

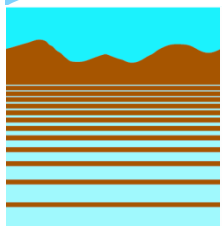
# EVALUATING GEOMORPHIC AND SUBSURFACE CONTROLS ON SURFACE WATER-GROUNDWATER INTERACTIONS TO CONTEXTUALISE A FLOODPLAIN REHYDRATION PROJECT AT MULLOON CREEK, NSW SOUTHERN TABLELANDS

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<sup>3</sup>Mulloon Institute, Mulloon, Southern Tablelands



**Dryland  
Salinity  
Hazard  
Mitigation  
Program**



**UNIVERSITY OF  
CANBERRA**



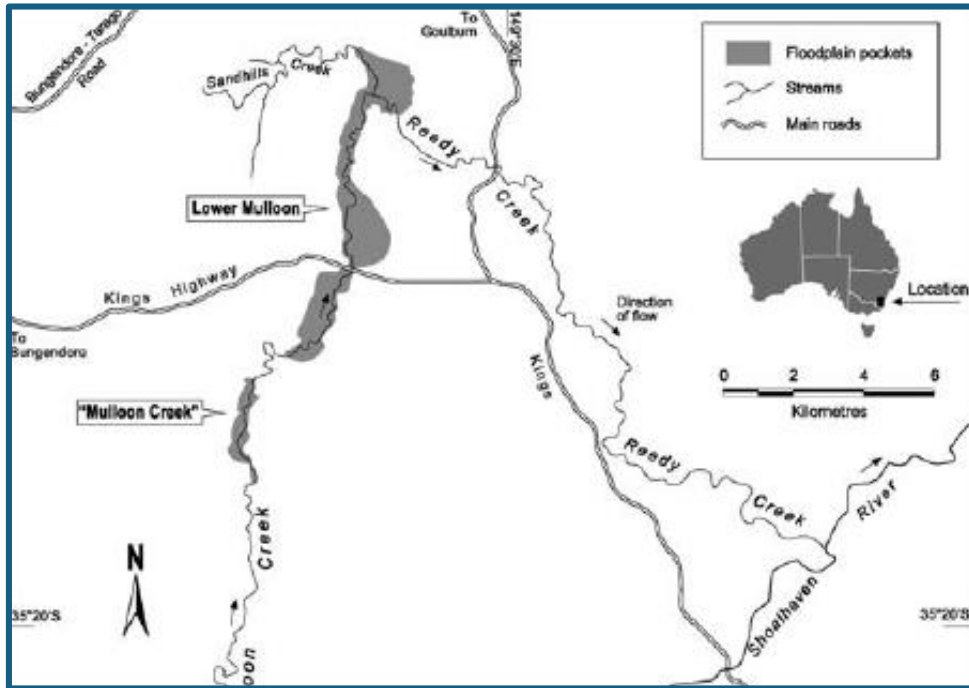
**INSTITUTE FOR  
APPLIED ECOLOGY**



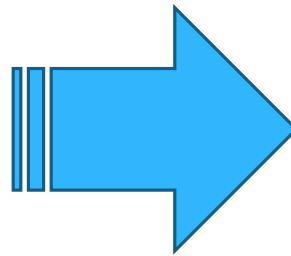
**the mulloon institute**  
for environment, farming and society



# Context for the Study



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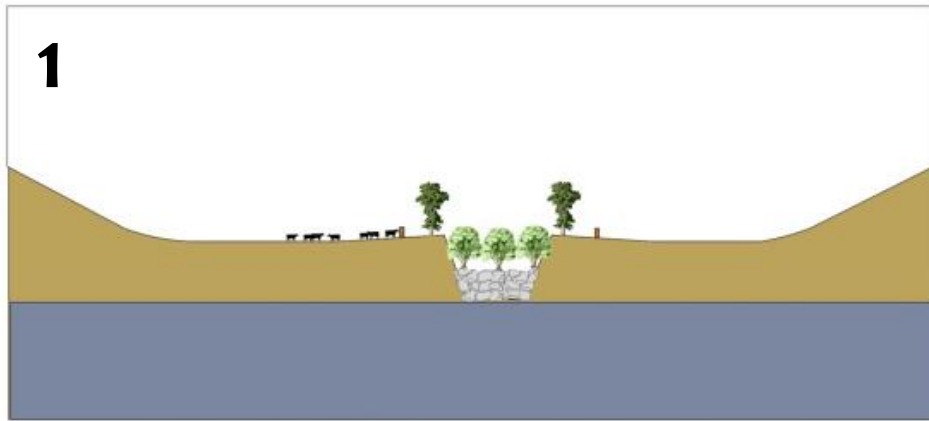


