
REVIEW OF ENVIRONMENTAL FACTORS for Horse Riding in Wilderness Pilot



Deua and Monga National Parks

March 2014

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BACKGROUND

Increasing visitor opportunities

The NSW Government is committed to providing a diverse range of sustainable visitor and recreational experiences to ensure a broad spectrum of the community can enjoy NSW national parks and reserves. Horse riding in national parks provides an opportunity to experience and appreciate these natural environments. Horse riding also has significant heritage value for many people in the community, and horse riding in national parks supports the maintenance of these cultural traditions and connections. Many national parks are on land where horse riding previously occurred, or continues today.

The *Strategic Directions for Horse Riding in NSW National Parks* is guiding the provision of improved horse riding opportunities across the national parks system. A feature of the strategy is a commitment to undertake a targeted trial of horse riding in wilderness.

Horse riding in wilderness

Approximately 30 per cent of the total area covered by NSW national parks is declared wilderness. There is a history of recreational horse riding in a number of NSW wilderness areas, prior to their declaration as wilderness. Following declaration, the past policy position has been to exclude horse riding from wilderness areas.

In recognition of strong historical usage and contemporary community interest, the NSW Government has committed to trialling horse riding in five wilderness locations through a two year pilot. The pilot program will enable NPWS to determine whether potential impacts on park and wilderness values can be managed within acceptable thresholds. The proposed trial is underpinned by a monitoring framework intended to provide early identification of impacts and apply appropriate management responses to minimise environmental risks.

The pilot program has been developed in accordance with the requirements of the *Wilderness Act 1987* and the *National Parks and Wildlife Act 1974*. In particular, the choice of trial locations, access arrangements, group size limits and the monitoring framework are intended to support the management principles for wilderness areas, including:

- protection of the unmodified state of the area and plant and animal communities;
- preserving capacity of areas to evolve in the absence of significant human interference; and
- providing opportunities for solitude and appropriate self-reliant recreation.

The horse-riding in wilderness pilot program involves five proposed locations:

- Kosciuszko National Park
- Mummel Gulf National Park
- Deua & Monga National Parks (two locations)
- Curracabundi National Park

Horse riding will occur on management tracks and trails (which are already vehicle accessible and used for park management purposes such as bush fire hazard reduction), and existing or historical bridle tracks (not vehicle accessible), on a casual and transitory basis, and will be generally accessible and open to the public for that purpose during the trial period. Consistent with the principle of protecting the unmodified state of wilderness areas, no new tracks or trails will be

constructed and maintenance actions will be limited to those needed to maintain existing trails or to ensure they are distinguishable and safe for use. Similarly, in accord with the principle of self-reliance, no new facilities will be developed to support the trial.

Locations for the pilots were canvassed taking into account environmental attributes and values, safety, other park users, connectivity and community interest.

A monitoring framework will be implemented and results publicly reported throughout the two year period. The framework establishes baseline data on current condition and use of the trial locations, using standard site monitoring techniques including stratified sampling. Results will be tracked to provide early identification of any potential adverse impacts to allow for management intervention. Implementation of the monitoring framework is a key element in supporting protection of the unmodified nature of the wilderness areas and their capacity to evolve without significant human interference.

Environmental assessment

In recognition of the level of community interest and the wilderness values of these areas, NPWS has prepared a precautionary Review of Environmental Factors (REF). Each REF has been undertaken using existing procedures and templates.

An REF has been prepared for all pilot locations, except for Curracabundi National Park. A separate REF will be prepared for that location after public consultation on the plan of management for that park has occurred.

DEUA NATIONAL PARK & MONGA NATIONAL PARK

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1. Brief description of the proposed activity

Please provide a brief description of the work to be conducted:

Description of proposed activity(ies)*	<p>The proposed activity is the two-year pilot trial for horse riding on existing or historical bridle tracks within Deua National Park and partly extending into Monga National Park. The preferred trial routes are shown on Figure 1 and in total cover approximately 39.1 km, spread over two pilots.</p> <p>The first pilot will comprise the Shoebridge Track in northern Deua National Park, and partly in Monga National Park. The second pilot location is the WD Tarlinton and Georges Pack Tracks in southern and eastern Deua National Park.</p> <p>The proposed trial location was exhibited for public comment from 7 June 2013 to 29 July 2013 as part of the plan of management amendment process.</p> <p>A monitoring framework will be applied to the wilderness pilot to ensure there are no unacceptable impacts on park or wilderness values. This is considered an acceptable and appropriate mechanism to ensure a precautionary approach is taken to implementation of the trial.</p> <p>At the conclusion of the two year pilot, an assessment of the outcomes will be undertaken.</p> <p>The overarching goals of the proposed activity are to:</p> <ul style="list-style-type: none"> - improve opportunities for sustainable recreational horse riding in NSW national parks; - provide opportunities in unique wilderness locations that recognise the strong historical usage and ensuring the natural and cultural values of the national park and wilderness are protected; - deliver an enhanced community awareness of existing and improved recreational horse riding opportunities in national parks; - build support in the horse riding community for national parks and collaborate on practical park management actions, including encouraging participation in volunteering.
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	<p>In order to minimise environmental impact and enhance the riding experience for the user, the pilot trial will:</p> <ul style="list-style-type: none"> - use existing management or bridle tracks; - endeavour to avoid or minimise impacts on other users of the park, with horse-riding groups sizes limited to a maximum of 20 to support opportunities for solitude, inspiration and appropriate self-reliant recreation - apply a monitoring framework, including thresholds and management responses - be subject to normal operating park management requirements, including management of trail access due to environmental impact, wet weather, fire, etc. - involve NPWS working with horse riding groups to build awareness about good riding techniques, including following the Code of Practice for Horse Riding and to assist in ongoing maintenance and surveillance of track condition. <p>Horse riding will occur on a casual and transitory basis, and will be generally accessible and open to the public for that purpose during the trial period. Other existing and legally permissible uses of the pilot location, such as bushwalking, will be able to continue.</p>
Estimated commencement date?	April 2014
Estimated completion date?	April 2016

****Note a comprehensive description of the proposal is contained at section 5.2 of this form.***





2. Proponents details

Name	Ms Melinda Murray
Organisation	Office of Environment and Heritage
ACN /ABN (if applicable)	ACN: ABN: 30 841 387 271
Section/Division (OEH proponents only)	NSW National Parks & Wildlife Service
Position	Director, Park Services and Strategy
Address	PO Box 1967
	Suburb: Hurstville
	State: NSW Postcode: 2220
Phone numbers	Business: Mobile:
Fax	
Email	Contact information not required – internal OEH proponent

3. Permissibility

3.1 Legal permissibility

Indicate whether the activity is permissible under the legislation. Section 1.10 and Appendix 1 of the *Proponents Guidelines for the Review of Environmental Factors* provides guidance on permissibility. Include explanation where necessary.

