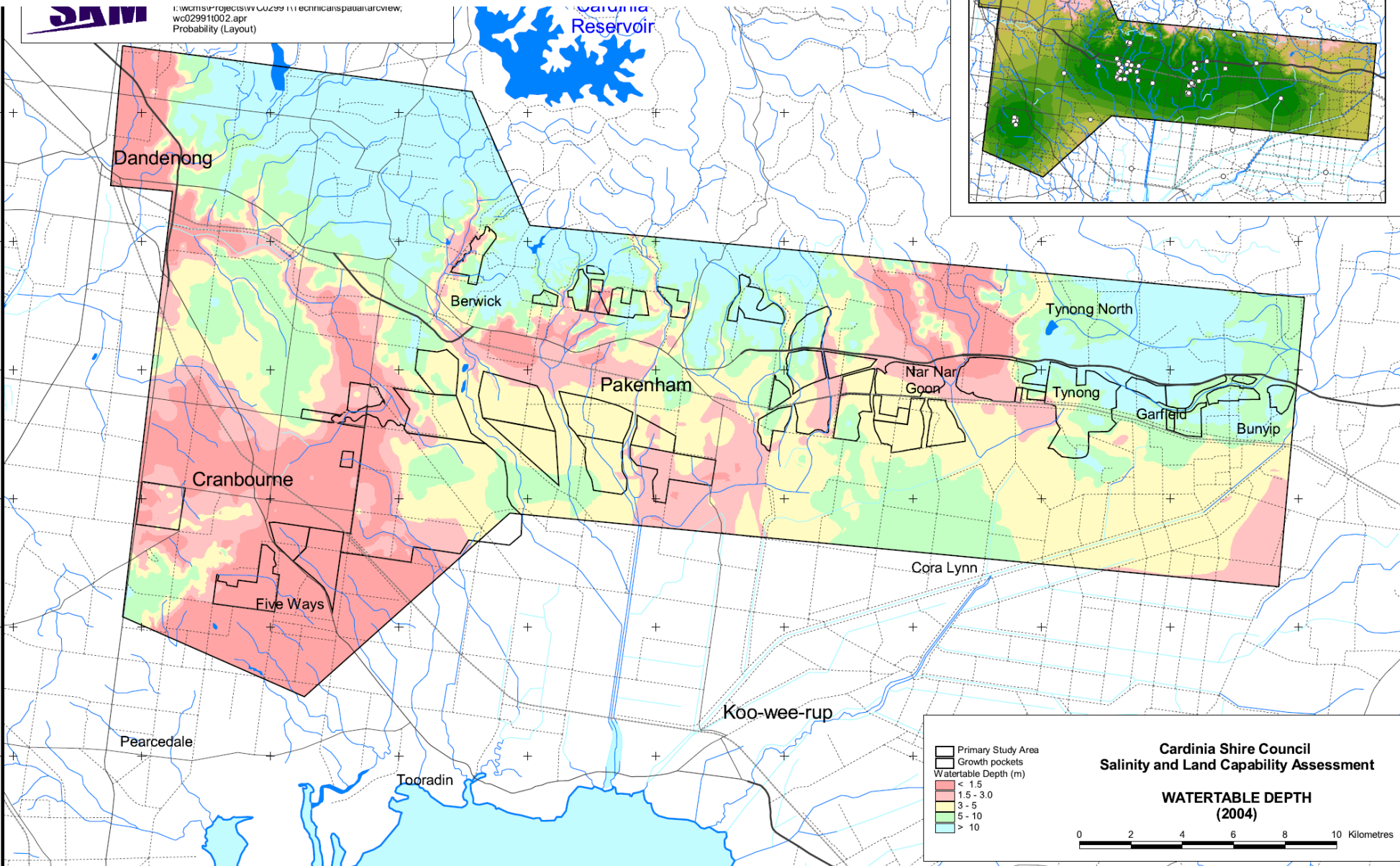


# South East Growth Corridor



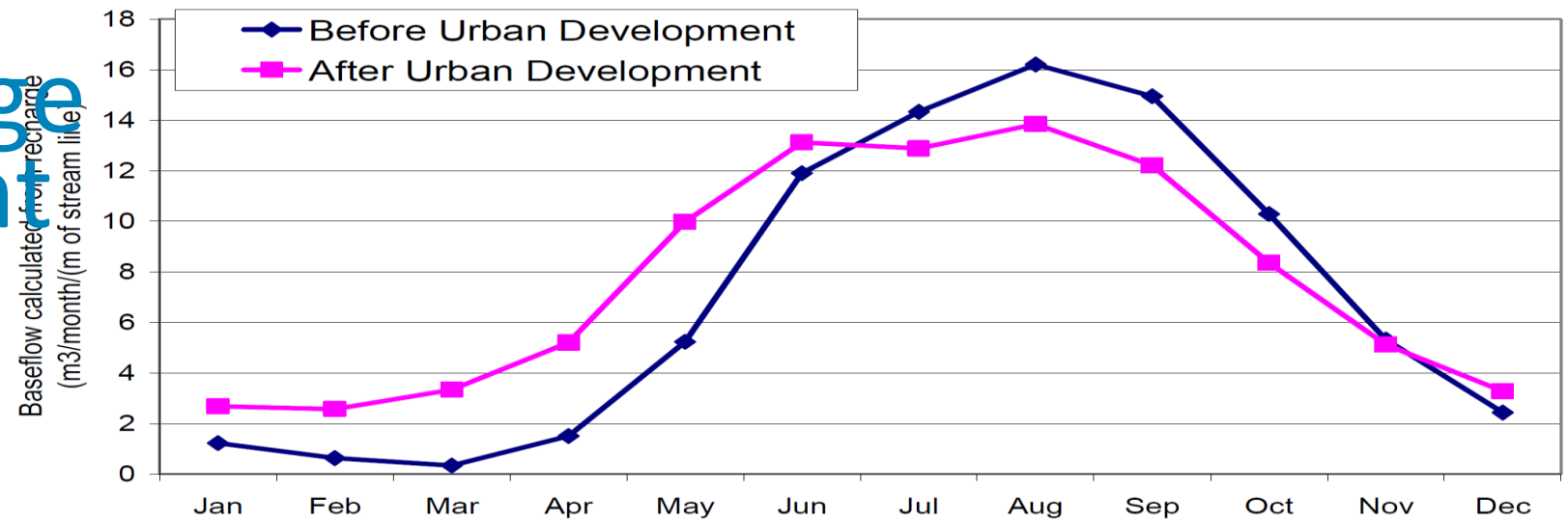


# Water Table Depth

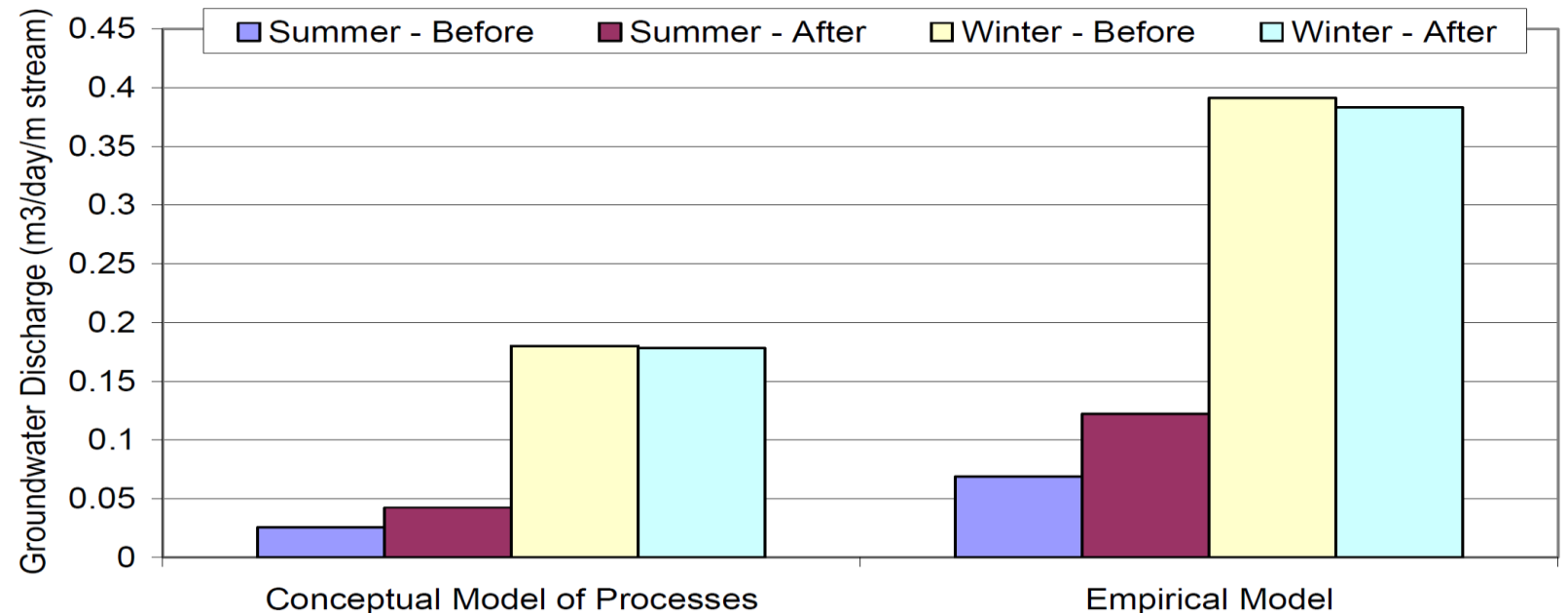


# Impact on recharge from development

- Reduced permeable areas
- Reduced vegetation and transpiration
- Garden watering & irrigation during summer
- WSUD infiltration pushing water into the ground
- Base stream flows tend to rise with development



**Figure 5 Average monthly baseflow calculated from recharge (Figure 2).**



**Figure 6. Groundwater discharge or stream baseflow generation rates on the Western Port Plains (m3/day/(m length of stream)). Discharge rates are shown for summer and winter before and after urban development using both discharge modeling approaches.**

