Visitor Values Health Checks

A guide to undertaking Health Checks for key visitor values

Version 1.8

August 2021

Queensland Government

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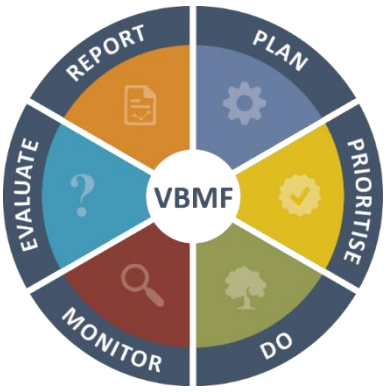
1. Introduction

Queensland's parks, forests and reserves are places we want to protect for future enjoyment and wellbeing. What makes these places special are the presence and diversity of natural, cultural, social and economic values. These areas experience natural cycles—they live and breathe—and therefore our management needs to be dynamic too. The Queensland Parks and Wildlife Service and Partnerships (QPWS&P), within the Department of Environment and Science (DES), applies a contemporary management process that is based on international best practice and targets management towards the most important features of each park: their key values.

The Values-Based Management Framework (VBMF) is an adaptive management cycle that incorporates planning, prioritising, doing, monitoring, evaluating and reporting into all areas of our business. This enables the agency to be more flexible and proactive and to improve management effectiveness over time.



By assessing the condition of an area's key values, QPWS&P can prioritise management efforts, balancing the importance of values and threats with our custodial obligations. Monitoring the condition of values and evaluating our performance is integral to closing the loop on the adaptive management process.

Health Checks are tools for efficiently and routinely assessing the condition of key park values. They use simple visual 'cues' and require no specialist skills or equipment and have been designed to work state-wide.

Health Checks are the basis for the evaluation of the condition of visitor values and associated infrastructure through time for the majority of estate managed by Queensland Parks and Wildlife Service (hereafter 'park' regardless of tenure) (Fig. 1). Health Checks use indicators of the value's condition, visual amenity and resilience in the face of visitor usage.

Direct evaluation of parameters such as crowding, congestion, noise levels, public contact with staff and visitor satisfaction are beyond the scope of a Health Check but can be identified as 'emerging issues' during the Health Check assessment (Table 2.4). Where highly significant values require management intervention on a high priority park, detailed, targeted monitoring may be warranted (Melzer 2015), and is identified in the Visitor Strategy or Monitoring and Research Strategy for that park. Health Checks may alert the management unit to the need for such monitoring.

Health Checks are not intended to replace current statutory requirements and reporting arrangements under the QPWS&P Strategic Asset Management System (SAMS) such as critical infrastructure inspections, non-statutory inspections of assets and inspections required under the Australian Walking tracks Standard AS 2156.1—2001.

The key visitor values on which to undertake Health Checks are selected and defined during the Key Values Assessment workshop (QPWS&P, 2019). The current condition and desired condition for each key value is determined along with the strategic direction for its management. Health Checks are subsequently undertaken during park inspections by local staff. Their frequency is determined during the development of the Monitoring and Research Strategy for the park and is guided by a risk matrix (Fig 2). An event (e.g. cyclone, bushfire) and/or observations and outcomes of recent Health Check assessments may trigger an earlier than scheduled assessment and/or increased frequency of assessment. Over time the information from Health Checks will provide a good indication of the trend in condition, and hence alignment with the stated desired condition for the value, and so help determine whether the current management approach is appropriate. The trend in condition ('health') for the visitor value/s on a park are 'rolled up' for high level management evaluation and reporting purposes (e.g. State of the Parks Report).

Health Checks provide a critical opportunity for the management unit to regularly review the effectiveness of their management in maintaining or recovering key values. The Health Checks must be reviewed by the management unit upon completion to determine whether, for example: current management actions are appropriate or need adjusting; urgent intervention is required; and additional funds are needed. In-line managers (to whatever level is appropriate) must be alerted to concerns about the condition of a value (whether at a specific site or across the whole park), or an emerging issue on the park, and a decision on a response – which may be to do nothing – must be made and documented.

This document provides: a) guidelines for undertaking Health Checks for visitor values; b) descriptions of the Health Check Indicators (Appendix 1) and: c) a record sheet (Appendix 2). Note that the Heath Check component of a Monitoring and Research Strategy must be developed prior to undertaking Health Checks. This enables questions about timing and site selection (e.g. number of sites, location) to be workshopped and appropriate guidance (or specifications) to be documented in the Strategy, as well as approval by line managers.