# Context for the Study

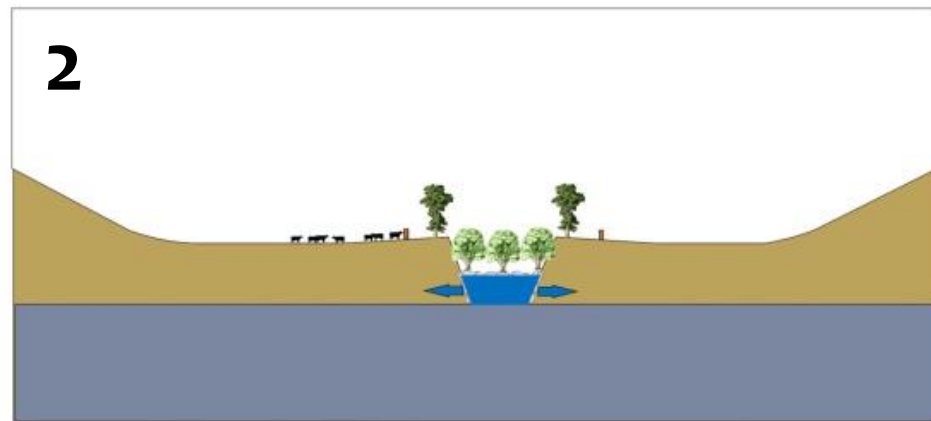


# Context for the Study

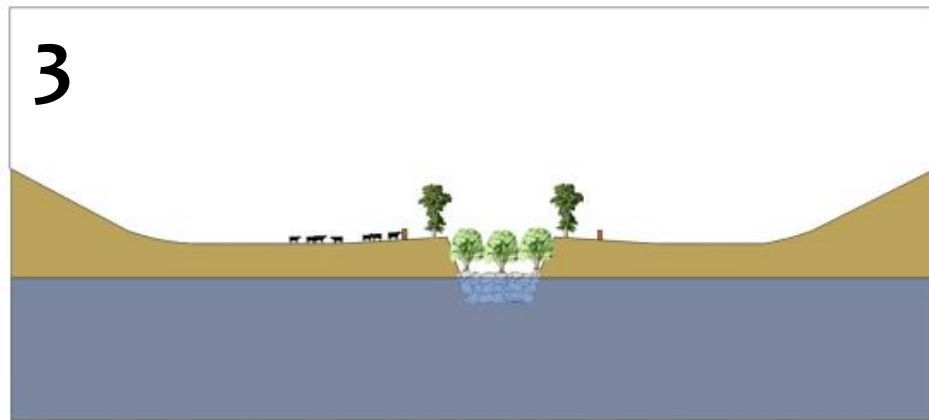
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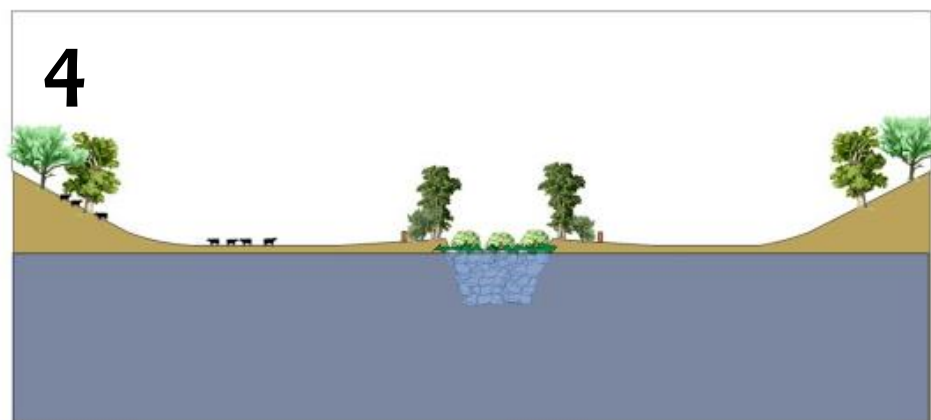
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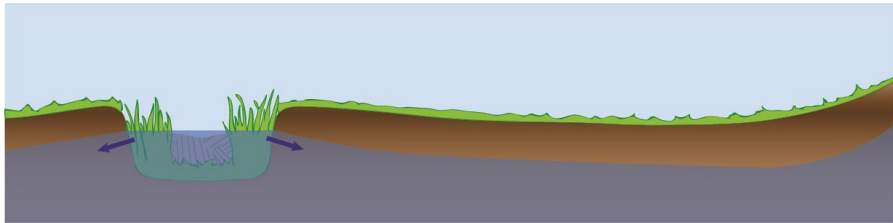


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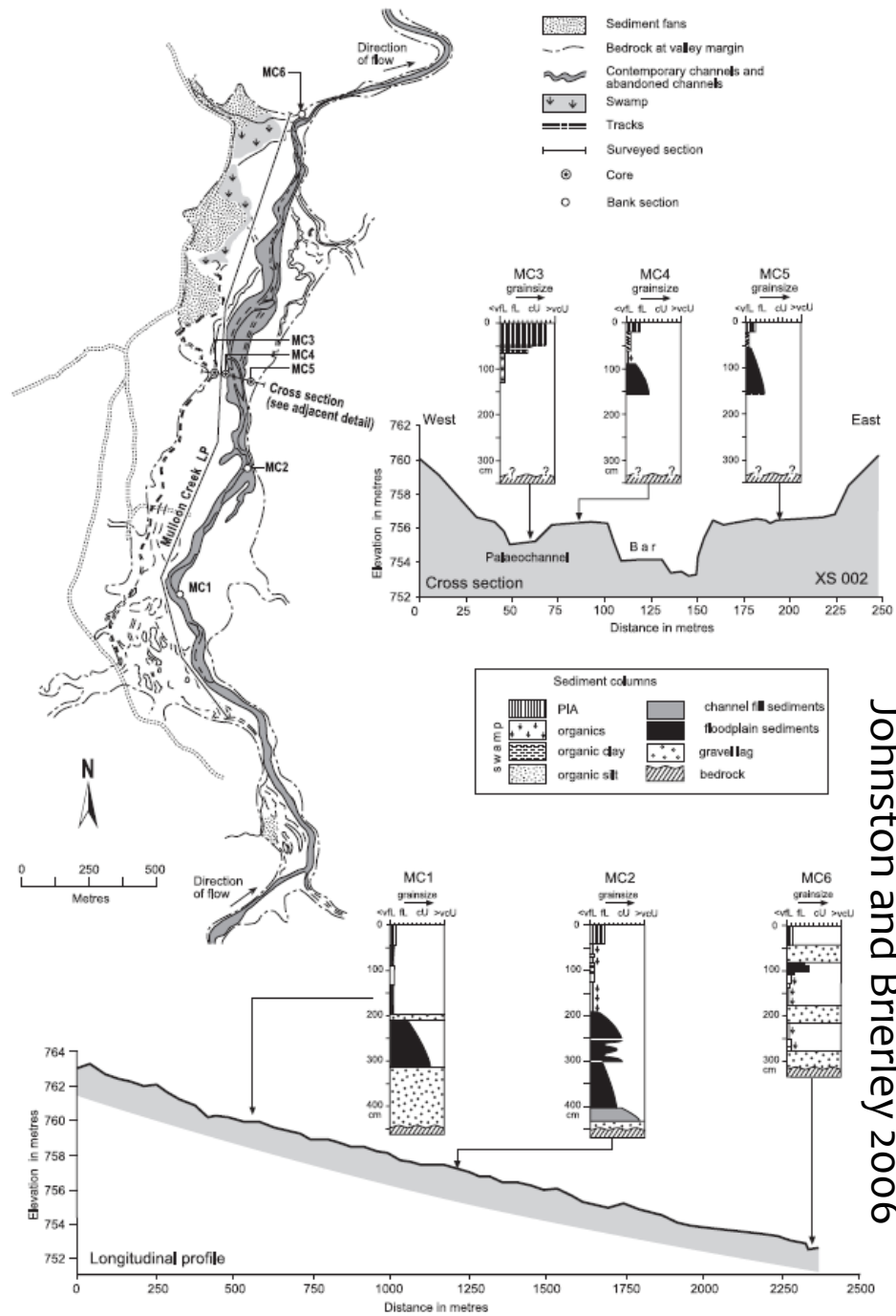
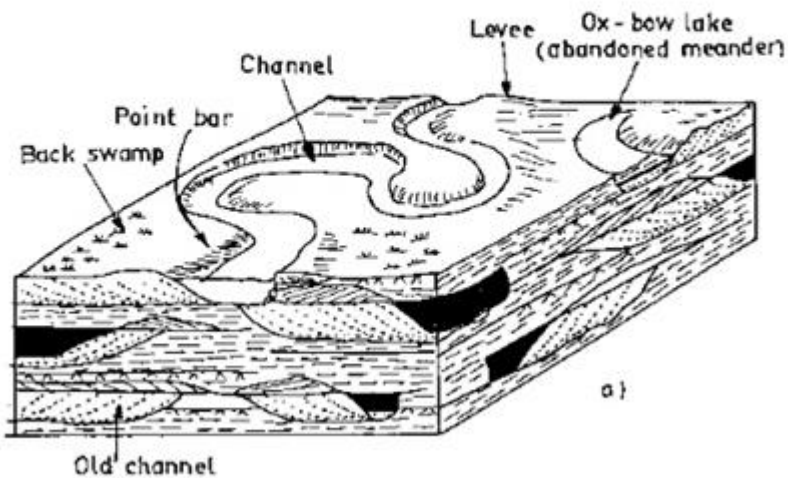


