Geoarchaeology Workshop EOI

Aims:

- **Provide training in the earth sciences (geomorphology, Quaternary geology, soil geomorphology, stratigraphy etc) to people working in Aboriginal archaeology.**
- **Standardisation of geomorphological, soil and sedimentary recording and sampling techniques.**
- **Provide training in coring and augering exploratory techniques.**
- **Promote understanding of the importance of geoarchaeology and in particular stratigraphic-based approaches to Aboriginal archaeology.**

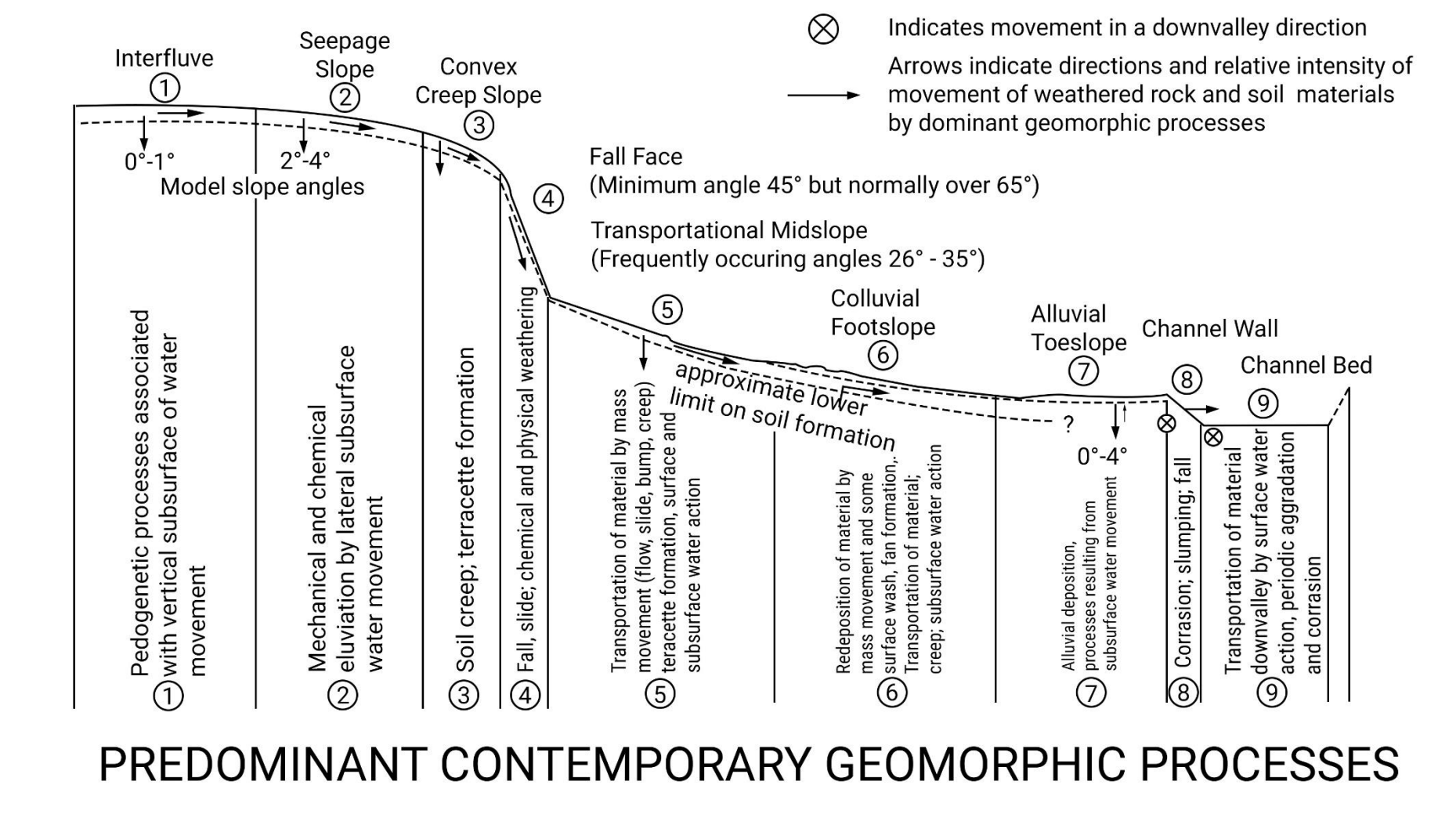
Requirements:

- **Participants!**
- **Access to land to undertake geoarchaeological pedestrian surveys and exploratory programs, particularly from TO's and Aboriginal landowners, LALCs etc.**

Outcomes:

- **Alignment with national and international standards and best practice in archaeology and the earth and environmental sciences.**
- **Embed geoarchaeological frameworks to archaeological investigations as standard practice.**
- **Geoarchaeological reports for landowners who participated in the workshops.**

