



NSW NATIONAL PARKS & WILDLIFE SERVICE

Hill End Historic Site

Planning Considerations





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How to use this report

This planning considerations report outlines the matters considered in preparing the Hill End Historic Site Plan of Management, including the historic site's key values, management principles and management considerations. Further information, including scientific names for common names of species, is provided in the appendices.

It is recommended that readers of this report also read the plan of management. The plan of management describes the desired outcomes for the site's values and actions that the National Parks and Wildlife Service (NPWS) proposes to undertake to achieve these outcomes. It also sets out the recreational and commercial activities that are permitted in the park and any requirements to undertake these activities, including whether consent must be sought from NPWS to undertake them.

This planning considerations report will be updated when appropriate, for example, if we have new information on:

- the values of the park (e.g. new threatened species)
- management approaches (e.g. new pest management techniques)
- new programs.

Changes will only be made to this report if they are consistent with the plan of management.

Acknowledgements

Hill End Historic Site is in the traditional Country of the Wiradjuri People.

This plan of management was prepared by staff of NPWS.

Contact us

For more information about the planning considerations, the plan of management or Hill End Historic Site, contact the Hill End Historic Site Office, Beyers Avenue, Hill End NSW 2850 or by telephone (02) 6370 9050.

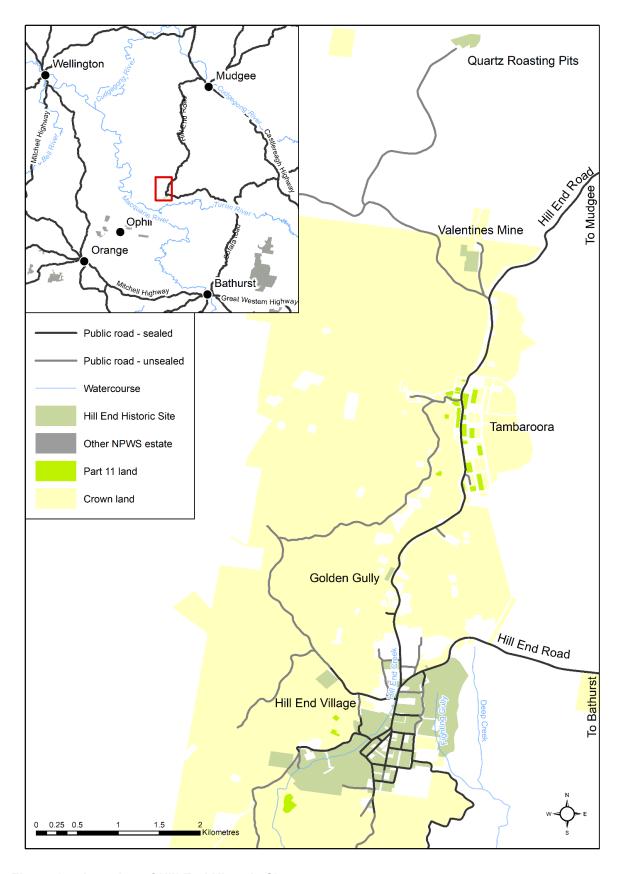


Figure 1 Location of Hill End Historic Site

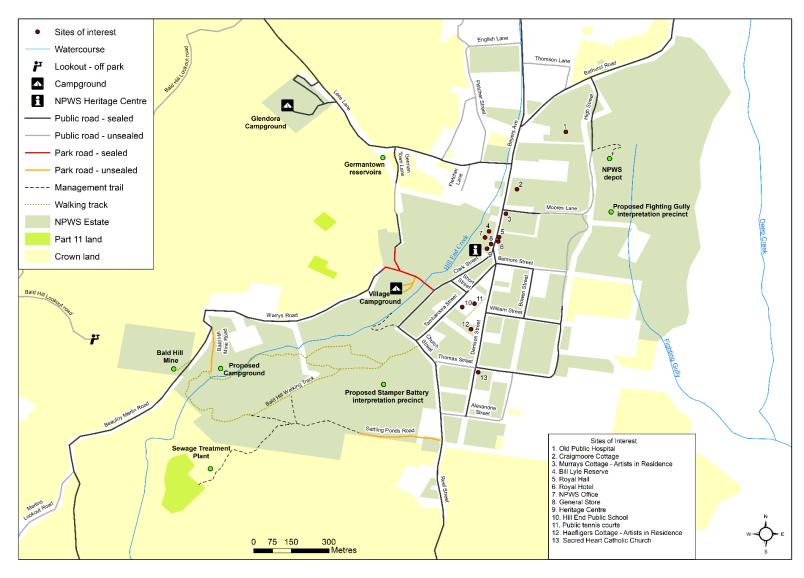


Figure 2 Hill End village within the historic site

1. Hill End Historic Site

1.1 Location and surrounding landscape

Hill End Historic Site is centred on the **village of Hill End** which came into being during the short-lived gold rush of the mid-19th century in the Central Tablelands of New South Wales. The historic site (referred to as 'the site' or 'Hill End' in this report) was among the first three historic sites reserved in New South Wales under the *National Parks and Wildlife Act 1967* (now repealed) and managed by the newly created National Parks and Wildlife Service (NPWS). Today the well-preserved village and its small population, which fluctuates between about 80 and 100 people, forms a living village in a state-significant cultural heritage landscape.

Hill End is located on Hill End Creek, a tributary of the Turon River, and is approximately 75 kilometres from the regional cities of Bathurst and Mudgee, and 38 kilometres from Sofala, another former goldmining town (see Figure 1).

The historic site has an area of 134 hectares and includes the core of the village of Hill End, the former Bald Hill Mine, recreation areas and several outlying historic mining sites to the north. These dispersed sites are **Golden Gully** (1.4 kilometres from Hill End village), the former village of **Tambaroora** (3.5 kilometres), **Valentines Mine** (5.7 kilometres), and the **Quartz Roasting Pits** (12 kilometres) (see Figure 1 and additional detail in Section 2.3).

The Hill End Historic Site Plan of Management covers all land reserved as historic site as well as unreserved lands vested in the Minister under Part 11 of the *National Parks and Wildlife Act 1974*. These Part 11 lands include most of the former village of Tambaroora, and some isolated parcels to the west and south-west of Hill End village (see Figure 1). These Part 11 lands do not form part of the reserved area of the site but their management is subject to this plan and the National Parks and Wildlife Regulation. Part 11 lands may include land that is intended to be reserved in the future and land that is unlikely to ever be reserved (e.g. severely modified areas). The Part 11 lands at Hill End will be reviewed to determine whether they should be added to the historic site.

Local **topography** comprises rolling hills and plateaus of the Turon River Valley, but the landscape around Hill End bears little resemblance to its natural landform following the modification of hillsides, creeks and drainage lines by goldmining activities. Existing vegetation comprises regrowth, considerably different in structure and species composition from the vegetation which would have existed before the 1850s.

Hill End is within the **South Eastern Highlands Bioregion** (Thackway & Cresswell 1995), which has a relatively high percentage of land managed for conservation, about 14.6%. There are several nature reserves and national parks to the south-west, south-east and east of Hill End, and another NPWS-managed historic site at Hartley on the western edge of the Blue Mountains, approximately 138 kilometres away.

Land ownership in Hill End is quite fragmented and complex. While the majority of land in the village is held by Department of Planning and Environment (DPE), some parcels such as the Hill End Public School are held by other government agencies, some parcels are Crown land, and a significant number are held in private ownership.

The majority of the historic site is located in the Bathurst Regional Council administrative area, while Valentines Mine and the Quartz Roasting Pits are in the Mid-Western Regional Council area (former Mudgee Shire and part of the former Merriwa and Rylstone shires). Freehold land in private ownership in Hill End village is subject to the provisions of *Bathurst Regional Local Environmental Plan 2014* and *Bathurst Regional Development Control Plan*

2014. The historic site is also within the administrative areas of the Central Tablelands Local Land Services and Orange Local Aboriginal Land Council.

Surrounding the village is **Hill End and Tambaroora Common** (see Figure 2), which comprises approximately 2500 hectares of Crown land managed by the Hill End and Tambaroora Common Trust under the *Commons Management Act 1989*. Commons were established throughout New South Wales in the late 1800s and early 1900s for common use by the local community for grazing, watering of stock and collection of firewood. These uses are still allowed on Hill End and Tambaroora Common. Within the Common are a rifle range, a historic racecourse, and the Hill End trig station at 969 metres AHD.

There are also several active mining leases in the area of Hawkins Hill, adjoining Hill End to the south, which continue to yield gold. To the east of Hill End are a private museum and a lodge offering accommodation for visitors.

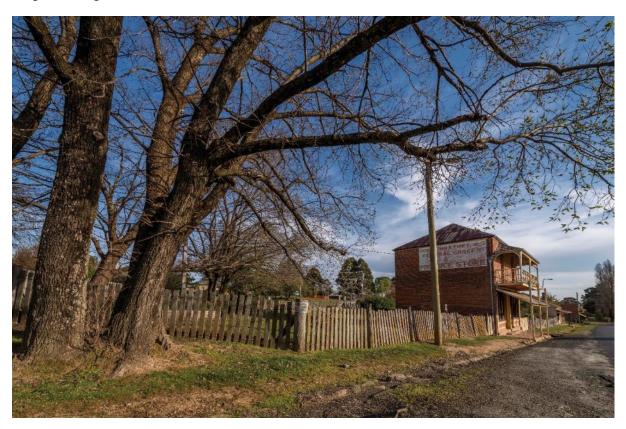


Photo 1 View of Northeys Store, Beyers Avenue. John Spencer/DPE

1.2 Background to the plan of management

Hill End Historic Site was among the first 25 national parks, so-called 'state parks', and historic sites gazetted for management and protection by the NPWS in 1967. The gazettal of the historic site came about as the result of a build-up of community concern and public interest in the decline of Hill End and the potential loss of a significant part of NSW history. Representations were made to the NSW Government by Hill End residents, the former Turon Shire Council and the NSW National Trust. It has been suggested that this intervention by the state government also arrested the destruction of further dwellings that had been evident with the changing fortunes of the town since its mining days (Conybeare Morrison 2013b).

Significant planning effort has been undertaken to guide NPWS management of Hill End and its significant cultural heritage values prior to preparation of the plan of management, and the reports generated have been used extensively in preparing the plan (see list of relevant

planning documents in Appendix C). The key document, comprised of 4 volumes, is the **Conservation Management and Cultural Tourism Master Plan for Hill End Historic Site** which was prepared in 2013 and endorsed by the NSW Heritage Council in the same year (Conybeare Morrison 2013a, 2013b, 2013c; Context Landscape Design 2013). It is referred to as the master plan in this report.

As a statutory document, the plan of management enables the master plan to be put into effect. Key elements of the master plan are explained in this report and form the basis for the plan of management's objectives and actions. More detail on the master plan is provided in Box 1.

Box 1. Conservation Management & Cultural Tourism Master Plan for Hill End Historic Site

The purpose of the master plan study was to take a close look at Hill End: what it was; what it has become; and what it needs in order to survive into the future. It identifies actions needed in the short and medium term, and sets them within the framework of a longer-term vision for the conservation and economic sustainability of the historic site as a whole.

The master plan consists of 4 volumes:

- 1. the overall master plan
- 2. a conservation management plan
- 3. a landscape management plan
- 4. a cultural tourism and recreation plan.

The master plan is being progressively brought into effect through an implementation strategy (Conybeare Morrison 2013d) with assistance from a project advisory group. This group includes local community representatives and meets on an as-needs basis. Consent is required from the Heritage Council for all works affecting state-listed heritage properties (see Section 2.3).

Analysis of the constraints and opportunities for the Hill End Historic Site in the master planning process resulted in a vision which sees the Hill End village progressively reinvigorated in a 'subtle and even organic way', to provide:

- new facilities and services for the community
- new business opportunities for locals and specialist operators
- new tourism infrastructure to gradually increase tourist interest in the unique qualities for the place.

This vision seeks to reinforce Hill End as a 'living village' and to stimulate the economic sustainability of the town. The vision acknowledges that the unique circumstances of Hill End and its isolation from employment opportunities lend themselves to cultural tourism, provided it can support local residents and businesses. Part of NPWS' approach to implementing the master plan is to provide the hospitality services and facilities needed to support a developing tourism market in a stepped, logical sequence. This means, for example, that a choice of hard-roofed accommodation will be provided ahead of additional attractions being developed (see Section 3.1).

The strategies and guidelines for Hill End village at the core of the historic site have been distilled into the tasks listed below, and some of these are shown conceptually in Figure 3:

- conserve heritage structures
- protect archaeological relics
- research Aboriginal history
- conserve moveable heritage
- interpret historic themes
- establish an 'authentic cottage hotel'
- · create a place of arrival
- improve access to Hill End
- develop the brand and marketing strategy
- develop an activities and events strategy
- develop the Hill End experience
- reinstate heritage landscapes
- landscape management
- develop new parks
- incorporate landscape features
- enhance walking trails
- introduce sustainability measures
- plan for population growth
- streamline infrastructure provision
- foster local commercial capacity.



Photo 2 Warrys Cottage. John Spencer/DPE



Figure 3 Key elements of the master plan for Hill End village (Conybeare Morrison 2013a).

2. Looking after our culture and heritage

2.1 Aboriginal heritage

The historic site lies in the traditional Country of the Bularidee tribe of the **Wiradjuri People**, and within the present-day Orange Local Aboriginal Land Council area. The Wiradjuri are geographically the largest Aboriginal nation in New South Wales and probably the largest in terms of population (MLDRIN n.d.; Tindale 1974). There appears to have been 3 distinct Aboriginal groupings in the region between the Bathurst Plains and valleys of Wellington and Mudgee, with Hill End situated at the centre (Zilber 2001).

