Facilities and Premises Procedure - Natural Asset Management

Section 1 - Purpose

(1) This procedure sets out expectations and responsibilities in relation to Charles Sturt University's approach to achieving and maintaining good practices for management of natural and cultural assets in strategic and operational decisions.

(2) This procedure also supports national and international frameworks aimed at supporting positive biodiversity outcomes and responds to climate change impact.

Scope

(3) This procedure includes the same scope as the Facilities and Premises Policy.

Section 2 - Policy

(4) This procedure supports the Facilities and Premises Policy.

Section 3 - Procedure

Targets and objectives

(5) The University has established the following commitments relating to natural and cultural assets:

a. Compliance with all relevant legislation, including but not limited to:
    i. Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
    ii. Biodiversity Conservation Act 2016
    iii. Environmental Planning and Assessment Act 1979
    iv. National Parks and Wildlife Act 1974
    v. Biosecurity Act 2015
    vi. Water Management Act 2000
    vii. Water Act 1912
    viii. Aboriginal and Torres Strait Islander Heritage Protection Act 1984
b. To ensure the conservation of natural values, buildings, places, objects, features and landscapes of cultural value to First Nations people in accordance with the cultural values of the First Nations people to whose heritage the buildings, places, objects, features or landscapes belong.
c. To support improving biodiversity value year on year by working collaboratively with local communities, neighbouring landholders, staff, students and campus user groups to restore, revegetate and maintain the variety and condition of native flora, significant trees, and natural and landscaped habitats on our campuses.
d. To conserve groundwater and surface water-dependent ecosystems and wetlands at all campuses.

e. To support the target of increasing biodiversity zone allocation to 30% across Facilities Management land area by 2030 (excluding areas allocated to Farm Management and Faculty of Science and Health).
f. Support increase in hollow bearing potential by preserving trees of significance, and other vegetation that falls within biodiversity zones.
g. No net loss of tree canopy cover by 2030.

Overarching management principles

Land asset management

(6) All new plantings, except those consistent with clause 7 and 8, are to be of local provenance (local native species) and must be suitable for a projected 2070 climate (refer to Which Plant Where website). Exclusions may include:

a. Communal vegetable garden areas
b. Farm management land allocated to agricultural use
c. Bible Garden, Canberra Campus
d. Sporting ovals and recreational areas

(7) Other plant species can be considered within high-attention-level areas (Level 2 or above, see FM Central Landscape Data Procedure) if plant species meet the following criteria:

a. Classified as an native Australian species
b. Not considered an invasive species within the region of use
c. The species is 'climate ready' (eg: suitable for 2070 climate as per Which Plant Where website).

(8) A nonnative species may be considered via consultation with the Facilities Management (FM) Campus Operations Team and Sustainability at Charles Sturt team if evidence of supporting biodiversity value is provided (eg: noted alternative food source for native species, habitat value for nesting birds).

(9) New buildings and/or infrastructure should not impede or impact on tree protection zones (TPZ) or structural root zones (SRZ) of established trees as per Tree Protection Project Guide.

(10) Activities within university grounds must not adversely impact on vulnerable, endangered or critically endangered species listed under State and/or Commonwealth lists within the legislation mentioned in clause 5a, including any species additionally identified on the IUCN Red List.

(11) Significant ecological trees will be identified and protected, with hollow-bearing trees mapped to provide baseline estimates of hollow availability.

(12) Pruning of live tree limbs below 2 metres within a biodiversity zone should be avoided to assist in the reduction of inundation from Common Myna and Noisy Miner populations.

(13) All business units involved in land management activities, and their nominated contractors should be aware of the following:

a. The application of this procedure.
b. Current trees of significance, and ensure adequate protections are provided to these trees.
c. Recommendations for land management actions within relevant biodiversity and land management reports.
d. Adequate identification skills to avoid accidental damage to natural or cultural assets incurred through the completion of their duties.
e. Occurrence of rare or threatened species.

(14) No dumping of foreign material is to occur within allocated biodiversity zones.

(15) Any pruning activities on trees, shrubs and other plants should only occur after the primary flowering period.

(16) Use of herbicides and pesticides should be adhered to as per Facilities and Premises Procedure - Pesticide Management and Notification, as well as consideration of the pesticide use hierarchy - prevent; cultural (behavioural) control; mechanical control; biological control; and chemical control.

(17) The use of rodenticides classified as second-generation anticoagulant rodenticides (SGARs) is to be avoided due to their high toxicity and potential adverse impacts on non-target wildlife. Alternative pest management strategies should be prioritised wherever feasible.