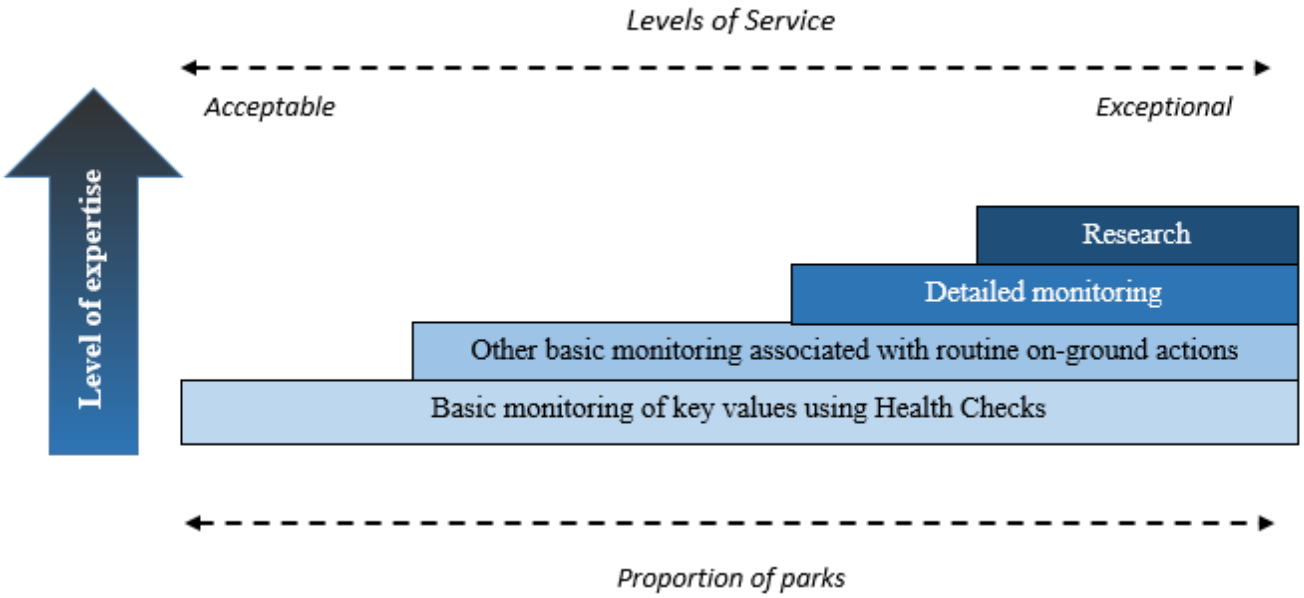


Figure 1. Hierarchical framework for monitoring and research on QPWS&P estate.

	Consequence				
Likelihood	**Insignificant**	**Minor**	**Moderate**	**Major**	**Catastrophic**
Almost certain	Every 3 years	Every 3 years	Every year	Every year	Every year
Likely	Every 3 years	Every 3 years	Every year	Every year	Every year
Possible	Every 4 years	Every 4 years	Every 2 years	Every year	Every year
Unlikely	Every 4 years	Every 4 years	Every 3 years	Every 2 years	Every 2 years
Rare	Every 4 years	Every 4 years	Every 4 years	Every 3 years	Every 3 years

Figure 2. Risk matrix used to guide the minimum frequency of Health Checks. **Note that an explanation of the likelihood and consequence is provided in the Planning User Guide.**

1.1 How to do a Health Check and complete the record sheets

1. Determine the most appropriate time period or season of the year to assess the condition of the key value. Endeavour to undertake the assessment in the same time period or season each year. Note that where important, the timing for Health Checks is specified in the Visitor Strategy or Monitoring and Research Strategy. During or soon after a peak visitation period is likely to be most informative.

2. The inspection should ideally be undertaken by at least two observers. It may be advantageous, but is not mandatory, for one of the observers to have participated in the previous year. A copy of the previous year's Health Checks, including photographs for permanent sites, should be carried with you for reference.

3. Selecting sites

The number and location of sites, particularly permanent sites, are best determined during development of the Visitor Strategy or Monitoring and Research Strategy.

For many key visitor values there will be little, if any, choice when it comes to selecting a site/s because the value is unique (e.g. Blue Lake on Nth Stradbroke Island) or only occurs in a small number of locations (e.g. three day use areas).

Where the value is extensive (e.g. walking track system) access as much of it as possible to get an 'overview' of the condition but also select 'representative sites' at which to undertake the assessments. A site should be relatively 'uniform' in terms of usage, management and factors such as topography. For example: a frequently traversed stretch of track and a rarely traversed stretch would be assessed as two separate sites; a portion of the track traversing a swamp would be assessed separately from a portion running along a ridgeline.

4. Defining your site

Determine what constitutes your site (if this has not already been specified in a Visitor Strategy or Assessment and Monitoring Strategy). For example, if your key visitor value is a lake with an associated carpark you would include the carpark, lake and lake surrounds – particularly the visitor focal points around the lake. Define your site as clearly as possible on the first page of the record sheet (Appendix 2).

The size of your 'representative site' (i.e. the area of the value that you include in your inspection) must be recorded on the record sheet as a quantitative measure (e.g. $10m^2$, 20x40m) unless the Site Id. clearly defines the area encompassed in the assessment (e.g. whole day-use area; lookout, carpark and access track).

5. It is not mandatory to go back to exactly the same site/s each year, unless of course the value is discrete (i.e. a specific campground or lookout rather than a walking track system or scenic drive or all of the picnic grounds in the park). However, it may be beneficial to have some permanent sites that are revisited each year and to incorporate standard photo-monitoring points into your Health Checks. Instructions on how to set up a photo-monitoring site are available on the Conservation Monitoring Pages or from the Ecological Assessment Unit.

6. A record sheet (Appendix 2) has to be completed for each key value. The standard record sheet allows up to five sites per key value (Table 2.1, Appendix 2). If more than five sites are required to get an adequate representation of condition (only likely for extensive key values with complex management issues) add extra columns.

7. Health Check Indicators (Appendix 1) are used to assess the condition of a value. They are based on disturbances and features that provide a good indication of the condition of a value and associated infrastructure. Table 1.1 lists Health Check Indicators appropriate to various types of key values – every Health Check Indicator that applies to your value MUST be used in your assessment.

Use the tables in Appendix 1 to determine the Condition Class, from *Good* to *Critical,* for each Health Check Indicator. **Ensure that you read the information and instructions provided for each Health Check Indicator every time! Do not assume you've remembered them correctly from last time!**

8. For each Health Check Indicator, the Condition Class that you determine for each site must be recorded on the record sheet.

9. Your general impression of the condition of the key value across the park for each Health Check Indicator is also recorded (unless the value occurs only at one site). Note that this general impression IS NOT an 'average' of the Condition Classes you recorded at each site. It IS your considered opinion about the state of the key value across the park (e.g. all the picnic grounds) based on the site results AND your observations as you drive, walk, paddle or fly between sites!

10. Where it is relevant (refer box 1), provide information in Table 2.3 of your record sheet about factors contributing to the Condition Class assigned to the key value at an inspection site, and in Table 2.4 for your general impression for a Health Check Indicator.

Box 1 Make good use of notes!