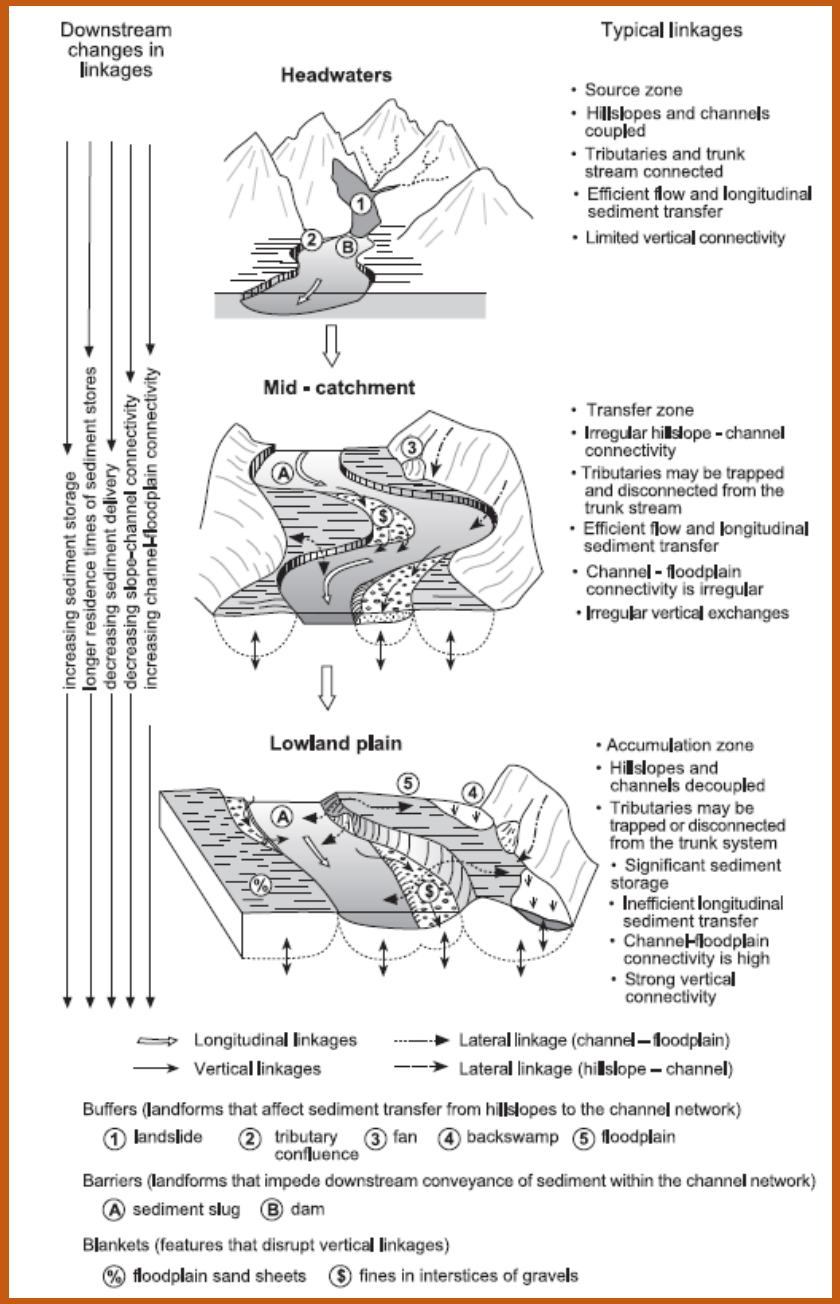
Introducing simple but powerful conceptual models, e.g. geomorphic process on Toposequences



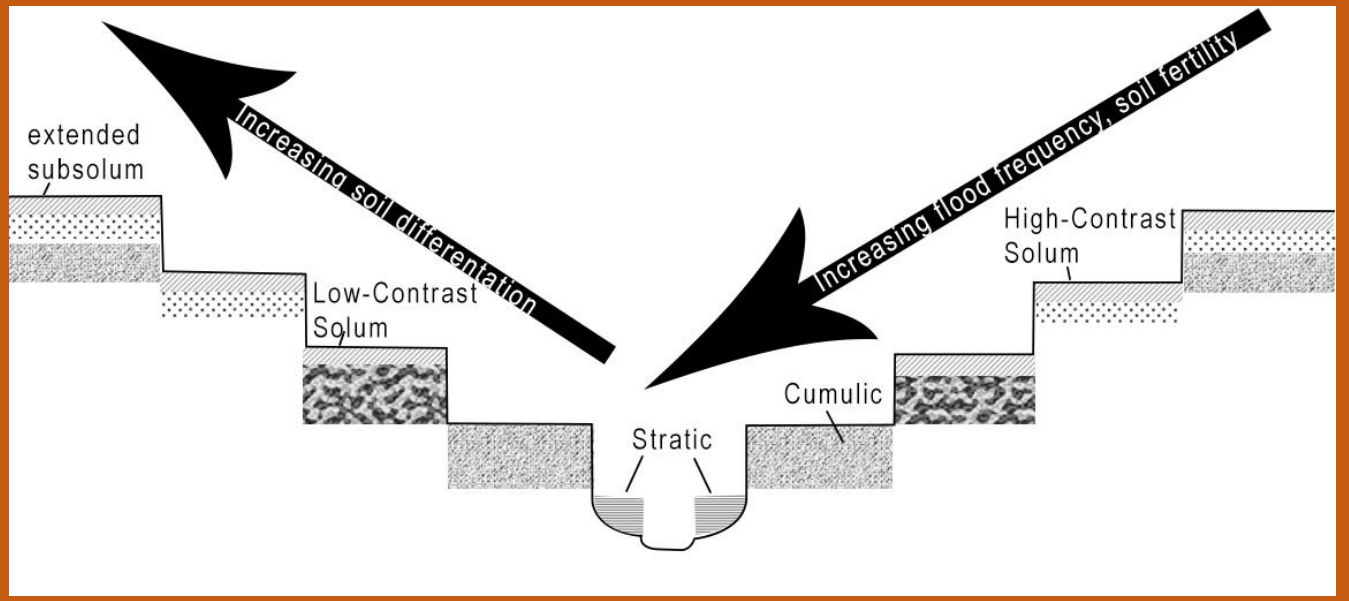
Nine Unit Landsurface model

Source: Dalrymple, J. B. 1968. *A hypothetical nine unit landsurface model*. In Zeitschr. Geomorph. 12: 60-76.