# Interaction with groundwater

Figure 2 Conceptual model – Pre and Post Development

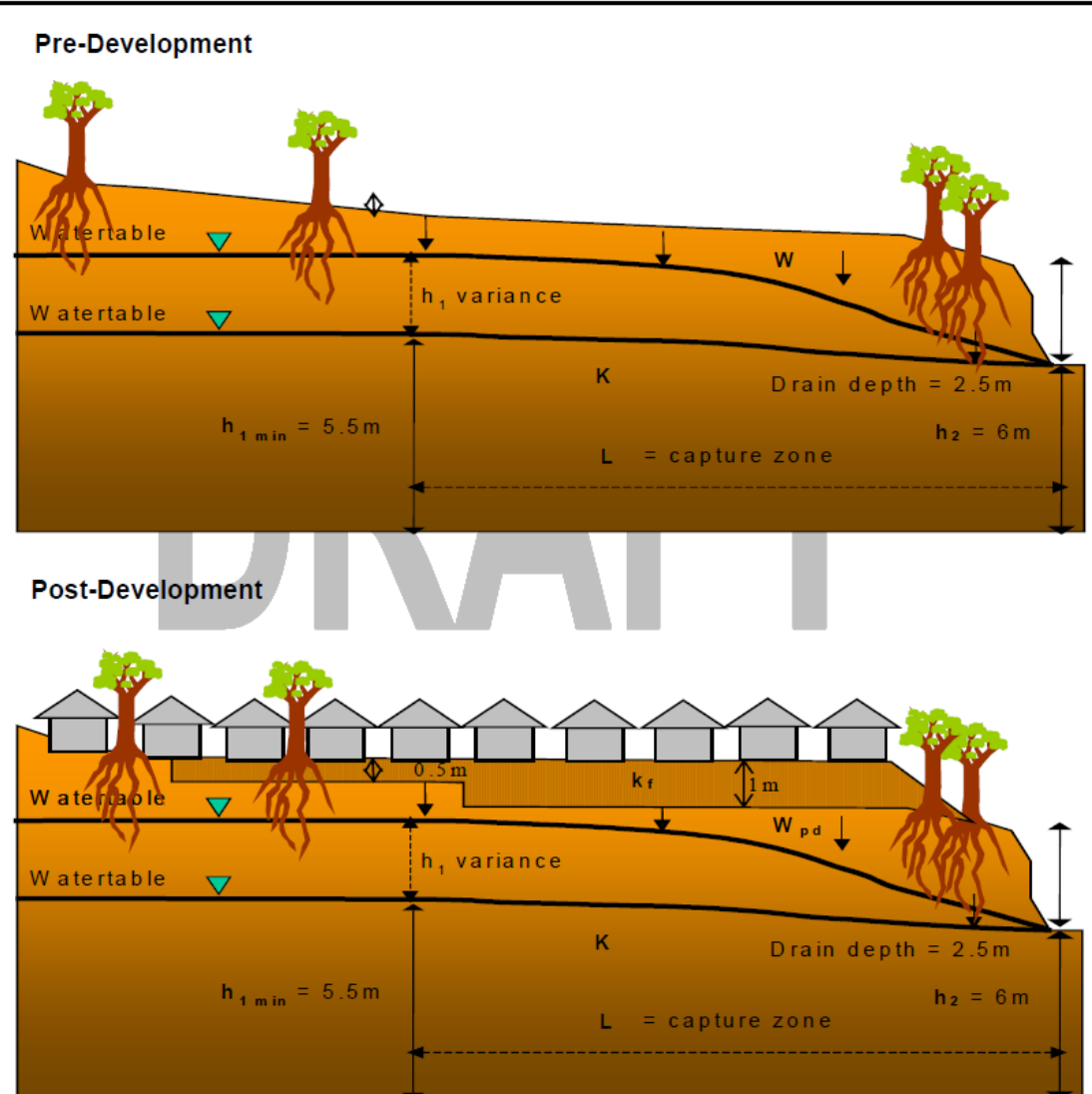
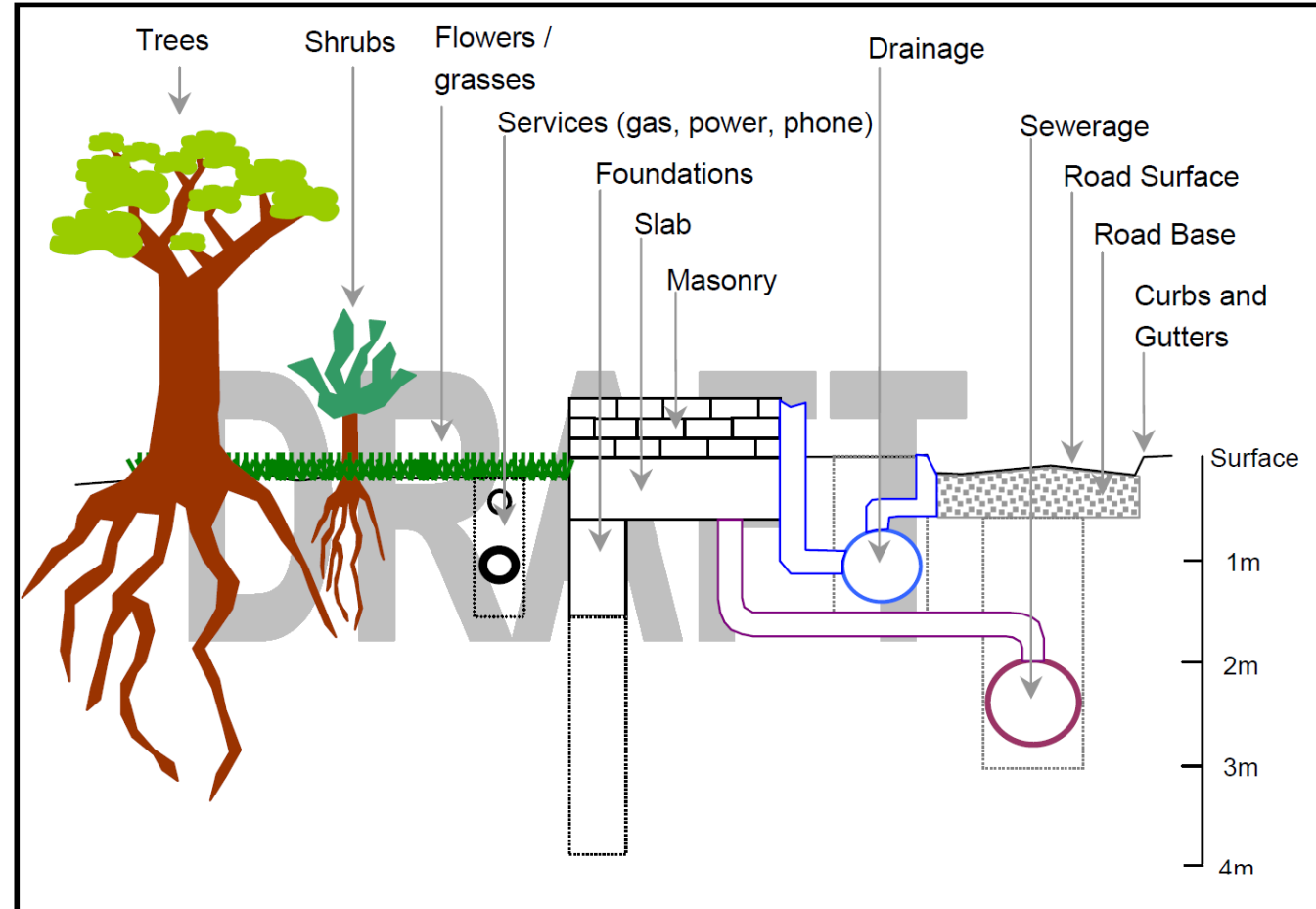