Notes are important! For some Health Check Indicators there is a specific instruction in Appendix 1about what to record in Table 2.3 (e.g. Record the cause/s of the impact e.g. human trampling….). **But don't limit yourself to those instructions**. Ask yourself, for example – "Will it be obvious to someone reading this record sheet (or to me in 12 months' time) why I have assigned a 'General Impression' of Significant Concern to the Health Check Indicator Impacts on wetlands; or why I have assigned Significant Concern as the Overall Condition Class for the value?" If it's not – then make some detailed notes on the record sheet.

Table 1.1 List of Health Check Indicators and the types of Key Values to which they are applied[1].

Indicator	Key Values
1.Condition of built infrastructure	All that incorporate built infrastructure
2.Ground surface damage or modification	All that incorporate foot or mountain bike traffic (e.g. camp grounds, walking tracks, lookouts, mountain bike trails, abseiling/climbing sites, cave floors). Roads are not included.
3.Condition of roads	All that include roads
4.Widening/spread of footprint	All with designated areas for foot and vehicle traffic (e.g. Camping areas, walking tracks, vehicle tracks, mountain bike tracks, car parks, mooring and anchorage sites, abseiling/climbing sites, viewing areas and tracks in caves).
5.Trampling by visitors or trampling, digging or rooting by feral animals or introduced native animals or stray stock	All, other than wetlands.
6.Adequacy of toilet facilities	All (regardless of whether toilets are provided or not)
7.Vandalism and theft	All
8.Vehicle impacts	All where vehicles are not permitted or not desirable. Designated roads and parking areas are excluded from this criterion.
9.Litter or dumped rubbish	All
10.Campfire places outside of designated fire pits	All where it is possible to light a fire
11. Modified wildlife behaviour	Campgrounds, day-use areas
12.Impacts on wetlands	Wetlands (e.g. rivers, streams, billabongs, swamps, lakes, salt marshes, springs)
13.Infestations of pest plants (includes aquatic pest plants)	All

Table 1.2 Overall Condition Class – what the categories mean.
(from IUCN 2012 & Osipova *et al*. 2014)

Good	The Key Value is in good condition and is likely to be maintained for the foreseeable future, provided that current conservation measures are maintained.
Good with some concern	The Key Value is likely to be essentially maintained over the long-term with minor additional conservation measures to address existing concerns.
Significant concern	The Key Value is threatened by a number of current and/or potential threats. Significant additional conservation measures are required to preserve the value over the medium to long-term
Critical	The Key Value is severely threatened. Urgent additional large-scale conservation measures are required or the value may be lost.

1.2 New/emerging issues noticed (anywhere on the park) while undertaking an inspection

When you are undertaking the inspection you may notice localised disturbances (point source or linear), biosecurity breaches or issues that require attention to prevent degradation and significant resource input in the future (e.g. a new infestation of an ecosystem-changing weed; illegal dumping; pollution event; erosion; tree-fall across a track resulting in new tracks), or pose a risk to life and property, or significantly impact on visitor experience (e.g overcrowding, excessive noise, conflict amongst user groups). Table 2.5 is provided as part of the record sheet to note relevant information.

Your in-line manager/s must be alerted to the issue as soon as possible after the inspection and a decision made about the management response to be undertaken.

This table must be taken on future inspections so that the effectiveness of the management response can be evaluated.

Abbreviations used in Appendix 1

< Less than
> Greater than

2. References

(References used in the Guidelines and Appendix 1)

IUCN 2012. Conservation Outlook Assessments - guidelines for their application to natural World Heritage Sites

Version 1.2 (final).

Melzer R. 2015. QPWS Monitoring Framework. Ecological Assessment Unit, Operational Support, Queensland Parks and Wildlife Service, Department of National Parks, Sport and Racing.

Osipova E, Shi Y, Kormos C, Shadie P, Zwahlen C & Badman T. 2014. IUCN World Heritage Outlook 2014: A conservation assessment of all natural World Heritage sites. Gland, Switzerland: IUCN. 64pp.

Queensland Parks and Wildlife Service & Partnerships (QPWS&P) 2019. Planning User Guide: Values-Based Management Framework Version 2 Planning Unit, Parks Services, Queensland Parks and Wildlife Service & Partnerships, Department of Environment and Science, Queensland Government.

Appendix 1. Health Check Indicators

1. Condition of built infrastructure

Here built infrastructure includes, for example, signs, shelter sheds, picnic tables, boardwalks, steps and lighting in caves but not tracks/trails/ roads. Impacts from vandalism are not included in this indicator.

Use the description to get the 'best fit' – not all parameters are relevant to all circumstances.

Level of decline	Description	Condition Class
None	No signs of degradation; amenity unimpaired; safety unimpaired. For example: • Signage clean and legible • No branches or trees on infrastructure • Shelters, picnic tables and benches are solid (no obvious movement), have no broken boards, no splintering • Paintwork clean and fresh in appearance • All lights working and associated cabling in good condition	Good
Minor	Some signs of degradation; amenity little impaired; safety unimpaired; minor repairs required. For example: • Mildew/ bird droppings on otherwise intact signs • Small branches on infrastructure • Shelters, picnic tables, benches, boardwalks are basically solid but have a cracked wall or broken board, some splintering • Paintwork dirty or dull; minor peeling • Small proportion of lights not working but no risk to safety	Good with Some Concern
Moderate	Substantial signs of degradation; amenity impaired; safety impaired; costly repairs required. For example: • Signage broken and/or fallen over • Shelters, picnic tables and benches having missing wall or boards • Damaging tree-fall on infrastructure • Paintwork peeling over substantial areas • Broken steps • Lighting inadequate for presentation of site and poses some safety risks	Significant Concern
Major	Heavily degraded, unclean, unsafe and requires immediate closure. • Infrastructure requires major repairs, reconstruction, cleaning or removal • Level of lighting and/or condition of cables is unsafe	Critical

2. Ground surface damage or modification

Evidence of surface modification can include water runoff, soil erosion, compaction, patches of bare ground (where they shouldn't be), landslides, subsidence and/or altered drainage which can threaten the integrity of a key value and/or associated infrastructure and natural and cultural features (e.g. camp sites, walking tracks, mountain bike trails, abseiling sites, lookouts, caves).