	<i>National Parks and Wildlife Act 1974</i> (NPW Act) The location of the proposed activity is on land reserved under the NPW Act.
Justification: consider the following matters	
	Objects of the Act (s.2A)
<p>The activity has been designed to be consistent with the objects of the Act regarding the conservation of natural and cultural heritage, demonstrated by careful site selection, group size limits and application of a monitoring framework to provide early detection and response to any environmental risks. It also supports the public use and enjoyment objects of the NPW Act by providing additional opportunities for horse riding to occur in a sustainable manner, thereby facilitating public appreciation of park and wilderness values and community heritage.</p> <p>The activity has also been developed to support application of key ESD principles, as follows:</p> <ul style="list-style-type: none"> • precautionary principle – after carefully considering and weighing potential environmental risks, it is considered that the activity is capable of proceeding subject to application of a focused monitoring framework to target and detect key changes in the environment and support management interventions to address these; • inter-generational equity – the activity as proposed will support protection of environmental quality for future generations, as well as providing current and future generations with new sustainable opportunities to experience and enjoy natural and cultural heritage; • conservation of biodiversity and ecological integrity – the location of the trial along existing management trails is a key element in avoiding risks to biodiversity values, together with group size limits and the monitoring framework; • improved valuation, pricing and incentives – the activity, via the monitoring framework, provides a mechanism to limit cost impacts associated with environmental risks (such as track damage and rehabilitation) by allowing early detection and intervention. Opportunities also exist to work with horse riders and other track users to undertake collaborative repair and maintenance works. <p>The activity gives effect to the public interest in protecting the values of this area and its appropriate management, by:</p> <ul style="list-style-type: none"> • site selection of the trial locations; • group size limits; and • the monitoring framework. 	
	Reserve management principles (s.30E-30K)
<p>The proposed activity is consistent with and supports the management principles for national parks. In particular it:</p> <ul style="list-style-type: none"> • has been designed to minimise risks to biodiversity and cultural heritage; • promotes public appreciation and understanding of the park's natural and cultural values; • provides for sustainable visitor use and enjoyment that is compatible with the conservation of the park's natural and cultural values; and <p>provides for appropriate monitoring.</p>	
	Title and relevant sections of plan of management or Statement of Interim Management Intent (or drafts):


Far South Escarpment Parks Plan of Management 2011 (as amended)

Deua National Park and Monga National Parks are two of a number of parks included within this plan of management.


The plan provides for a range of horse riding recreation opportunities. Horse riding is permitted on road corridors, management trails, and bridle tracks outside wilderness, including parts of the Shoebridge Track, Mongarlow-Corn Trail link, Corn Trail in Monga National Park and the Zig Zag Track and Deua River valley in Deua National Park. Camping with horses is allowable at Bendethera.

An amendment to the plan of management was adopted by the Minister for the Environment on 10 February 2014. The amendment enables the two year wilderness pilot to proceed.

The amendment occurred following public consultation in mid-2013, and statutory consultation with the Regional Advisory Committee and National Parks and Wildlife Advisory Council.

 Leasing, licencing and easement provisions of Part 12

Part 12 of the *NP&W Act 1974* is not relevant to this activity.


 Management powers and responsibilities of NPWS (s.8 and s.12) – for internal NPWS projects

The activity is permissible under s.8 (3)(b) *arrange for the carrying out of such works as the Director-General considers necessary for or in connection with the management and maintenance thereof*, and s.12 (f) *the provision of facilities and opportunities for sustainable visitor or tourist use and enjoyment on land reserved under this Act*.

Special note: for lease proposals under s.151 NPW Act involving new buildings or structures

Section 151A(5) of the NPW Act states that the Minister must not grant a lease under s.151 for visitor or tourist uses that authorises the erection of a new building or structure unless the plan of management identifies the purpose as permissible and the general location for the new building. If relevant to the proposal indicate whether this requirement has been met, or will be.

N/A – no new buildings or structures proposed.

 *Wilderness Act 1987 (for activities in wilderness areas consider objects of the Act, management principles, s.153, etc)*







Justification:

The *Wilderness Act 1987* states that a wilderness area shall be managed so as to:

- (a) restore (if applicable) and to protect the unmodified state of the area and its plant and animal communities,
- (b) preserve the capacity of the area to evolve in the absence of significant human interference, and
- (c) permit opportunities for solitude and appropriate self-reliant recreation (whether of a commercial nature or not).

The proposed wilderness trial in Deua and Monga National Parks has been developed to be consistent with these management principles. In particular:

- **the choice of trial locations along existing management trails** – to protect the unmodified state of the area and biodiversity, and capacity to evolve
- **no new trails or supporting facilities** – enabling appropriate self-reliant recreation of a non-mechanical or motorised nature, and recognising the unique inter-dependent nature of, and skills involved in, the rider-horse relationship and its cultural significance to many in the community
- **application of group size limits** – to protect the unmodified state of the area and biodiversity, capacity to evolve, and support the sense of solitude
- **application of a monitoring framework including thresholds and management responses** – providing a precautionary system for assessing environmental change and taking action, in order to protect the unmodified condition of wilderness and preserve evolutionary capacity.