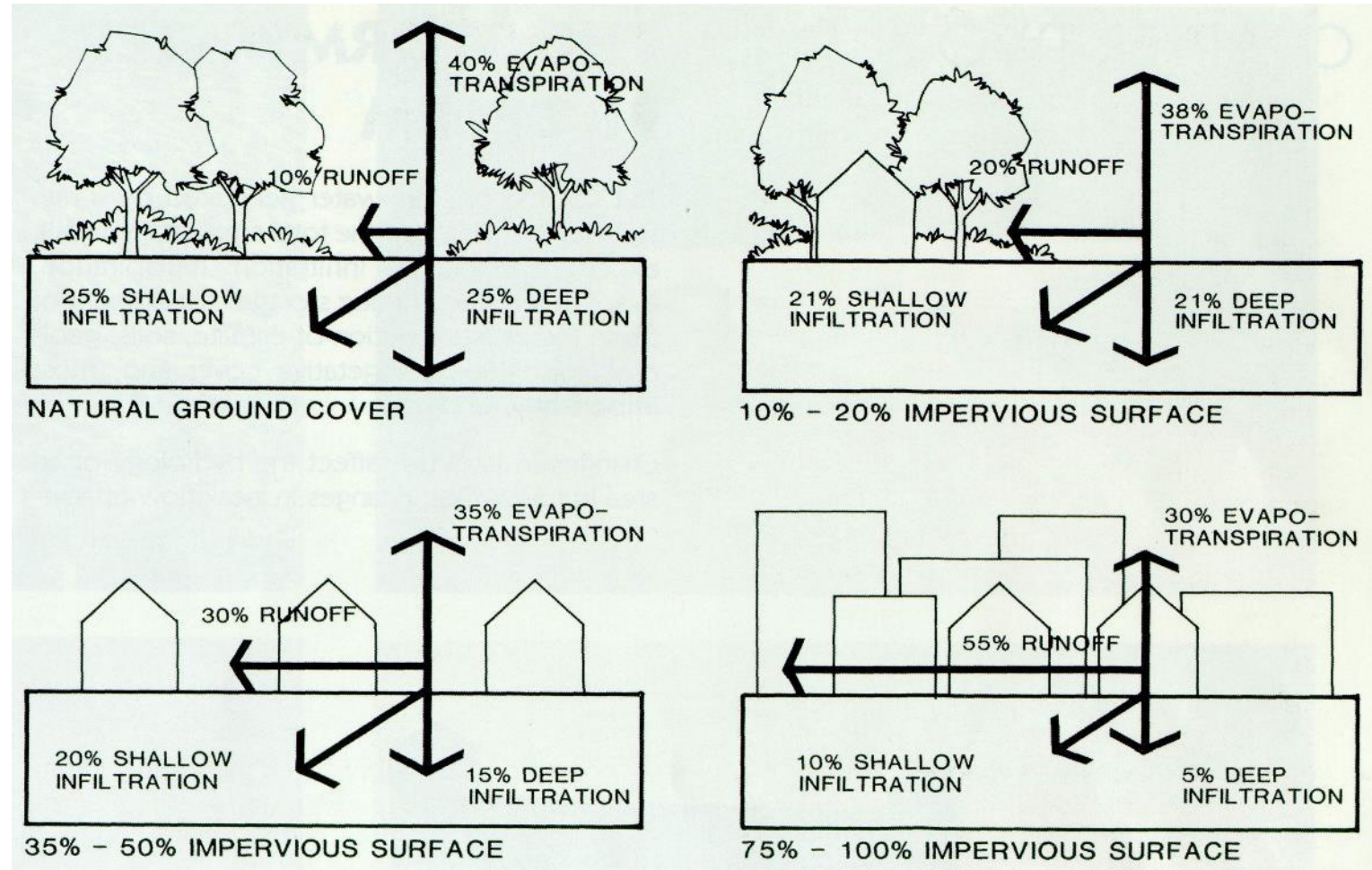
Figure 2 Summary of key elements of urban development that may interact with groundwater





