Hard mulga

Landform	Gently undulating to undulating plains with variable stone and gravel cover (slopes 1–6%). Often occur on scarp retreats and back slopes of residuals.
Woody vegetation	Sparse mulga shrublands to mulga low woodlands, some areas associated with poplar box, bastard mulga and western bloodwood, and variable shrubby understorey of cassia, hopbush or turkey bushes. Areas of heathlands and spinifex patches occur on ridges.
Expected pasture composition	** Denotes non-native "Expected Pasture Composition" species*.
Preferred	Cotton panic, mulga oats, kangaroo grass, mulga Mitchell.
Intermediate	Dwarf mulga grass, bottlewasher grasses, purple lovegrass, woollybutt wanderrie grass, mountain wanderrie grass, five-minute grass.
Non-preferred	Wiregrasses (e.g. Jericho, brush threeawn, dark, erect kerosene).
Annual grasses	Hairy armgrass, button grass, pretty wanderrie grass, rare panic. Bunched kerosene (non-preferred).
Common forbs	Caustic vine, daisy burrs, silvertail, green pussytail, green crumbweed, burrs, smooth goodenia, hill hibiscus, sidas (e.g. corrugated, ridge), mulga nettle, soft roly poly (western form), potato bushes.
Suitable sown pastures	Not suitable for sown pastures.
Introduced weeds	None of significance known to occur.

Soil	Shallow to moderately deep (30–90 cm), stony or gravely loamy red earths with areas of ironstone and stone throughout the profile.
Description	***Surface*:** Loamy hard surfaces; ***Surface texture*:** Sandy clay loam to clay loam; ***Subsoil texture*:** Clay content may increase down profile to light clay; ironstone gravel common throughout profile.
Features	Hard-setting; high runoff zone.
Water availability	Low to medium.
Rooting depth	Shallow
Fertility	Very low to low (phosphorus, nitrogen, carbon).
Salinity	Very low
Sodicity	Non-sodic
pH	Very acid to slightly acid throughout profile.
Utilisation	15%
Enterprise	Mixed dry sheep and cattle, or adult wethers only.
Land use and management recommendations	• Stock lightly during dry periods and post drought to maintain ground cover. • Mulga fodder provides drought protein reserves. • Wiregrasses often predominate in areas cleared of mulga. • Opportunistic use of fire as management tool to control woody weeds (e.g. turkey bush, hopbush, cassias and mint bush). • Maintain ground cover to minimise water and wind erosion and maximise rainfall capture. Any grass cover is better than none. • Strip clearing is preferable to clearing of large areas to minimise erosion and degradation.
Land use limitations	• Fragile grazing lands. • Difficult to reclaim if degraded by either soil erosion or woody weed domination. • Poor surface structure, soil acidity and stoniness limit mechanical treatment options.
Conservation features and related management	• These areas provide potential habitat for rare and threatened fauna (pink cockatoo, red-throat, yellow-footed rock-wallaby, woma python) and flora (climbing caustic, *Euphorbia sarcostemmoides).* • Maintenance of ground cover will minimise extensive loss of topsoil and degradation of these areas.
Regional ecosystems	6.7.9, 6.7.10, 6.7.11, 6.7.12, 6.5.16, 6.5.16a.