	<p><i>Environmental Planning and Assessment Act 1979 (EP&A Act) (consider aims and objectives of relevant environmental planning instruments, zoning and permissible uses, development controls, etc.)</i></p> <p><u>Explanatory note:</u> Clause 65 of State Environmental Policy (Infrastructure) 2007 provides that development for any purpose may be undertaken within specified OEH lands without consent. This removes the need for development consent under Part 4 of the EP&A Act, meaning that most activities within NPWS land are assessed under Part 5. However, proponents should still confirm that the SEPP is applicable to their particular proposal, and provide consideration of other environmental planning instruments that would otherwise apply to the proposal if it were not occurring on NPWS land.</p>
	<p>Justification: Part 5 of the <i>EP&A Act 1979</i>, requires the NPWS to assess the likely environmental impacts of activities proposed to be undertaken on NPWS land. An 'activity' includes:</p> <ul style="list-style-type: none"> (a) <i>the use of land, and</i> (b) <i>the subdivision of land, and</i> (c) <i>the erection of a building, and</i> (d) <i>the carrying out of a work, and</i> (e) <i>the demolition of a building or work, and</i> (f) <i>any other act, matter or thing referred to in section 26 that is prescribed by the regulations for the purposes of this definition.</i> <p>As currently proposed, the horse riding pilot trial is not considered to meet the definition of an 'activity'. Nevertheless, given the level of public interest and the wilderness location this precautionary REF has been prepared as if the proposal were an activity.</p>
	<p><i>Heritage Act 1977 (for activities likely to affect items or places of historic cultural heritage value)</i></p>
	<p>Justification:</p> <p>A search of the NPWS Historic Places Register HHIMS was undertaken and the results are discussed below. There are no aspects of the activity that trigger assessment or approval under the Heritage Act 1977.</p>
	<p><i>Threatened Species Conservation Act 1995 (TSC Act) (is the activity consistent with the biodiversity conservation objectives of the Act?)</i></p>
	<p>A search of the OEH Wildlife Atlas was completed and discussion of threatened species matters occurs below. The activity as proposed is considered to be consistent with the objects of the TSC Act.</p> <p>The proposed activity is not considered likely to affect threatened species either directly or indirectly. The monitoring framework will assist in reducing the risks of potential impact.</p> <p>The activity is not a threatening process under the TSC Act and no critical habitat is present.</p>
	<p><i>Rural Fires Act 1997 (is the activity consistent with the objectives of protecting life and property and protection of the environment?, is it consistent with bush fire management plans?)</i></p>
	<p>Justification: The <i>Rural Fires Act 1997</i> is not relevant to this activity.</p>
	<p><i>Fisheries Management Act 1994 (will the activity affect fish or marine vegetation, including threatened species? Is approval required under the Act?)</i></p>
	<p>Justification: The activity does not require approval under the Fisheries Management Act. Group size limits, the use of existing management and bridle tracks and the monitoring framework will support protection of fish habitat.</p>
	<p><i>Commonwealth legislation (including the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EP&BC Act) and the <i>Telecommunications Act 1997</i>)</i></p>
	<p>Deua and Monga National Parks contain threatened species listed under the EPBC Act. These are discussed below.</p> <p>The proposed activity will not have a significant impact on national heritage values, threatened species or other matters of national environmental significance under the EPBC Act 1999.</p>


3.2 Consistency with NPWS policy

Indicate whether the activity is consistent with NPWS policy, including an explanation where necessary:

Provide details of relevant Government and NPWS policy	<p>The activity is strategically consistent with the <i>NSW 2021</i> commitment to encourage a diverse range of recreational activities in the reserve system and will assist in implementing:</p> <ul style="list-style-type: none"> • Goal 22 – working with the community to protect our local environment and provide more opportunities to enjoy parks, waterways and natural bushland • Goal 27 - encourage increased participation in sporting activities to support healthy lifestyles. <p>The activity is consistent with the <i>OEH Corporate Plan 2014 – 2017</i> and is aligned with the organisation's strategic vision and goals as follows;</p> <ul style="list-style-type: none"> • Vision – <i>Our environment and heritage is valued, protected, enjoyed and supports a prosperous and healthy NSW</i> • Goal – <i>Ensure vibrant natural assets for the health and prosperity of NSW.</i> • Purpose – <i>To enrich life in NSW by helping the community to conserve and enjoy our environment and heritage</i> • Role – <i>Encourage communities to experience and enjoy national parks and value their local environment.</i> <p>The activity is an identified priority in the NPWS Delivery Plan 13/14. The Delivery Plan incorporates annual agency priorities and ensures project delivery efforts are focused and aligned to agreed outcomes and programs.</p> <p>This activity is consistent with the <i>Strategic Directions for horse riding in NSW National Parks</i> adopted in 2012. The strategy commits to establishing five wilderness pilots across NSW, to trial horse riding in wilderness locations for a two year period.</p> <p>The activity is consistent with the NPWS <i>Horse Riding Policy Directive</i> (2012). That policy specifically notes the intention to trial horse riding in up to five wilderness locations within parks, using existing trails, without provision of new facilities (excepting signage and park user information), subject to a monitoring program and the park plan of management.</p> <p>The activity is also consistent with the principles of the NPWS <i>Code of Practice for horse riding in parks</i> (2010). The aim of the code is to provide practical details to help guide horse riders and NPWS staff to sustain the use of horses in parks by maximising safety and enjoyment while minimising any potential impacts on the park's natural and cultural values.</p> <p>The proposed activity is consistent with the published NPWS <i>Horse Riding Regional Work Plans</i>. These were developed by NPWS for eight priority regions working in consultation with local horse riders to identify and prioritise new opportunities for horse riding in each region.</p> <p>The Far South Coast Region Work Plan includes actions to implement the horse riding in wilderness trial in Deua and Monga National Parks.</p>
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3.3 Type of approval sought

OEH proponents

	Internal NPWS approval* or authorisation, including expenditure
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***Note:**

- NPWS does not grant park approvals (e.g. leases, licences, consents, etc.) to itself.
- NPWS has a range of general powers to undertake activities on-park, for example sections 8 and 12 of the NPW Act.

4. Consultation

Specify the details of consultation, including who was consulted, how, when and the results of the consultation. Section 2.6 of *Proponents Guidelines for the Review of Environmental Factors* provides guidance on consultation.