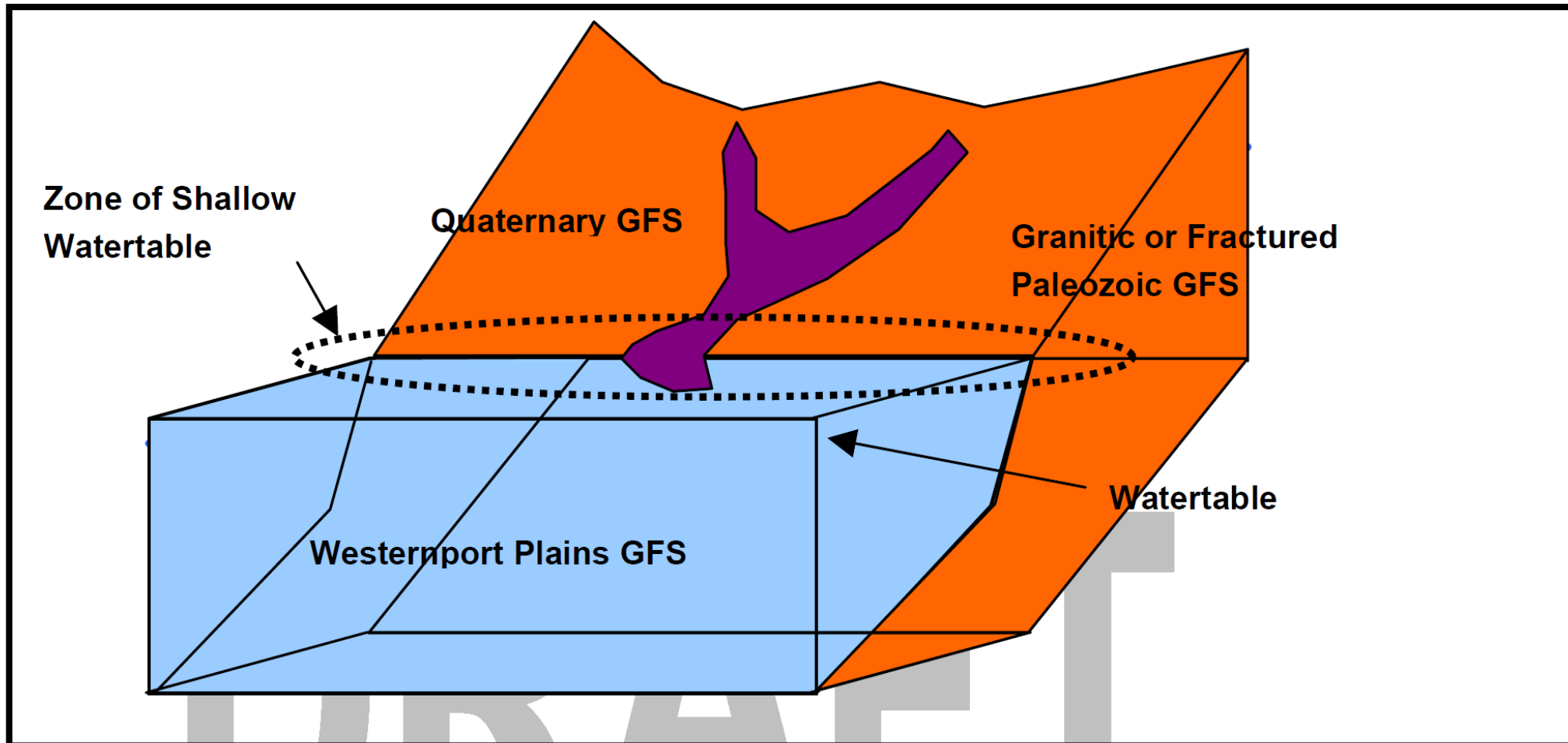
# Questions for Research

- What is the impact of development on groundwater?
- WSUD and groundwater recharge?
- How to manage in shallow saline areas?
- Risks to urban infrastructure and fauna?
- What is the seasonal variation?



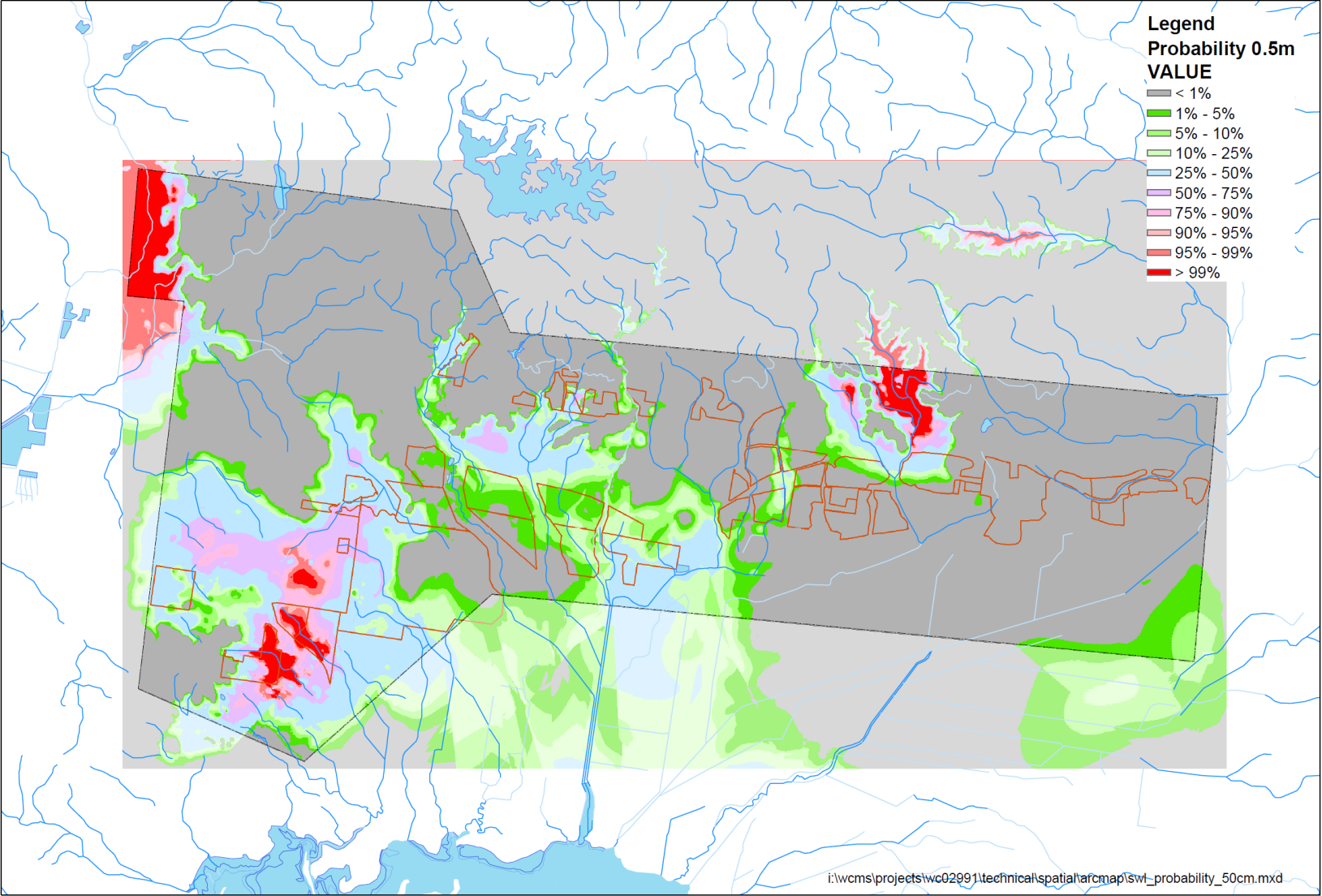
Is the model right??