Use the descriptions to get the 'best fit.'

Level of impact	Description	Condition Class
None	• Little or no (0-5% of site) evidence of runoff, altered drainage, soil movement, instability or compaction, and; • No deterioration/damage/disturbance evident	Good
Minor	• >5-15% of site impacted by runoff, altered drainage, soil movement, instability or compaction • Damage/disturbance is minor and temporary/repairable • Structural integrity ('soundness') is not impaired/threatened	Good with Some Concern
Moderate	• >15-25% of site impacted by runoff, altered drainage, soil movement, instability or compaction • Soil washed or worn away • Some roots or rocks slightly exposed • Damage/disturbance is substantial but all/largely reversible/repairable if addressed promptly • Structural integrity ('soundness') is at risk • Safety may be a concern	Significant Concern
Major	• >25% of site impacted by runoff, altered drainage, soil movement, instability or compaction • Erosion scars, severe gouging • Roots or rocks substantially exposed • Damage/disturbance is substantial and some or all is permanent • Substantial funding and urgent attention required to redress the damage. • Value/assets at risk • Safety may be a significant concern	Critical

3. Condition of roads

The table below lists the range of road types on QPWS&P estate and the parameters relevant to each type when assessing the current condition of the road for the purpose of the Health Check (note that these differ somewhat from the parameters used for road valuation):

Code	Description	Assessment criteria
Z	Cleared track corridor, no formation (includes unformed sand roads)	Driveability; drainage
Y	Minimally formed (flat-bladed) road	Driveability; drainage
X	Formed sand road	Driveability; profile & drainage
V	Corduroy road	Driveability; pallet condition
A	Formed road without pavement	Driveability; profile & drainage
B	Formed and paved road	Driveability; profile & drainage; pavement depth & condition ('ride comfort')
C	Sealed rural road 'fit for purpose' design standard	Driveability; profile & drainage; pavement condition; surface (seal) condition
D	Single carriageway full design standard	Driveability; profile & drainage; pavement condition; surface (seal) condition

Record the 'road type' (using the above codes) in the Site Id. column on the record sheet for each site that you assess.

Level of decline	Description	Condition Class
None	No/minimal signs of degradation; amenity unimpaired; safety unimpaired. For example: • Can be driven safely at designated speeds in appropriate[1] vehicle in typical weather[2] • Road profile good/excellent; effective diversion and run off drains • If palleted – little to no evidence of holes or scouring at sides, no broken, loose or missing planks, plastic pallets 100-200 mm below road surface • Culverts/pipes clean and free of debris, no erosion at inlet or outlets • If paved (unsealed or sealed) – very smooth ride or smooth with some minor bumps but still very safe and comfortable. • Pavement depth >75mm • Seal surface cracking &/or patching evident over < 5% of the total segment ('site') area; majority of cracks <2mm	Good
Minor	Some signs of degradation; amenity little impaired; safety unimpaired; minor repairs required. For example: • Can be driven safely at designated speeds in appropriate[1] vehicle in typical weather[2] • Road profile reasonable/good; diversion and run off drains only partially effective • If palleted – only shallow holes or scouring at sides, occasional (< 5%) broken, loose or missing planks, plastic pallets becoming exposed at 50-100mm or buried at 200-300mm below road surface • .Culverts/pipes not blocked and intact, functioning, outlet with minor erosion & scouring • If paved (unsealed or sealed) – small up & down or side to side movements; defects are starting to effect driving. • Pavement depth 50-75mm • Seal surface cracking &/or patching evident over 5-25% of total segment ('site') area; majority of cracks <5mm	Good with Some Concern
Moderate	Substantial signs of degradation; amenity impaired; safety impaired; costly repairs required. For example: • Cannot be driven safely at designed speeds in appropriate[1] vehicle except by experienced drivers regardless of the weather • Road profile poor; road is becoming the drain; diversion and run off drains are largely ineffective • If palleted – substantial holes or scouring at sides, several (5-15%) broken, loose or missing planks , plastic pallets exposing at 25 - 50mm or buried at 300-500mm below road surface • Culverts/pipes blocked but intact, partially functioning, outlet eroded & scoured. • If paved (unsealed or sealed) – rough, uncomfortable 'ride'; defects can be felt while driving & at times it is difficult to control the steering wheel. • Pavement depth 25-50mm; subgrade occasionally exposed • Seal surface cracking &/or patching evident over 25-50% of the total segment ('site') area; cracks >5mm common	Significant Concern
Major	Section unsafe & must be closed; major reconstruction required • Cannot be driven in 4WD regardless of the weather • No road profile; the road is the drain; diversion and run off drains are totally ineffective • If palleted – major holes or scouring at sides, several (>15%) broken, loose or missing planks, plastic pallets exposed at <25mm or buried at 500mm below road surface • Culverts/pipes separated under road or completely blocked and not functioning, outlet severely eroded & scoured. • If paved (unsealed or sealed) - pavement depth <25mm; subgrade frequently exposed • Seal surface cracking and/or patching evident over >50% of the total segment area; majority of cracks >5mm	Critical

1. Appropriate vehicle – 4WD with suitable tyre pressure or 2WD where permissible and road type intended to be suitable.
2. Typical weather – conditions usually experienced throughout the year including average rainfall events; not extreme weather events such as floods and cyclones.