Provide details of consultation*:	<p>Statewide consultation: Consultation on horse riding matters has been an ongoing process over many years leading to adoption of the 2006 <i>Recreational Horse Riding Policy</i>. The policy had been subject to review since 2002, including considerable internal and external consultation. The policy sought to provide a balanced approach to the various issues raised during the review process.</p> <p>A Horse Riding Consultative Group has met since mid-2011, comprising key horse riding stakeholders and National Parks and Wildlife Service (NPWS) staff. The non-statutory group was established to provide a forum to discuss opportunities and issues relating to horse riding in national parks and associated policies and procedures, including the implementation of a 2006 MoU established with the Liberal National Coalition.</p> <p>In April 2012, the Minister for the Environment released the <i>Draft strategic directions for horse riding in NSW national parks and reserves</i> to outline the NSW Government's commitment to improved horse riding opportunities. The draft strategy was publicly exhibited from 20 April to 30 June 2012 and over 200 submissions received. After considering public submissions the final strategy was released in late 2012.</p>
	<p>Regional work plans consultation: In early 2013, NPWS consulted with local stakeholders to identify horse riding opportunities and prepare work plans for eight priority regions. The final work plans were publicly released in April 2013.</p> <p>That includes a Far South Coast Region Horse Riding Work Plan, which includes priority actions related to implementation of the horse riding in wilderness pilot in Deua and Monga National Parks.</p> <p>Consultation with Regional Advisory Committee NPWS has consulted with the Regional Advisory Committee, which represents a diversity of local community views, on significant horse riding proposals.</p> <p>Public Exhibition of Plan of Management proposed amendment The proposed amendment to the plan of management for the Far South Coast Escarpment Parks was exhibited between 7 June 2013 and 29 July 2013. Ninety four submissions were received and assessed. A copy of the submissions report is provided as Attachment 2.</p> <p>In accordance with statutory requirements the draft amendment and submissions were considered by both the RAC and National Parks and Wildlife Advisory Council. The recommendations of both groups were provided to the Minister for the Environment for consideration.</p> <p>The Minister for the Environment, after considering the draft amendments, submissions, and views of the RAC and Council, adopted the final amendments to the plan of management in February 2014.</p> <p>OEH Website Consultation and feedback on horse riding matters has been facilitated through the OEH website which provides key information on horse riding, policy updates and contact details. http://www.environment.nsw.gov.au/policies/HorseRideStrat.htm</p>

***Notes:**

- Proponents should provide evidence that the relevant NPWS (Parks & Wildlife) office supports the proposal in-principle.
- There are specific consultation and referral requirements for certain proposals requiring a lease or licence under s.151A of the NPW Act. Refer to the *Leases and Licences Referral Policy and Procedures* for more information.

5. Proposed activity(ies)

5.1 Location of activity

Description of premises location	The wilderness pilot trail lies within the northern and southern sections of Deua National Park and partly within Monga National Park. The route is shown at Figure 1 and covers approximately 39 km.		
	Deua and Monga National Parks are located around 300 kilometres south of Sydney, and 100 kilometres east of Canberra.		
	The proposed route of the wilderness pilot follows the Shoebridge Track, Georges Pack Track and WD Tarlinton Track.		
Site reference	South-eastern corner of the Australian mainland at coordinates 35°58'27"S 149°43'15"E.		
	AMG zone: (54, 55, 56 or 57)	Zone 55	Reference system: (eg. GDA94, WGS84, AGD) WGS84
Local Government Area	Eurobodalla		
NSW State electorate	Bega		
Catchment	Southern Rivers Catchment, Eurobodalla sub-region		
National Park	Deua and Monga National Parks		

5.2 Description of the proposed activity

Include a full and comprehensive description of the activity. All aspects of the proposed activity should be described. See Section 3.2 of *Proponents Guidelines for the Review of Environmental Factors* for further guidance.

Description of the proposed activity – include pre-construction, construction, operation and remediation:

The activity involves the provision of an appropriate, safe and sustainable horse riding experience in declared wilderness, on established trails, subject to a monitoring framework for a two year trial period between 2014-2016.

Two separate routes are proposed:

1. the Shoebridge Track
2. the WD Tarlinton Track and Georges Pack Track, which link through Bendethera and the Zig Zag Track to form one route.

No new construction or trail work, or new supporting facilities, are proposed.

Some targeted maintenance works will be undertaken to ensure the trail is safe, distinguishable and accessible (e.g. removal of fallen debris). This is necessary as the majority of the trails are bridle track style (no vehicle access), rather than management trail standard (vehicle accessible). Over time, vegetation has encroached into the trial route or fallen across it. NPWS proposes to collaborate with local horse riders to undertake basic trail maintenance using hand-tools only.

No horse based camping is proposed in the wilderness area.

Baseline monitoring sites have been established at key locations along the trial route and baseline data has been collected. The methods for choosing and establishing each baseline sites are detailed in Attachment 6. The baseline sites (quadrats) are marked by temporary pegs or stakes, which were installed by hand and have no impact on park or wilderness values.

As discussed below and in Attachment 6, remote sensing cameras are also being temporarily installed in discrete targeted locations as a key mechanism to enable counting of horse usage. The cameras are attached using non-intrusive, non-damaging techniques (such as cable ties). Small-scale signage will similarly be installed to inform the community about the purpose of the cameras, consistent with privacy requirements.

Horse riding access is subject to:

- a maximum size limit of 20 horses per riding group. This is consistent with group size limits on other recreational users in the region, taking account of the particular environmental values present and capacity of the environment;
- standard park management operational requirements including any need to restrict access due to fire, weather, or track conditions;
- application of the monitoring framework and any management actions or interventions implemented in response to the monitoring thresholds being reached. That may include small-scale works needed to repair or rehabilitate sites. The need for further environmental assessment of any repair or rehabilitation works will be considered on a case-by-case basis.

Subject to the above, during the two year trial period access will be available on the identified trails on a casual and transitory basis. No pre-bookings are required. Given the remote location it is expected that horse riding numbers will be low across the two year trial period, but this will be assessed as part of the monitoring program.