■ **Figure 11 Conceptual model – Berwick –Pakenham zone**



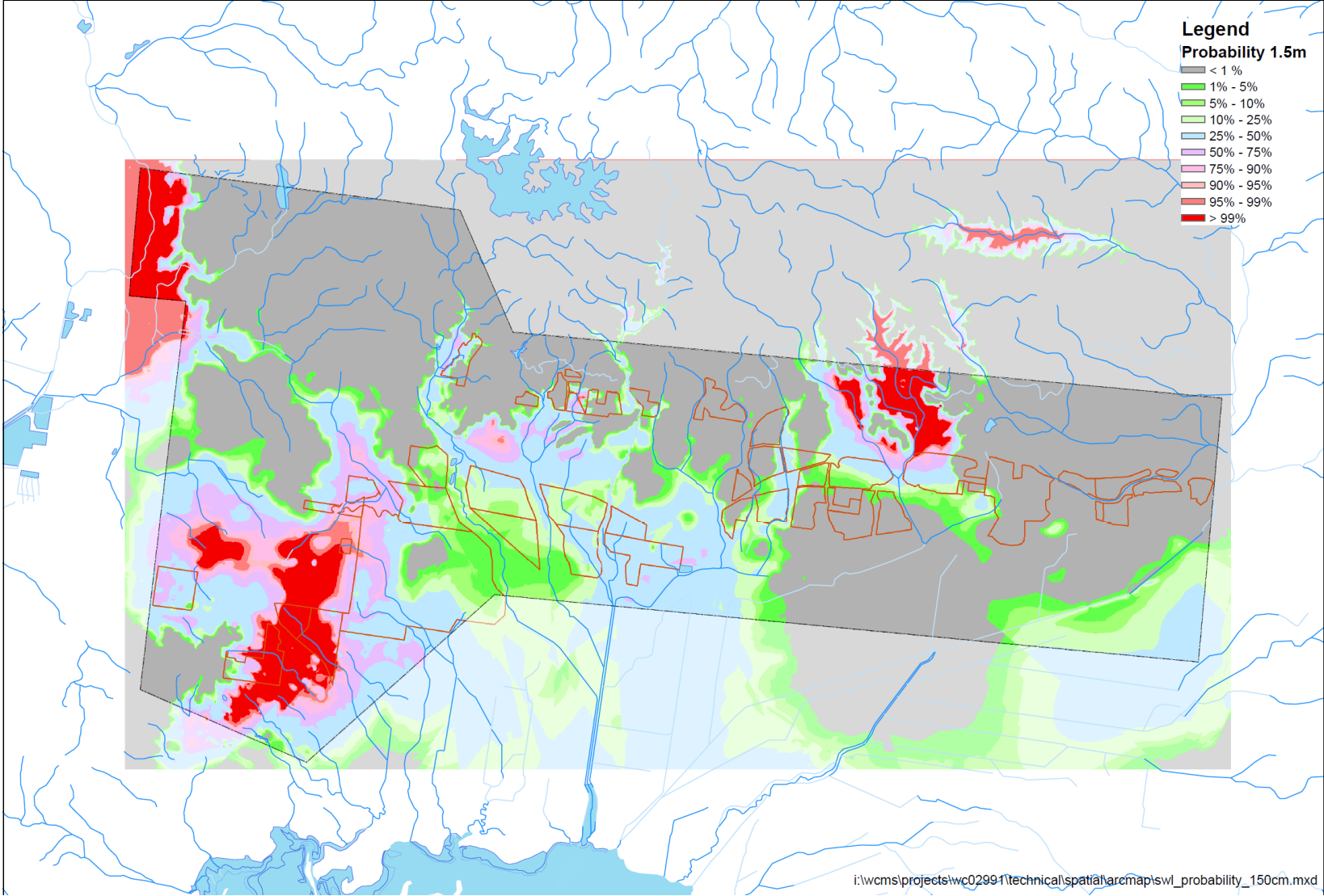
TDS 6000 to 8000 ppm

# Saline Risk 0.5m