It has been suggested that Hill End was an ideal situation for Aboriginal camps due to its proximity to reliable water supply such as the Turon River and the Macquarie River, the availability of stones from river beds, and ready sources of granite and quartz for tool-making (Zilber 2001). This appears to be borne out by the presence of at least 62 Aboriginal sites within a 20–30 kilometre radius of Hill End (NPWS 1997). However, no sites have been recorded within the historic site itself. Most of the recorded sites in the surrounding area are camp sites, but there are also carved trees, quarries, stone arrangements, burial grounds, a rock engraving and shelter, all showing a strong history of Aboriginal occupation (Zilber 2001). The thorough disturbance to ground surfaces by goldmining is certain to have destroyed an unknown number of Aboriginal sites and would have had a significant impact on many archaeological remains in the Hill End area (Zilber 2001). Tambaroora and other Aboriginal place names in use add to the legacy of past Aboriginal history.

It is thought that the Aboriginal people around Hill End traded and shared stone tools with Aboriginal groups of western New South Wales. Examples of trade between tribes have been discovered near Tambaroora Creek in the early 1960s. There, road construction workers found stone axes and fragments of a hard, black stone not usually found in the area (Zilber 2001).

The history of Aboriginal people in Hill End is poorly known due to the paucity of archaeological and documentary evidence and the dominance of goldmining histories for the area. Research suggests that the Bularidee did not 'die out' but were irreversibly displaced, firstly by pastoralists, then gold-seekers and the conflicts that resulted. It is likely that the degree of disturbance, influx of non-Aboriginal people and land loss led to the Bularidee becoming fringe dwellers, and they subsequently made the decision to go elsewhere. A site south of the Turon River and 15 miles from Hill End was referred to as 'Blackfellows Gully' in 1873 (Court of Petty Sessions, cited in Zilber 2001). Aboriginal people were also removed to Aboriginal reserves such as those at Sofala, Bathurst, Ilford and Wellington from about 1860 onwards (Register of Aboriginal Reserves 1861–1899, cited in Zilber 2001).

Although Hill End is known today primarily for its goldmining heritage, Aboriginal histories have played a role in defining the natural and cultural heritage of the Hill End district (Zilber 2001). Today the Aboriginal interests of the Hill End area are represented primarily by the Orange Local Aboriginal Land Council but there is also overlap with the Bathurst Local Aboriginal Land Council.

To date, there has been little involvement by the Aboriginal community in the management of the Hill End Historic Site. Consistent with agency policy, NPWS acknowledges Aboriginal connection to Country and includes Aboriginal history in interpreting the site where possible. NPWS also seeks to encourage Aboriginal involvement in the protection of Aboriginal cultural heritage and in other site management activities where appropriate.

2.2 Shared heritage and history

Pastoralism and the discovery of gold

In 1813, early colonists were finally successful in finding a way over the Blue Mountains with the assistance of Aboriginal people. This led to the **establishment of Bathurst in 1815** and opening up of pastoral country by European settlers. Grants of land were taken up in the plains north of Bathurst in the 1820s and 1830s, and it was not until the 1840s that pastoralists occupied the steep rugged area around Hill End. The Bridle Track was constructed in the 1870s over an existing track to bring supplies from Bathurst to Bald Hill, as Hill End was originally known (Hodge 1976, cited in Hickson, McLachlan & Bathurst Regional Council 2009).

Gold was discovered in small amounts at various locations around Bathurst, including the Fish River between Rydal and Bathurst (1823), near Hartley (1839), and on the Coxs River (1841). Then gold was discovered at California, USA, and a gold rush ensued there in 1848. However, it was the discovery of gold in payable quantities by Edward Hargraves in 1851 at Ophir, on a tributary of the Macquarie River approximately 65 kilometres south-west of Hill End, that ignited the infamous NSW gold rush. Gold was found in Tambaroora Creek near Hill End in 1851, and once the news was released in the Sydney papers, eager gold-seekers flocked to the area in their thousands. Discoveries of gold at Ballarat and Bendigo in Victoria also occurred in the same year.

Goldmining and the growth of Hill End

There were three main periods of gold prospecting in Hill End: alluvial mining from 1851 to 1870, reef mining from 1871 to 1874, and a third boom period from 1908 to 1924.

Alluvial mining extracted gold from the shallow sedimentary deposits in and adjoining watercourses by washing, sluicing and panning. Tambaroora developed as a village before Hill End village due to its proximity to alluvial mining in Tambaroora Creek (Conybeare Morrison 2013a). Within a year of the discovery of the first gold, a tent village had sprung up at Tambaroora with a population of 2000 people. Buildings were then constructed from wattle and daub with bark roofs, none of which survive today.

Once the more accessible alluvial gold was exhausted, miners turned to **reef mining** which required digging out deeper quartz deposits for hand crushing (or 'dollying') of the ore inside iron cylinders (Mayne 2003, cited in Conybeare Morrison 2013b). 'Holtermann's Nugget', the largest specimen of reef gold, was unearthed in 1872 (see Box 2). As reef mining struck deeper underground, the work became more demanding and more dangerous. Crushing was carried out by stamper batteries that consisted of rows of cylinder heads that moved up and down to crush the ore. At the Quartz Roasting Pits, ore was heated to make it easier for crushing using a method developed by miners in Cornwall, England.

Reef mining proved to be prosperous and stimulated rapid development of Hill End, transforming it from a temporary settlement to a more stable and permanent township. Buildings became more substantial using masonry and galvanised iron, and were surrounded by ornamental gardens (Context Landscape Design 2013).

By the end of 1872, Hill End had more than 8000 people, making it one of New South Wales's largest inland towns. Retail shops stretched along more than a kilometre of road, and there were five banks, two newspapers, a brewery, 27 pubs, and over 200 mining companies (Hill End Family History n.d.). By 1873 significant civic improvements were made, including four churches, a hospital, a public school and improved roads. The majority of extant structures surviving in Hill End date from this period (Conybeare Morrison 2013b).

Box 2. Holtermann's Nugget

Gold production in Hill End peaked in 1872. In October of that year, the world's largest specimen of reef gold was uncovered at Hill End. It was discovered by the Star of Hope Gold Mining Company, owned by Bernhardt Otto Holtermann and Ludwig Hugo Louis Beyers. 'Holtermann's Nugget' as it was known, weighed 630 pounds (286 kilograms), measured 59 inches (1.5 metres) and had an estimated gold content of 3000 troy ounces (93 kilograms). It was by rights a specimen rather than a nugget because it consisted of a mass of gold embedded in quartz rock.



Holtermann with 'Holtermann's Nugget', Hill End 1872.

Photo: Holtermann Collection, State Library of New South Wales

The effect of Holtermann's find was felt as far away as Sydney, where people started buying and selling shares desperate to be part of the gold bonanza (Landline 2013). Holtermann became wealthy overnight, and an influential businessman, going on to be a councillor on the first Borough Council of Hill End and later a member of parliament. He is now better known for the extensive photographic record of Australia's gold rush he commissioned (see Box 5).

The discovery of gold in Australia became a magnet for the movement of people from all over the world keen to join the gold rush. Hill End and Tambaroora developed with large **influxes of immigrants** from the United Kingdom, Scandinavia, other parts of Europe and America in the 1870s. Some of the place names that have survived reflect these nationalities such as Germantown Lane, Irishtown, Scandinavian Mine, and Fighting Gully (the American area) (Conybeare Morrison 2013a).

A significant population of Chinese migrants also came to the goldfields. The 1861 census for Tambaroora recorded 1625 Chinese people (Hill End Family History n.d.), and the 1859 Parish Map shows a Chinese cemetery outside the boundaries of the historic site. It is separate from the Catholic and Anglican cemeteries close to Golden Gully, though it is less defined, and bodies of Chinese people were exhumed at the end of the 19th century (Conybeare Morrison 2013b). The Chinese cemetery was listed on the non-statutory Commonwealth Register of the National Estate (now archived on the Australian Heritage Database, DAWE n.d.a).

In 1874, the yield of gold started to decline dramatically with mines closing down and prospectors moving to other fields. The boom lasted less than 2 years and by the turn of the century, the population had fallen from 8000 to around 500 people (Hill End Family History n.d.). A modest mining revival occurred in the pre-World War I years, centred on reef mining around Hawkins Hill, and reworking of alluvial deposits at Tambaroora and Golden Gully (Mayne 2003, cited in Conybeare Morrison 2013b).

The processes for mining gold were labour intensive, requiring clearing of vegetation and access to water, and transformed the Hill End landscape into a mass of mullock heaps, dotted with water races and pit heads. There were few if any areas where vegetation and the ground surface remained undisturbed. Much of the modern landform remains as it was when the gold rush ceased. Settling ponds, mullock heaps, mine shafts and the eroded Golden Gully formation are all relics of the gold rush.

Hill End artists

With the end of the gold era, like other goldmining towns, Hill End declined, and the only activities to continue were timber-getting, cattle grazing and small-scale fossicking. Then, after World War II, Hill End and Sofala were 'discovered' by a significant number of now well-known artists, starting with a visit by **Donald Friend and Russell Drysdale** in 1947. Artists seemed to be attracted by Hill End's ability to inspire in them a romantic interpretation of our 'frontier' history. The result has been a collection of remarkable paintings which have become iconic Australian works, reflecting the tortured landscape, vernacular architecture and people of Hill End (Mayne 2003, cited in Conybeare Morrison 2013b).

Among the 'first wave' of artists who visited Hill End regularly were Margaret Olley, Jean Bellette, Paul Haefliger and David Strachan. Some artists, including Donald Friend, Jean Bellette and Paul Haefliger, bought cottages and established an artists' colony in the village. Their work depicting the Hill End landscape has helped to promote an appreciation of its heritage values (Conybeare Morrison 2013c).

Part of the attraction of the place to artists was the post-mining landscape of exposed mullock heaps and eroded gullies. Hill End also seemed to exist on the margins of Australian society, and had an element of 'oddity' about it that included a 'romantic frontier' history (Conybeare Morrison 2013a). The Holtermann Photographic Collection, discovered during the 1950s (see Box 5), was also instrumental in providing imagery for artists from the gold rush time (Conybeare Morrison 2013a).

A second generation of artists were attracted to Hill End in the 1960s and 1970s. These included Jeffrey Smart, Brett Whiteley, John Olsen and John Firth-Smith.

The Hill End Artists in Residence Program continues the legacy of the early artists' colony, based in Murrays Cottage (formerly Donald Friend's house) and Haefligers Cottage (Beyers Avenue and corner of Denison and Havilah streets respectively).

This program started in 1995 and has been managed for some years by Bathurst Regional Art Gallery in partnership with NPWS. Well over 320 residencies have been awarded to artists from a diverse range of disciplines via the program.

NPWS has been advised that 12 contemporary artists currently live and work in Hill End. This group of artists exhibits regularly and works across all mediums and art-forms, including music and performance. Most are represented by galleries across Australia and internationally. There are another 12 contemporary artists who own property in Hill End and visit regularly. Most, if not all of the artists now practising their art in Hill End have attended art schools across Australia, most notably the National Art School in Sydney.

NPWS is committed to honouring the significant contribution by artists past and present by enabling use of heritage buildings such as Murrays and Haefligers cottages for artistic

endeavours like residencies, exhibition spaces and workshop venues. These activities can be provided for through consent for short term use or via long term leases.

2.3 Management considerations and opportunities

Heritage significance

Hill End Historic Site has exceptional heritage significance to New South Wales and Australia due to its historic, aesthetic, social and research potential values (Conybeare Morrison 2013a).

In 1976, part of the village within a two-kilometre radius of the Royal Hotel was listed as the Hill End Urban Conservation Area on the non-statutory National Trust Register. Permanent heritage protection was achieved with listing of the NPWS Hill End Historic Site on the State Heritage Register in 1999. See Box 3.

Box 3. State Heritage Register

State heritage significance, in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

The statement of significance which supports the listing of Hill End on the State Heritage Register includes consideration of Hill End's unique history, the integrity and well-preserved nature of its buildings and moveable heritage, the record it provides of goldmining technologies, and its rarity.

State heritage listing has specific implications in terms of approvals and permits required by the NSW Heritage Council for work on heritage buildings. Under the requirements of the *Heritage Act 1977*, before NPWS can undertake any works affecting items on the State Heritage Register, the consent of the Heritage Council must be obtained. These approval bodies must take into consideration any potential impacts of the proposed works on the heritage significance of the item. Approval is required for excavation, maintenance and repair, and demolition (though some exemptions may apply). These approval processes add significant additional cost and time to NPWS conservation programs at Hill End.

NPWS policy requires all items listed on the State Heritage Register to have a conservation management plan and to be maintained in accordance with best practice management principles. The Heritage Act also stipulates that all buildings listed on the State Heritage Register, other than ruins, must meet minimum standards of maintenance and repair.

Under the Act, the Heritage Council can issue an order to the owner of a listed building, work or relic if it is not being maintained or repaired in accordance with the specified minimum standards.

The conservation management plan completed in 2013 (Conybeare Morrison 2013b) provided additional assessment against the criteria for *national* heritage listing (NSW Heritage Council 2001) to address some omissions in the 1999 listing. These included specific reference to the Holtermann Photographic Collection, the associations Hill End has for Chinese immigrants, the unusual artistic response to Hill End by prominent Australian artists of the post-World War II period and the contemporary Artists in Residence Program (Conybeare Morrison 2013b).

On the basis of the additional assessment, the conservation management plan recommended that Hill End Historic Site should be listed on the national heritage list as many of its elements are of exceptional significance. The conservation management plan also states (Conybeare Morrison 2013b, p. 53):

Hill End has international significance as a gold rush town with an environment that has not been reconstructed or 'upgraded', which allows for an accurate exploration of a former significance point in time in the economic, social and artistic history of the country.

Possible additions to the historic site

The historic site was established in two stages. In Stage 1, a core area of 27.5 hectares of privately owned land was identified for purchase in 1967. Stage 2 extended the historic site beyond the core area in 1970 with a change in NPWS policy to also acquire undeveloped land, and to leave developed land until offered by sale by the owner.

The original acquisition program created some concern in the Hill End community as large areas of the village came under public ownership. Residents were apprehensive about the management arrangements and how these would impact the town and residents.

Since 1970, most of the leasehold Crown land, abandoned freehold land, and some freehold lands offered for sale by owners within the extended area have been added to the historic site. The last major addition was the purchase of lands at Tambaroora.