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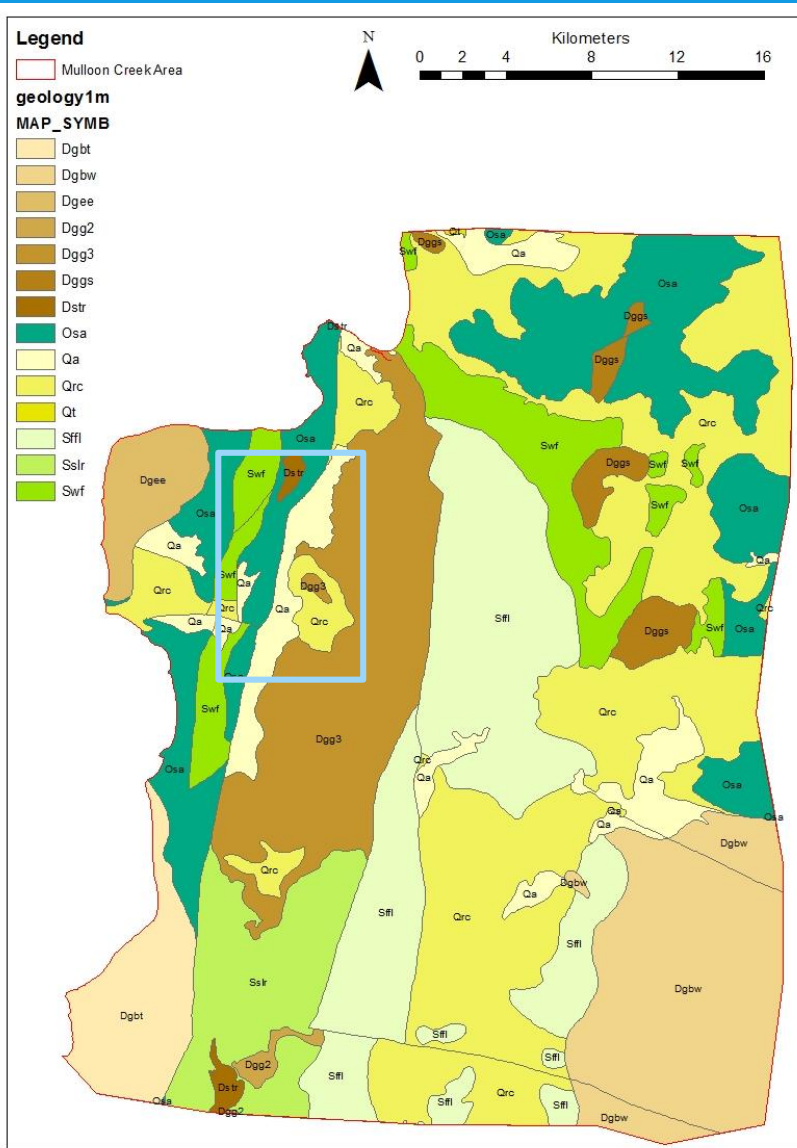