For river valleys/catchments:

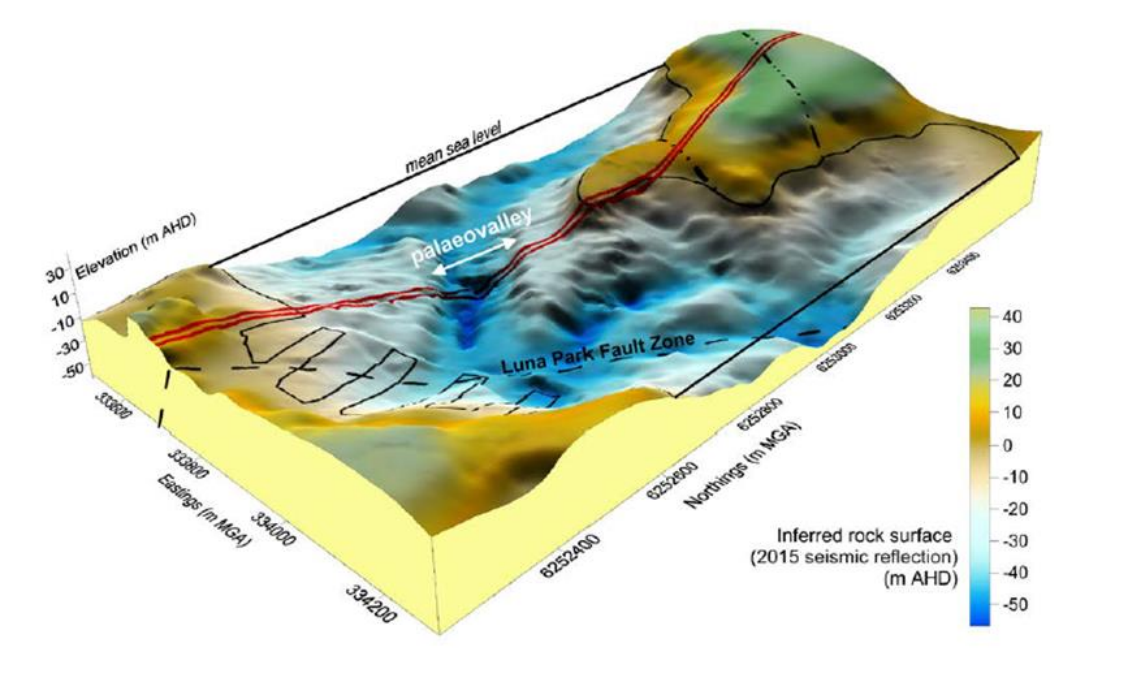


Sediments illustrating downstream changes in linkages within an idealised catchment (Source: Friars 2013).