4. Widening/spread of foot print

Widening/spread of the footprint of camp sites, roads, tracks (e.g. walking tracks, mountain bike tracks), viewing areas or tracks in caves, car parks or anchorage sites beyond their designated/desired boundary can indicate overcrowding or congestion and inadequate facilities and/or the need for measures to limit/better distribute use or modify behaviours. This can include shortcutting between tracks or trails and tracking of mud onto formations in caves.

Use the description to get the 'best fit' – not all parameters are relevant to all circumstances.

Level of invasion	Description	Condition Class
None to little	Little or no widening/spread evident • 0-5% increase in size • No signs of inappropriate camping, parking/anchoring, walking, riding • No undesignated tracks or signs of short cutting	Good
Minor	Some widening/spread evident; amenity little impaired. • >5-15% increase in size • Temporary impact/damage from inappropriate camping, parking/anchoring, diverted tracks or short cutting • Easily repaired/redressed	Good with Some Concern
Moderate	Conspicuous widening/spread evident; amenity impaired. • >15-25% increase in size • Some longer term damage from inappropriate camping, parking/anchoring, diverted tracks or short cutting • Funding & management strategy required to redress & prevent in future	Significant Concern
Major	Extensive widening/spread evident; amenity significantly impaired. • >25% increase in size • Substantial & potentially permanent damage from inappropriate camping, parking/anchoring, diverted tracks or short cutting • Integrity of asset significantly impaired • Substantial funding & management strategy required to redress & prevent in future	Critical

5. Trampling by visitors or trampling, digging, rooting, rubbing and similar impacts caused by feral or introduced native animals or stray stock

(Use for all sites other than wetlands)

Do not assess visitor trampling on surfaces intended for human foot traffic or vehicles.

Record (Table 2.3 your record sheet) the cause/s of the impact (e.g. human trampling; the pest/problem species impacting your inspection site/s). If there is more than one causal agent (e.g. cattle & pigs) indicate, if possible, the primary agent.

Use the description to get a 'best fit' – not all parameters are relevant to all circumstances.

Level of impact	Description	Condition Class
None	No signs of disturbance.	Good
Minor	Site mostly intact; amenity little impaired • Up to 15% of soil surface has been visibly disturbed[1] and/or • Up to 15% of understorey vegetation disturbed • Little or no disturbance to typical target/amenity species[2]	Good with Some Concern
Moderate	Impact obvious; amenity impaired • >15-25% of soil surface has been disturbed[1] and/or • >15-25% of understorey vegetation disturbed • Disturbance to typical target species may be obvious[2]	Significant Concern
Major	Extensive disturbance; amenity significantly impaired • >25% of soil surface has been disturbed and/or • >25% of understorey vegetation disturbed • Disturbance to typical target species may be extensive[2]	Critical

1. Compacted or eroded/bare from trampling, rubbing, licking; dug over.
2. Example of 'typical target/amenity species' for pigs – palm seedlings/hearts.

6. Adequacy of toilet facilities

Bush toileting may indicate that toilet facilities or additional toilet facilities need to be provided or that those currently provided are not adequately maintained. Alternatively, it may mean that there are some cultural issues to address.

Level of issues	Description	Condition Class
None	No evidence of bush toileting • No bush toilet sites within a radius of 50m around the site (or associated toilets if they are provided) and • If toilets present they are in good order, clean & have no more than an expected level of odour.	Good
Minor	Bush toileting not obvious but occurring • <3 bush toilet sites within a radius of 50m around the site (or associated toilets if provided) and/or • If toilets present they are in good order & clean; may be somewhat odorous.	Good with Some Concern
Moderate	Bush toileting obvious • >3-5 bush toilet sites within a radius of 50m around the site (or associated toilets if they are provided) and/or • If toilets present they are in substandard condition & unclean; may be odorous.	Significant Concern
Major	Bush toileting highly obvious • >5 bush toilet sites within a radius of 50m around the site (or associated toilets if they are provided) and/or • If toilets present they are in poor condition & unhygienic; odorous.	Critical

7. Vandalism or theft

Vandalism includes graffiti, property damage and arson to assets (e.g. natural, cultural, built infrastructure including tracks). An example of vandalism to tracks – 'donuts.'

Examples of vandalism or theft to natural and cultural values include but are not limited to: removal of shrubs or trees or parts thereof (e.g. branches for firewood) or other natural or cultural materials; scarring of tree trunks by an axe, chainsaw or hand-saw; damage to or removal of cave formations; graffiti on rock formations or artwork; theft from artefact scatters, bottle dumps, crash sites, mine sites (so-called 'souveniring' and 'scavenging'). Standard photopoints may be very useful in determining the level of impact – in particular from theft.

Record (Table 2.3 your record sheet) details about the damage including the cause/type.

Use the description to get the 'best fit' – not all parameters are relevant to all circumstances.

Disturbance	Description	Condition Class
None	No vandalism and/or theft evident	Good
Minor	Some vandalism and/or theft evident; amenity[1] little impaired: • Damage is minor and temporary or easily repaired • Natural recovery will occur within weeks or, at most, a few months • Occasional superficial damage to, or removal of, small branches • A few superficial trunk scars • Theft inconspicuous/difficult to detect. • Visitor safety unimpaired if appropriate behaviour/precautions taken (e.g. suitable footwear).	Good with Some Concern
Moderate	Conspicuous vandalism and/or theft evident; amenity[1] and/or safety impaired: • Damage is substantial but all/largely reversible/repairable and/or costly repairs required • Natural recovery likely to take many months to years • Tree branches damaged or removed and/or • Scarred trunks common and unsightly • Loss from theft is obvious but does not threaten structural integrity nor the ability to 'tell the story' of the place. • Safety impaired.	Significant Concern
Major	Extensive vandalism and/or theft evident; amenity[1] and/or safety significantly impaired: • Damage is substantial and some or all is permanent – substantial funding and urgent attention required to redress the damage. • Trees cut down or killed. • Loss from theft is substantial; may include structural elements and significantly impacts on the ability to 'tell the story' of the place.	Critical

1. If graffiti is offensive, abusive, racist or culturally insensitive ensure that in-line managers are alerted to its presence, particularly if it is conspicuous or extensive. Table 2.5 can be used for this purpose.