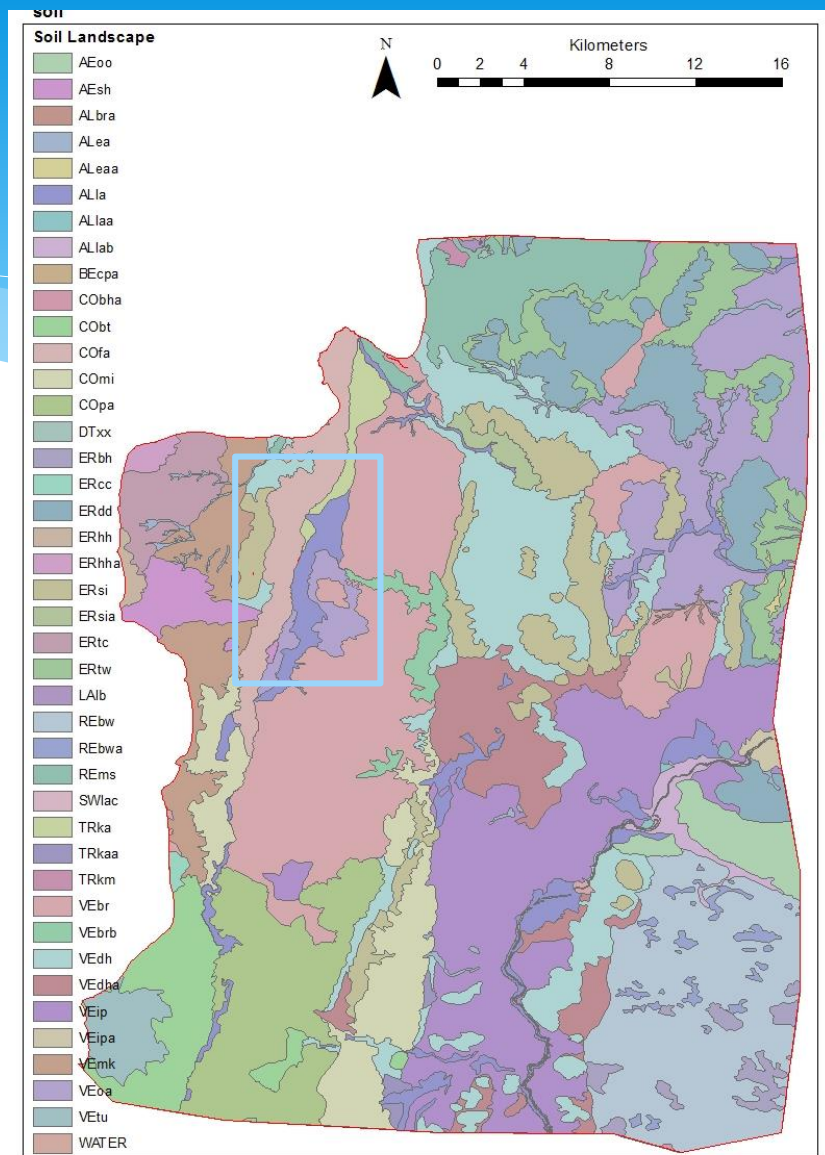
# Simplified Model



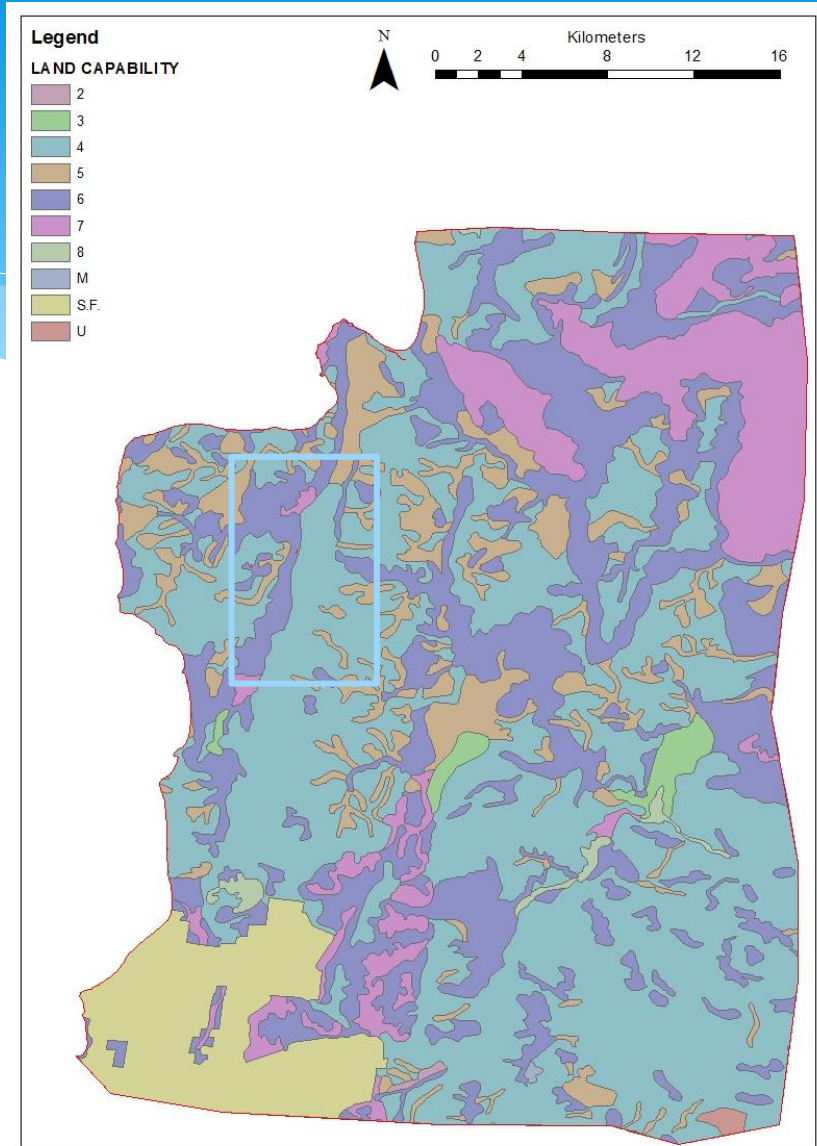
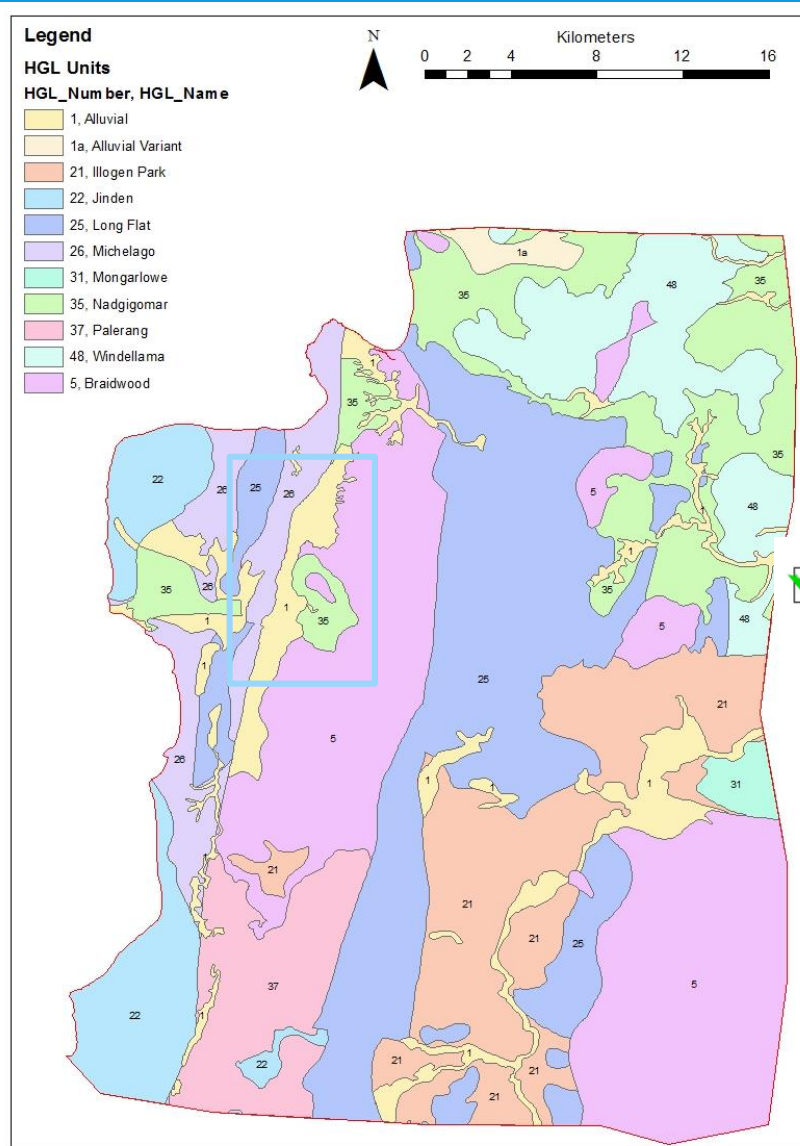




WEST: METASEDIMENTS AND FELSIC VOLCANICS  
 CENTRAL: ALLUVIUM EAST: GRANODIORITE



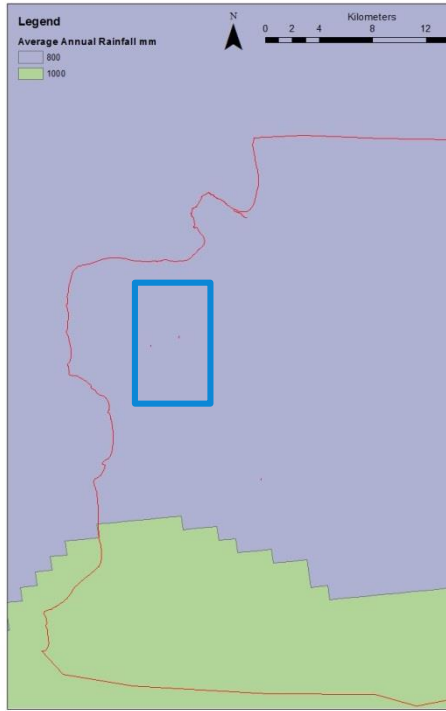
WEST: LITHOSOLS (CRESTS) AND CHROMOSOLS  
 CENTRAL: ALLUVIAL SOILS  
 EAST: LITHOSOLS (CRESTS) AND TENOSOLS



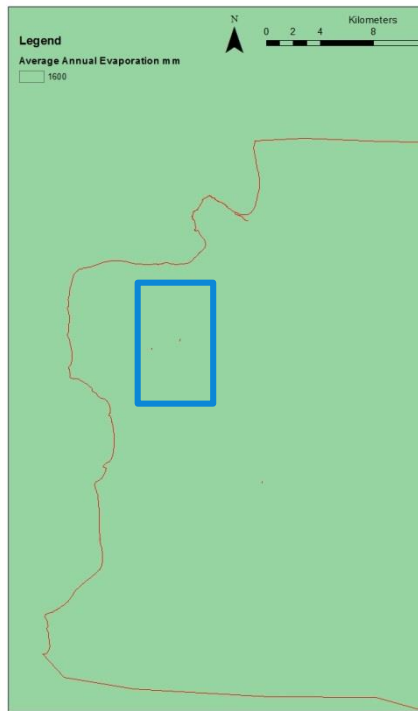
WEST: METASEDIMENTS AND FELSIC VOLCANICS  
 CENTRAL: ALLUVIUM EAST: GRANODIORITE