The assessment of heritage values in the master plan for Hill End (see Box 1) adopted a 'whole-of-landscape' approach, regardless of tenure. As part of this process, some properties outside of the current historic site boundaries were identified, which could enhance the conservation and protection of Hill End if under NPWS management.

Given the fragmented ownership pattern of Hill End village, the master plan considers there are some strategically located individual properties which should, if the occasion arises, be purchased by NPWS (Conybeare Morrison 2013a). This would assist in maintaining the authenticity of the area.

NPWS proposes to review the potential for adding properties to the historic site, if and when they become available, provided they meet the following criteria:

- heritage significance
- critical to the historic appearance of the village
- critical to the historical appearance of access roads
- historic building
- critical to management of NPWS land.



Photo 3 Great Western Store, Tambaroora Street. M Billington/DPE

Standing shared heritage

Hill End village contains approximately 200 heritage buildings dating from the 1870s or soon afterwards, as it was relatively untouched by new development from the 1900s onwards. A few buildings were lost to decay in the period 1954 to 1967 but no buildings have been lost since the site was acquired by NPWS (Conybeare Morrison 2013b).

Today the village exhibits a high degree of integrity. The surviving buildings and structures show fine examples of 19th century building styles and construction techniques, including the evolution of slab construction, weatherboard, stone, brick, wattle and daub, and corrugated iron. A number of the buildings also contain original interior finishes, furnishings and artefacts which are of outstanding importance (see Moveable heritage section below). Built heritage values are complemented by remnants of historic gardens, orchards and street plantings which form an intrinsic part of the cultural landscape.

NPWS owns and manages 60 properties in Hill End (Conybeare Morrison 2013a) which together represent a unique collection of historic buildings, structures and archaeological sites listed on the State Heritage Register. Early stabilisation and maintenance efforts were guided by conservation management strategies prepared for a number of individual properties in the historic site. All buildings and sites owned by NPWS are now managed in accordance with the vision and recommendations of the conservation management plan for the village endorsed by the State Heritage Council (see Box 4) which forms volume 2 of the Hill End master plan. Prior to any conservation work being commenced, a building- or site-specific conservation management plan must be prepared and submitted to the Heritage Council for endorsement.

Box 4. Conservation vision for Hill End Historic Site

The vision established by the conservation management plan (Conybeare Morrison 2013b) is encapsulated as follows:

- conserve heritage authenticity for future generations
- maintain the unique heritage experience of the place while maintaining a living village
- continue management by NPWS to ensure a holistic approach and outcome
- · revitalise a sustainable Hill End
- manage change with care
- reinforce the heritage significance of Hill End by recognising all phases of occupation of the site
- seek national heritage listing and World Heritage listing to recognise and promote Hill End's extraordinary cultural significance
- encourage shared values by stakeholders including the local community.

At acquisition, the condition of the buildings in Hill End village varied greatly, ranging from those requiring minimal attention to those requiring urgent stabilisation or comprehensive renovation. Natural ageing, termites, dry rot, vermin and fire all pose ongoing risks to standing heritage structures. Because of their age, heritage buildings also require ongoing monitoring and maintenance. The master plan and conservation management plan (Conybeare Morrison 2013a, 2013b) assessed the condition of NPWS-owned buildings and provided options for their restoration and possible future use.

As allowed for by the National Parks and Wildlife Act and in accordance with the conservation management plan (volume 2 of the master plan), many of the heritage buildings are proposed to be adaptively reused as a means of achieving an optimum conservation outcome. As outlined in the NPWS *Adaptive Reuse of Heritage Places Policy* where adaptive reuse is proposed, emphasis is placed on retaining the original heritage fabric where possible and avoiding impacts on heritage values during the restoration process. Adaptive reuse provides opportunities for buildings to be used for suitable tourist and community purposes and to generate an economic return to fund ongoing maintenance. Hill End's unique collection of historic heritage buildings and structures provide opportunities for accommodation, tourism ventures, cafes, restaurants and community facilities.

Extensive investment and restoration work have been undertaken by NPWS to recover and conserve the heritage of Hill End since 1967. NPWS is progressively working through the conservation priorities established in the Hill End master plan implementation strategy, using heritage building specialists and craftsmen where required. Table 1 describes the status of the 22 properties which are the key heritage elements of NPWS heritage management. Once restoration work is complete, buildings are generally leased to private parties who are responsible for maintaining the buildings in accordance with lease conditions. As at 2020, recently completed buildings include Woolards Cottage, the Post Office, The Pines Cottage, the General Store, the old Rural Fire Service (RFS) Shed (now the Heritage Centre), the Country Women's Association (CWA) Building (now the NPWS Site Office, see Section 4.4) and Hosies Store. Continued restoration and adaptive reuse work is dependent on approval by the Heritage Council, available funding and satisfactory leasing options (see Conditional leasing section below).

There are many heritage buildings and structures both in and outside Hill End village that are owned by other authorities or are in private ownership. These contribute to the overall integrity of the village and its heritage significance, as do the myriad of historic streetscape structures such as paling fences, gates and old pathways. If heritage items are not maintained in accordance with their assessed level of heritage significance, this can depreciate the overall heritage values across the broader landscape.

Table 1 Key NPWS properties under restoration and ongoing management

				.	
No.*	Property name	Condition 2020	Conservation required	Current use	Possible future use
1	Denmans Cottage	Stabilisation in progress	Urgent stabilisation and subsequent upgrade	Vacant	Authentic cottage hotel
2	Fairfax House	Stabilisation in progress	Urgent stabilisation and subsequent upgrade	Vacant	Authentic cottage hotel
3	Sacred Heart Catholic Church	Fair	Major upgrade	Vacant/ occasional venue space	Art gallery/artist residence/arts centre
4	Post Office	Excellent (minor upgrade completed)	Maintenance	Post Office & accommodation	Post Office/residence/authentic cottage hotel
7	Beyers Cottage	Non- habitable	Upgrade/ maintenance	Vacant	Cottage museum/ representative sample of mid-19th C. lodging
8	Woolards Cottage	Excellent (stabilisation complete)	Maintenance	Residence	Authentic cottage hotel/ residence
10	Great Western Store	Good	Maintenance	Vacant	Retail/residence
11	The Manse	Fair	Upgrade/ maintenance	Community Nurse	Community facility/ accommodation
12	Royal Hall	Good	Minor upgrade/ maintenance	Public Hall	Conference centre/public hall
13	CWA Building	Excellent (upgrade complete)	Maintenance	NPWS Site Office	NPWS Site Office/ retail
14	Craigmoor House	Good/fair	Maintenance	House Museum	House Museum
16	Old Hospital Building	Fair	Upgrade/ maintenance	Vacant	Themed cottage hotel/event venue
17	The Pines	Excellent (stabilisation	Maintenance	Vacant	Authentic cottage hotel
		complete)			

No.*	Property name	Condition 2020	Conservation required	Current use	Possible future use
19	The Rectory	Fair	Refresh/ maintenance	Residence	Residential
20	Old RFS Shed	Excellent (stabilisation complete)	Maintenance	Heritage Centre	Interpretation centre/ information centre
21	General Store	Excellent (stabilisation complete)	Maintenance	Cafe/General Store	Cafe/General Store
22	Hosies Store	Excellent (stabilisation complete)	Maintenance	Authentic cottage hotel	Authentic cottage hotel/ restaurant
23	Hill End Hilton	Non- habitable	Stabilisation/ maintenance	Vacant	Representative sample of mid-19th C. lodging
28	Holtermanns Store	Poor	Upgrade/ maintenance	Vacant	Interpretative display/museum/ gallery
37	Bryants Butcher Shop	Fair	Upgrade/ maintenance	Vacant	Accommodation/ retail
	Sydney Hotel	Completion pending	Stabilisation/ upgrade	Vacant	Authentic cottage hotel

^{*} Number allocated in master plan

There are several instances of suspected encroachments within the village where property boundaries appear to differ from NPWS historic site boundary information. There are also encroachments by verandas, fences and other built structures from private properties into the historic site. Boundary surveys are needed to determine the accurate alignment of boundaries so that options for correcting encroachments can be properly investigated with landowners.



Photo 4 Historic weights and measure for gold finds. John Spencer/DPE.

Moveable heritage

Hill End's collection of moveable heritage forms a significant component of the physical evidence of the village's history as one of the earliest goldmining towns of the first gold rush. There are a large number and variety of mid-19th century items ranging from home furnishings and domestic paraphernalia, tools and coaches to stamper batteries and other mining equipment. These items are located at several venues around the historic site (see Table 2). The collection adds considerably to our understanding of the social and cultural way of life of Hill End's 19th century inhabitants, and together with the original interior finishes in many of the buildings, comprises a collection with few rivals (Conybeare Morrison 2013b).

From time to time, moveable heritage items are loaned by NPWS to leaseholders within the village for use during public events, for example, church pews are made available for seating. Regrettably, some of the more mobile items have disappeared over the years.

An inventory of known moveable heritage collection was prepared in 2011 (Cummings & Elkemo 2011). NPWS is in the process of establishing a web-based inventory which is readily accessible to a range of users. This will become increasingly important as the collection of objects is likely to expand if archaeological investigation of key sites is undertaken (Conybeare Morrison 2013a).



Photo 5 Craigmoor House. John Spencer/DPE

The Hill End master plan implementation strategy includes a project to develop a comprehensive moveable heritage plan to address the researching, cataloguing and secure housing of this important heritage asset. This plan would also promote exhibition and publications to make the collection more accessible to the public.

Until 2017, a significant portion of the moveable heritage collection was displayed at the former NPWS office at the Old Hospital. With the relocation of the NPWS office to the former CWA Building in early 2018, the bulk of the collection is now stored in an archive room within the historic hospital building.

Table 2 Moveable heritage collection

Location within the historic site	Description of items	
Old Hospital (former NPWS Visitor Centre)	Collection includes memorabilia, jewellery, gold pocket watches and other items from the Beyer family. An undercover outdoor display includes a Cobb & Co coach, vehicles and industrial equipment	
Craigmoor House	Complete house museum, with displays that relate to the original occupants of the house, including furnishing, furniture, quilts, photo images and table settings	
Haefligers Cottage	Artefacts include books, letters, crockery and furnishing relating to the occupancy of the cottage by Jean Bellette and Paul Haefliger	
Archive Shed	Artefacts include iron tools, ceramic and glass bottles, old cameras, medical implements, horse equipment and furniture	
Royal Hotel	Furniture including tables, chairs, sideboards, wardrobes etc.	
Heritage Centre	Objects include furniture, bottles, crockery, patchwork quilts, tools and photographic images. It is intended that display items are rotated from time to time	

Perhaps the most significant moveable heritage associated with Hill End is the Holtermann Photographic Collection, held off-site and managed by the State Library of New South Wales (see Box 5).

Box 5. The Holtermann Photographic Collection

This collection consists of 3500 well-preserved glass plate negatives, which depict highly detailed scenes of life in Hill End and other goldfields between 1872 and 1876, as well as Sydney Harbour and other sites. The collection is described as the most important photographic documentation of life in the goldfields and was included on the UNESCO Australian Memory of the World register in May 2013 (State Library of NSW 2020).

Shortly after discovering his namesake, the Holtermann's Nugget (as described in Box 2), a newly-rich Holtermann commissioned and possibly participated in the project, which was aimed at mounting an overseas exhibition to encourage immigration to Australia. The photographers were Charles Bayliss and Beaufoy Merlin. Significantly, the plates were only discovered in 1951, almost 70 years after Holtermann's death, far from Hill End in a garden shed in the suburbs of Sydney.

The photographs record a snapshot in time that provides a remarkable understanding of how the Hill End township was built (Conybeare Morrison 2013b). Photographs from the Holtermann Collection have been used extensively in the multimedia displays at the NPWS Heritage Centre in Hill End and are likely to continue to provide unique opportunities for interpretation of the historic site. Holtermann's legacy is also preserved in the form of the Holtermann Corner Store on the corner of Short Street and Tambaroora Street.

Historic mining landscapes

The former goldmining sites and relics which form part of the historic site (see Figure 4) have unique heritage significance as a tangible record of industrial heritage and mining technologies.

Tambaroora supported the earliest goldmining activities in Tambaroora Creek and Golden Gully Creek, and pre-dates Hill End village. In 1861 Tambaroora supported a population of 2235 people, and in 1884 it was proclaimed a town, laid out in regular, gridded streets and boasting an assortment of public buildings, including churches, a courthouse and a post office.

The Holtermann Photographic Collection holds a significant number of photos of a well-developed town, belied by the grassy open spaces evident today. There is almost no physical evidence remaining of Tambaroora historic village due to the wattle and daub construction with bark roofs which was used in many of its original buildings. Now, apart from the brick chimney of the Hargraves Hotel, a brick-lined well, a brick and stone floor, and three cemeteries (Anglican, Catholic and Chinese), indications of the former town are confined to alluvial mined areas and a low ridge on the eastern side of the village that demarcates the former Humboldt Street (High Ground Consulting 2007).

Tambaroora is a mixture of NPWS, Crown and private landholdings. The 21 dispersed parcels in Department ownership that form part of the Hill End Historic Site are presently held under Part 11 of the National Parks and Wildlife Act, but are managed as part of the historic site. These parcels are interspersed by the Hill End and Tambaroora Common, and unformed Crown roads. Fragmented ownership presents some challenges for effective management. While fossicking is not allowed within the boundaries of the historic site (see Section 3.4), fossicking is a permissible use on the Common and has resulted in significant ground disturbance in places and the illegal collection of relics. Heritage NSW is responsible for enforcing compliance with the provisions of the Heritage Act for the Crown land.