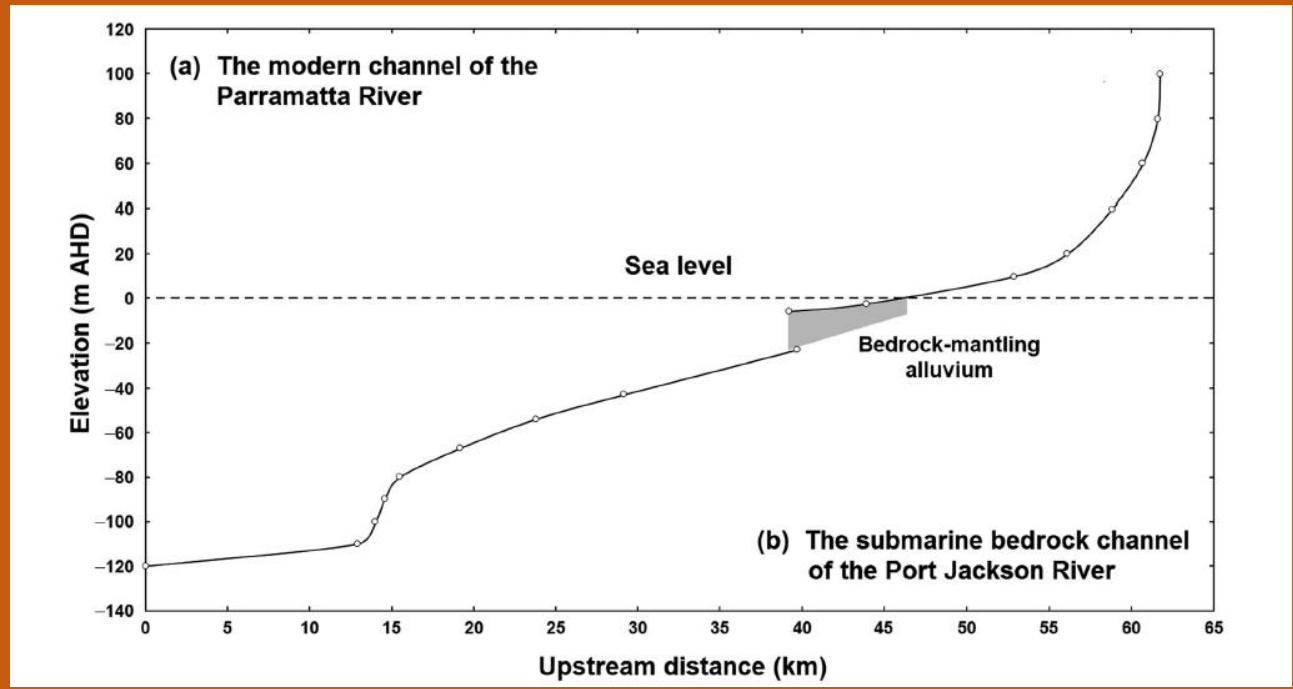


Commonly occurring soil profile stages on alluvial terrace sequences in south-eastern Australia (after Walker 1989:595: Figure 4).

Drowned river valleys:

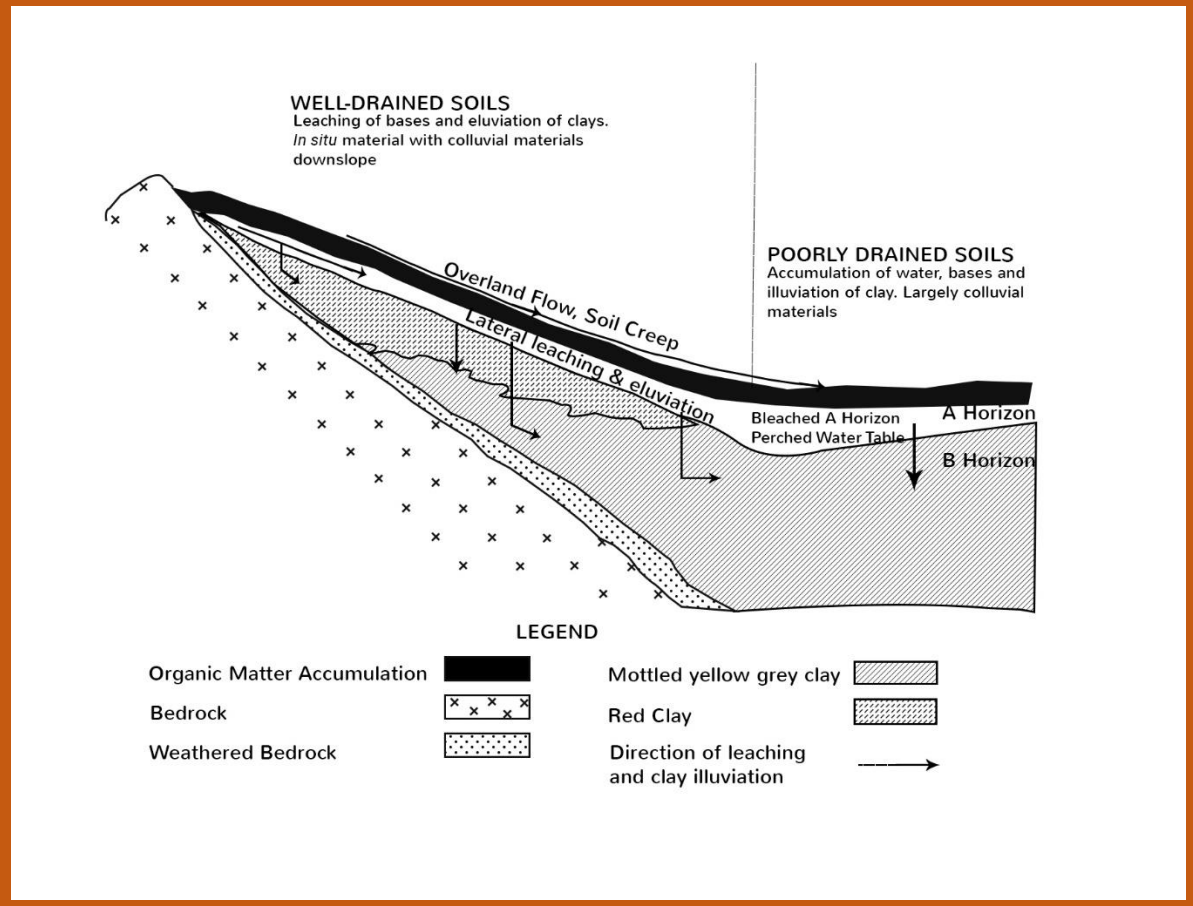


The drowned river valley (palaeovalley) of the Proto-Parramatta River in Port Jackson: the red line is Sydney Harbour crossing (Source: Och et al 2017).