4: GRAZING 5/6 NON-ARABLE/STEEP

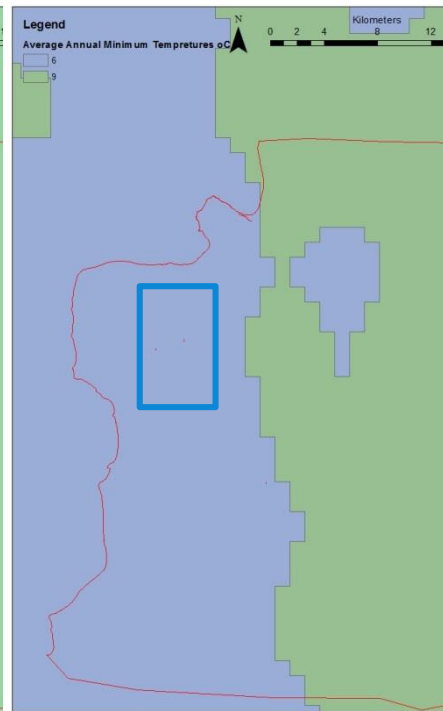




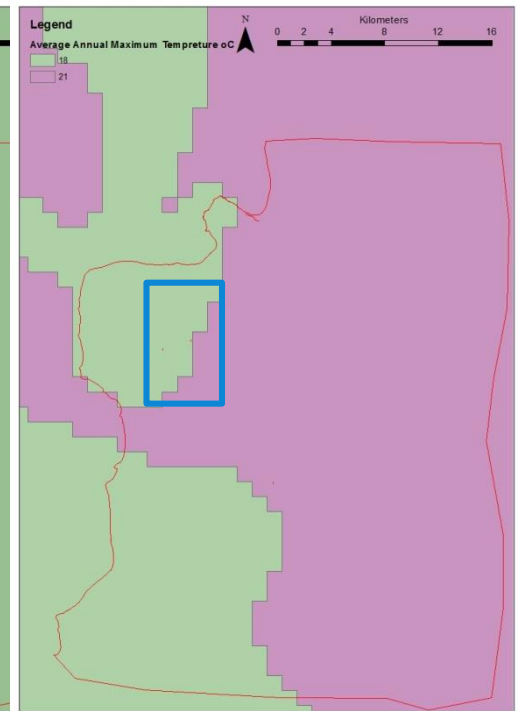
AVE ANNUAL  
RAINFALL ~800mm



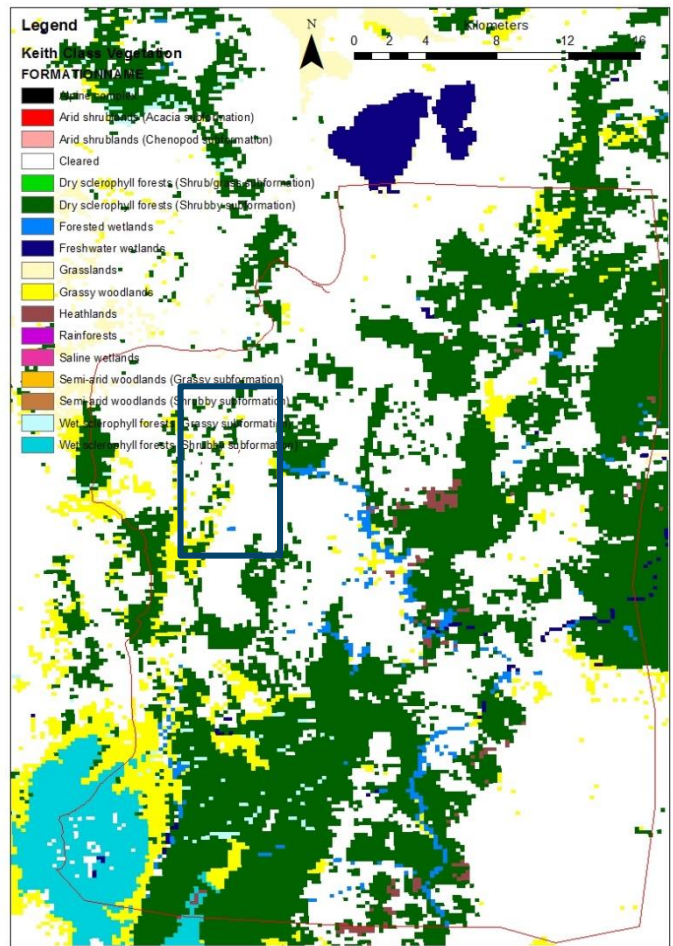
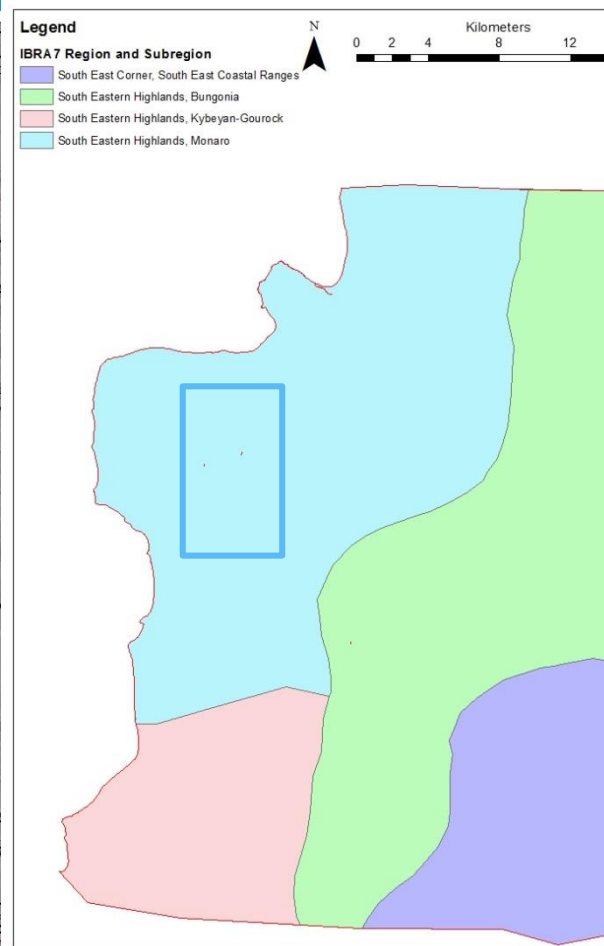
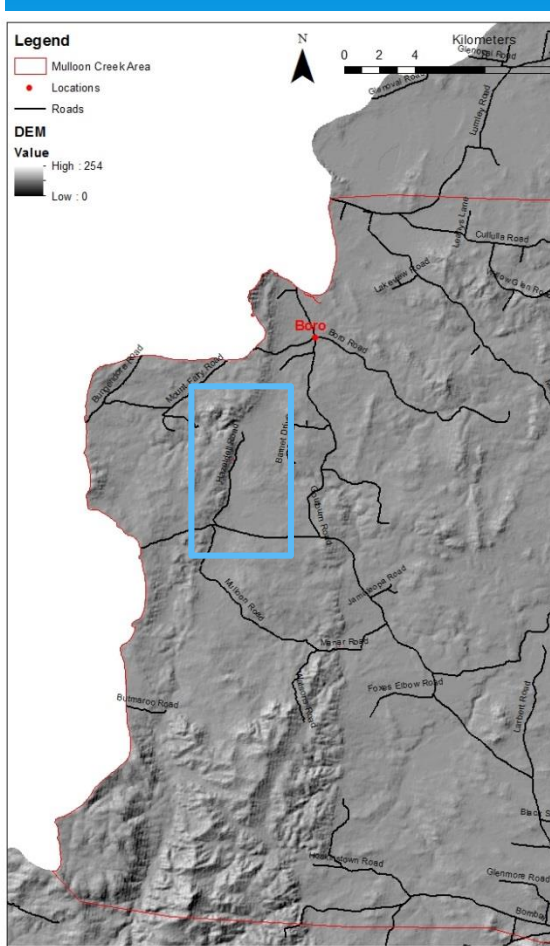
AVE ANNUAL  
EVAPORATION  
1600 mm



AVE ANNUAL MIN.  
TEMPERATURE 6°C



AVE ANNUAL MAX.  
TEMPERATURE 18-20°C



## GEOMORPHOLOGY

WEST: STEEP (HILL)

CENTRAL: FLAT, TERRACED (PLAIN)

EAST: GENTLE GRADIENT (LOW HILL)