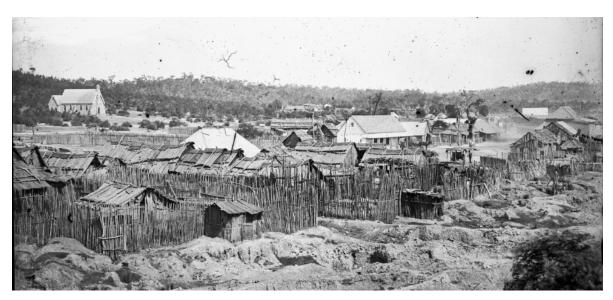


Photo 6 Looking from Chinatown to St Saviours Church, Tambaroora. Holtermann Photographic Collection (FL1251670), State Library of New South Wales

Tambaroora is significant as the site of the first payable gold and rapid influx of gold-seekers initiating the NSW gold rush. Of particular interest is the Chinese presence in Tambaroora's history and the impact of Chinese immigration on the cultural development of New South Wales. Tambaroora is included on the State Heritage Register and despite its lack of standing heritage structures, is considered to be one of Australia's most significant archaeological sites (Conybeare Morrison 2013a). The Hill End master plan makes a series of recommendations for ensuring that this heritage significance is adequately recognised. These include making visible the historic footprint of Tambaroora's roads and allotments, staged archaeological research which may identify additional parcels to be acquired by NPWS, and enhanced interpretation including signage and upgrading of paths.

NPWS is aware that archaeological survey has the potential to reveal additional sites of significance at Tambaroora which should be added to the historic site. However, before any additional investment is made, NPWS will review the status of the Part 11 lands and develop a compliance strategy for managing Tambaroora.

Golden Gully was the site of large-scale alluvial mining at the onset of the NSW gold rush, which became the main alluvial goldfield at Tambaroora from 1850 to 1870. The site now comprises a deeply incised, man-induced braided channel system, which was formed by simultaneous excavation using both European and Chinese mining techniques along several different lines, but generally along the course of Tambaroora Creek (Rose Deco Planning & Design & High Ground Consulting 2007). The resulting canyon-like eroded gully is aesthetically striking with vertical sides of 'organ pipe' formations. A massive archway about five metres in diameter collapsed in 2021 following prolonged wet conditions.

As a disturbed mining landscape open to the weather, the erosion at Golden Gully is irreversible. The features are continually eroding, and protection cannot be provided to retain them in their current state. While natural erosion will be allowed to take its course, NPWS will continue to monitor the site to ensure the safety of staff and self-guided visitors.

Golden Gully is listed on the State Heritage Register and on the former Register of the National Estate. The conservation management plan for Hill End considers that Golden Gully is of national heritage significance when assessed against the national heritage criteria which superseded the Register of the National Estate (Conybeare Morrison 2013b).

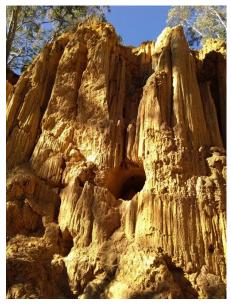


Photo 7 Worked and eroded gully side, Golden Gully. M Billington/DPE



Photo 8 Historic pit head, Valentines Mine. M Billington/DPE

The **Quartz Roasting Pits** (also known as the Cornish Roasting Pits) were established by the Colonial Gold Mining Company on Fighting Ground Creek in 1855. They are an early example of a reef mining technique developed in Cornwall, England, to extract gold from quartz by industrial means. In addition to the inverted bell-shaped kilns for heating the quartz, the site contains ruins of the quartz-crushing plant, battery, and a subsurface flue covered with stone flagging which runs from the crushing plant to the kilns, providing an updraught for the boiler fire (Hodge, cited in Conybeare Morrison 2013b). There are also 2 early worker/overseer cottages, a dam and a quarry which may have provided some of the stone needed for the roasting pits (Gojak & Allen 2000).

The roasting pits were in operation for only 18 months and are an example of imported technology for winning gold; ultimately not a successful one. The roasting pits are exceptionally well-preserved, and the whole site is listed on the State Heritage Register as it represents one of the oldest surviving gold extraction sites surviving in Australia. The conservation management plan (Conybeare Morrison 2013b) considers the roasting pits are also of national significance.

Valentines Mine is an early example of reef mining by means of deep-shaft extraction of gold-bearing ore, and development of a steam-driven stamper battery. The mine comprises a series of shafts at a depth of 53 metres, the battery and battery house, cyanide tanks, blacksmith's shop, manager's residence and dam. The shafts can be viewed by the public behind protective fencing.

The mine is included on the NSW State Heritage Register listing for Hill End Historic Site. The conservation management plan (Conybeare Morrison 2013b) considers Valentines Mine is of exceptional significance.



Photo 9 Inverted bell-shaped quartz roasting pits. M Billington/DPE

The **Bald Hill Mine** is located on the south-west edge of the historic site. The mine was built during 1872 but proved unsuccessful in finding gold (High Ground Consulting, cited in Conybeare 2013b). The mine complex consists of a tunnel approximately 145 metres long, a vertical shaft, mullock heaps and adits (Conybeare Morrison 2013b). The level of significance has been assessed in the conservation management plan as moderate at a state level. The site is leased by NPWS to an external tourist operator who operates tours of the underground mine (see also Section 3.3).

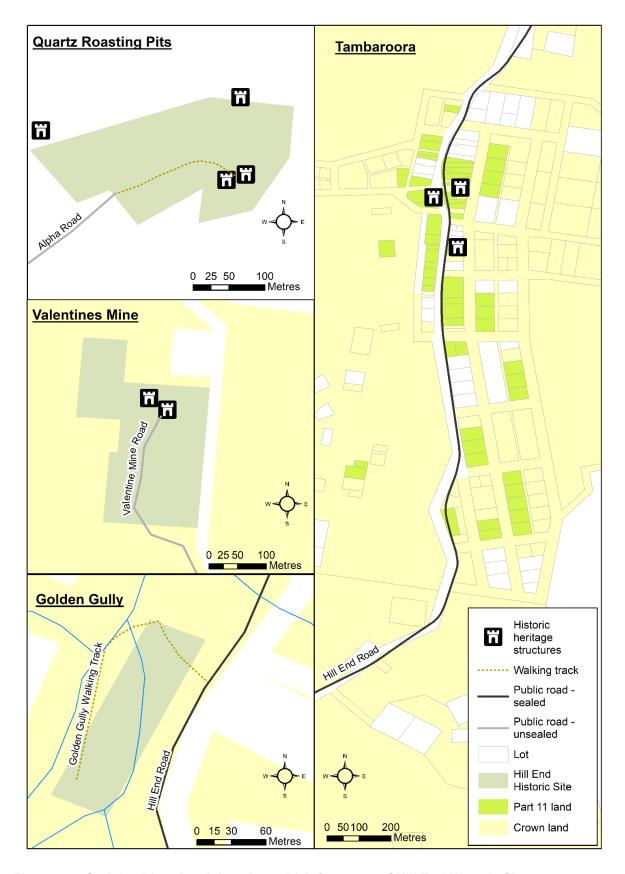


Figure 4 Outlying historic mining sites which form part of Hill End Historic Site

Non-Aboriginal archaeological heritage

In addition to standing (built) heritage, Hill End contains a significant non-Aboriginal archaeological heritage resource which is associated with existing heritage buildings, ruins, disturbed landscape features such as mullock heaps and mined depressions, and cultural plantings.

In 2002, the archaeological significance of Hill End was assessed and an Archaeological Landscape Management Plan for Hill End Historic Site prepared (Andrew Long & Associates 2002). The plan classifies areas according to their archaeological sensitivity as high, moderate, low and sterile (as the result of subsequent land-use activity and/or impacts).

Hill End as a whole represents an area of outstanding archaeological sensitivity (Andrew Long & Associates 2002). The area of high sensitivity is the core precinct around Clarke and Church streets, being the oldest section of Hill End dating from 1859. Moderate sensitivity is beyond this area to the east, and is associated with the later expansion of the town from 1871. Low sensitivity is further to the east and north as well as in areas of past mining disturbance (see Figure 40 Archaeological Zoning Plan for Hill End Village in the conservation management plan, Conybeare Morrison 2013b). Bathurst Regional Development Control Plan 2014 seeks to ensure that development on freehold land in Hill End village also takes account of archaeological sensitivity.



Photo 10 Ruins at Tambaroora. M Billington/DPE

The archaeological landscape management plan, completed in 2002, is dated and needs to be expanded to include other areas which were not originally assessed (Conybeare Morrison 2013a). In its present form, the plan provides zoning for Hill End village but does not include other areas within the historic site such as Golden Gully, Tambaroora, Valentines Mine and the Quartz Roasting Pits. There are also areas within the village that need to be added (e.g. areas where boundaries of the historic site are not clearly defined and need to be surveyed) and some areas need to be reviewed for accuracy.

Conditional lease of heritage buildings

NPWS offers leases over heritage buildings in Hill End village as a means of meeting heritage conservation objectives, maintaining Hill End as a viable living community and encouraging visitation. Leases on offer, therefore, allow for a variety of residential, commercial and/or retail uses.

Heritage buildings are particularly vulnerable to deterioration if they are not used and maintained. Leasing of the historic site's significant heritage assets can help combat the risk of deterioration while offering residential opportunities and commercially viable business opportunities to experienced operators. NPWS has commercial lease arrangements in place for key buildings, including the Royal Hotel and the General Store, to encourage cultural tourism, consolidate the sense of arrival in the core area of the village and help to maintain the heritage values of the buildings. A community health clinic operates under lease from The Manse on Denison Street.

With the constraints of a very small permanent population and comparative isolation, lease conditions and terms for business opportunities in Hill End must be sufficiently flexible to suit local circumstances.

Table 3 provides examples of lease agreements that have been developed to ensure the best conservation outcome for Hill End's heritage assets through sympathetic reuse of heritage buildings and partnerships with the private sector and business community where these are consistent with heritage values. The lease terms offered by NPWS are indicative of the level of obligation required for the specific building and type of use. As the restoration of more buildings is completed, NPWS will consider additional lease arrangements.

Table 3 Current examples of leases in the historic site

Туре	Purpose	Indicative term	Maintenance responsibility
Residential	Lease of buildings and houses for residential purposes	Short term	Lessor (NPWS)
Residential – conservation	Properities rented for residential purposes with responsibilities to conserve as per the conservation management plan (CMP) and the tenancy agreement	Medium term	Tenant is required to maintain property and its heritage/cultural values
Commercial/retail		Medium term	Structural maintenance – NPWS; other types of maintenance – tenant
Commercial – conservation		Long term	Heritage values to be conserved in accordance with CMP – tenant

As with all state-listed heritage properties, all leases within Hill End are subject to the provisions of the Heritage Act, including the requirement to meet the minimum maintenance standards. This requires that heritage buildings are maintained in accordance with values identified in the conservation management plan.

NPWS endeavours to operate as a good landlord and maintain good neighbour relations in Hill End. NPWS administration of leases in Hill End has encountered difficulties due to the variety of lease types and lease conditions. Non-compliance with lease conditions has also resulted in poorly maintained buildings and significant repair costs in some instances.

3. Providing for residents and visitors

3.1 Cultural tourism

NPWS parks, reserves and historic sites provide a range of opportunities for recreation and tourism, including opportunities for relaxation and renewal as well as appropriate active pursuits. NPWS aims to ensure that visitors enjoy, experience and appreciate the State's parks while at the same time conserving and protecting park values.

The cultural tourism and recreation plan (volume 4 of the master plan, Conybeare Morrison 2013c) establishes a sound justification for cultural tourism, which will ensure that Hill End's state significant heritage values are protected into the future and the economic and social prospects of the village improved. Retaining the character of Hill End's significant built environment and surrounding landscape is integral to the strategy for visitation and critical to the amenity of local residents who live in the historic site.

In the same way that some smaller regional country towns throughout New South Wales struggle to generate sustainable employment and business opportunities for their residents, the options available to Hill End village are limited. Hill End also faces additional economic sustainability challenges by virtue of its size and relative isolation. NPWS acknowledges the potential for cultural tourism in Hill End and the importance of enabling delivery of a range of engaging and distinctive cultural tourism experiences to improve the economic viability of the village.

Hill End sits within the larger Central NSW Tourism Region of Destination NSW for marketing and tourism data reporting purposes. This region includes the townships of Bathurst, Coonabarabran, Cowra, Dubbo, Mudgee, Narromine, Orange and Parkes. Central NSW received over 2.9 million domestic overnight visitors in the year ended September 2019, up 4.5% from the previous period, and 7.2 million nights down by 5.9%. The majority of visitors to the region are from Regional NSW (48%), followed by Sydney (31%) and states other than New South Wales (21%). In the same period there were over 3.5 million domestic daytrip visitors, which was up by 15% on the previous year. International visitors make up only a small proportion of visitors to the tourism region with just over 40,000 visitors.

Visitation to Hill End has tended to fluctuate over the last few years and exact visitor numbers are difficult to determine as there are multiple access points to the site. Combined data from traffic counters and the campgrounds indicates the number of visitors is in the order of 110,000 annually. Overall visitation to Hill End follows the trends of the Central NSW Tourism Region in terms of visitor origin and purpose of visit. It appears the share of visitors coming to Hill End from Sydney may be increasing, which is consistent with Sydney being a comfortable four-hour drive away. Peak visitation at Hill End occurs on long weekends and over school holidays.

There is potential for overnight visitation to Hill End to grow with the provision of more quality accommodation options and enhanced visitor experiences aimed at extending visitor stays.

Management considerations and opportunities

Up until the last few years, NPWS management focus has, of necessity, been on stabilising and restoring heritage buildings. In accordance with the priorities established in the Hill End master plan implementation strategy (Conybeare Morrison 2013d), NPWS is continuing the program of conserving and adaptively reusing heritage buildings in order to provide a strong foundation for cultural tourism.

Diverse options for adaptive reuse as outlined in Section 2.3 will help to present Hill End as a standalone overnight destination for visitors rather than as an 'add-on' for people visiting their friends and relatives in the surrounding area.

As a living village, Hill End also needs to provide attractive business opportunities to produce a viable return on investment for both NPWS and private business operators. NPWS is also mindful of the need to work with the local community and regional organisations, such as Destination NSW, Mudgee Region Tourism and Bathurst Regional Council, to align Hill End with broader objectives for tourism in the region.

