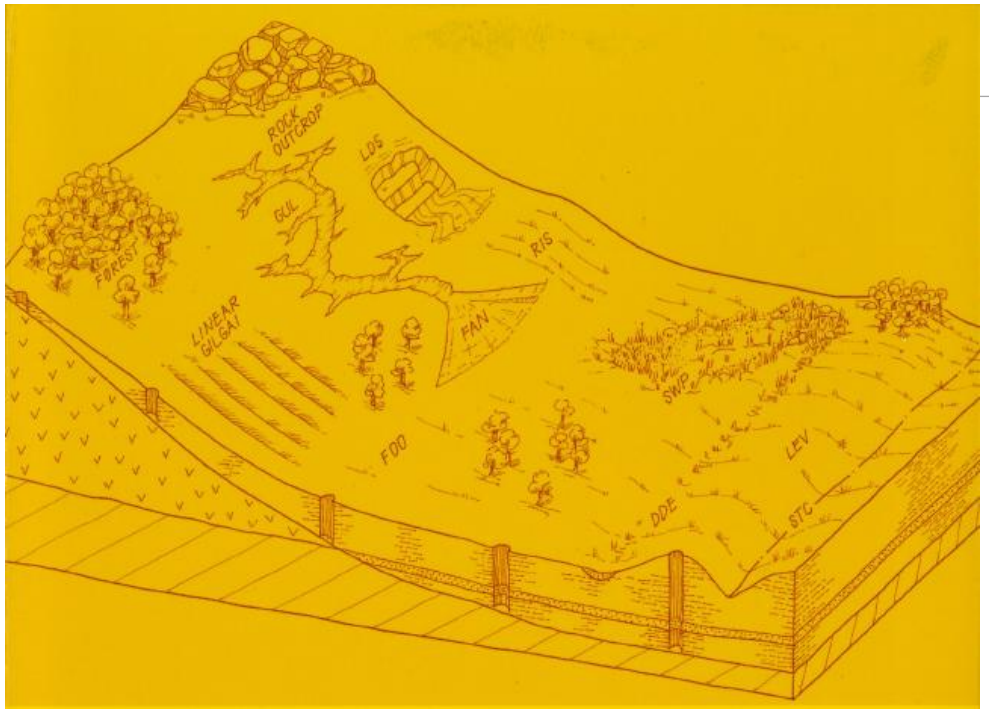
# QG NSAP Project – Legacy Data and Training

1. Strategic data capture
2. Training to improve the quality and completeness of future soils data
3. Capability uplift





# Soil description: landform and surface features




1st edition in 1984

4th edition in 2024

# Describing landform - Pattern

| Starter patterns | Code | Relief (m) |
|---|---|---|
| Mountain | MTN | >300 |
| Hill | HIL | 90-300 |
| Low hill | LOW | 30-90 |
| Rise | RIS | 9-30 |
| Plain | PLA | <9 |
| Alluvial plain | ALP | <9 |
| Alluvial fan | ALF | <9 |
| Flood plain | FLO | <9 |

How to check relief? – view the contours on QGlobe, or download from QSpatial

Is the site alluvial? – check the detailed surface geology on QGlobe or download from QSpatial

Also consider how low in the landscape site is are you close to creeks, rivers, does the site experience flooding

# Describing landform - Element

| Elements | Typical elements |
| --- | --- |
| Mountain, hill, low hill, rise | Crest, **slope**, footslope, drainage depression, stream bed |
| Plain | Plain (uniform flat area), slope (gently undulating with some slope) |
| Alluvial plain, alluvial fan, flood plain | Plain, bar, stream channel |

# Describing landform – Morphological type

| Common types | Code |
|---|---|
| Crest | C |
| Upper slope | U |
| Mid slope | M |
| Lower slope | L |
| Flat | F |

View the contours again on QGlobe, or download from QSpatial

From the highest contour to the lowest contour where does the site sit?

In the field, always validate this by casting your eye over the landscape

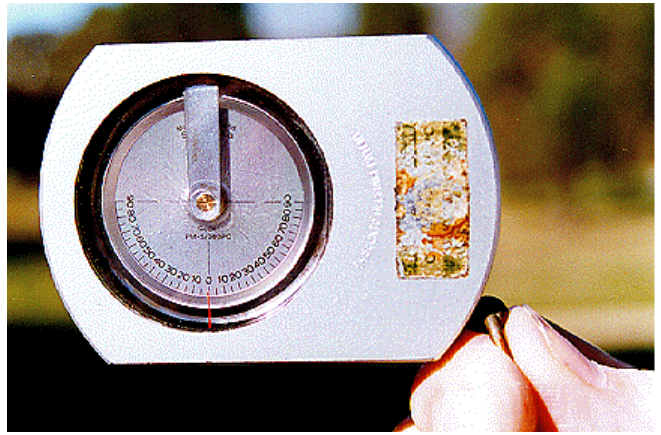
# Describing landform - Slope

Slope is measured in the field with a Clinometer Link – method code A

Pick a point on a person/ vehicle/ equipment that is at your eye level and at the point of observation – you may tie some tape to mark it

Walk 20m from the point of observation then look back at your chosen person/ object and hold the clinometer to one eye and move it until the marked line is at the same level

Record slope to the nearest 0.5 or .0% interval



# Describing surface - Disturbance

| Disturbance | Code |
|---|---|
| No effective disturbance | 0 |
| As above except grazing land | 1 |
| Limited clearing | 2 |
| Extensive clearing | 3 |
| Complete clearing but never cultivated | 4 |
| Complete clearing cultivation at some stage | 5 |
| Cultivation - rainfed | 6 |
| Cultivation – irrigated | 7 |
| Highly disturbed – urban, mine | 8 |
| Regrowth after clearing | 9 |
| Significant natural disturbance | 10 |

Context about the recent history of the site

If easier/ faster record in the notes section

Always good to ask the landholder

Can record types of natural disturbance- e.g. fire, flood

# Descr
# condit

| Common surface c |
| --- |
| Loose |
| Self-mulching |
| Soft |
| Firm |
| Hardsetting |
| Crusting |
| Periodic cracking |
| Recently cultivated |
| Trampled |
| Poached |









# Describing surface – Coarse fragments

| Abundance | Code |
|---|---|
| 0% | 0 |
| <2% | 1 |
| 2-10% | 2 |
| 10-20% | 3 |
| 20-50% | 4 |
| 50-90% | 5 |
| >90% | 6 |

| Size | Code |
|---|---|
| 2-6mm | 1 |
| 6-20mm | 2 |
| 2-6cm | 3 |
| 6-20cm | 4 |
| 20-60cm | 5 |
| 60cm-2m | 6 |
| >2m | 7 |

Observe the soil surface at a few different spots around your site

Visualise a square and estimate what % is covered by coarse fragments

The categories are broad estimates

Recording size helps – you can record more than one size

If you observe rock outcrop record the percent group in the site notes

# Describing surface - Notes

You can use the notes section to record any obvious surface features not recorded

Examples include:

*Soil erosion was visible at the site/ close to the site*

*Termite mounds at site or other features e.g. gilgai*

*Landholder indicated site was recently laser levelled/ cultivated/ fertilised*

*Nearby trees showed indication of recent fire/ flooding*

# Describing tips

Divide and conquer – soil coring takes time, other team members can be capturing the landform and surface features at the same time

Having the same team members describing the same features at a site can help consistency across site data

When in doubt write a note/ take a photo – field time is limited so you can always ask for advice at a later date and photos will help

Always record 0’s/ not present values – this confirms the value has been observed