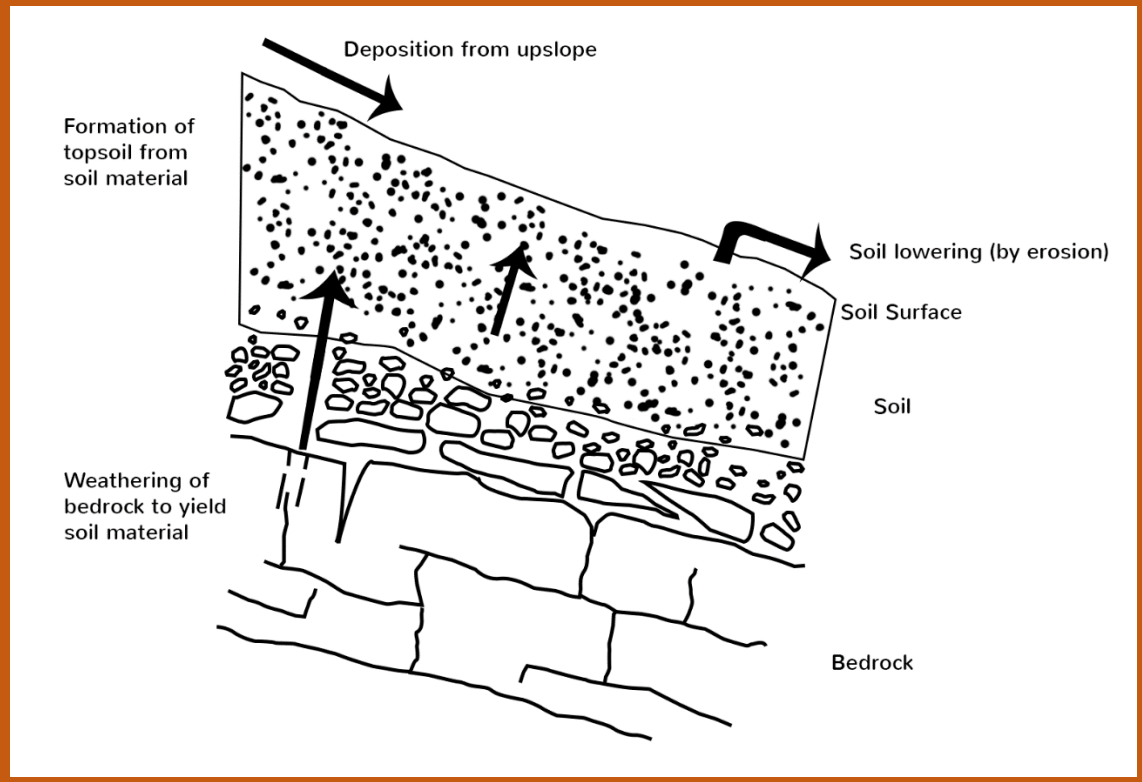


The long profiles of (a) the Parramatta River from the head of the main tributary of Toongabbie Creek to Ryde Bridge; and (b) the submarine bedrock channel of the Port Jackson River downstream of Ryde railway bridge (Source: Gale 2023: Figure 4).

Soils:



Topography and soil forming processes (Source: Murphy, B. W. 2000: Figure 1.3; In Charman and Murphy (eds) 2000).