Now that conservation works have been completed for a number of buildings, there is an opportunity to pursue more active marketing and promotional strategies. NPWS has completed a demand analysis and tourism market assessment, choice modelling and used other tools to help identify the best means of developing and promoting Hill End's unique offering. This information will contribute to development of a business plan which will direct sustainable tourism and business opportunities in Hill End into the future.



Photo 11 Hill End Heritage Centre in the restored Old RFS Shed. John Spencer/DPE

A range of options is being explored using restored heritage buildings to make Hill End more appealing to the target markets. These include:

- Providing greater choice in visitor accommodation. Options that are presently
 available include bed and breakfast, the Royal Hotel, private rental and camping.
 Hotel/motel accommodation is also available from private operators nearby. Demand for
 more hard-roofed accommodation, particularly at the upper end of the market, could be
 met in completed restorations such as The Pines in Beyers Avenue, and Hosies Store in
 Clarke Street.
- Allowing short stays in restored buildings. While it has proved difficult to find long-term lessees and some restored buildings remain unused, a more viable and attractive alternative may be to allow short-term stays in individual restored heritage buildings, furnished with period fittings, as an 'authentic cottage hotel' experience for visitors. Conservation of the various cottages could also include reinstatement of original cottage

gardens. A hotel of this kind could be managed from a centrally located reception facility in the village and run as a business opportunity by a private operator.

- Greater choice in food and dining venues. This would draw visitors and complement their visitor experience in Hill End as well as providing additional night-time activities to encourage overnight stays. Options could include fine dining restaurants and family friendly pop-up cafes.
- Adaptive reuse of the Sacred Heart Catholic Church or another suitable venue could provide a standalone cultural arts centre to connect with Hill End's rich artistic history and the scenic and visual values that attracted many of Australia's finest artists. A centre of this kind could exhibit historic and contemporary art pieces associated with Hill End, including re-housing of the Jean Bellette gallery (from the Old Hospital where it was attached to the former NPWS Visitor Centre). An arts centre could provide a space for art workshops and master classes, and support the work of the Hill End Artists in Residence Program and regional artists.
- An Art Trail around the village would allow visitors to take in views and buildings
 painted by World War II artists at their own pace. It could also include the cottages
 occupied by artists, and incorporate the cultural arts centre. Other themed walking trails
 and guided tours could also be considered, for example, around gardens, archaeology
 or family history.
- There may also be circumstances where NPWS and private leaseholder partnerships
 can respond to initiatives from entrepreneurs in the private sector to provide a particular
 service or visitor experience at a commercially viable level. These would need to be
 administered through customised commercial agreements.
- Hill End's fascinating history and intact village environment need to be appropriately interpreted. **An interpretation plan** for Hill End (GML Heritage et al. 2014) has been prepared and 2 potential **new interpretation precincts** have been proposed to build on existing interpretation (see Section 3.3).

3.2 The village centre

The precinct around the intersection of Beyers Avenue and Clarke Street is being developed as a central hub for visitors arriving and staying in Hill End. They can readily access information about the historic site and gain an appreciation of its unique attractions. This follows recommendations in the master plan (Conybeare Morrison 2013a) which recognised the need for visitors to orientate themselves in a central place that provided a sense of arrival.

In the last few years, NPWS restoration work has focussed on key projects to establish the village centre, including restoration and adaptive reuse of several centrally located buildings to improve availability of dining and accommodation for visitors:

- The **Heritage Centre** was developed through the adaptive reuse of the Old RFS Shed. It contains state-of-the-art multimedia displays, including wall-sized projections of Holtermann photographs, and visitor-activated digital 'photo albums'. A collection of moveable heritage from the goldmining era and the restored 1940 fire truck are also on display.
- The **General Store** was upgraded to enhance cafe facilities and provide an outdoor eating area which gives a broad view of the historic site and provides a venue where the community and visitors can gather.
- **Hosies Store** has been extensively restored and renovated to provide boutique accommodation upstairs and a restaurant on the ground floor.

Carparking for visitors to the village is mostly informal. NPWS has reconfigured car parking and undertaken landscaping in the village centre to help retain the village streetscape and

encourage visitors to dine outdoors. By moving car spaces away from being directly in front of heritage buildings, visual amenity is improved, and visitors are encouraged to walk around and experience the village as its original inhabitants did.

Generally, there is no shortage of parking due to low volumes of visitor traffic, but with the increase in tourism predicted, additional off-street parking may be needed.

3.3 Interpretation and education

Hill End's landscape and historic architecture lend themselves to self-discovery and many visitors to Hill End choose to wander at will. Amateur historians and people seeking out the history of their descendants are among the most numerous visitors. Individuals interested in connecting with their Hill End ancestry are assisted by 2 locally based groups, the Hill End and Tambaroora Gathering Group and Hill End Family History. Over the years these groups have worked together to collate a great deal of useful material and can provide well-informed interpretation of local history.

Hill End Historic Site also provides a wide variety of interpretive experiences, including guided tours offered by commercial tour operators, revolving exhibitions and static displays, events and occasional activities (see Table 4). Tours, events and activities generally occur during holiday periods and over long weekends.

Table 4 Existing interpretive experiences at Hill End Historic Site

Type of experience	Venue	Mode of delivery
Tours	Historic village Craigmoor House Ghost tour Golden Gully, cemeteries Bald Hill Mine	Commercial tour operators
School excursions	Various	Private tour operator
Exhibition spaces	NPWS Heritage Centre General Store Sacred Heart Catholic Church	NPWS Leaseholder Galleries and artists
Theme-based programs	Artists in Residence Program Hill End & Tambaroora Gathering Group, Hill End Family History	NPWS & Bathurst Regional Art Gallery Descendants of early residents & current residents, independent historians
Events	Festivals Sacred Heart Catholic Church	NPWS Weddings and private functions

The NPWS Heritage Centre in the Old RFS Shed, and the recently relocated NPWS Office in the former CWA Rooms, now provide the focus of NPWS interpretation activities. The Heritage Centre, completed in early 2017, boasts a sound and light show about Hill End's fascinating history and other self-guided media. These displays are complemented by exhibitions of moveable heritage at Craigmoor House. The museum of moveable heritage and Jean Bellette Gallery, that were previously housed in the Old Hospital when it was used as the NPWS office, will be relocated to a new venue.

Two of the more innovative interpretive experiences on offer at Hill End are the Bald Hill Mine Tour and The End Festival. The **Bald Hill Mine Tour** allows visitors to go down a historic 1870s mine shaft and 80-metre tunnel. The mine experience also features an

underground display area and demonstrations of historic goldmining techniques. **Festivals** celebrating the arts, culture and heritage have also been held by NPWS from time to time. The End Festival in 2018 was attended by an estimated 7000 people, indicating that events of this kind have the potential to make a meaningful economic contribution to Hill End and the surrounding region.

Many of the tours and interpretive experiences at Hill End have been on offer for over 20 years. While there have been improvements and revisions from time to time, NPWS recognises the need to revisit Hill End's interpretive experiences and make them more relevant to today's visitors in keeping with sound marketing practice. As part of this approach, NPWS is proposing to introduce self-guided digital interpretation opportunities to appeal to today's visitors.



Photo 12 Self-guided interpretation in the NPWS Heritage Centre. M Billington/DPE

A Hill End Interpretation Plan and Implementation Strategy (GML Heritage et al. 2014) was prepared to guide this process. An analysis of the visitor profile for Hill End at that time (using the See Australia tourism market segments) found the target market would be True Travellers and Pampadours (see Glossary) who live in the Blue Mountains, Canberra, Newcastle, the NSW Central Coast and Sydney's Inner West. In addition to focussing on these types of visitors, the plan advocates that NPWS should connect with cultural

entrepreneurs who can help with marketing Hill End in a new and exciting way. More recently NPWS commissioned a segmentation study of the domestic market for parks in 2015–16 (NPWS 2016). Four primary segments were identified: Socialisers, Adventurers, Explorers and Escapers. The last 3 of these have strong correlations with the See Australia segments mentioned above. Therefore, the commentary and recommendations of the draft interpretation plan retain their overall relevance for Hill End.

The plan states (p. 30):

In planning for interpretation at Hill End it has become apparent that an interpretative approach based exclusively on generally accepted interpretive media and techniques – such as on-site signage, guided and self-guided tours, and digital and print media – will not effect [sic] or realise the transformation that is required at Hill End.

There is also a need to move away from images of old buildings, and introduce 'a more distinctive and differentiated identity' for today's sophisticated visitor markets. This would involve revitalising some existing interpretive activities and introducing new ones. Among the suggestions for introducing a more contemporary cultural life are the following:

- adding contemporary stories and portraits of local people
- using the work of local artists to provide fresh and creative insights into Hill End's fascinating history
- connecting interior and exterior experiences
- avoiding visitor 'museum fatigue'
- crafting 'intimate' initiatives that 'go behind closed doors' to previously closed off areas, via special visitor packages
- introducing themed tours that connect interpretive and recreational experiences.

NPWS is currently giving consideration to the plan's recommendations.

The following themes from the plan (GML Heritage et al. 2014) have been developed as the basis of a detailed interpretation strategy:

- quartz veins and saddle reefs
- muurruun Wiradjuri attachment to land and continuity
- pure gold a feverish rush
- the art of life seeing and being in Hill End
- making history reimagining the past.

Each of these themes relates to Hill End in its broader context as well as to specific sites. The interpretation plan recommends that these themes are used where appropriate for tours, interpretation material, exhibition spaces and activities and programs. It is also recommended that, where possible, the various themes are separated across exhibition spaces to encourage people to move through the village and more fully explore all it has to offer.

Two **new interpretation precincts** have been proposed in the landscape management plan (Context Landscape Design 2013). The stamper battery interpretation precinct is proposed on the site of a former 25-head stamper battery which stood approximately 60 metres from the end of Clarke Street, on a site bounded by Bald Hill Creek and other mined gullies on the south-west edge of Hill End village (see Figure 2). In the 1870s this site formed a highly visual element in the Hill End landscape which has been captured in the Holtermann Photographic Collection.

The Fighting Gully interpretation project is proposed on the north-east edge of Hill End village adjoining High Street. It takes its name from the boxing matches held between American and Irish miners during the late 1800s.

These interpretation precincts have been proposed as large recreational spaces combining formed paths, bush regeneration and eroded mined areas. Development of these precincts will depend on the growth of cultural tourism in Hill End, and as of 2020 they have not been included in the Hill End master plan implementation strategy.

3.4 Recreation activities

Visitors are primarily attracted to Hill End by its goldmining history and historic heritage. The majority of visitors look around the village and drive the short distance to outlying mining sites after accessing information from the Heritage Centre in Beyers Avenue, the NPWS Site Office and onsite interpretative signs. There are also two popular lookouts off-park on the Hill End and Tambaroora Common which afford views of the surrounding landscape: Beaufoy Merlin Lookout and Kissing Point Lookout on Hawkins Hill.

As at 2020, there are only two formed walking tracks within the historic site. The four-kilometre Bald Hill Walking Track begins on Reef Street and passes through open woodlands and historic relics of old mine workings, stamper batteries and dams. The Golden Gully Walking Track is only 200 metres long and leads to the deeply incised Chinese and European mine workings of Tambaroora Creek.

There is no defined walking route at Tambaroora other than a path worn by fossickers going to Tambaroora Creek which lies outside of the historic site. The walking routes for visitors at outlying mine sites are also not well-defined. At Valentines Mine, mineshafts have been securely fenced and capped under the Derelict Mines Program carried out by NSW Resources and Energy to ensure visitor safety. NPWS proposes to improve interpretation at both of Valentines Mine and the Quartz Roasting Pits. This may include better delineation of walking tracks to assist visitor understanding and orientation.



Photo 13 Visitors to Hill End during The End Festival. John Spencer/DPE

Volume 1 of the master plan (Conybeare Morrison 2013a) and the landscape management plan (Context Landscape Design 2013) recommend that a number of new walking trails be

established as part of improving thematic interpretation to enhance the visitor experience. The majority of these proposals would not require sealed track construction but could require track delineation, additional signage and seating. Consideration will also be given to user-activated interpretation on phones and tablets.

The historic site provides opportunities for cycling along public roads. However, as all roads in Hill End are owned and managed by Bathurst Regional Council, and outside NPWS jurisdiction, the plan of management does not include any proposals for formalising and/or interpreting cycling routes.

Although fossicking is not permitted within the historic site itself, fossickers are among the largest interest groups of visitors coming to Hill End. Throughout the year, fossickers commonly stay in the campgrounds in the historic site which are conveniently close to fossicking opportunities in the Hill End and Tambaroora Common and the surrounding gold-bearing region. Fossicking is not permissible in the historic site due to the likelihood of adverse impact on archaeological values of the state-listed heritage site.

With regard to other recreational activities:

- mountain biking is not permissible in the historic site due to the absence of suitable terrain
- horse riding is not permissible in the historic site due to its small size, the potential for conflict with pedestrians and the potential for adverse impact on archaeological values
- the Bridle Track originally linked Bathurst to Hill End and in recent years was favoured by four-wheel drive enthusiasts. This track is outside the historic site on land managed by Bathurst Regional Council. Over recent years the track has been out of commission due to rockfalls and collapsed sections.

3.5 Camping

There are currently two campgrounds in Hill End, both accessible by two-wheel drive vehicles and caravans, and offering powered and unpowered sites.

The Village Campground off Clarke Street is within walking distance of the village centre and provides an open grassy setting for camping adjoining Hill End Creek. The Glendora Campground on Germantown Lane provides more secluded camping in a bush setting which contrasts with the open cultivated landscape of the village.



Photo 14 (L) Glendora Campground. M Billington/DPE



Photo 15 (R) Village Campground. M Billington/DPE

A range of facilities are included for campers in both locations (see Table 5). During most school holidays and summer these campgrounds are regularly full and it is not uncommon for people to stay for up to a week or longer. An online booking system has been introduced to help address the demand for popular times of year. In peak periods an overflow area is also made available for campers in the grassed area below Bald Hill Mine at the southern edge of the village. Due to increasing demand, NPWS may consider developing this area as a third campground in the future, with facilities comparable to the other campgrounds. An increase in camping capacity will help to enhance the economic impact of events for visitors wanting to stay overnight. Innovative short-term options such as 'glamping' could also increase the range and quality of accommodation.