Standard compliance and enforcement measures will be applied by NPWS to regulate the undertaking of the activity.

The following images provide a snapshot of the trial location and were collected during baseline monitoring visits.



Tarlinton Trail



Tarlinton Trail -



Tarlinton Trail -









Georges Pack Track -



Georges Pack Track



Georges Pack Track



**Deua National Park
Georges Pack Track**



**Deua National Park
Georges Pack Track**

Construction:

No new construction of new trails or related, supporting infrastructure will be undertaken as part of the pilot.

As noted above, some targeted maintenance works will be undertaken to ensure the trail is safe, distinguishable and accessible (e.g. removal of fallen debris). This is necessary as the majority of the trails are bridle track style (no vehicle access), rather than management trail standard (vehicle accessible). Over time, vegetation has encroached into the trial route or fallen across it. NPWS proposes to collaborate with local horse riders to undertake basic trail maintenance using hand-tools only.

Small-scale rehabilitation or repair works may be undertaken if identified as required via application of the monitoring framework.

The size of the proposed activity footprint:

The total pilot trail length is approximately 39.1km, comprising parts of the Shoebridge Track, Georges Pack Track and WD Tarlinton Track

Ancillary activities, such as advertising or other signage (including any temporary signs, banners or structures promoting an event or sponsorship arrangements), roads, infrastructure, bush fire hazard reduction:

Trail closures may be implemented due to various factors such as wet weather, high fire danger and track damage (including management responses identified in the monitoring framework).

Park access information is provided to the community via notices and the OEH website.

Signage required to support the trial within the wilderness area may include: use of remote cameras; and discrete, small-scale track markers if required.

Proposed construction methods, materials and equipment:

No construction of new trails or related infrastructure will be undertaken as part of the pilot. Targeted maintenance will be undertaken to ensure the trail is safe, distinguishable and accessible (e.g. removal of fallen debris and encroaching vegetation), using hand tools.

The baseline monitoring locations are identified using basic marker pegs or stakes.

Receival, storage, and on site management for materials used in construction:

No construction of new trails or related infrastructure will be undertaken as part of the pilot.

Access for basic maintenance will be on foot or via horse (including collaboration with horse riders) and hand tools will be carried in and out.

Access for monitoring purposes is on-foot and all recording materials are removed from the park at the conclusion of the monitoring visit.

Earthworks or site clearing including extent of vegetation to be removed:

No earthworks or site clearing will be undertaken as part of the pilot.

As noted above, some targeted maintenance works will be undertaken to ensure the trail is safe, distinguishable and accessible (e.g. removal of fallen debris). This is necessary as the majority of the trails are bridle track style (no vehicle access), rather than management trail standard (vehicle accessible). Over time, vegetation has encroached into the trial route or fallen across it. NPWS proposes to collaborate with local horse riders to undertake basic trail maintenance using hand-tools only.

Impacts on vegetation will be minimal and limited to that which is absolutely necessary to provide safe access.

Environmental safeguards and mitigation measures:

The activity is supported by a range of environmental safeguards to ensure protection of the park's values, the unmodified nature of the wilderness area, the ability of the area to evolve without significant human interference, and opportunities for the community to access and enjoy the area's solitude, peace in self-reliant ways.

Choice of trial location

The proposed routes mostly comprise bridle style tracks, historically used for horse riding and not accessible by vehicle. They are also accessed by bushwalkers from time to time. Use of these areas avoids the need to open or provide new access for horse riders, ensuring that only existing or previously modified areas are used.

Further discussion of the rationale for choice of these routes is provided below.

Group size limits

As noted above, a limit of 20 horses applies to any group. This is established in the plan of management amendment and is consistent with other limits applied to recreational activities in the broader region.

Camping

No horse based camping is proposed in the wilderness area.

Monitoring framework

The draft monitoring framework is at Attachment 5, and the baseline monitoring methods are at Attachment 6. The monitoring approach has been developed taking account of existing research literature and best practice techniques, internal and external peer review and consultation, and refinement following field visits and baseline survey to ensure it is pragmatic and workable.

The monitoring framework seeks to establish whether horse riding on wilderness trails can occur in a sustainable way and within appropriate limits of acceptable change. Specifically, it aims to:

- a) detect impacts that may occur to key values as a result of horse riding, on the pilot wilderness trails, within the two year trial period
- b) define thresholds for implementing management interventions to protect key values from irreversible damage
- c) detect whether interventions are successful in ensuring key values are protected from irreversible damage and inform when interventions should cease.

The monitoring framework focuses on key variables including track and soil condition, weeds and visitor experiences.

For the trial in Deua and Monga National Parks, 15 monitoring sites have been established and baseline data collected. This provides the key information to determine the condition of the area before the trial commences, and future monitoring visits will report change against this data.

The monitoring thresholds (i.e. what level of change will prompt management intervention) and the related management responses (i.e. what actions will be implemented) are being developed and refined in a two-stage process allowing for further expert and community input:

1. internal and external expert consultation will develop initial thresholds and management interventions
2. local community consultation will refine and recalibrate the initial thresholds and interventions to ensure they take account of specific local circumstances and environmental conditions.

The thresholds and management responses will be finalised and in place in advance of the first monitoring visit occurring, which is scheduled within six months of the trial commencing.

Throughout the trial period, data from monitoring will be used to indicate whether impacts are occurring and triggers are being reached. It is also used to assess if any required management interventions are keeping impacts to within acceptable limits. Outcomes from the monitoring work will be regularly updated and released on the OEH website. At the conclusion of the two-year period, overall analysis of the monitoring outcomes will be a key part of the trial's evaluation.

Mitigation measures / potential intervention:

As noted above, the final monitoring thresholds and management responses are being developed through a consultative process and will be in place prior to the first monitoring visits occurring. As an example only, the following are an illustration of the types of management responses that could be applied if thresholds of change are met:

- work with horse riding groups to improve education, awareness and compliance with the Horse Riding Code of Practice;
- implement remediation activities whilst horse riding continues (e.g. regeneration fencing, weed control, silt fencing, track maintenance), including joint projects with user groups;
- temporary track (or section) closure combined with remediation activities;
- permanent track closure if impacts cannot be mitigated in a reasonable timeframe.

