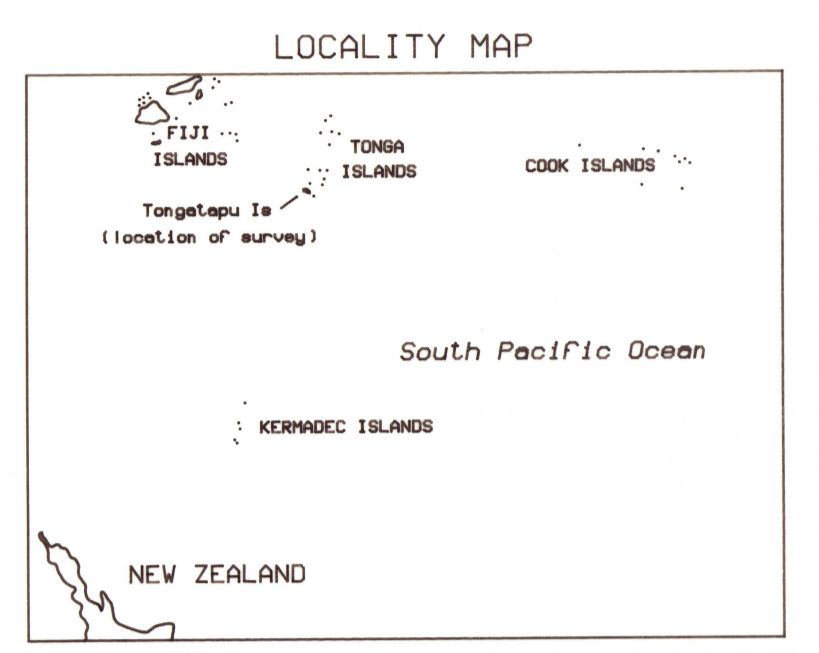
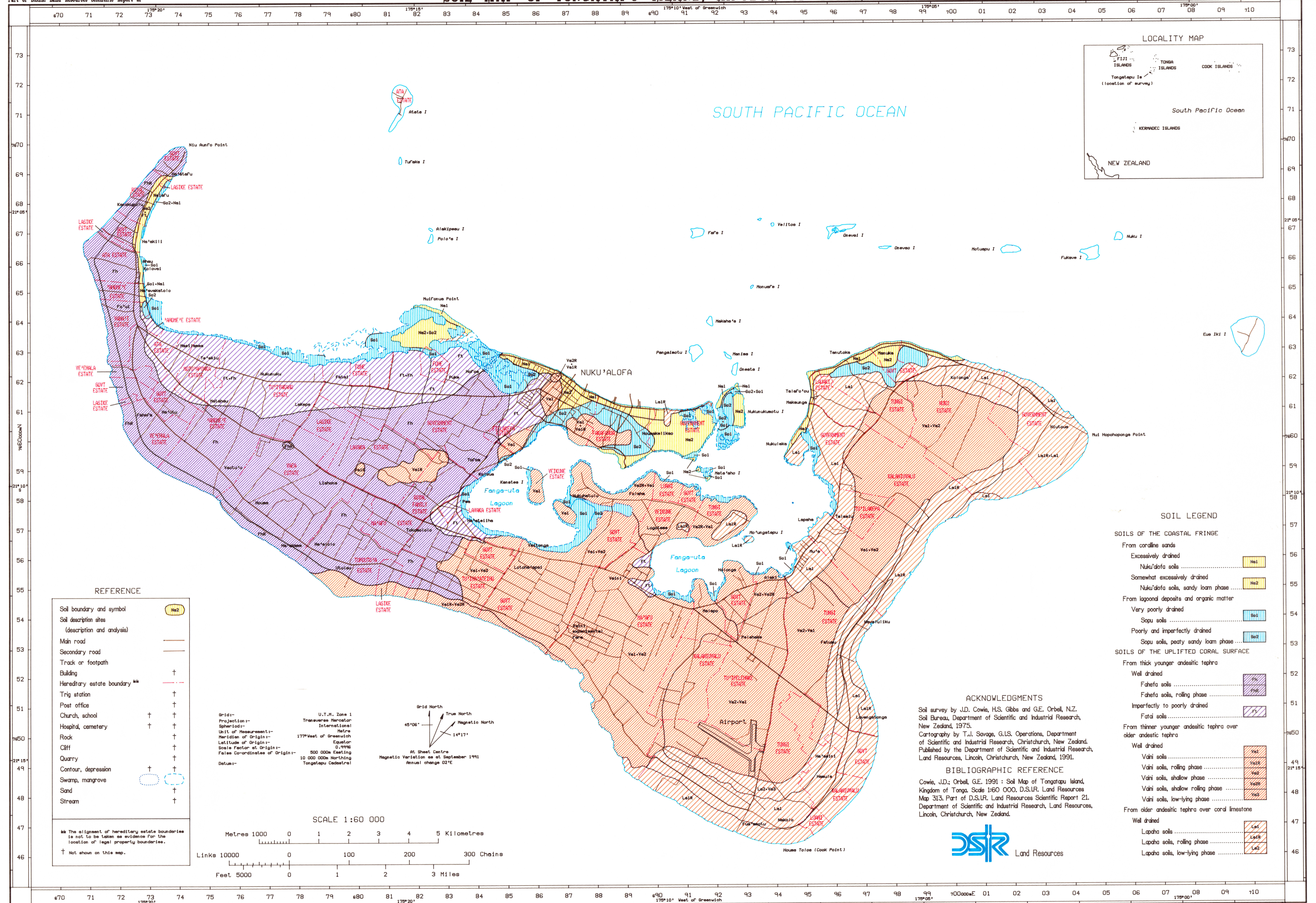