Table 5 Camping areas in the historic site

Camping area	Number of sites (approximate)	Style of camping	Available facilities
Village Campground	45	Caravan and camping, grassed sites, less than 1 km to village centre	Amenities block with showers, toilets and laundry, picnic tables, shelter shed, information display, barbecues and fire rings. 18 powered sites and 27 unpowered sites. Dump point for caravans.
Glendora Campground	70	Caravan and camping in bush setting, 1.5 km from village	Amenities block with showers and toilets, picnic tables, barbecues and fire rings. 16 powered sites and 54 unpowered sites. Dump point for caravans.
Bald Hill overflow campground	50	Grassed area	Toilet block.

3.6 Pets in the historic site

Pets are generally not allowed in NPWS-managed parks according to the NPWS *Pets in Parks Policy,* but the National Parks and Wildlife Regulation authorises pets under certain circumstances. These include compliance with the provisions for assistance animals under the *Companion Animals Act 1998*.

Hill End is a living village and NPWS has regard to the amenity of its resident population of approximately 120 people. NPWS permits lessees to keep pets on site premises, provided lessees comply with lease conditions. NPWS also acknowledges that some visitors who choose to visit or stay in Hill End would like to be able to bring their pet dog.

Box 6. Dogs and cats in the historic site

NPWS has assessed the impacts associated with having pet dogs in the historic site including:

- impacts on native plants and animals, ecosystems and threatened species
- potential conflicts with other site visitors
- impacts on site property
- impacts on cultural heritage
- any alternative walking routes that don't involve access through the site.

On balance, NPWS has determined that dogs may be brought by visitors into the historic site on a temporary basis provided they are kept within the boundary of the campgrounds overnight and on a leash at all times. Dogs may also be kept by residents in Hill End where allowed by their lease.

Dogs may also be walked on-leash by residents or visitors in the historic site.

In the interests of protecting native wildlife, NPWS will not allow cats to be brought to the historic site by visitors or to be kept by lessees as domestic pets.

3.7 Events and group activities

Group activities can provide opportunities for people who would otherwise not be able to experience Hill End and can promote support for conservation. Group activities can also provide opportunities for commercial tour operators to partner with NPWS in providing enjoyable visitor experiences.

The historic streetscape, gardens and surrounding landscape of Hill End offers unique locations and opportunities for community events and private functions such as weddings. Restored buildings owned and managed by NPWS which are not under long-term leases are available for one-off events.

Not all areas of the historic site are suited to group activities due to unsafe access or the sensitivity of site values. NPWS is also mindful of the need to consider the amenity of the local community when assessing applications for group activities and events.

Events and functions must be consistent with the management principles for the historic site and avoid adverse impacts on its values. Consent must be obtained from NPWS before conducting events and functions involving 40 people or more, whether of a commercial or non-commercial nature. The type of approval issued will depend on the duration and circumstances of the proposed event, for example, whether or not the event will be open to the general public or whether it is for exclusive use by a specific group of people.

Organised group activities that currently occur in Hill End include the ghost tour, the Bald Hill Mine Tour, the Hill End and Tambaroora Gathering Group Market Day, and occasional festivals which celebrate Hill End's art, culture and heritage. Those that operate from NPWS-owned premises are required to meet the sustainability assessment criteria contained in the NPWS Sustainability Guidelines for Visitor Use and Tourism in NSW National Parks (DECCW 2011).

4. NPWS infrastructure and services

4.1 Sewerage management

NPWS provides a centralised, reticulated sewerage system consisting of pump stations, transfer stations and gravity mains which transfers the waste from individual septic tanks to the sewage treatment system at Kittys Flat south-west of the village. Sewage is treated by a series of maturation and evaporation ponds which are located on Part 11 land and on Crown land (see Figure 2). Access to the ponds is partly through the Hill End and Tambaroora Common. NPWS will review tenure and access arrangements in consultation with the relevant Crown lands management agency to ensure secure access for sewerage management in the longer term. An assessment of the system in 2015 found it to be sufficient for current demands (lan Grey Groundwater Consulting 2015).

NPWS manages the sewerage scheme in accordance with Environment Protection Authority Environmental Protection Licence No 10074 and the Pollution Incident Response Management Plan for Hill End (OEH 2016) as required by the *Protection of the Environment Operations Act 1997*. The pollution incident response plan identifies risks and establishes protocols and procedures for dealing with incidents in accordance with public health statutory requirements and in collaboration with relevant public authorities.

As of 2020, 53 properties were connected to the sewerage system. This includes 17 privately owned properties not reserved as historic site and there are still additional privately owned properties in Hill End village which have septic systems not connected to the sewerage system. Those that are upgradient of the groundwater bores which supply drinking water (see Section 4.2) pose a risk of contaminating the village's water supply. Bathurst Regional Council's Development Control Plan 2014 also requires connection to a reticulated system for blocks in the village that are less than 1000 square metres in area.

4.2 Drinking water supply

NPWS has provided potable water to the Hill End village and Glendora Campground since 1990. Prior to this, Hill End residents relied on rainwater storage in tanks and dams for their water supply.

Drinking water is obtained by extracting groundwater from 2 licensed bores in Clarke Street and at the Old Hospital on High Street. Due to critically decreasing groundwater levels in the summer of 2019, the supply was expanded to enable connection to a network of 3 bores and voluntary water restrictions were introduced to lessen pressure on the supply. Groundwater is treated and transferred to storage reservoirs for secondary treatment before being distributed by 2 gravity mains to the village and pump-assisted to Glendora Campground. The Germantown reservoirs are NPWS-owned assets but are located on Crown land. NPWS will review this arrangement in order to secure drinking water supply in the longer term.

Under the *Public Health Act 2010* drinking water suppliers must follow a quality assurance program that complies with the Public Health Regulation 2012. Accordingly, NPWS manages drinking water for Hill End under the Hill End Historic Site and Village Drinking Water Policy and a Risk-based Drinking Water Management System (City Water Technology Pty Ltd 2014), both approved by the NSW Ministry of Health. The drinking water policy outlines NPWS commitment to consumers and other stakeholders to manage the water supply, apply appropriate contingency planning to address risks, and undertake regular monitoring of drinking water in compliance with relevant standards. Mandatory monitoring and testing exacts a significant cost in NPWS staff time. Automation of these systems is underway and aims to reduce labour commitments.

Hill End's groundwater is sourced via a cracked rock aquifer which is recharged primarily by rainfall infiltration from a relatively small catchment. Groundwater is the only available source of town drinking water supply for Hill End, and only 25% of the total rainfall recharge is available for extraction. These hydrogeological constraints mean that groundwater storage is limited in comparison to other sources and provides less buffering storage during dry years (lan Grey Groundwater Consulting 2012).

Historically the extraction of groundwater in the area has fluctuated but has generally increased over time. Up until 2011, large volumes of groundwater were needed to support goldmining operations to the south of Hill End village. Now that the more readily accessible gold deposits have been exhausted, these mines are currently inactive, but the mining leases are maintained.

Within the village, water demand increases during peak visitation periods and the summer months. Overall, yearly demand is expected to increase as NPWS continues to develop cultural tourism opportunities in the historic site.

NPWS commissioned an assessment of the groundwater resource in 2009 which determined that the groundwater resource is already substantially over-allocated and will contribute to lowering of groundwater levels particularly during dry periods (Ian Grey Groundwater Consulting 2012). The critical loss of supply in the summer of 2019 has prompted NPWS to urgently pursue several of the report's recommendations aimed at avoiding exhaustion of the aquifer to ensure an adequate supply into the future.

One of the key recommendations of the groundwater assessment is that no additional allocations should be made to the groundwater supply system outside of the historic site. At a more strategic level NPWS will urge a review of water allocations within the aquifer by Water NSW and more effective management of the groundwater resource. Collaboration with other water extractors will be required so that extraction rates in the vicinity of Hill End are sustainable into the future.

Management considerations and opportunities

Providing drinking water and wastewater services to a residential population is not a usual role for NPWS in reserve management practice, but was originally seen as part of the agency's responsibility in the years following reservation of the historic site. Although providing and maintaining these services is outside core business and requires significant and ongoing investment, NPWS recognises the importance of these essential services.

The water supply and sewerage systems for Hill End were historically developed on an ad hoc and as-needs basis. There has been limited formal planning or assessment of long-term suitability, capital investment costs to date or those required for the future. This is also the case for operational and maintenance requirements and costs (Ian Grey Groundwater Consulting 2015).

To address this, in 2015 NPWS commissioned a Long Term Utilities Management Plan (Ian Grey Groundwater Consulting 2015) to assess the condition and performance of existing infrastructure and plan for future drinking water and sewerage provision. The utilities plan included consideration of constraints unique to Hill End including:

- some very old infrastructure components, crowded building layout and small lot size
- fragmented ownership
- the elevated risk of contamination presented by short distances between sewage disposal and drinking water bores in the village and the increased importance of having preventative measures in place
- the need to avoid adverse impacts on significant cultural heritage values.

NPWS is now enacting key recommendations of the utilities plan which addresses the limitations of the current facilities and proposes strategic improvements aimed at more sustainable systems.

NPWS is no longer able to provide sewerage and drinking water supply services under the current arrangements and is reviewing its servicing commitments with a view to achieving more sustainable water usage and partial cost recovery. This may mean that, in the future, NPWS will only supply connections to properties within the historic site where there is an economic benefit to the agency.

There is also a clear need for a more contemporary pricing approach (which could involve increased charges for some users and potential savings for others) to ensure that NPWS can continue to provide these services and protect the available water resource. To date, residents have received sewerage and water services at rates well below those levied by local government and other providers in the Bathurst/Mudgee region. Given the small number of connections to the water supply system, the need to incorporate growing visitation to the historic site, and other equity issues, NPWS acknowledges that full cost recovery from residents and businesses in Hill End would be prohibitively expensive. NPWS is now considering options for recovering a proportion of operating and capital costs for both water supply and sewerage to enable the agency to effectively and sustainably manage the systems into the future.

A utilities service agreement will be introduced for existing connections and other parties wishing to connect to NPWS services in Hill End Historic Site based on the NSW Office of Water Guidelines for Best Practice Management of Water Supply and Sewerage (NSW Department of Water & Energy 2007, cited in Ian Grey Groundwater Consulting 2015) and a contemporary pricing structure.

4.3 Solid waste management

Hill End does not have a household waste collection service, and residents must take their rubbish to the tip operated by Bathurst Regional Council in the Common south-west of the historic site.

NPWS manages rubbish removal in the historic site, including campgrounds and key visitor sites, for disposal at the council tip.

4.4 NPWS site buildings

Up until January 2018, the NPWS Visitor Centre and NPWS office were in the Old Hospital building on High Street. Following substantial renovations and in line with recommendations in the master plan (Conybeare Morrison 2013a), NPWS has relocated to the former CWA Building on Beyers Avenue. In this new location, the **NPWS Site Office** is part of a centralised tourist hub together with key visitor facilities such as the Heritage Centre (see Section 3.2).

The master plan recommends that the Old Hospital be adaptively reused (along with several other underutilised and other appropriate heritage cottages) for an 'authentic cottage hotel' (see Section 3.1). Consideration may also be given to a conference or reception centre in the Old Hospital.

NPWS also has a works depot on High Street and an archive shed on Reef Street.

The location of Hill End and the significant value of its irreplaceable built heritage require onsite NPWS presence. Under current servicing arrangements, NPWS staff are also required to respond to sewerage and water incidents. From time to time **accommodation** is

needed for staff and/or contractors in the village. Several cottages are available on an asneeds basis.

4.5 Visitor and community facilities

Visitor facilities managed by NPWS include the Heritage Centre (see Section 3.2), 2 campgrounds (see Section 3.5) and walking tracks at Valentines Mine and Golden Gully (see Section 3.4).

By nature of Hill End's history and distance from other townships, NPWS also maintains a variety of buildings for use as community facilities for the wellbeing of local residents and visitors including:

- the Hill End Post Office on the corner of Tambaroora Street and Church Street
- the **General Store** on Beyers Avenue which provides a cafe, fuel and a limited supply of groceries such as milk, bread and meat
- Royal Hall which provides a venue for meetings, markets and other community events
- the **community health clinic** with a nurse and visiting doctor, is provided by Greater Western Area Health Service in The Manse on Denison Street three days/week
- the Bill Lyle Reserve adjoining the former CWA Building which provides barbecues, picnic tables and a playground. (Bill Lyle was the former owner of the Sydney Hotel in Clarke Street, now known as Lyles Cottage)
- the cricket oval at Post Office Flat on Church Street.



Photo 16 Stamper battery, Valentines Mine. M Billington/DPE

5. Non-NPWS infrastructure and services

5.1 Roads

Most of the roads in the historic site are public roads owned and maintained by Bathurst Regional Council.

The council also has responsibility for protecting and maintaining the significant heritage values that occur within road verges, for example, the historical plantings of English elm, oak and plane trees along Beyers Avenue on the approach into the village from Bathurst (see Section 6.2).

There are some sections of the original kerb, gutter and drains made of local stone on Beyers Avenue, Clarke Street and Tambaroora Street. These structures have heritage value and it is important these areas are maintained where possible.

The landscape management plan (volume 3 of the master plan, Context Landscape Design 2013) makes recommendations for road verges (along with other public spaces) to help preserve significant view corridors and the historical integrity of Hill End. NPWS works cooperatively with the council to help manage these areas and to assist in conserving the heritage landscapes as recommended in the landscape management plan.

Some roads on the outskirts of the village are Crown roads, including the road accessing the sewerage treatment plant at Kittys Flat, Germantown Lane, Reef Street and the northern end of High Street. There are also **access tracks** to dispersed parts of the historic site, for example at Valentines Mine and Golden Gully, which appear to be on land which is not owned by NPWS. A reserve access strategy has been prepared to address tenure issues with the relevant Crown lands management agency and/or other landowners as appropriate.