8. Vehicle impacts

(Use for key values or parts of key values where vehicles are not permitted or not desirable)

(e.g. tracks across salt pans, saltmarsh, dunes, beaches, wetland margins)

Vehicles can impact on visitor experience and safety in various ways (e.g. physical disturbance to site amenity, noise pollution, vehicle ruts can be an impediment to the movement of turtle hatchlings).

Level of impact	Description	Condition Class
None	No signs of vehicle tracks.	Good
Minor	Ecosystem mostly intact; amenity little impaired: • 1-10% of the soil surface is disturbed.	Good with Some Concern
Moderate	Ecosystem integrity under threat; amenity impaired: • >10-25% of soil surface is disturbed.	Significant Concern
Major	Ecosystem integrity & amenity significantly impaired: • >25% of soil surface disturbed.	Critical

9. Litter or dumped rubbish

Examples of rubbish include paper, cans, bottles, fragments, detritus, food scraps, flotsam and jetsam. It also includes charcoal and ash from fire pits or barbeques when it is dumped outside of designated fire pits. In caves and other sensitive locations this can include human derived detritus such as lint, skin flakes, hair.

Dumping is a pre-meditated action of going to 'the bush,' rather than the rubbish dump, to get rid of waste (e.g. car wrecks, fuel containers).

Use the description to get the 'best fit' – not all parameters are relevant to all circumstances unless specified.

Level of impact	Description	Condition Class
None	• No litter evident or it is rarely encountered and • No dumping	Good
Minor	• No dumping and • Some litter occasionally encountered; amenity little impaired; no safety concerns and • Site can be quickly and easily cleaned up during a routine patrol	Good with Some Concern
Moderate	Conspicuous litter (potentially including from dumping) evident; amenity impaired; safety may be compromised • Clean up will be time consuming and/or some bulky/heavy items require removal • Toxic (non-lethal) or dangerous[1] materials/liquids may be present • Temporary, relatively short-term closure of site may be required for clean-up and/or remediation	Significant Concern
Major	Extensive litter (typically from dumping) evident; amenity significantly impaired; significant safety concerns • Clean up will require a major, coordinated effort and/or heavy equipment • Toxic or dangerous[1] materials/liquids (lethal/ highly toxic to the environment) may be present • Immediate and either permanent or relatively long-term site closure required	Critical

1. Examples of things to look out for include labels listing or indicating (skull and cross-bones) toxic materials/liquids, oil slicks, yellowing/dying vegetation. Dangerous materials include sheets of broken glass, barbed wire or sharp edged metals, or materials potentially containing asbestos.

1. Examples of signs include labels listing or indicating (skull and cross-bones) toxic materials/liquids, oil slicks, yellowing/dying vegetation. Dangerous materials include sheets of broken glass, barbed wire or sharp edged metals, or materials potentially containing asbestos.

10. Campfire places outside designated fire pits

This includes campfire places where campfires are not permitted and campfire places outside of designated fire pits where fires are permitted.

Level of impact	Description	Condition Class
None	• No campfire places evident where fires not permitted • No campfire places evident outside of designated fire pits	Good
Minor	Few campfire places evident; amenity little impaired. • 1 campfire place/ha where fires not permitted • 1-3 campfire places/ha outside of designated fire pits	Good with Some Concern
Moderate	Campfires places frequently encountered; amenity impaired • 2-3 campfire places/ha where fires not permitted • >3-7 campfire places/ha outside of designated fire pits	Significant Concern
Major	Campfire places common and/ extensive; amenity significantly impaired • >3 campfire places/ha where fires not permitted • >7 campfire places/ha outside of designated fire pits	Critical

11. Modified wildlife behaviour

The definitions applied here are as follows.

Scavenging behaviour is where an animal searches out discarded food and associated refuse.

Habituated behaviour is where an animal is unafraid of being in the presence of humans but is otherwise not seeking any interaction.

Nuisance behaviour is where an animal is unafraid of being in the presence of humans and initiates unwanted interaction (e.g. begging for, or stealing, food) but is not capable of causing, or very unlikely to cause, physical harm (e.g. magpie, butcher bird, lorikeet).

Potentially dangerous behaviour is where nuisance behaviour could result in non-permanent injury (e.g. aggressive goanna seeking 'handouts'; kookaburra stealing food from hand/mouth).

Potentially lethal behaviour is where nuisance behaviour could result in maiming or death (e.g. large macropod or dingo seeking 'handouts').

Use the description to get the 'best fit' – not all parameters are relevant to all circumstances. Local staff knowledge will usually be required.

Level of disturbance	Description	Condition Class
None-rare	Little or no evidence of modified wildlife behaviour. • No or rarely encountered signs of scavenging • No habituated behaviour • No nuisance behaviour • No potentially dangerous behaviour • No potentially lethal behaviour	Good
Minor	Some evidence of modified behaviour. • Few signs of scavenging • 1 or more species displaying habituated behaviour • 1 or more species displaying nuisance behaviour • No potentially dangerous behaviour • No potentially lethal behaviour	Good with Some Concern
Moderate	Conspicuous evidence of modified behaviour. • Scavenging resulting in unsightly amount of strewn rubbish • 1or more species displaying potentially dangerous behaviour • No species displaying potentially lethal behaviour	Significant Concern
Major	Major evidence of modified behaviour. • 1 or more species displaying potentially lethal behaviour	Critical

12. Impacts on wetlands

Wetlands include, for example, rivers, creeks, streams, swamps, lakes, waterholes, saltmarshes and springs. If there are concerns that water quality may be compromised by contamination (e.g. human or animal waste) additional monitoring should be undertaken (e.g. faecal coliform counts), particularly in sites used for swimming or drinking. Increased levels of faecal coliform may indicate a higher risk of waterborne pathogens that may cause diseases (e.g. ear infections, gastroenteritis and hepatitis A) as well as environmental impacts. They can occur as a result of human or animal waste being deposited directly in a waterbody or via runoff or leaching from nearby sources (e.g. septic/agricultural systems).