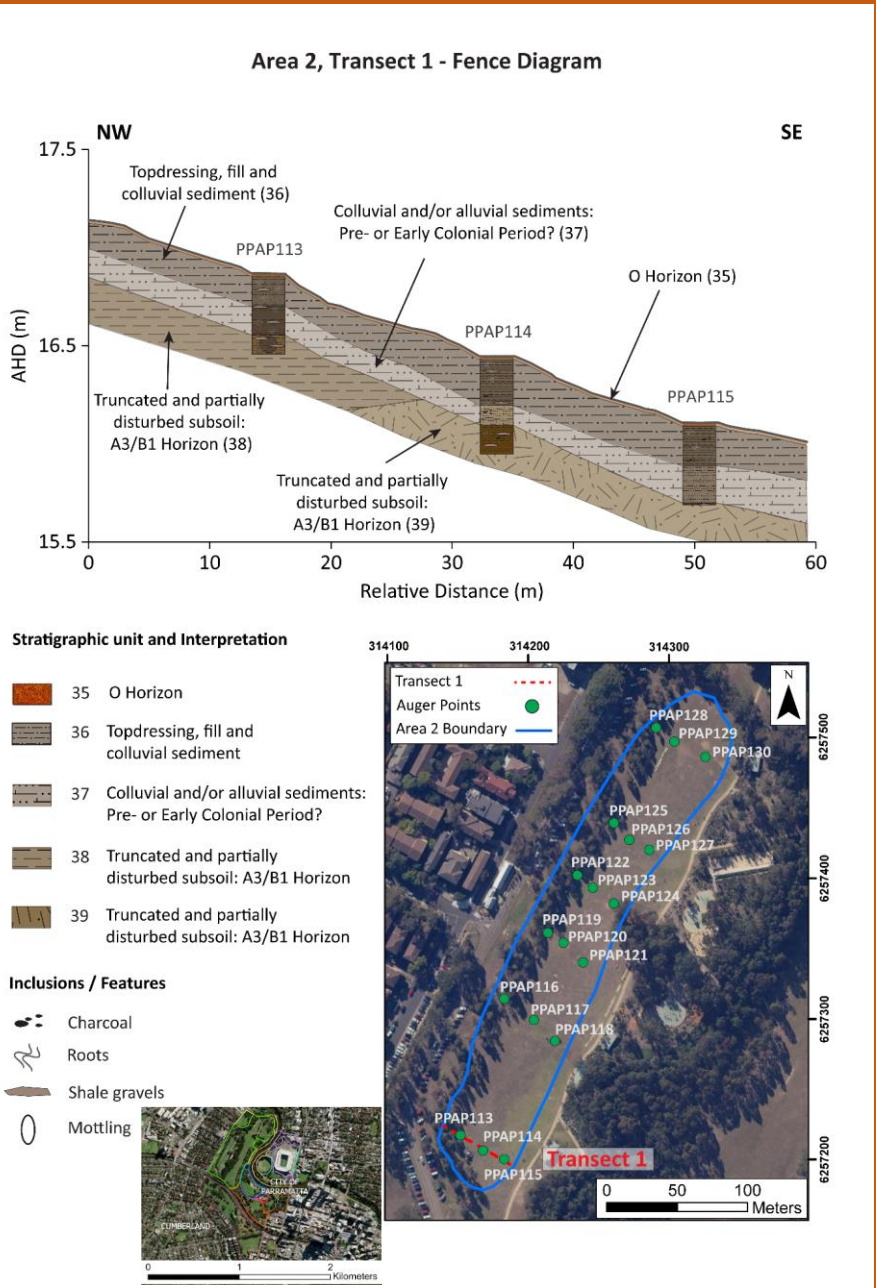


Some of the processes acting on the soil profile (Source: Edwards and Zierholz 2001).

Exploratory Techniques:

- High impact techniques such as trenching or mechanical augering
- Low impact techniques such as hand augering or mechanical coring