5.2 Powerlines

Essential Energy has a number of powerlines traversing the historic site. Tree thinning and other necessary activities such as access trail maintenance are carried out annually in consultation with NPWS, and in accordance with an approved review of environmental factors.

5.3 Telecommunications

There are several underground phone lines and above-ground poles for telecommunications in Hill End. These require infrequent maintenance.

There is limited mobile phone reception in Hill End with the nearest tower being located outside the historic site near Fighting Gully.

5.4 Fire brigade shed

The Hill End Volunteer Fire Brigade operates from a shed on Moores Lane under agreement from NPWS.

6. Protecting the natural environment

Hill End's natural environment was extensively and dramatically modified by the gold rush and what remains today is a cultural landscape representative of its past history. Not only did wholescale clearing of vegetation take place, but massive disturbance of topography, natural drainage and the soil matrix itself occurred.

NPWS management of the historic site recognises that the contemporary landscape is highly significant for its rich cultural history and less notable for its biodiversity values.

6.1 Landform, geology and hydrology

Hill End is positioned on the southern edge of an undulating plateau 870 metres above sea level, with a central upland valley and associated gullies forming low hills, ridges and gently sloping land within the village area (Context Landscape Design 2013; Conybeare Morrison 2013a). The village occupies the valley floor along Hill End Creek and is visually dominated by prominent topographic features, including Bald Hill to the west, Hawkins Hill to the south and Fighting Gully to the east.

The **geology** of the Hill End region can be traced back 400–500 million years ago to the Ordovician, Silurian and Devonian periods when a large undersea trough (the Hill End Trough) was formed and infilled with sediment. The sediments were subjected to intense pressure movements, metamorphosed and uplifted above sea level by volcanic activity to form a high mountain range. These intrusions cooled and solidified into a narrow belt of goldbearing quartz, veining within greywacke and shale strata running south from Tambaroora to Hawkins Hill. Further uplifting occurred during the Tertiary Period (50 million years ago), with the development of a basalt plug. The plug, now known as Bald Hill, remains a prominent feature in the landscape. Centuries of weathering have reshaped the mountains into tablelands, which are bisected by rivers and creeks draining to the east (Context Landscape Design 2013).

Hill End is located in the upper reaches of the **Macquarie River catchment** which is part of the Murray-Darling Basin. The Macquarie River and one of its major tributaries, the Turon River, meet at Kissing Point, approximately seven kilometres south of Hill End, where a lookout offers dramatic view of the river landscapes. Hill End Creek drains the Hill End plateau and is joined by a series of deeply incised local creeks such as Specimen, Bear, Brewery and Insolvent creeks. Former goldmining of these creeks has left deep gullies, some up to three metres, which continue to erode.

The **soils** of Hill End are made up of sandy loam over clay subsoil. They comprise red and yellow earths with yellow texture contrast soils and lithosols formed from weathered rock fragments. Red earths occur on the upper steeper slopes and yellow earths on the lower slopes with yellow duplex soils in drainage lines.

Throughout the local area, gold prospecting activities and soil erosion have resulted in the downslope movement of sandy loam topsoil and part of the subsoil layer. Former mining sites are often defined by sparse areas of regenerating bushland and areas of eroded soil. The impact of these processes is highly visible in some areas, for example, Golden Gully, and creates challenges for erosion control, nutrient and salinity management (Context Landscape Design 2013).

6.2 Vegetation and the cultural landscape

The existing vegetation at Hill End is a mix of introduced species and **severely modified remnants** of native woodland communities, limited in species composition and reduced to

stunted, coppiced canopy trees. This vegetation is the multi-stemmed regrowth of the last 150 years or so that has regenerated since the local timber was stripped to feed stamper batteries for refining gold ore. It has been identified as dry sclerophyll forest community (plateau association), dominated by brittle gum and red stringybark (Context Landscape Design 2013). At lower elevations outside the historic site, the Hill End subregion of the South Eastern Highlands Bioregion also supports White Box – Yellow Box – Blakely's Red Gum Woodland, a critically endangered ecological community listed under the *Biodiversity Conservation Act 2016* and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

The most substantial patches of native vegetation in the historic site are at Glendora Campground and Valentines Mine. Woodland regeneration is occurring naturally around the cleared, open spaces of Hill End village and has generated some concern about visually encroaching on the historic heritage values of the man-made landscape (Context Landscape Design 2013).

Native woodland is also regenerating in former mined areas beyond Hill End village and Tambaroora to form vegetated links with the greater Turon Valley.

Exotic plantings in the form of gardens, orchards and street trees are scattered throughout Hill End village and on adjoining land. They are recognised as important cultural landscape elements, complementing built heritage structures and the broader cultural setting. These plantings were initiated during Hill End's heyday and now add to our understanding of life in the goldmining town (Context Landscape Design 2013).

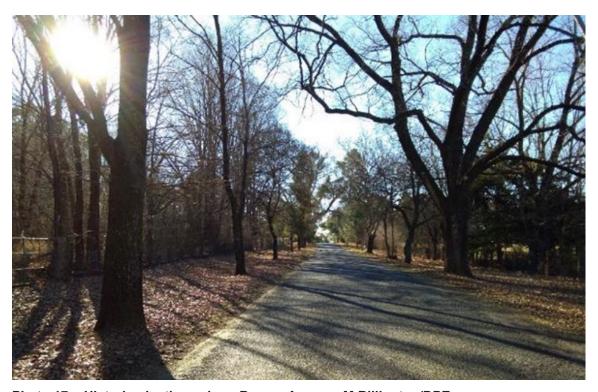


Photo 17 Historic plantings along Beyers Avenue. M Billington/DPE

Introduced plantings throughout the village include ornamental species and a mix of evergreen, deciduous and fruiting orchard trees. The gardens were essentially English cottage gardens in design adapted to the local environmental conditions and influenced by the various cultural backgrounds of people who arrived during the mining boom, e.g. German, Irish, English, American and Chinese (Context Landscape Design 2013).

The remnant gardens now display a variety of landscape styles and horticultural species from various periods and provide a visual contrast to open spaces and native vegetation,

particularly where deciduous species show seasonal changes. Many of the gardens provide a sense of the original structure and geometry of the allotments and the greater village through their historical fences and paths. Vegetable gardens and orchards were established as part of everyday subsistence living practised in the 19th century, and today the orchards and cottage gardens harbour some rare species from that period, including heritage roses.

Arguably the most striking of the exotic plantings is the row of landmark trees along Beyers Avenue which form a landscape gateway into the historic site (Context Landscape Design 2013). This avenue of trees was initiated in 1877 by Louis Beyers who was a Polish miner involved in the famous Holtermann's Nugget discovery, and who later became the mayor of Hill End. The trees include English elm, London plane tree and English oak. Being on a public road, the trees are maintained by Bathurst Regional Council. Replanting to replace dead or removed trees has occurred several times, including in 1885–86, 1973 and 1981.

Some of the introduced species in the historic site are **pest plant species** that need to be actively managed, mostly along previously mined creek lines, creek batters, pit heads and around the sites of former mining equipment. Some exotic species present have potential to become pests by invading native bushland, where they compete with native plant species and deplete habitat for native birds. For example, Monterey pine appears to have naturalised and wildings have become established in creek lines, gardens and other open spaces. Similarly, English elm has formed a double line of trees along Beyers Avenue through suckering.

The main species of concern at Hill End are St John's wort, serrated tussock, Paterson's curse, radiata pine wildings and exotic grasses (OEH 2013b). Blackberries also require ongoing monitoring. St John's wort and serrated tussock are identified as regional priority weeds (Central Tablelands LLS 2017). (See Appendix D for a complete list of weeds recorded in the historic site).

The *Biosecurity Act 2015* and regulations provide specific legal requirements for the response, management and control of biosecurity risks, including weeds and pest animals. These requirements apply equally to public and privately owned land. Under this framework, Local Land Services has prepared regional strategic weed management plans and regional strategic pest animal management plans for each of its 11 regions, including Central Tablelands Region. The *Central Tablelands Regional Strategic Weed Management Plan 2017–2022* (Central Tablelands LLS 2017) identifies priority weeds and appropriate management responses for the region (i.e. prevention/alert, eradication, containment or asset protection).

NPWS prepares regional pest management strategies which identify the pest species and priority programs for Hill End Historic Site. The overriding objective of the NPWS Pest Management Strategy is to minimise adverse impacts of introduced species on biodiversity and other park and community values while complying with legislative responsibilities. The strategy also identifies where other site or pest specific plans or strategies need to be developed to provide a more detailed approach. Reactive programs may also be undertaken in cooperation with neighbouring land managers in response to emerging issues.

Management considerations and opportunities

A landscape management plan forms the third volume of the master plan for Hill End (Context Landscape Design 2013). It includes guidance for managing all vegetation values of the historic site, including native vegetation, introduced plant species, visual values and the cultural landscape as a whole. The landscape management plan proposes that, where possible, the cottage gardens, orchards and significant street trees should be retained and interpreted alongside the heritage buildings and structures. The plan also recommends that a seed collection/propagation program and nursery be developed to ensure the replacement

of historic orchard trees and cottage garden species, including those that are now rare (Context Landscape Design 2013).

The landscape management plan also identifies significant **visual values** associated with Hill End, including views within the historic site, and from outside 'looking in'. For example, significant views can be obtained from high points in the surrounding Common, including Kissing Point Lookout on Hawkins Hill, Beaufoy Merlins Lookout and Bald Hill. The significance of views is based on how they contribute to the overall landscape character and cultural landscape experience (Context Landscape Design 2013). In addition, Hill End village contains a number of significant view corridors that connect the landscape cultural elements with the built structures in the village.

Where possible, NPWS applies the landscape principles recommended in the landscape management plan to protect the integrity of the cultural landscape of the historic site, particularly around Hill End village. These include:

- adopting a whole-of-landscape approach that includes visual values
- managing the curtilage between natural bushland and the open spaces
- encouraging bushland in areas that will not impinge on open areas
- conserving and managing significant street plantings
- reinstating front gardens of existing cottages and other buildings to replicate their historic layout and planting styles
- limiting replantings to specified historic species.

6.3 Native and introduced animals

Despite the absence of intact native habitat, the historic site supports a varied suite of native fauna including 55 bird species, 10 mammal species (of which seven are bats), and 15 reptile species (OEH 2018). Five threatened animal species listed under the Biodiversity Conservation Act have been recorded, however, the koala record dates back to 1987, and the record for the large-eared pied bat dates back to 1966 (see Table 6). With increased visitation to Hill End proposed through the development of additional visitor experiences and facilities, it is unlikely that the site will become home to increased numbers of native animals.

Open grassed areas around Hill End village are attractive to kangaroos in good seasons. At times, there is potential for kangaroos to become aggressive and a nuisance to residents and visitors at the campgrounds. NPWS will update signage and visitor education in recognition of any risks.

Table 6 Threatened animal species recorded in the historic site

Common name	Scientific name	BC Act status	EPBC Act status
Birds			
Barking owl	Ninox connivens	V	
Little lorikeet	Glossopsitta pusilla	V	
Speckled warbler	Chthonicola sagittata	V	
Mammals			
Koala	Phascolarctos cinereus	V	V
Large-eared pied bat	Chalinolobus dwyeri	V	

V = vulnerable; BC Act = Biodiversity Conservation Act;

EPBC Act = Environment Protection and Biodiversity Conservation Act.

The Central Tablelands Regional Strategic Pest Animal Management Plan 2018–2023 (Central Tablelands LLS 2017) identifies priority pest animals for the region and appropriate management responses (i.e. prevention/alert, eradication, containment or asset protection). The NPWS Blue Mountains Branch draft pest management strategy identifies pest species and priority programs for Hill End Historic Site. NPWS strategies are consistent with the priorities from the Local Land Services' regional strategic pest management plan, as well as other important programs such as the Biodiversity Conservation Program.

A number of introduced pest animal species are having negative environmental and social impacts at Hill End. These include feral fallow deer, feral goats and foxes. (See Appendix D for a complete list of recorded pests). Each of these species is identified as a regional priority in the *Central Tablelands LLS Strategic Pest Animal Management Plan*. Feral goat, feral deer and the European red fox are also listed as key threatening processes under the Biodiversity Conservation Act (NSW SC 2004a; NSW SC 2004b; and NSW SC 1998 respectively) and under the Environment Protection and Biodiversity Conservation Act (DAWE n.d.b).

Isolated populations of these species occupy habitat in the surrounding Hill End and Tambaroora Common. Deer and goats are a regular presence in Hill End village and make a nuisance of themselves by foraging on garden plants and fruit trees. From time to time feral pigs are also observed in the village. These pest animals can impact on the conservation values of the historic site by grazing, trampling vegetation, spreading weeds and damaging heritage sites. In the absence of regular control activities, pest species have the potential to increase in numbers and do more damage, particularly by exacerbating erosion.

Pest management is essential for conserving important natural and cultural values at Hill End. As the site is almost completely surrounded by Hill End and Tambaroora Common and has a highly irregular boundary around Hill End village, pest management can be challenging. Pest control activities in the vicinity of Hill End village must be carefully planned in order to maintain safety for Hill End residents and visitors, and NPWS will continue to work with the Common Trust and the relevant Crown lands management agency to reduce the adverse impacts of pest animals.

Destruction of built assets by termites is particularly relevant to the historic site and presents a significant risk to historic heritage. As set out in the Heritage Amendment Regulation 1999 (amendments to the *Heritage Act 1977*), owners of items listed on the State Heritage Register are required to achieve minimum standards of maintenance and repair. The standards are set out in the Regulation and relate to waterproofing, fire protection, security and essential maintenance. Essential maintenance and repairs include taking measures to control pests such as termites, rodents, birds and other vermin. Yearly inspections, together with monitoring and baiting programs, are carried out at Hill End Historic Site to comply with these requirements.