Sustainability measures – including choice of materials (such as recycled content) and water and energy efficiency

No materials required

Construction timetable and staging, hours of operation:

N/A – no construction is proposed.

Note: if the activity involves building or infrastructure works, it may require certification to Building Code of Australia or Australian Standards prior to commencement. Further information on the types of projects requiring certification, and how to obtain certification, is contained the NPWS *Construction Assessment Procedure* at: <http://www.environment.nsw.gov.au/protectedareas/developmentadjoiningdecc.htm>

5.3 Objectives of the proposal

Clearly state the objectives of the proposal. See section 3.2 of *Proponents Guidelines for the Review of Environmental Factors* for further guidance.

Provide details of objectives of the proposal	The key aim of the wilderness pilot is to meet the NSW Government's commitment to provide sustainable horse riding recreational experiences to ensure a broad spectrum of the community can enjoy and appreciate national parks and reserves.
	<p>The overarching goals of the proposed activity are to:</p> <ul style="list-style-type: none"> - improve opportunities for sustainable recreational horse riding in NSW national parks; - provide opportunities in unique wilderness locations that recognise the strong historical usage and ensuring the natural and cultural values of the national park and wilderness are protected; - deliver an enhanced community awareness of existing and improved recreational horse riding opportunities in national parks; - build support in the horse riding community for national parks and collaborate on practical park management actions, including encouraging participation in volunteering.
	The wilderness pilot in Deua and Monga National Parks will build on existing horse riding opportunities in the area, expanding the scope of options available.

6. Reasons for the activity and consideration of alternatives

Section 3.2.1 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

Reasons for activity:

In 2012 the NSW Government released the *Strategic Directions for Horse Riding in NSW National Parks*. The strategy committed to trialling horse riding in selected wilderness areas in NSW national parks, through establishment of five wilderness pilots. The initiatives proposed in the strategy are consistent with the NSW Government's commitments in *NSW 2021* to work with the community to protect our local environment and to provide more opportunities to enjoy parks and natural bushland. The NSW Government is committed to increasing the level of access to allow horse riders the opportunity to experience a wider range of national parks.

Horse riding is a popular recreational activity that has strong cultural associations for many Australians. Many national parks are on land where horse riding occurred for over a century and a half. Horse riding is already permitted in non-wilderness areas in Deua and Monga National Parks and there is community interest in additional access to support connections to heritage.

In addressing interest in further horse riding opportunities in national parks, the implementation of the wilderness pilots will enable NPWS to determine whether the environmental and social impacts can be managed within acceptable thresholds.

Alternatives:

The choice of the pilot location has considered a range of factors including environmental attributes and values, historical and contemporary demand, safety, connectivity and the views of local stakeholders.

Horse riding currently mainly occurs on the Corn Trail, Shoebridge Track (non-wilderness sections), Deua River Track and part of the Zig Zag Trail. Popular areas for recreational horse riding include the Corn Trail in Monga National Park and the Deua River valley and Bendethera in Deua National Park. Local community members with historic links to this country regard the tracks as having very high social and cultural values. For bridle tracks outside wilderness areas, NPWS has undertaken informal but periodic assessment of the environmental impact of horses on tracks. Over a two-year period, at current levels of use, the level of impact has been low with no indication of any increase and no significant environmental damage caused by horse riding has been observed.

Options for the proposed pilot in Deua National Park were discussed with representatives from local horse riding groups during development of the Far South Coast Regional Work Plan, taking account of existing road and trail networks; vehicle and horse float access, track conditions, cultural heritage connections, topography, horse watering points, etc. Clear feedback was provided on the value of horse riding access as part of the community's heritage, and desires to ride tracks to maintain cultural connection. The Shoebridge Track, Georges Pack Track and WD Tarlinton Track all have a history of previous use for horse and/or cattle movement. As noted above, in recent years some parts of the tracks have become less defined due to vegetation encroachment and fallen debris.

Other tracks were considered but excluded. These include tracks upstream of Bendethera on the Deua River. These were excluded because they are only a route and no distinct track is evident and the upper reaches of the Deua River are in very sensitive cool temperate rainforest where impacts would be significant.

Also, parts of the WD Tarlinton track through Belowra and across to Yowrie were considered but found to be too short. There is also community discussion regarding the intent and description of the wilderness gazettal in these areas. The track is also broken by tracts of private property.

Finally, tracks in Wadbilliga National Park were also considered. These have fewer links to other tracks described and were not considered a high priority by horse riders stakeholders.

Do nothing:

Under the 'do-nothing' option horse riding would continue to be restricted to the current locations within the area. While this option would remove any potential impacts associated with the activity, it is not consistent with the Government's commitments to expand opportunities for horse-riding, including via a trial in wilderness areas. It would also diminish the ability to provide well-managed and monitored access to this area, limiting the scope for some community members to experience and appreciate it (e.g. if they are unable to walk-in) or to support and celebrate cultural and historical connections.

Justification for preferred option:

The preferred option as presented in this REF is for two wilderness pilots to be undertaken using the Shoebridge Track, Georges Pack Track and WD Tarlinton Track, which comprise mostly bridle track style access.

Following consideration of submissions and recommendations of the RAC and Advisory Council, the Minister for the Environment adopted a plan of management amendment providing for the preferred option proposed in this REF.

Key issues considered in that decision-making process included:

- the various and strong views on the proposal
- potential environmental impacts; and
- pragmatic requirements for a two-year trial and monitoring program.

The preferred option proposed in this REF will provide for appropriate sustainable horse riding access to fulfil the NSW Government's commitments to trialling horse riding in wilderness locations. It will increase community accessibility and opportunities to enjoy and appreciate the park's values. In addition, it will be undertaken in a manner, and with safeguards in place, to ensure consistency with the management principles for wilderness. Namely: protection of the unmodified state of the area and plant and animal communities; preserving evolutionary capacity; and enabling opportunities for solitude and appropriate self-reliant recreation.