(18) Rodenticides should not be used within biodiversity zones unless essential for achieving specific conservation outcomes. Any use must be justified by clearly defined ecological objectives and must not form part of routine or long-term management practices.

Water asset management

(19) All business units involved in land management activities must take care to mitigate against the following identified threats to the condition and status of wetlands and other significant water bodies: drainage, sediment, excavation and filling; pollution including eutrophication (nutrient enrichment); water level changes; salination; aquatic or declared weeds; aesthetic disruption (that is, threats to the natural and cultural landscape qualities of the areas) and insect pest control.

(20) Mitigation strategies can include (but not limited to) the following:

a. Creating a buffer zone around water bodies where fertiliser (including manures, composts and mineral fertilisers), herbicide and pesticide use must be minimised, or avoided where possible, to avoid pollution of wetland ecosystems and groundwater.
b. Where required, implement sediment control measures such as sediment fencing to prevent undesirable erosion and/or sediment run off into waterways.
c. Incorporate suitable aquatic plants to enhance water oxygenation and help regulate nutrient levels within water bodies.
d. Ensure adequate training and awareness of staff tasked with land management custodianship in prevention of pollution of soil.
e. Water quality monitoring by business units tasked with land management responsibility.

(21) If a pollution event occurs and requires discharge of water, the responsible business unit must undertake an impact assessment to identify appropriate approach to mitigate impact.

Tree auditing and register

(22) A tree audit plan should be undertaken by the FM Operations Team at each campus.

(23) The purpose of a tree audit will be to:

a. identify high risk trees
b. provide recommendations to mitigate risk
c. monitor trees of significance (both ecological and cultural) and proactively implement strategies to ensure their longevity
d. ensure compliance with relevant local, state and national regulations.

(24) The tree audit plan should include:

a. information on trees of significance (location, vested stakeholders)
b. directions for audits to capture information on tree health and structure, risk assessment, and recommendations for preventative works to preserve trees
c. schedules for ongoing monitoring and maintenance.

Tree and hollow management

(25) Tree maintenance will not, generally, be carried out on a tree that is:

a. in a healthy condition with no predictable tree or branch failure
b. not interfering with utility services
c. not impeding motorists' line of sight
d. not causing major damage to public or private property
e. not causing risk to public safety or amenity.

(26) All tree maintenance should adhere to relevant Australian standards.

(27) If removal of trees within a biodiversity zone is unavoidable, consultation must be undertaken with FM Campus Operations Team and Sustainability at Charles Sturt Team and where necessary, other vested stakeholders before commencement of works.

(28) Where removal of native species cannot be avoided, a provision of funding must be allocated into project funding to replace trees based on their diameter at breast height (DBH).

Tree size	Tree/ hollow replacement requirement
Very large tree (DBH greater than 100cm)	Plant minimum 16 trees
Large tree (DBH between 50cm and 100cm)	Plant minimum 8 trees
Medium tree (DBH greater than 20 cm, but less than 50cm)	Plant minimum 4 trees
Small tree (DBH greater than 5cm, but less than 20cm)	Plant minimum 2 trees
Hollow replacement requirement	Provide 3 artificial hollows for every occupied hollow removed

(29) Tree replacements are not required to be planted in the immediate vicinity of the original removal site. The selection of replacement locations must align with the parameters outlined in the Tree Protection Project Guide, including ensuring that new trees are not planted in close proximity to built assets.

(30) Trees removed without obtaining DBH will attract the highest tree replacement requirement for the land ownership business unit.

(31) Trees removed without obtaining hollow inspection will attract a requirement for the provision of three artificial hollows, ensuring artificial hollow are affixed to trees of suitable size and context.

(32) The accounting of tree replacement requirements cannot be offset with trees planted during biodiversity tree planting days.

(33) Tree replacement requirements can be planted in conjunction with biodiversity tree planting days coordinated by the Sustainability Team, given they are supplementary to the primary plantings and agreed upon by vested stakeholders.

(34) Tree replacements do not need to occur immediately. They can be deferred and banked for the following year, allowing time for budget requests and planting during optimal seasonal conditions.

(35) For determining hollow replacement - assume 20% occupancy rate. For every five hollows identified within tree audits (or where less than five hollows will be impacted), assume one hollow will be occupied and requires replacement. Where hollows are inspected during the clearing process, actual occupation can be used as the basis for the replacement requirement.

(36) Options for hollow replacement include:

a. manufactured nest boxes – can be derived of untreated timber
b. salvaged natural hollows
c. chainsaw hollows.