Record (Table 2.3 your record sheet) the cause/s of the impact (e.g. human trampling; the pest/problem species impacting your inspection site/s). If there is more than one causal agent (e.g. cattle & pigs) indicate, if possible, the primary agent.

Use the description to get a 'best fit' – not all parameters are relevant to all circumstances.

Level of impact	Description	Condition Class
None	• No signs of physical disturbance[1] • Water quality/clarity good (e.g. no cloudiness/murkiness) • No evidence of altered stream flow (other than expected from natural seasonal fluctuations) • No disturbance to aquatic or target species[2] • No obvious/likely source[3] of un-natural nutrient input (e.g. effluent) nor signs[4]	Good
Minor	Ecosystem mostly intact; amenity little impaired ***In the case of wetlands with open water:*** • Some disturbance around the margins/ banks (<25% of margins) • Water quality/clarity good (e.g. no cloudiness/murkiness) except in the immediate vicinity of the disturbance • Little or no disturbance to aquatic vegetation • Little or no evidence of altered stream flow (other than expected from natural seasonal fluctuations) • No obvious/likely source[3] of substantially elevated levels of un-natural nutrient input; minor input possible (e.g. swimmers, feral animals); no obvious signs[4] ***In the case of wetlands without open water:*** • 1-10% of soil surface has been physically disturbed[1] • Little or no disturbance to typical target species[2]	Good with Some Concern
Moderate	Impact obvious; amenity impaired ***In the case of wetlands with open water:*** • Substantial disturbance around the margins/banks (25-75% of margins) • Water quality/clarity impacted (e.g. areas of cloudiness/murkiness) beyond the immediate vicinity of impacted points/ margins • Disturbance/ destruction of aquatic vegetation obvious or substantial proportion of the vegetation appears unhealthy • Altered stream flow and/or ponding beyond that expected from natural seasonal fluctuations. • Likely source[3] of substantially elevated levels of un-natural nutrient input; may be obvious signs[4] ***In the case of wetlands without open water:*** • >10-25% of soil surface has been physically disturbed[1] • Disturbance to typical target species may be obvious[2]	Significant Concern
Major	Extensive disturbance; amenity significantly impaired ***In the case of wetlands with open water:*** • Most or all of the margins/banks are disturbed (>75%) • Water quality/clarity poor throughout • Most or all aquatic vegetation damaged/destroyed/appears unhealthy • Greatly reduced stream flow beyond that expected from natural seasonal fluctuations and/or stream diverted or level of disturbance is such that the length of time that water will be available will be severely curtailed - a usually permanent waterbody will dry up • Known source[3] of substantially elevated levels of un-natural nutrient input; may be obvious signs[4] ***In the case of wetlands without open water:*** • >25% of soil surface has been physically disturbed[1] • Disturbance to typical target species may be extensive[2]	Critical

1. Eroded/bare from trampling by humans or animals (e.g. cattle, goats or wallabies) or boat wash; dug over; pugging.
2. Example of 'typical target species': pigs – *Eleocharis dulcis* (bulkaru) (tubers).
3. Examples of sources – leaching from septics; large feral animal population
4. Examples of signs of elevated levels of un-natural nutrient input – scum, sludge, algal blooms, odour

13. Infestations of pest plants (includes aquatic pest plants)

Weeds 'take advantage' of disturbance, nutrient input and gaps. They impact on site amenity, the surrounding environment and at times the comfort of visitors. In the case of heavily used sites such as formed campgrounds a non-native species such as a lawn grass (e.g. Qld blue couch) may not be considered a pest species of concern providing it does not pose a threat of escaping into the surrounding landscape. Pest species of concern are those that: have the potential to: 1. Escape into and impact the surrounding landscape (and hence ecosystem health and natural amenity); and/or 2. Impact on visitor comfort (e.g. Mossman River burr, prickly pear, Noogoora burr) and /or 3. Impact visitor values eg (Lampenflora are plants (mostly algae and mosses) that would not be present in a cave if additional light was not provided for the safety and enjoyment of visitors. They can grow to a point where they start to damage the cave/cave formations)

Record (Table 2.3 on your record sheet) any significant/priority pest species present at the site.
Note: Prohibited & Restricted plants must be reported to Biosecurity Qld as soon as possible.

Level of infestation	Description	Condition Class
None	**Pest species** (all pest species) are absent including on margins.	Good
Light	***Pest species of concern*** are inconspicuous[1]; mainly confined to heavily disturbed nodes • Pest spp. in ground stratum – represent up to 5% of cover • Pest shrubs/trees – represent up to 5% of stems • Pest climbers – cover up to 5% of canopy	Good with Some Concern
Moderate	***Pest species of concern*** are a conspicuous • Pest spp. in ground stratum – represent 5-25% of cover • Pest shrubs/trees – represent >5-25% of stems • Pest climbers – cover >5-25% of canopy	Significant Concern
Heavy	***Pest species of concern*** are abundant • Pest spp. in ground stratum – represent >25% of the cover • Shrubs/trees – represent >25% of stems • Pest climbers – cover >25% of canopy	Critical

1. Consider what they would look like and the space they would occupy in a good season.

Appendix 2. Record sheet: Visitor Values Health Checks

Park name (& section): _____

Recorder/s: _____

Value[1]: _____

Site Details (for permanent and non-permanent sites):

	Site Id.	GPS Location (Datum:)	Permanent site & photo point established (Y/N)	Approx. site area	Date assessed (d/m/y)
1					
2					
3					
4					
5					

Site & photo point definition

Is it likely that someone doing the Health Checks in future could be confused about what might or might not be included in the site you are establishing? If the answer is yes, then provide clear details about your site and its boundary below. Details about why you chose the site may also be useful.
For permanent sites describe how the photos are to be taken. Record photo numbers here also.