6.4 Fire management

The primary objectives of NPWS fire management are to protect life, property, community assets and cultural heritage from the adverse impacts of fire, while also managing fire regimes in parks to maintain and enhance biodiversity. NPWS also assists in developing fire management practices that contribute to conserving biodiversity and cultural heritage across the landscape, and implements cooperative and coordinated fire management arrangements with other fire authorities, neighbours and the community (OEH 2013a).

In Hill End village, the risk of fire damaging state heritage buildings and structures is the key threat. In keeping with its statutory role as a fire authority, NPWS does not respond to structural fires in Hill End, which are attended by the Hill End Volunteer Fire Brigade. The RFS also provides first response to ignitions on Hill End and Tambaroora Common and

other Crown land. The historic site is also included in the Chifley Bush Fire Management Committee's risk plan.

A fire management strategy which defines the fire management approach for the historic site has been prepared (NPWS 2009) and is updated periodically. In keeping with the management principles of historic sites and the heritage significance of Hill End, the key focus of the strategy is on heritage asset conservation rather than ecological assets. The fire management strategy outlines the known fire history of the site, key assets within and adjoining the site, fire management zones and fire control advantages such as water supply points. All state-listed heritage properties are contained within an asset protection zone and within this zone the overall fuel hazard is maintained equal or below a moderate level.

NPWS owns and maintains a fire hydrant system that services the historic core area of the village. Buildings and structures owned and leased by NPWS are fitted with fire prevention measures such as smoke alarms as required under the Building Code of Australia.

NPWS maintains cooperative arrangements with the Hill End brigade, and landowners surrounding the historic site, and is a member of the Chifley Bush Fire Management Committee.



Photo 18 Hosies Store. M Billington/DPE

6.5 Climate change

Human-induced climate change is listed as a key threatening process under the Biodiversity Conservation Act (NSW SC 2000) and habitat loss caused by human-induced greenhouse gas emissions is listed under the Environment Protection and Biodiversity Conservation Act (TSSC 2001). NPWS's approach to managing climate change in Hill End Historic Site is outlined in Box 7.



Photo 19 Ruins at Quartz Roasting Pits. M Billington/DPE

Box 7. Climate change in the historic site

Climate change modelling has been produced for 12 defined regions in south-east Australia. The following is a snapshot of the predicted changes to climate for the Central West and Orana Region, which covers Hill End Historic Site (OEH 2014):

Maximum temperatures are projected to increase in the near future by 0.4–1.0°C	Maximum temperatures are projected to increase in the far future by 1.8–2.7°C
Minimum temperatures are projected to increase in the near future by 0.5–0.9°C	Minimum temperatures are projected to increase in the far future by 1.5–2.6°C
The number of hot days (i.e. > 35°C) will increase	The number of cold nights (i.e. < 2°C) will decrease
Rainfall is projected to decrease in spring	Rainfall is projected to increase in autumn
Average fire weather is projected to increase summer, spring and winter	e in Severe fire weather days are projected to increase in summer, spring and winter

Source: OEH 2014. Near future = 2020-2039; Far future = 2060-2079

The climatic conditions of the Central West and Orana region are quite variable due to the effect of the Great Dividing Range on the eastern edge where Hill End Historic Site is located. Here the Central Tablelands have milder temperatures throughout the year and higher rainfall than the hot, dry western plains. However, under climate change, temperatures are forecast to increase throughout the region. The Central West and

Orana currently experiences considerable rainfall variability across regions, seasons and from year-to-year. This variability is due to the complex interactions between weather patterns in the region, the influence of larger-scale climate patterns such as El Niño Southern Oscillation, the topography of the Blue Mountains and Great Dividing Range and distance from the coast.

This variability is also reflected in the climate change projections; that is, seasonal rainfall projections for the near future and far future span both drying and wetting scenarios.

The projected changes that are likely to have the greatest effects on the historic site are increases in temperature, the number and frequency of heatwaves and fire weather. The Central Tablelands currently experience fewer than 10 hot days per year but this is likely to increase. With higher rainfall predicted to occur in autumn in the far future, there will be an increase in biomass, and drying off under warmer summer temperatures could potentially increase fuel loads and fire risk in the native vegetation.

The oldest standing buildings in Hill End are approaching 160 years of age, for example Beyers Cottage was built in the 1860s, Woolards Cottage in 1869 and Fairfax House in 1870. Even older are some of the mining sites, such as the Quartz Roasting Pits established in 1855. While many of the heritage buildings have been restored and may include new building materials for some elements, a generally hotter and drier climate will exacerbate the effects of aging, particularly on timber components. Historic plantings of exotic species are also senescing as time progresses and may be adversely affected by the drying climate, particularly hot days and heat wave conditions.

As the historic site continues to age, NPWS will monitor the condition of its heritage buildings, historic structures and cultural plantings with regard to the effects of climate change. The gradual decline of some items may be inevitable. For the natural values of the site, NPWS will continue to manage threatening processes such as pest animals and wildfire in collaboration with neighbours to help lessen the severity of the effects of climate change.

A hotter, drier climate may also affect visitation and increase pressure on the groundwater system, which supplies drinking water for the site.

Recent water shortages in Hill End over the summer of 2019 clearly demonstrated the pressure of hot summer conditions, reduced winter rainfall, visitors and historical usage patterns on the local supply of groundwater. The introduction of water-saving measures and an upgrade of supply infrastructure to access an additional bore successfully remedied the shortage. But in order to plan for sustainable use and allocation of groundwater resources, all relevant users who currently rely on the regional aquifer will need to collaborate for long-term solutions under a drying climate.

Appendices

Appendix A Legislation and policy

The following laws and policies apply to how we manage our parks (this is not a complete list):

NSW legislation

- Biodiversity Conservation Act 2016
- Biosecurity Act 2015
- Companion Animals Act 1998
- Environmental Planning and Assessment Act 1979
- Heritage Act 1977
- Local Land Services Act 2013
- National Parks and Wildlife Act 1974 and NPW Regulation
- Protection of the Environment Operations Act 1997
- Public Health Act 2010 and Public Health Regulation 2012
- Rural Fires Act 1997

Other NSW laws may also apply to park management:

- Bathurst Regional Local Environmental Plan 2014
- Commons Management Act 1989
- Crown Lands Act 1989

Commonwealth legislation and policy

- Building Code of Australia
- Environment Protection and Biodiversity Conservation Act 1999

NPWS policies and strategies

A range of NPWS policies and strategies may also apply to park management:

- Adaptive Reuse of Heritage Places Policy
- Boundary Fencing Policy
- Fire management strategies
- Park management policies
- Pets in Parks Policy
- Regional pest management strategies
- Staff Housing Policy

Appendix B Scientific plant and animal names

The following table shows the scientific name for common plant and animal names used in this plan.

Common name	Scientific name
Plants	
Blakely's red gum	Eucalyptus blakelyi
Brittle gum	Eucalyptus mannifera subsp. maculosa
English elm (exotic)	Ulmus procera
English oak (exotic)	Quercus robur
London plane tree (exotic)	Platanus x hybrida
Monterey pine (exotic)	Pinus radiata
Red stringybark	Eucalyptus macrorhyncha
White box	Eucalyptus albens
Yellow box	Eucalyptus melliodora
Birds	
Barking owl	Ninox connivens
Little lorikeet	Glossopsitta pusilla
Speckled warbler	Chthonicola sagittata
Mammals	
Koala	Phascolarctos cinereus
Large-eared pied bat	Chalinolobus dwyeri

Common plant names from PlantNET (The NSW Plant Information Network System). Royal Botanic Gardens and Domain Trust, Sydney. http://plantnet.rbgsyd.nsw.gov.au [05/08/16].

Appendix C Planning documents for the site

Name	Year	Author	Description
Hill End Historic Site Conservation Management and Cultural Tourism Master Plan:			
Volume 1: master plan	2013	Conybeare Morrison International	Provides a vision and planning strategy to guide the future management of the historic site. Provides a guide for the conservation, adaptive reuse and upgrade of infrastructure and services. It aims to increase revenue by providing a range of high quality visitor experiences.
Volume 2: conservation management plan	2013	Conybeare Morrison International	It provides an assessment of the cultural significance of the study area and provides strategic direction. The CMP provides historical background, values and updated statement of significance.
Volume 3: landscape management plan	2013	Context Landscape Design & CAB Consulting	Provides guidelines for the conservation and interpretation of Hill End landscape, protection of the natural environment, opportunities for recreation and tourism.
Volume 4: cultural tourism and recreation master plan	2013	Conybeare Morrison International	Outlines ways to enrich the visitor experience at Hill End and to improve the economic return through increase in visitor numbers, length of stay and their spending.
Hill End Conservation Management and Cultural Tourism Master Plan – Implementation Plan	2013	OEH	Summarises key actions recommended by the Hill End Historic Site Conservation Management and Cultural Tourism Master Plan.
Hill End Interpretation Plan and Implementation Strategy – Research and review report	2014	GML Heritage, Trigger and Simon McArthur & Associates	Provides a guide for future interpretation initiatives, facilities and programs. Outlines ways to improve visitor enjoyment and understanding of the site.
Long Term Utilities Management Plan	2015	lan Grey Groundwater Consulting	A long-term utilities management plan to address Hill End's water and sewerage systems. Plan ensures statutory obligations are met, outlines protection for public health and environmental impacts. Suggests ways to improve efficiencies, to reduce operating costs and options for future pricing structure.
Statement of Management Intent	2014	NPWS	Outlines values, issues, management directions and priorities for Hill End Historic Site. The statement is an interim document until the plan of management has been prepared.
Hill End Historic Site Draft Plan of Management	1994	NPWS	Draft plan was prepared and publicly exhibited in 1988 and 24 submissions were received. The plan was presented three times for adoption but never adopted. The plan provides a good

Hill End Historic Site Planning Considerations

Name	Year	Author	Description
			overview of the issues and strategic direction for Hill End. Where appropriate the 1994 draft plan has been used in preparing the current plan of management.
Archaeological Landscape Management Plan	2002	Andrew Long & Associates	Provides archaeological zoning maps and assessments of the Hill End area, as well as conservation policies and guidelines.
Hill End Historic Site Master Plan	2002	Graham Brooks and Associates	A framework for the management of the site.
Heritage Interpretation Program	2009	Rose Deco Planning and Design	

Appendix D Pests in the site

The following table summarises key information on pests in the park at the time of publication of this plan. Current information on the status of pests can be found on the Department's website. Further pest information on the park is also available in the relevant NPWS Pest Management Strategy. The Local Land Services Act declares certain animals to be pests.

Common name	Scientific name	КТР	Regional priority ^A
Animal pests			
Cat	Felis catus	Υ	Υ
Feral goat	Capra hircus	Υ	Υ
Rabbit	Oryctolagus cuniculus	Υ	Υ
Red fox	Vulpes vulpes	Υ	Υ
Rodent	Rattus rattus		
Termites	Coptotermes cinaciformis		
Wild deer	Cervus spp.		
Wild dog	Canis lupus familiaris		Υ
Weeds			
Bathurst burr	Xanthium spinosum		
Blackberry	Rubus fruticosus sp.agg		
Bridal veil creeper	Asparagus asparagoides		
Gorse	Ulex europaeus		
Monterey pine (radiata pine)	Pinus radiata		
Patterson's curse	Echium plantagineum		
Prickly pear	Opuntia spp.		
Serrated tussock	Nassella trichotoma		Υ
St John's wort	Hypericum perforatum		Υ
Sweet briar	Rosa rubiginosa		
Thistles (scotch, stemless and Illyrian)	Onopordum spp.		
Weeping willow	Salix spp.		

KTP = key threatening process listed under NSW Biodiversity Conservation Act 2016 and Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

TAP = threat abatement plan prepared under NSW Biodiversity Conservation Act.

A = Regional priority identified by Central Tablelands Local Land Services (Central Tablelands LLS 2018).

Abbreviations

AHD	Australian Height Datum
BC Act	Biodiversity Conservation Act 2016
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
NPW Act	National Parks and Wildlife Act 1974
NPWS	National Parks and Wildlife Service
NSW	New South Wales
RFS	Rural Fire Service

Glossary

Term	Meaning in this report
Aboriginal sites	Places with evidence of Aboriginal occupation or places that are related to other aspects of Aboriginal culture. They are important as evidence of Aboriginal history and as part of the culture of local Aboriginal people.
Adaptive reuse	The conservation and redevelopment to revive old dilapidated buildings, and to subsequently increase their architectural, functional and economic potential.
Asset protection zone	Area where the overall fuel hazard is maintained at moderate or below, mostly by mechanical means (e.g. mowing or slashing). The objective of an asset protection zone is to protect human life and property, and this objective takes precedence over biodiversity conservation in these zones.
Pampadours	This is one of several market segments identified in the draft Hill End Interpretation Plan and Implementation Strategy (GML Heritage et al. 2014). Pampadours are described as:
	 the indulgers who want it all they seek out new places, new faces, a different culture, climate and food, and activities not available or taken up at home they travel outside school holidays they avoid caravans, self-contained accommodation, day trips, adventure and risk.
Shared history	History has taken place across the landscape. This includes the history of the first Australians – Aboriginal people – and our shared history since European settlement. Cultural heritage comprises places and items that may have historic, scientific, cultural, social, archaeological, architectural, natural or aesthetic significance. NPWS conserves the significant heritage features of NSW parks and reserves.
Traditional Country	To Aboriginal people, the landscape is made up of many features that are interrelated. These include land, water, plants and animals, places and stories, historical and current uses, and people and their interactions with each other and place. These features are central to Aboriginal spirituality and contribute to Aboriginal identity. They are inseparable and make up what is known as 'Country'.

Term	Meaning in this report
True travellers	This is one of several market segments identified in the draft Hill End Interpretation Plan (GML Heritage et al. 2014). True travellers are described as:
	 they are travellers, not tourists they often holiday overseas where they immerse themselves in a different culture
	 they favour spontaneity they respond to physical activity, personal fitness travel, adventure, risk and things they would not do at home.
Weeds	Plants that don't occur naturally in the historic site.

More information

- Hill End Historic Site Plan of Management
- Local Land Services Act
- NPWS Pest Management Strategy

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