(37) Hollow replacements must be of similar size to the hollow removed.

Biodiversity zone management

Dedicated zone

(38) Dedicated biodiversity zones can be assigned after consultation and support from relevant stakeholders, and approval from Chief Operating Officer.

(39) Biodiversity zones marked as 'dedicated' have protections from future developments, and therefore cannot be built upon, disturbed or reclassified.

(40) All new plantings within dedicated zones must be of local provenance (local native species).

(41) If mowing/slashing is required, a dedicated zone should employ an intermittent mowing regime.

(42) Intermittent mowing regime should entail the following general principles:

a. Cut in late spring. Avoid cutting during summer to allow growth of native grasses and forbs to produce seed and/or flowers.
b. Cutting length should be no less than 10cm.
c. Accompany with weed control measures where necessary and appropriate.
d. Where local provenance tree seedlings have naturally germinated within grassed areas, they should be retained by mowing around them, where practicable.

(43) An alternative mowing regime plan or activity can be considered via consultation with FM Campus Operations Team and Sustainability at Charles Sturt.

(44) All mowing equipment must be cleaned prior to mowing in a biodiversity zone to minimise the risk of importing weed seeds and other foreign material.

(45) If there are walking trails intersecting biodiversity zones, a regular mowing regime may be implemented within 1.5 metres of the trail.

(46) Alternative control measures such as crash grazing, cultural and ecological burns can be considered within dedicated biodiversity zones via consultation with Sustainability at Charles Sturt Team.

(47) Fencing should avoid the use of barbed wire and instead prioritise alternative approaches (eg: plain wire, low impact electric, mesh and netting, post and rail fencing) that reduce impacts on native wildlife movement. For

example, barbed wire can pose a serious risk to species such as squirrel gliders, which may become entangled while gliding between trees."

(48) When activities clauses 15 and 27 occur, the use of the woody debris to enhance ground cover and ground habitat in nearby biodiversity zones should be considered.

Integrated biodiversity zone

(49) Integrated biodiversity zones can be assigned via consultation between Sustainability at Charles Sturt and Facilities Management Operations, along with other relevant stakeholders, with final approval from Director, Facilities Management.

(50) An integrated biodiversity zone generally has the following characteristics:

a. Close proximity to building/major infrastructure assets
b. High pedestrian foot traffic
c. Numerous established native trees, of which may contain trees of significance

(51) If impacted by development, alternative strategies should be considered by referring to the impact mitigation hierarchy – avoid, minimise, rehabilitate or restore, offset.

(52) All new plantings within integrated biodiversity zones should be of local provenance (local native species).

(53) If avoidance cannot be achieved, refer to 'Tree and hollow management'.

(54) If planting canopy trees, they are to be no closer than 10 metres to buildings.

(55) Where possible, intermittent mowing regimes should be considered to support the growth of native grasses and forbs (eg: Button Wrinkle Wort, Burr-Daisey and Common Everlasting).

(56) Where fencing is required within an integrated zone, it should align with the principles outlined in clause 47.

(57) Where feasible, intermittent mowing regimes should enhance habitat connectivity for faunal species—for example, maintaining designated no-mow zones from late March to mid-December at the Albury campus to support Sloane's Froglet habitat.

Farm biodiversity planting zone

(58) Farm biodiversity planting zones can be assigned via consultation between the Sustainability at Charles Sturt team and Farm Management for use of farm management land for improving biodiversity value.

(59) Where fencing is required to be replaced within a farm biodiversity planting zone, it should align with the principles outlined in clause 47, where practicable.

(60) Crash grazing principles can be implemented for maintaining and/or suppressing biomass of area within zones if revegetation efforts are yet to be implemented.

(61) Once revegetation works has been undertaken, the zone should be excluded from any grazing activities for at least 5 years, unless a biodiversity benefit can be identified.

(62) Crash grazing during this period may only be permitted where a fire hazard has been identified through a risk assessment conducted in consultation with Sustainability at Charles Sturt.

(63) Where crash grazing is required before the five-year establishment period has elapsed, the following conditions

must be met:

a. Select smaller livestock species for crash grazing (e.g., sheep rather than cattle) to minimise physical and ecological impacts.
b. Implement a high-density, short-duration grazing approach. Livestock must be confined to a small area for a limited period—typically hours to a few days, but not extending into weeks.
c. Prior to grazing, inspect the planting area to ensure all protective measures (such as tree guards) are in place and have not been displaced.
d. Grazing must not occur on clay soils when the soil profile is wet, to prevent pugging and associated soil compaction or structural damage.
e. Avoid grazing during summer to allow native plant species to complete their seed set and support regeneration.
f. Ensure a minimum interval between crash grazing events on the same site to allow ecological recovery and prevent overgrazing. To maximise the survival of planted native species, this minimal interval will typically be 12 months, unless alternative arrangements are agreed upon under specific conditions.