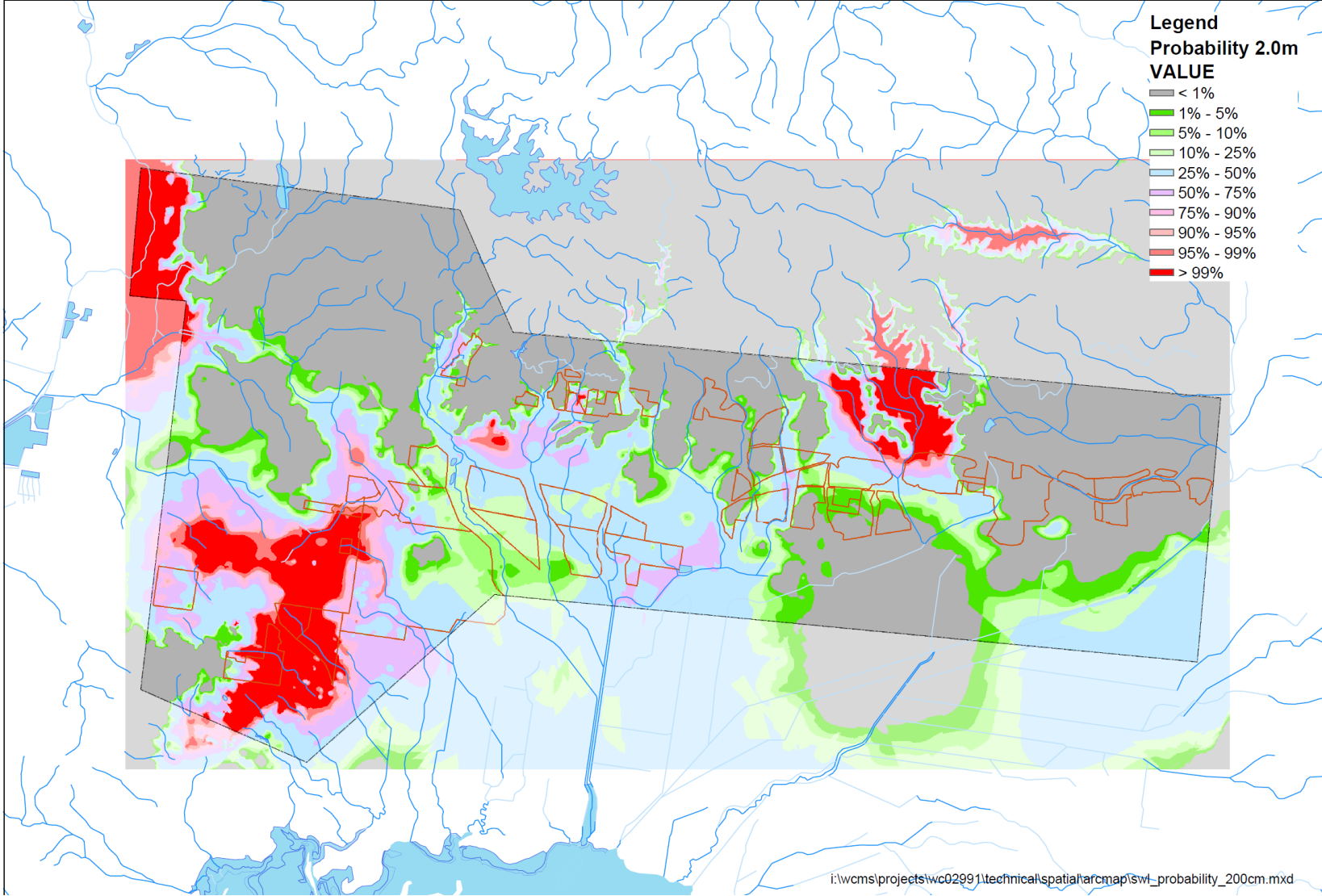




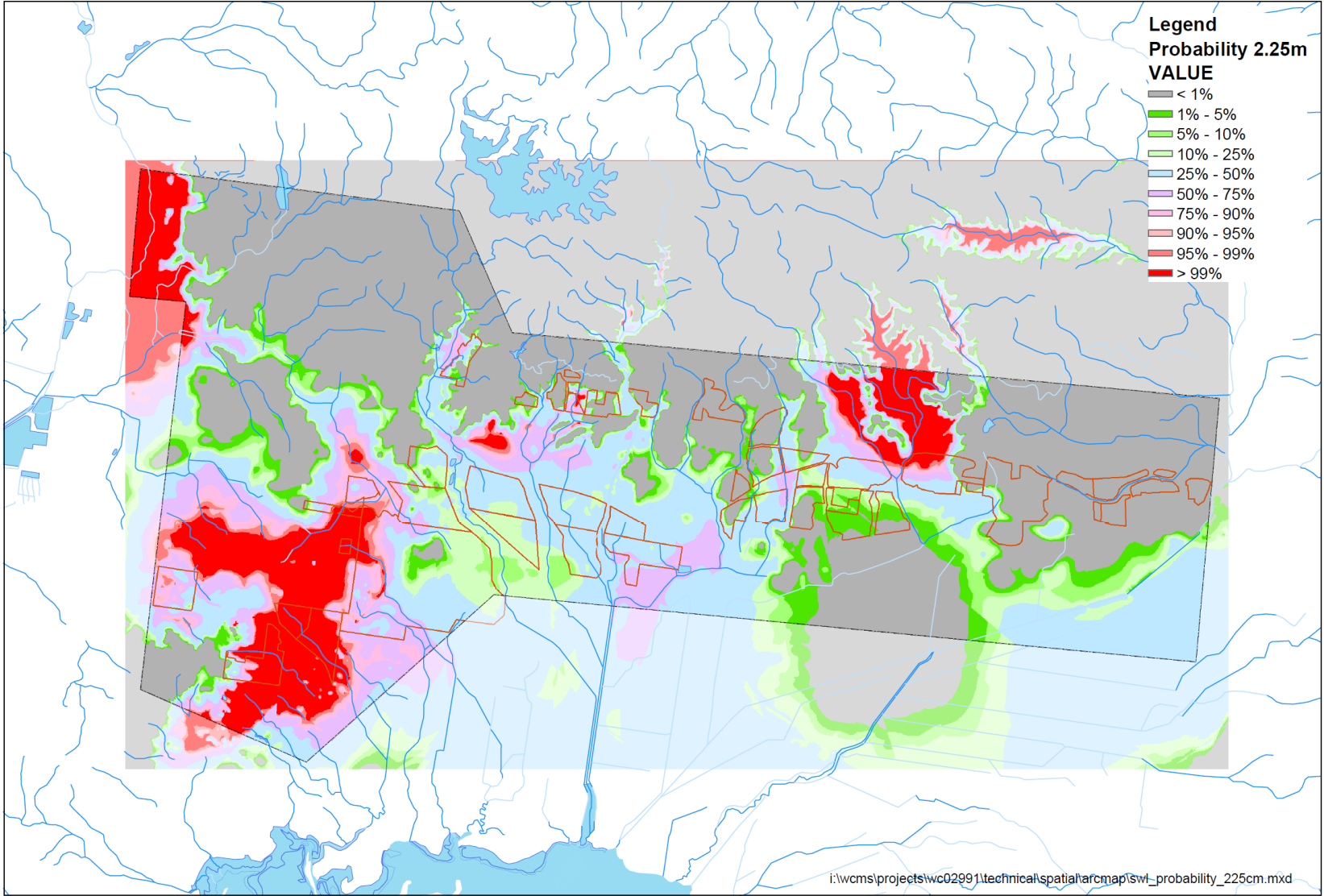
# Saline Risk 1.5m



# Saline Risk 2.0m

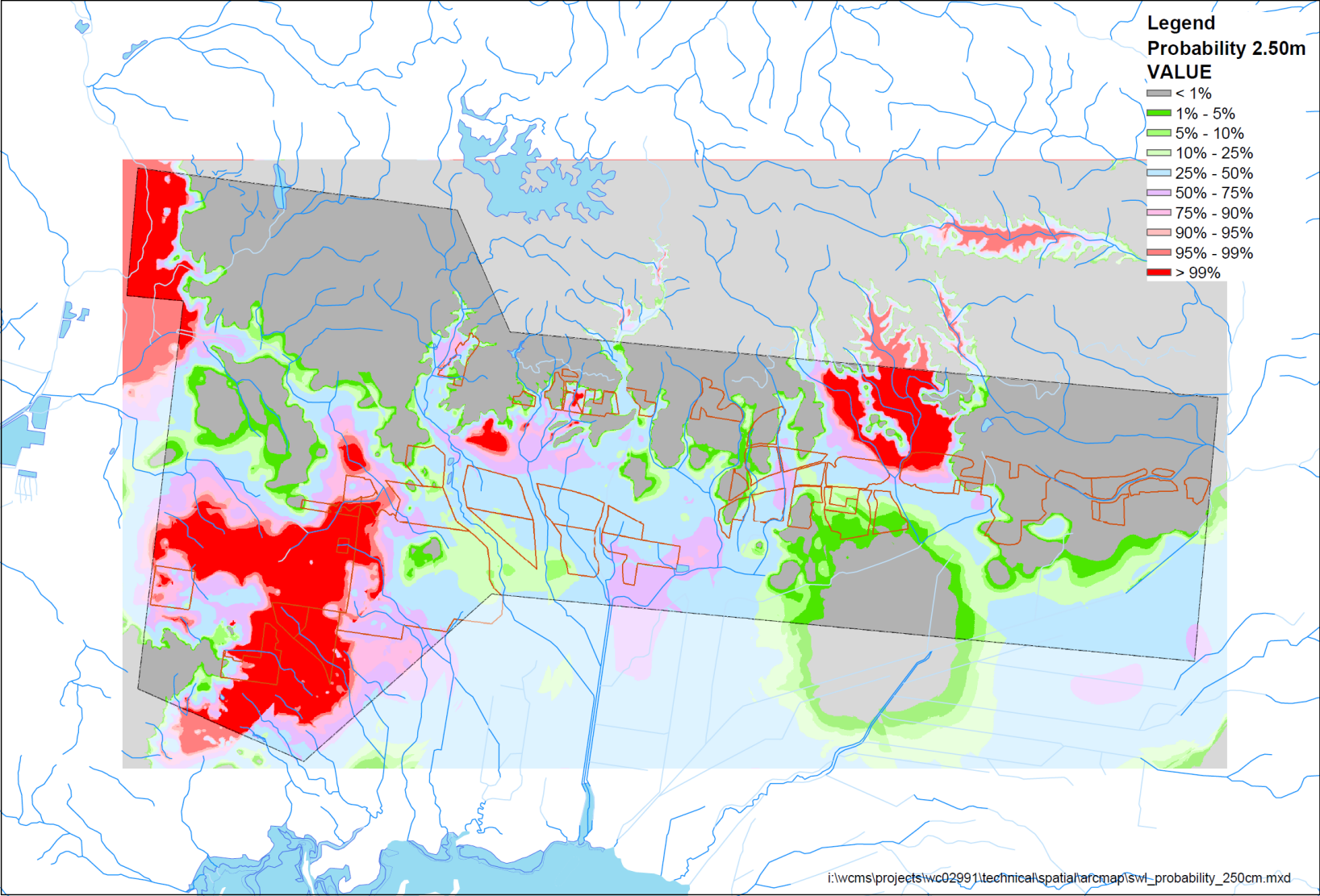