Hand augering: The Paddocks Precinct (West) VF



South view of PPAP113

East view of PPAP114

North view of PPAP115

Auger Sample: PPAP113

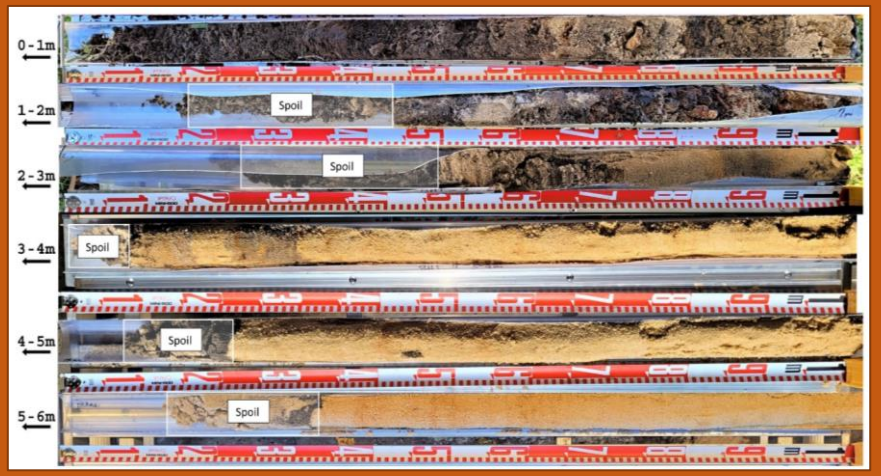
Top

SU36

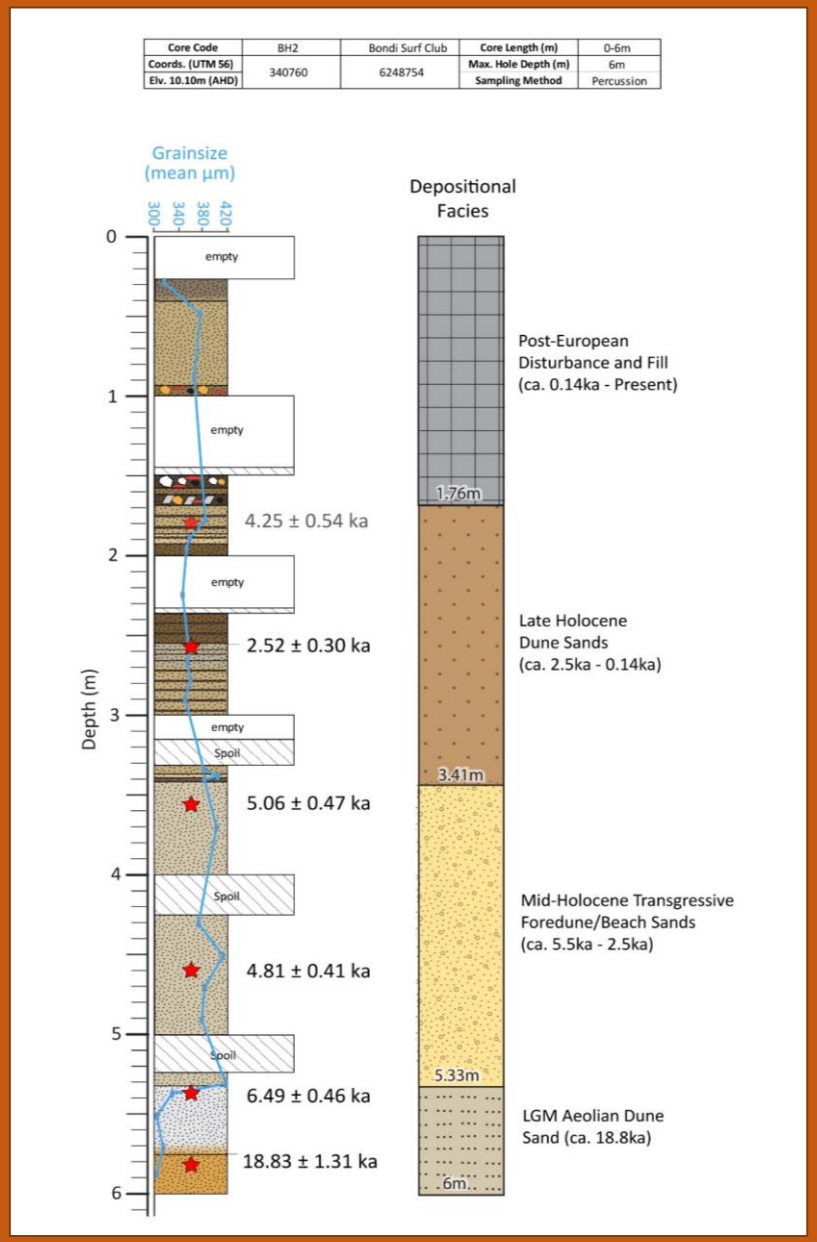
SU37

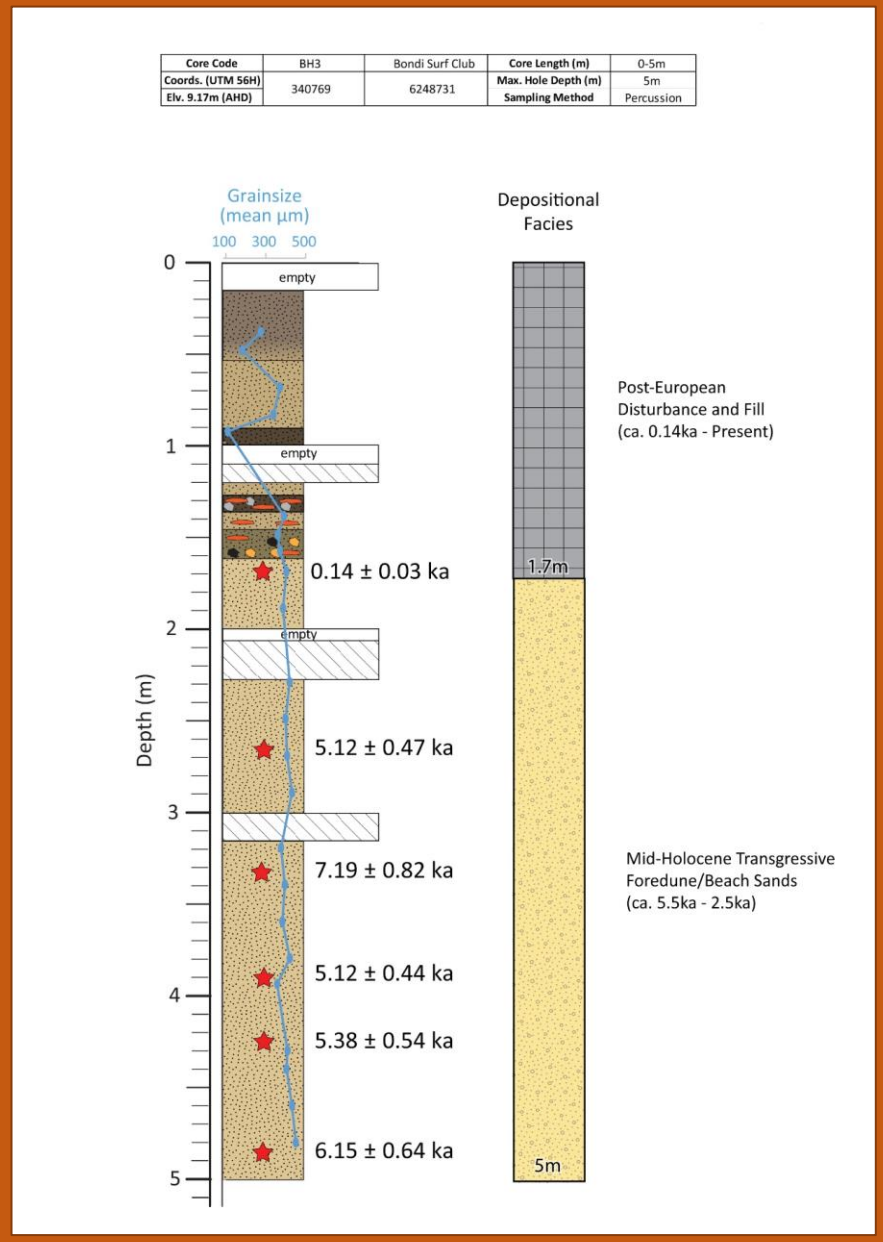
SU38

Pushtube coring: Bondi Surf Bathers' Life Saving Club

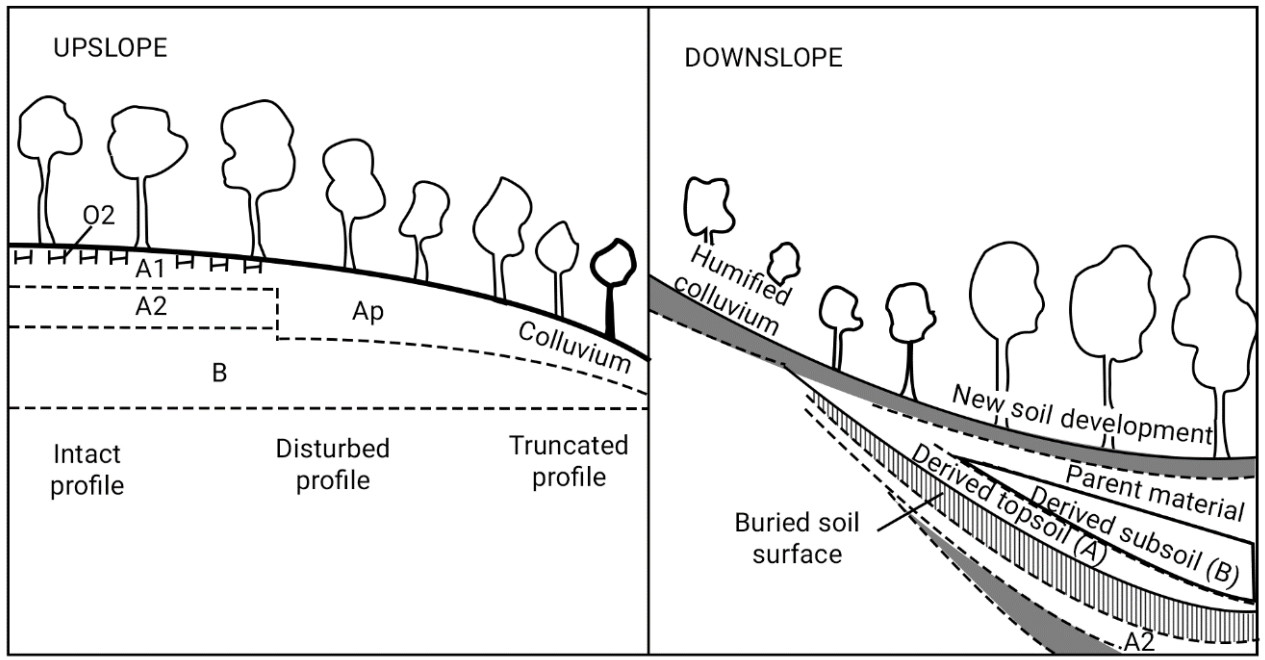


Sedimentary Facies: Bondi Surf Bathers' Life Saving Club

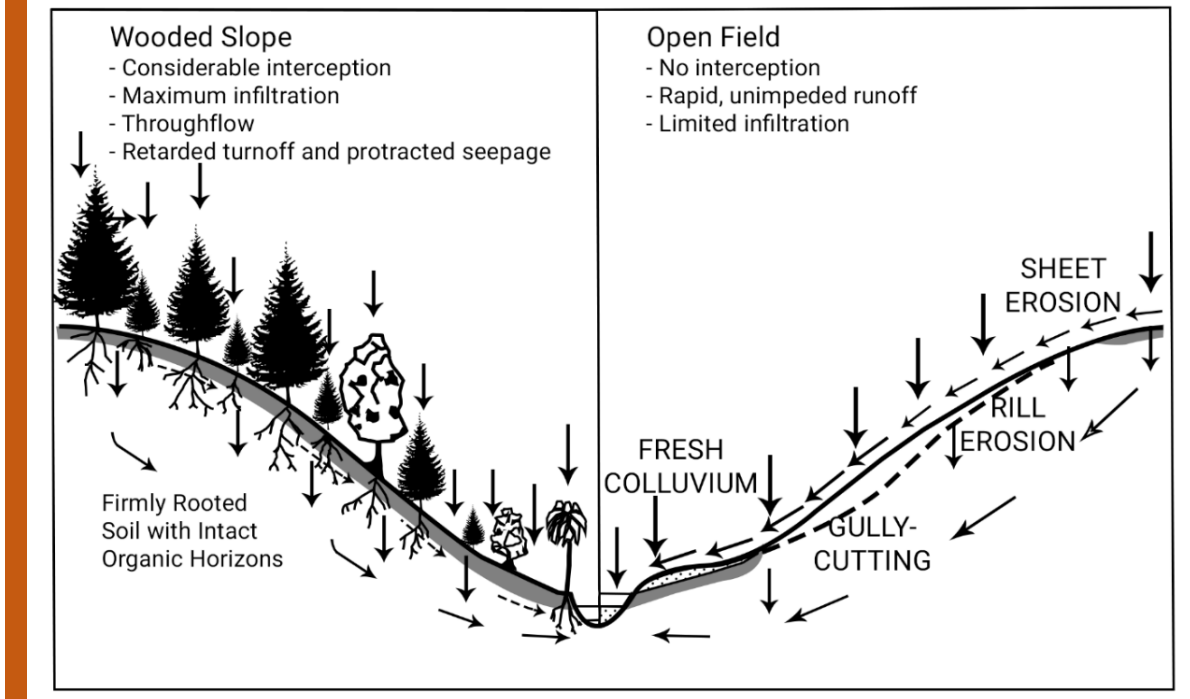




Site Formation Processes



Simple model in cross section illustrating potential stratigraphic relationships between soils and sediments in a post-Contact landscape (Source: Butzer 1982: Figure 8-2).



The effects of clearance on hillslopes Source: Butzer 1976: Figure 6.2

Questions?

How do I register my interest in the workshops?

- **Contact Jakub Czastka (Chaz): Mobile: 0438 805 886 / Email jakubdownunder@yahoo.com.au**
- **Bec Parkes: Mobile: 0447 746 050 / Email bec@lanternheritage.com.au**

Next steps?

- **Identify study area(s).**
- **Provide draft workshop program to participants.**