(64) Any plantings within these zones will have their plant quantities, locations, and times documented by the Sustainability at Charles Sturt team within a planting register.

Selling/leasing of land with biodiversity zones

(65) If land containing biodiversity zones are to be sold, Commercial Property and Leasing are responsible for ensuring:

a. the Sustainability at Charles Sturt Team are notified of any proposed changes to landownership
b. if biodiversity land is required for repurpose, a review must be undertaken by the Sustainability at Charles Sturt and alternate land be considered by the University.
c. if unable to identify alternate land, biodiversity zones are to be identified when divesting of land.

(66) If land containing biodiversity zones are to be leased, Commercial Property and Leasing are responsible for ensuring engagement with Sustainability at Charles Sturt to identify specific requirements for the occupation and management of the land which is being occupied including any biodiversity zone.

Monitoring

(67) Overarching monitoring programs will be conducted and coordinated by Sustainability at Charles Sturt and be implemented in partnership with stakeholders to ensure progression of biodiversity targets.

(68) Overarching biodiversity monitoring programs will include (but not limited to):

a. photo point monitoring
b. avian surveys
c. canopy cover assessment (where funding is available).

(69) Campus specific monitoring will also be undertaken where value can be represented in providing ongoing management direction.

(70) Recommendations for management interventions from these monitoring processes will be reported the Campus Facilities Managers (CFM) and campus environmental working groups (CEWG).

(71) Findings from research and surveys conducted by staff and students on Charles Sturt campuses should be provided to the Sustainability at Charles Sturt team. This information is valuable and may be used to enhance

practices to support biodiversity on campuses.

Review of the procedure

(72) This procedure shall be reviewed every three years. The review shall include:

a. an audit of procedure implementation
b. review referenced documents, codes of practice and the legislation
c. review of feedback from stakeholders.

Section 4 - Guidelines and supporting documents

(73) See:

a. Facilities and Premises Procedure - Pesticide Management and Notification
b. FMCentral Grounds Procedure (login required)
c. Protection of Trees
d. Sustainability at Charles Sturt Resources for campus specific reports and plans
e. Other resources include:
    i. Australia's National Biodiversity Strategy and Action Plan
    ii. Australia's Strategy for Nature 2024-2030
    iii. Kunming-Montreal Global Biodiversity Framework
    iv. Protecting 30 by 30
    v. Nature Positive Pledge
    vi. Which Plant Where

Section 5 - Glossary

(74) In this procedure:

a. Biodiversity zone – means an area of land/water that has been identified to be of ecological importance within the University's operating boundaries.
b. Identified cultural asset - means a registered Aboriginal object, site, or declared Aboriginal place that has been formally documented and recorded by Heritage NSW within the NSW Aboriginal Heritage Information Management System (AHIMS) database.
c. Impact mitigation hierarchy – means an approach used in environmental management and project planning to minimize the negative impacts of development or other activities on biodiversity and the environment.
d. Intermittent mowing regime - means how often and when the lawn is mowed to encourage biodiversity and enhance native ground cover health.
e. Local provenance - means the origin of plant material from a specific geographic area.
f. Structural root zones (SRZ) - means a critical area around a tree's trunk where the loss of roots can significantly impact the tree's stability.
g. Tree protection zones (TPZ) - means a designated area around a tree that is protected during construction or development to ensure the tree's health and survival.
h. Trees of significance - means trees recognised within biodiversity reports, cultural surveys, and/or via FM Central Tree Register for their qualities, such as size, age, rarity, hollow bearing capacity, environmental amenity or cultural and historical importance.

i. Trees with cultural significance – means trees identified either within the AHIMS Database and/or via an identified panel of First Nations individuals in consultation with business units tasked with land management custodianship.

j. Water asset - means any water-related natural feature or infrastructure that holds ecological, cultural, or economic value and requires active stewardship.

Status and Details

Status	Current
Effective Date	20th April 2026
Review Date	20th April 2031
Approval Authority	Chief Operating Officer
Approval Date	20th April 2026
Expiry Date	Not Applicable
Unit Head	Steve Mitsch Director, Facilities Management +61 (02) 6051 9863
Author	Benjamin Heard Project Officer, Sustainability
Enquiries Contact	Facilities Management 02 633 86336