Special note: for visitor use, tourism and other proposals requiring a lease or licence under s.151 NPW Act

Proposals seeking a lease or licence under s.151 NPW Act must address the site suitability requirements of the sustainability assessment criteria adopted by the Director General of NPWS (**see below**). For further information on completing the assessment of site suitability, refer to the criteria and supporting guidelines at: <http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm>

Site suitability (lease or licence proposals under s.151 NPW Act)

Site character	N/A – the activity is not subject to the provisions of s.151
Landscape context	N/A
Application of site suitability matrix	N/A

Strategic site assessment (if required by the matrix) <i>Attach any separate assessment report</i>	N/A

7. Description of the existing environment

Include a comprehensive description of the existing environment and surrounds that will be, or are likely to be, affected by the proposed activity. Sensitive areas of the environment should be identified in this section.

Section 3.4 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

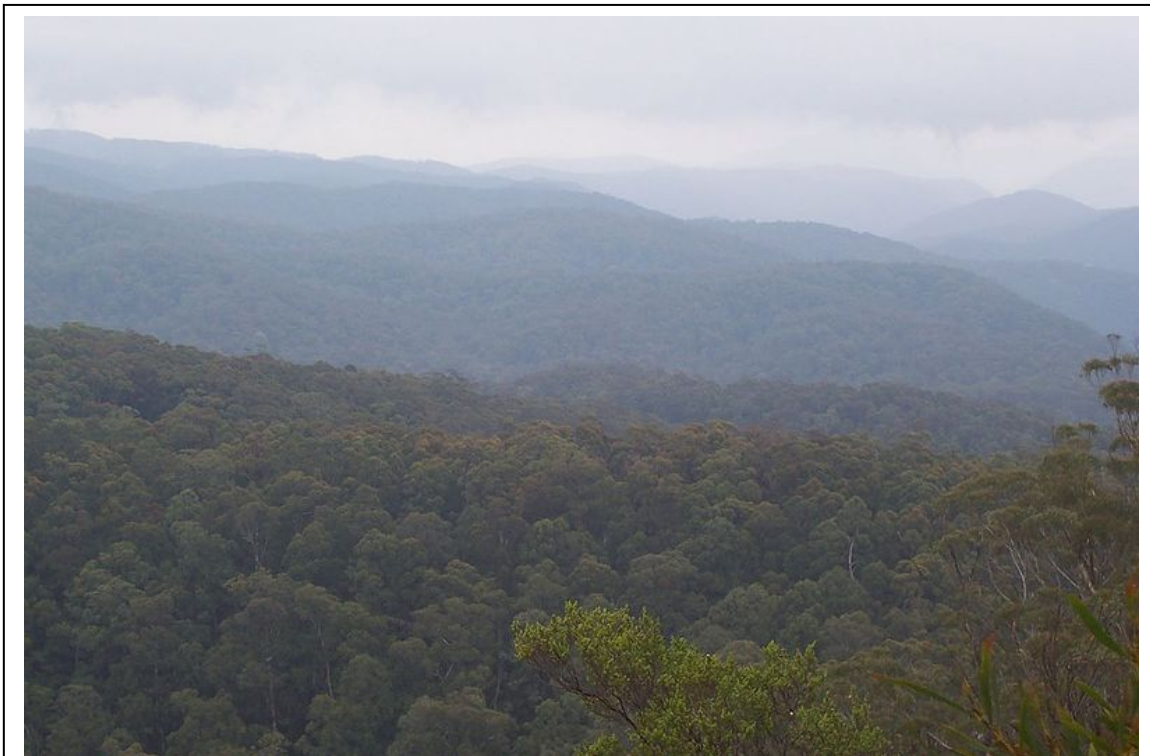
Description of the existing environment:

Deua and Monga National Parks are one of a collection of parks known as the Far South Coast Escarpment Parks.

The Parks are located in the rugged coastal ranges of South Eastern New South Wales and cover an area of over 240,000 hectares. In the main, they are bounded by the Kings Highway to the north, Snowy Mountains Highway to the south, Monaro and Southern Tablelands to the west and are west of the Princes Highway.

Deua National Park was originally gazetted in 1979, and following further additions now has a total area of around 122,000 hectares. Monga National Park was gazetted in 2001 and covers 26,000 hectares.

The areas include remote wilderness area containing escarpments and gullies, waterfalls, limestone caves, pockets of Pinkwood rainforest and outstanding eucalyptus scenery. It is an important refuge for plant and animal species, many listed as threatened. Over 106 species of birds and 62 types of mammals have been recorded in Deua National Park. Particularly noteworthy is the high diversity of birds of prey, including the Peregrine Falcon and Powerful Owl. The caves provide maternity sites for a large variety of bats.



View from Hanging Mountain, Deua National Park

Meteorological data:

In summer the average temperature ranges between 15.7°C and 23.5°C. The area's highest recorded temperature in summer is 43.3°C. In winter, the average temperature ranges between 6.5°C and 16.7°C. The area's lowest recorded temperature in winter is -10°C.

Rainfall: The wettest month on average is March, the driest is August. The area's highest recorded rainfall is 275.3mm in one day.

Topography:

Valleys dissected by wild rivers, rugged mountains, deep gorges, dry ridges, steep escarpments, limestone karst country and high plateaus are some of the diverse landforms of the Far South Coast Escarpment Parks. The land ascends from the steep coastal hinterland valleys, across steeper escarpment ranges to the gentler tablelands.

Within these rugged landscapes, there is an altitudinal range of 1,465 metres, from the Slap Up Trig (1,469 metres) to Wamban Creek. Dominant features of the escarpment include the Big Badja (1,352 metres) and Table Top Mountain (1,180 metres), which give outstanding views across both Deua and Wadbilliga National Parks and, on clear days, to both the ocean and Snowy Mountains.