Site 1

Site 2

Site 3

Site 4

Site 5

1. Use the name provided in the management plan/statement (or Values Assessment & Assessment & Monitoring Strategy if no plan)

Condition class summary

Record: the Condition Class that you determine for the value at each inspection site for each Health Check Indicator (HCI); your general impression of the condition of the value across the park (if there is more than one example of the value) for each HCI (based on site results and other observations – note that the Condition Class you record as your general impression IS NOT an 'average' of the Condition Classes at each site. It IS your considered opinion about the state of the value (across the park if relevant) based on the site results and your observations; and the overall condition of the value (across the park if relevant) based on the IUCN definitions (Table 2.2).
Where it is relevant, provide information on factors contributing to the Condition Class assigned to an inspection site, in Table 2.3. Details relevant to your determination of the General Impression and the Overall Condition Class can be recorded in Table 2.4 and the notes field below Table 2.4, respectively.

Table 2.1 Record of the Condition Class for a key visitor value.

Key: **G = good**; **GC = good with some concerns**; **SC = significant concern**; **C = critical**; **NA** = not applicable.

Health Check Indicator	Condition Class					General impression
	Site 1	Site 2	Site 3	Site 4	Site 5	Not an 'average'!
1. Condition of built infrastructure						
2. Ground surface damage or modification						
3. Condition of roads						
4. Widening/spread of footprint						
5. Trampling by visitors or animals						
6. Adequacy of toilet facilities						
7. Vandalism and theft						
8. Vehicle impacts						
9. Litter or dumped rubbish						
10. Campfire places outside of designated fire pits						
11. Modified wildlife behaviour						
12. Impacts on wetlands						
13. Infestations of pest plants (includes aquatic pest plants)						
Overall Condition Class (refer Table 2.2)						

Table 2.2 Overall Condition Class – what the categories mean	
Good	The Key Value is in good condition and is likely to be maintained for the foreseeable future, provided the current conservation measures are maintained.
Good with some concern	The Key Value is likely to be essentially maintained over the long-term with minor additional conservation measures to address existing concerns.
Significant concern	The Key Value is threatened by a number of current and/or potential threats. Significant additional conservation measures are required to preserve the value over the medium to long-term.
Critical	The Key Value is severely threatened. Urgent additional large-scale conservation measures area required

Trigger for management response			
Maintain effort	**Minor attention required**	**Requires prompt decision &/or planned course of action**	**Requires urgent decision re course of action**

Table 2.3 Information, including key issues/threats, relevant to determining the condition of the value at Site/s _____

Health Check Indicator	Notes *If you don't use a separate notes page for each site then record the relevant site number below against each set of notes*
1. Condition of built infrastructure	
2. Ground surface damage or modification	
3. Condition of roads	
4. Widening/spread of footprint	
5. Trampling by visitors or animals	
6. Adequacy of toilet facilities	
7. Vandalism and theft	
8. Vehicle impacts	
9. Litter or dumped rubbish	
10. Campfire places outside of designated fire pits	
11. Modified wildlife behaviour	
12. Impacts on wetlands	
13. Infestations of pest plants (includes aquatic pest plants)	

Table 2.4 Information relevant to the determination of the *General Impression* for a Health Check Indicator.

Health Check Indicator	Notes
1. Condition of built infrastructure	
2. Ground surface damage or modification	
3. Condition of roads	
4. Widening/spread of footprint	
5. Trampling by visitors or animals	
6. Adequacy of toilet facilities	
7. Vandalism and theft	
8. Vehicle impacts	
9. Litter or dumped rubbish	
10. Campfire places outside of designated fire pits	
11. Modified wildlife behaviour	
12. Impacts on wetlands	
13. Infestations of pest plants (includes aquatic pest plants)	

Notes relevant to the determination of the Overall Condition Class:

New or emerging issues noticed (anywhere on the park) while undertaking an inspection

Make a note in Table 2.5 of localised disturbances (point source or linear), biosecurity breaches or issues that require attention to prevent degradation and significant resource input in the future (e.g. a new infestation of an ecosystem-changing weed; illegal dumping; pollution event; erosion; tree-fall across a track resulting in new tracks), or pose a risk to life and property, or significantly impact on visitor experience (e.g overcrowding, excessive noise, conflict amongst user groups).

Determine, with your in-line managers, an agreed management response and desired outcome – record these in Table 2.5 (or in a separate project plan if warranted). During future inspections evaluate the effectiveness of the management response in achieving the stated desired outcome – use the ratings below to do so.

Effectiveness of management response	Rating
Desired outcome achieved	1
Heading towards desired outcome	2
Situation static	3
Heading away from desired outcome	4

Table 2.5 Details of localised disturbances/issues requiring attention and effectiveness of management response.

Y = yes; N = no; P = partially

ISSUE 1							
Date of initial record (d/m/yr):	GPS location (including datum):						
Issue & current condition:							
Agreed management response (AMR):							
Desired outcome:							
	Follow-up inspections						
Date (d/m/yr)							
AMR implemented (Y/N/P)							
Rating:							
ISSUE 2							
Date of initial record (d/m/yr):	GPS location (including datum):						
Issue & current condition:							
Agreed management response (AMR):							
Desired outcome:							
	Follow-up inspections						
Date (d/m/yr)							
AMR implemented (Y/N/P)							
Rating:							
ISSUE 3							
Date of initial record (d/m/yr):	GPS location (including datum):						
Issue & current condition:							
Agreed management response (AMR):							
Desired outcome:							
	Follow-up inspections						
Date (d/m/yr)							
AMR implemented (Y/N/P)							
Rating:							