SOIL MAP OF TONGATAPU ISLAND, KINGDOM OF TONGA

Part of D.S.I.R. Land Resources Scientific Report 21

D.S.I.R. Land Resources Map 313



REFERENCE

| | |
|---|--|
| Soil boundary and symbol | |
| Soil description sites (description and analysis) | |
| Main road | |
| Secondary road | |
| Track or footpath | |
| Building | |
| Hereditary estate boundary | |
| Trig station | |
| Post office | |
| Church, school | |
| Hospital, cemetery | |
| Rock | |
| Cliff | |
| Quarry | |
| Contour, depression | |
| Swamp, mangrove | |
| Sand | |
| Stream | |

† The alignment of hereditary estate boundaries is not to be taken as evidence for the location of legal property boundaries.
 † Not shown on this map.

Grid
 U.T.M. Zone 1
 Transverse Mercator
 Spheroidal
 Unit of Measurement: Metres
 Meridian of Origin: 177° West of Greenwich
 Latitude of Origin: Equator
 Scale Factor at Origin: 0.9998
 False Coordinates of Origin: 10 000 000m Northing
 Tongatapu Cadastre

Grid North
 True North
 Magnetic North
 45° 08'
 14° 17'

At Sheet Centre
 Magnetic Variation as at September 1991
 Annual change 02'E

SCALE 1:60 000

Metres 1000 0 1 2 3 4 5 Kilometres
 Links 10000 0 100 200 300 Chains
 Feet 5000 0 1 2 3 Miles

SOIL LEGEND

SOILS OF THE COASTAL FRINGE

- From coralline sands
- Excessively drained
 Nuku'alofa soils
- Somewhat excessively drained
 Nuku'alofa soils, sandy loam phase
- From lagoonal deposits and organic matter
- Very poorly drained
 Sopa soils
- Poorly and imperfectly drained
 Sopa soils, peaty sandy loam phase

SOILS OF THE UPLIFTED CORAL SURFACE

- From thick younger andesitic tephra
- Well drained
 Fafaha soils
- Fafaha soils, rolling phase
- Imperfectly to poorly drained
 Fafaha soils
- From thinner younger andesitic tephra over older andesitic tephra
- Well drained
 Vaini soils, rolling phase
- Vaini soils, rolling phase
- Vaini soils, shallow phase
- Vaini soils, shallow rolling phase
- Vaini soils, low-lying phase
- From older andesitic tephra over coral limestone
- Well drained
 Lapaha soils
- Lapaha soils, rolling phase
- Lapaha soils, low-lying phase

ACKNOWLEDGMENTS
 Soil survey by J.D. Cowie, H.S. Gibbs and G.E. Orbell, N.Z. Soil Bureau, Department of Scientific and Industrial Research, New Zealand, 1975.
 Cartography by T.J. Savage, G.I.S. Operations, Department of Scientific and Industrial Research, Christchurch, New Zealand. Published by the Department of Scientific and Industrial Research, Land Resources, Lincoln, Christchurch, New Zealand, 1991.

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 Cowie, J.D.; Orbell, G.E. 1991: Soil Map of Tongatapu Island, Kingdom of Tonga. Scale 1:60 000. D.S.I.R. Land Resources Map 313. Part of D.S.I.R. Land Resources Scientific Report 21. Department of Scientific and Industrial Research, Land Resources, Lincoln, Christchurch, New Zealand.

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