## REGION

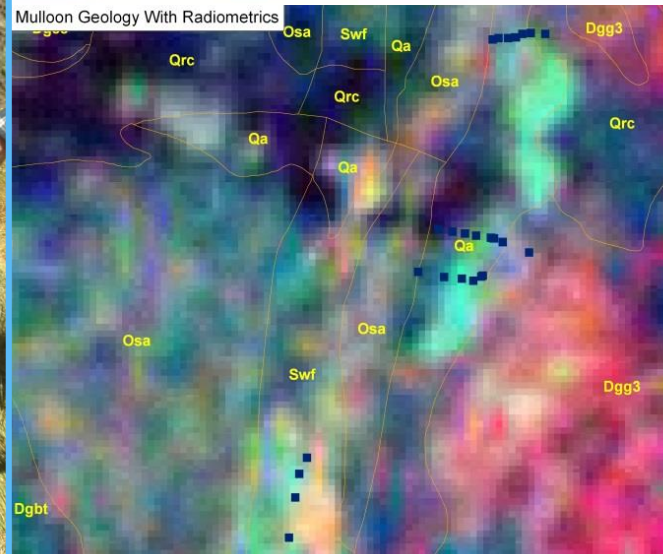
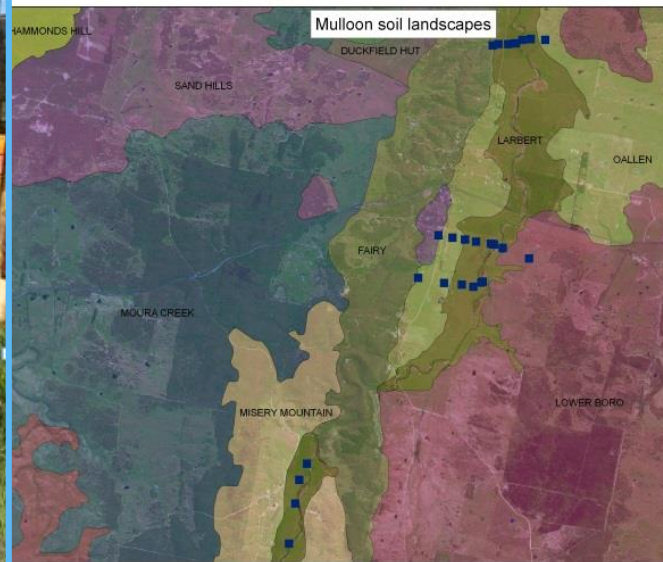
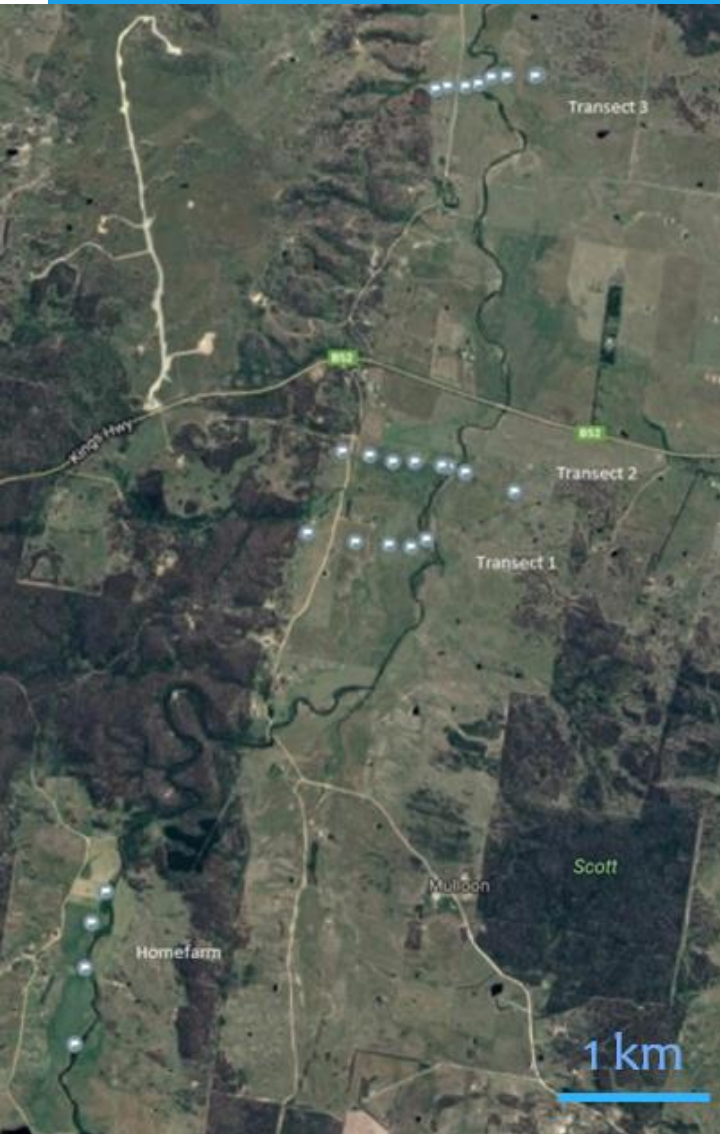
SOUTH EASTERN HIGHLANDS

VEGETATION (REMNANT)

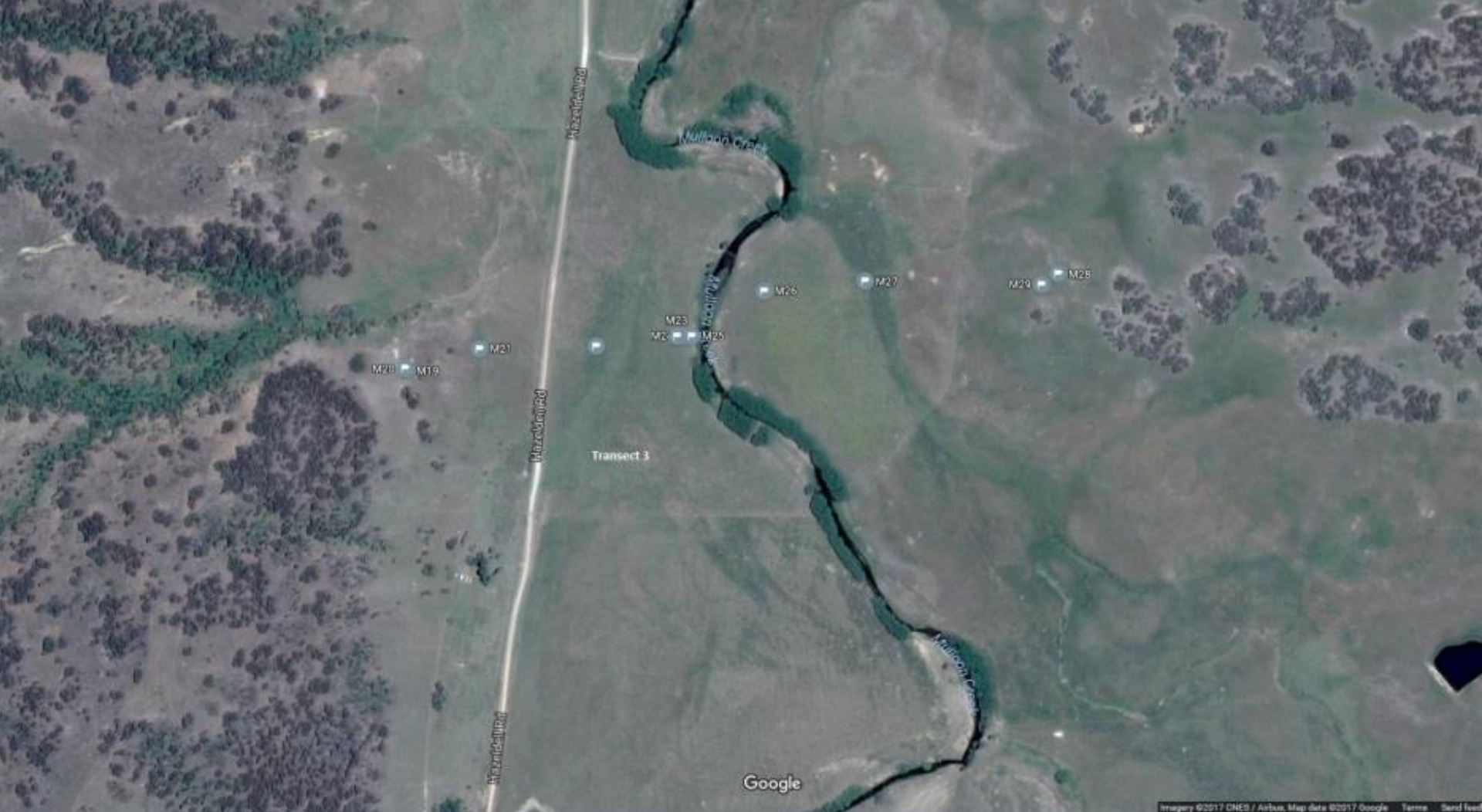
GRASSY WOODLAND

DRY SCLEROPHYLL FOREST (SHRUBBY)