# Saline Risk 2.25m

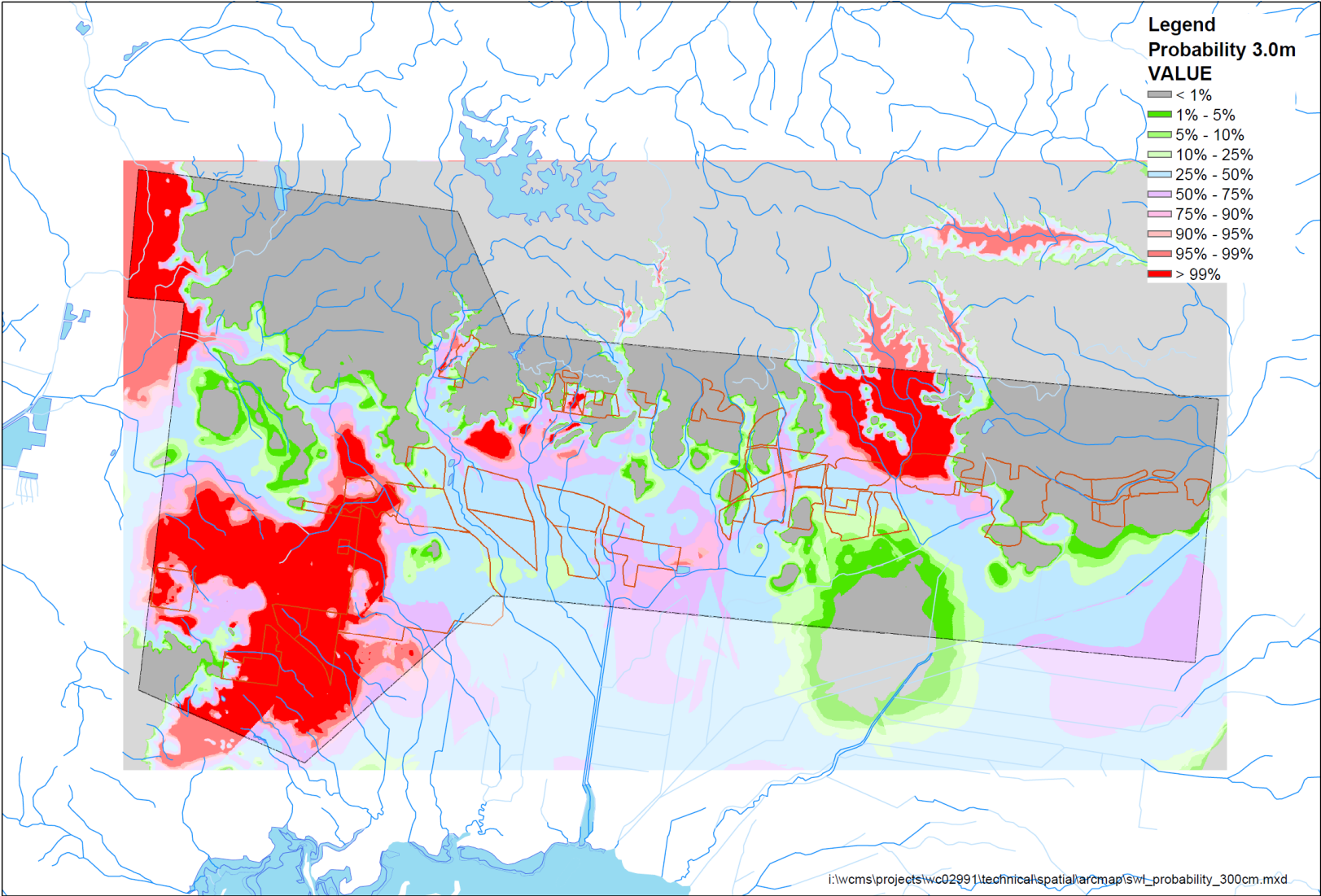




# Saline Risk 2.5m



# Saline Risk 3.0m



# Saline Risk 3.25m