## TRANSECT 3 (NORTH)



## TRANSECT 2 (MULLOON SOUTH)





## TRANSECT 1 (MULLOON SOUTH)

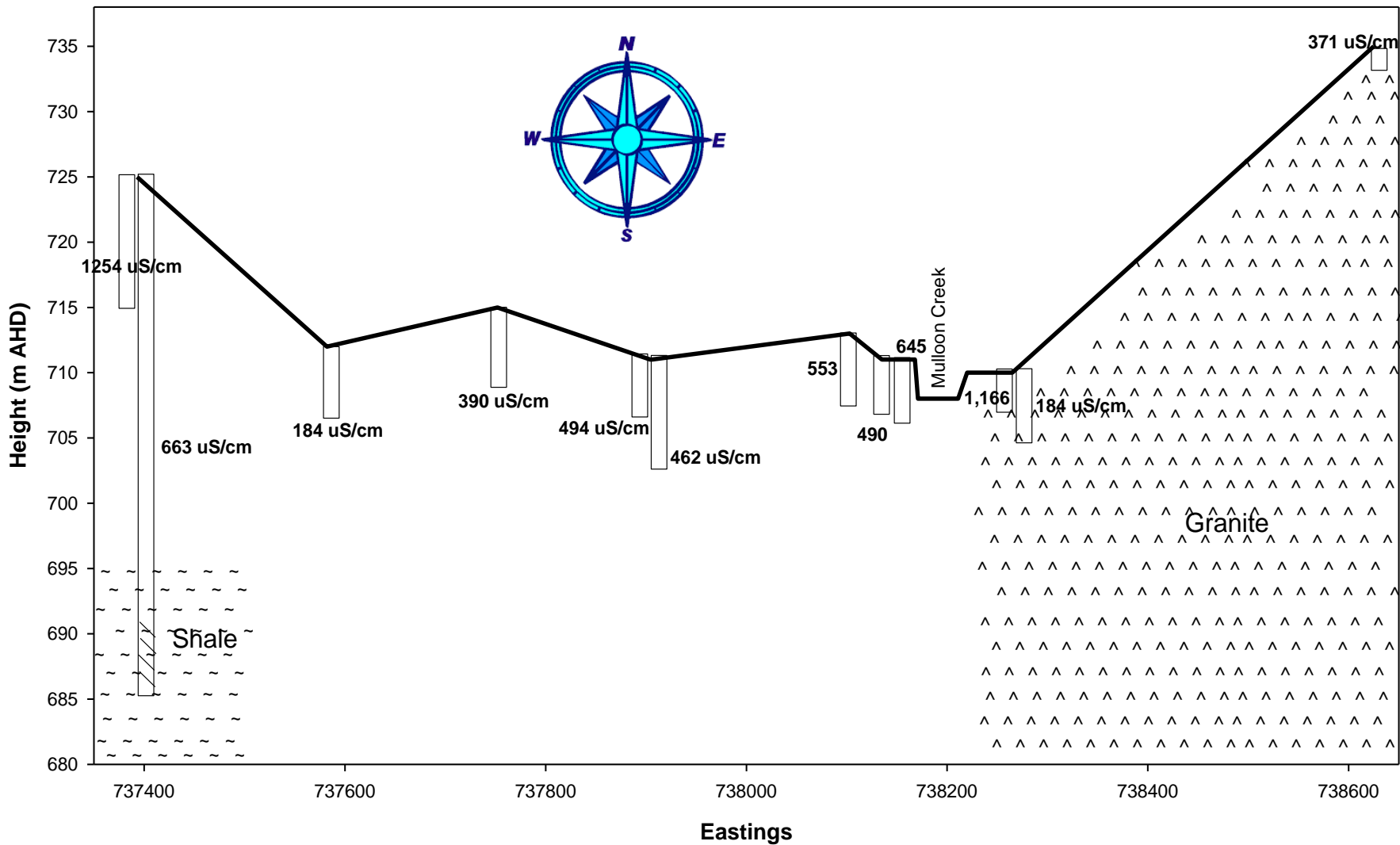




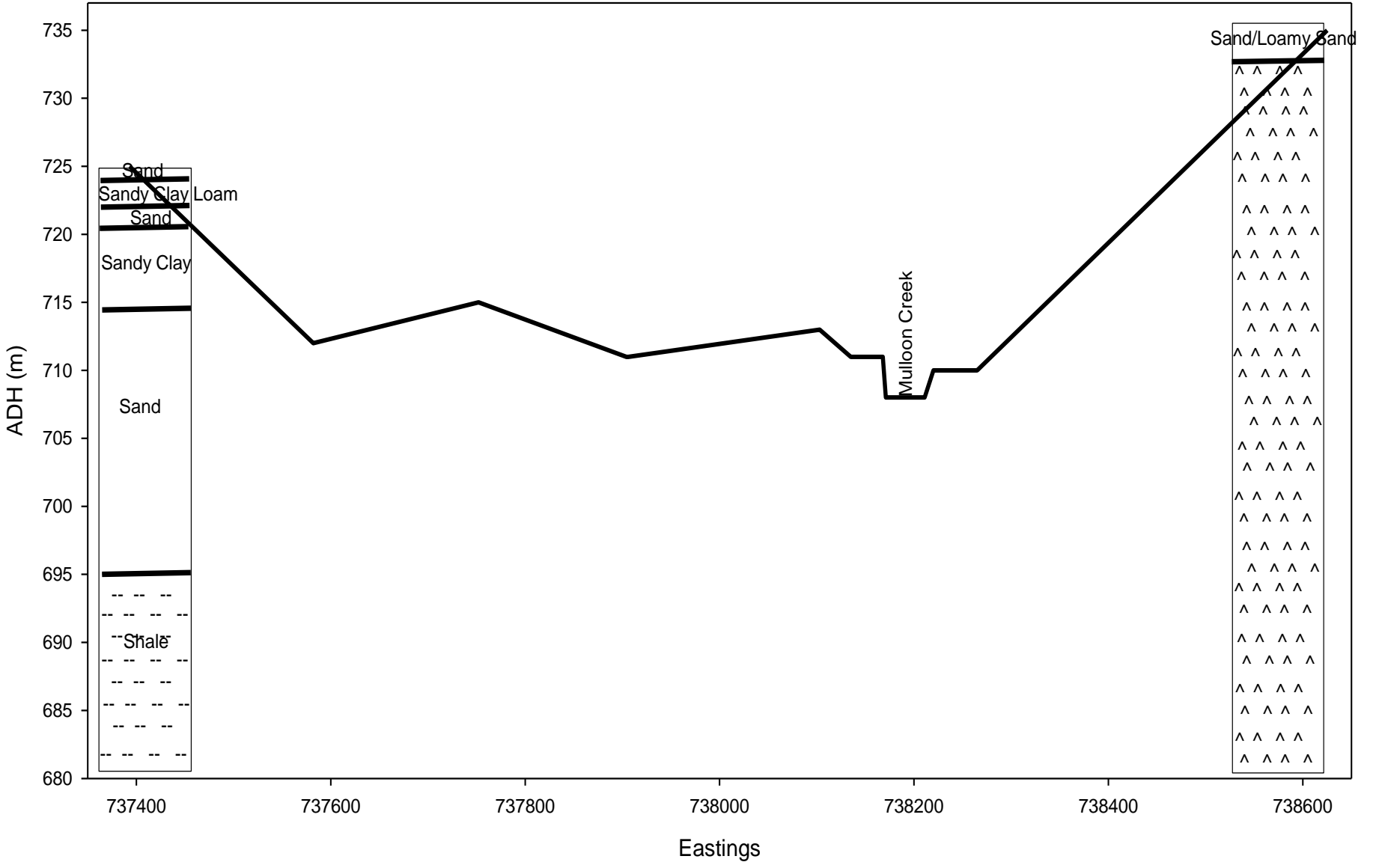


— Land Surface

### MCLRTRansect 2 East-West View

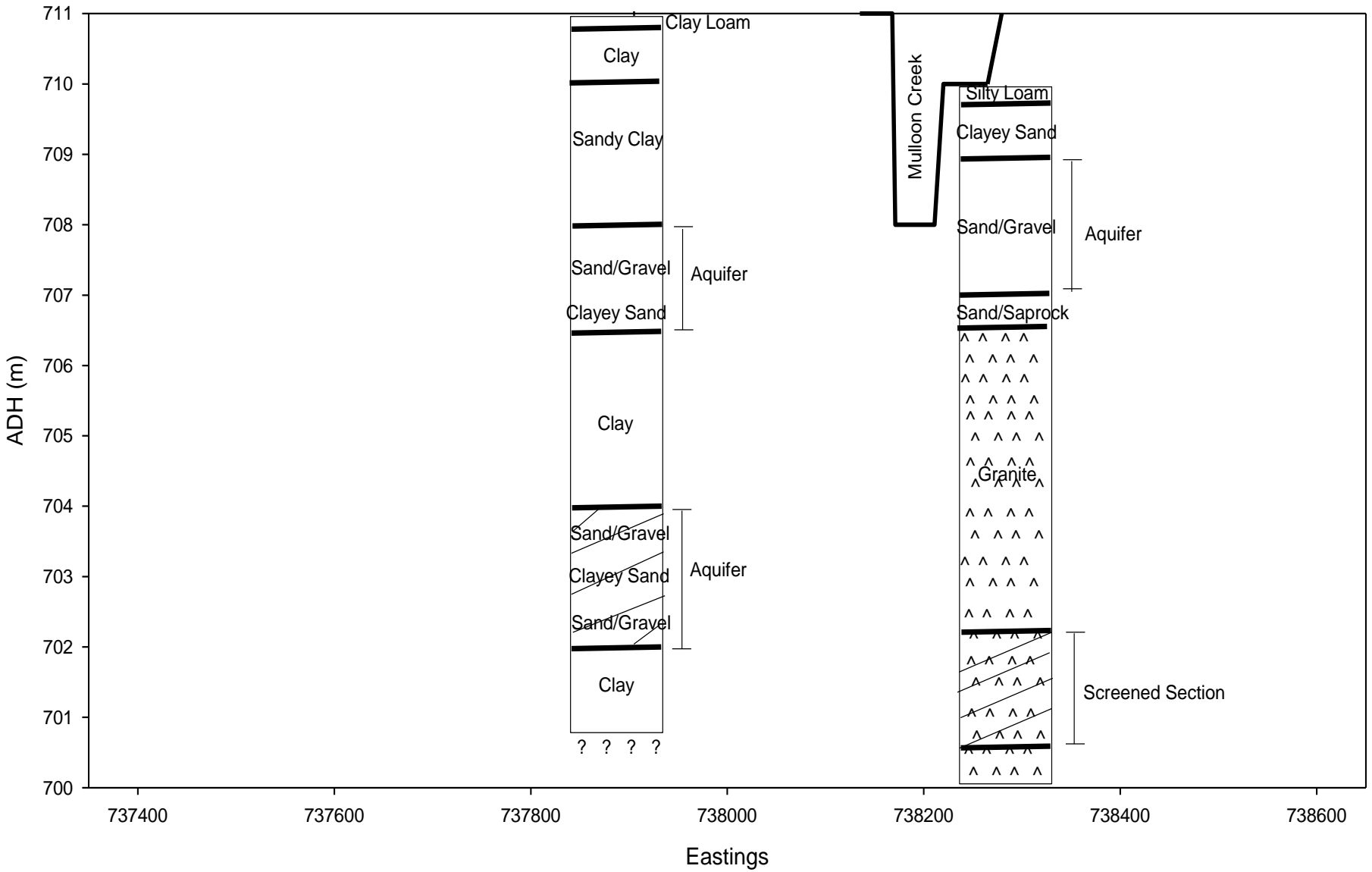


# MCLRTP Transect 2 East-West Regolith Profile 1





# MCLRP Transect 2 Bore Holes 31 & BH 35 Regolith Profile

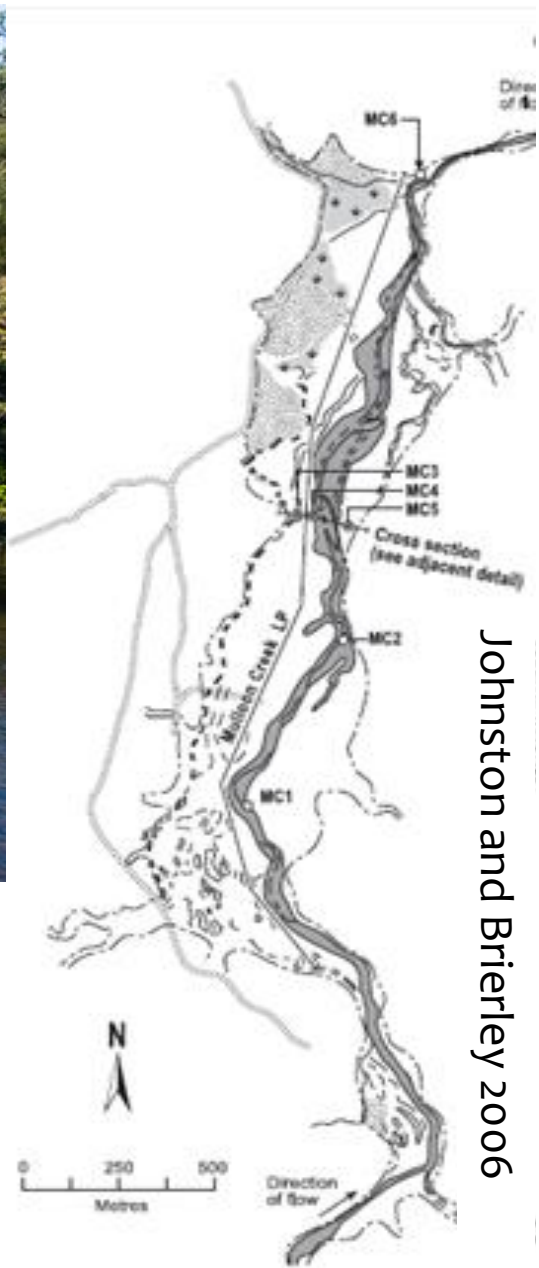












Johnston and Brierley 2006