Peaks along the Minuma Range in Deua National Park are typically over a thousand metres high, for example Dampier (1,239 metres), Deua (1,048 metres) and Wyanbene (1,058 metres). The eastern Deua is the dominant landscape seen from the Princes Highway at Moruya with landmarks being the Mountains of the Moon, Mt. Donovan, Hanging Mountain and the spectacular symmetrical cone of Wamban Mountain. Deua, Monga and Wadbilliga National Parks have altitudinal ranges of up to 1,000 metres, contrasting with Gourack National Park on the tableland plateau to the west of the escarpment which has an altitudinal range of 600 metres.

Surrounding land uses:

Much of the surrounding land (79%) is forested (State Forest and National Park) with only 21% in private land or managed by local government. Much of the protected land has significant biodiversity values. The natural beauty, high diversity of flora and fauna and clean beaches of the Eurobodalla region and the coastal lifestyle have supported a growing population. These features also support a strong local tourism industry based around nature-based activities, particularly in peak seasons.

There are a number of towns in the regions surrounding the Parks that provide bases for park visitors, including Braidwood, Nimmitabel, Araluen, Cooma, Moruya, Batemans Bay, Narooma and Bega.

Significant primary industries in the Eurobodalla are forestry, fishers, oyster growers, dairy and beef farmers. However the traditional industries of dairying, beef, timber and fishing have given way to the growth industries of tourism, building and service sectors.

Geology/Geomorphology:

The formation of the escarpment started about five hundred million years ago when sediments washed off adjoining landmasses and were deposited in a deep ocean trench. These sediments were then subjected to forces that folded, heated and compressed them to form the area's base rocks. Fringing coral reefs on the edge of the seas became the limestone bands that run through the area. Between four hundred and one hundred million years ago, the supercontinent of Gondwana was subject to mountain building, volcanic activity, and landmass slumping and uplift.

During a period of volcanic activity and folding, large granite bodies intruded into the sedimentary rocks heaving them upwards. Mother Woila (1,134 metres), with its knife-edged ridges of broken quartzite, is an example of this. These granite bodies also metamorphosed the limestone of the Wyanbene and Marble Arch areas in Deua National Park and recrystallised them into coarse red and white marble.

Since mountain building activity ended thirty million years ago, erosion has carved out the massive valleys of the rivers and creeks. Five karst areas, Marble Arch, Wyanbene, Bendethera, Cleatmore and Deua, have developed on limestone. All the karst areas contain features of high conservation or scientific importance, which are sensitive to any human activity.

Soil types and properties:

Soils are mostly poor, the result of a combination of steep slopes and low fertility bedrock (of sedimentary, meta-sedimentary and granitic origin). In a few places, fertile basalt, acidic rhyolite or alkaline limestone rock outcrops occur.

Waterways including wild and scenic rivers:

The Brogo, Tuross and Deua Rivers flow through and dissect the Far South Coast Escarpment Parks. There are sixteen catchments within the Parks of which the largest are the Deua, Tuross and Brogo. With the recent additions to Deua National Park, the Parks protect the headwaters of the Deua River.

The Shoalhaven River rises on the western side of the Minuma Range in Deua National Park and, after a long northward journey, finally cuts through the range and enters the sea east of Nowra. Deua River rises about 5km southeast of Bendethera Mountain, on the eastern slopes of the Badja Range, part of the Great Dividing Range. The river flows generally south, west, north, northeast, south southeast and east, making almost a complete circuit, joined by fourteen minor tributaries before reaching its confluence with the Moruya River near Kiora. The river descends 634m over its 139km course.

The south-western corner of Deua National Park and the western side of Gourock National Park drain into the Murrumbidgee River system. The river systems within Deua National Park are characterised by having water that is largely free from turbidity, siltation and bacterial contamination.

The Burra-Oulla Creek system, including the small Diamond Creek catchment, is in an exceptionally undisturbed condition. The swamp and peat areas of the upper Shoalhaven River in Deua National Park and Badja Swamps Nature Reserve act as a large 'absorption' area evening out the effects of fluctuations in rainfall from season to season.

Catchment values:

Deua National Park falls into the Southern Rivers catchment which covers a 32,000 square kilometre area of the south-east of NSW – from Stanwell Park in the north, to the Victorian border in the south, and includes the major river systems of the Shoalhaven, Snowy and Genoa.

The Southern Rivers Catchment Management Authority is responsible for the development and implementation of Action Plans. The catchments for rivers in the Parks are also further protected through wilderness declarations.

Coastal risk areas:

N/A

Wetland communities including SEPP 14 wetlands:

N/A

Flora (including flora of conservation significance):

The area contains significant stands of undisturbed old growth eucalypt forests. Common eucalyptus species include: Black Ash, Monkey Gum, Messmate and White Ash. More rare species include the Jilliga Ash and Mongamulla Mallee. High altitude rainforests occur in gullies protected from fire. They are dominated by the Pinkwood, Hard Water Fern and Soft Tree Fern. Other habitats include swamps, bogs, riverside forest, and rocky scrub.

The trial locations are relatively weed free and in good condition.

A search of known records is at Attachment 4 together with maps showing locations. **As these contain sensitive information regarding the specific location of species they are not to be made publicly available.**

This section focuses on TSC Act listed species. EPBC Act listed species are discussed later in this REF

The following threatened flora species were identified within 5km of the proposed pilot trail, listed as **vulnerable** under the TSC Act:

- *Eucalyptus kartzoffiana* (Araluen Gum)
- *Correa baeuerlenii* (Chef's Cap Correa)
- *Pomaderris gilmourii* var. *cana* (Grey Deua Pomaderris)

The following threatened flora species were identified within 5km of the proposed pilot trail, listed as **endangered** under the TSC Act:

- *Monotaxis macrophylla* (Large-leafed Monotaxis)
- *Eucalyptus parvula* (Small-leaved Gum)



Large-leafed Monotaxis

This endangered species above have been assigned to the [Keep-watch species](#) management stream under the *Saving our Species* program.



Small-leaved Gum

The Small-leaved Gum has been assigned to the [Site-managed species](#) management stream under the *Saving our Species* program.

These species have not been identified in immediate proximity of the proposed pilot trails.

Fauna (including fauna of conservation significance):

Deua and Monga National Parks provide habitat for a diverse range of native animals. High numbers of bird and mammal species have been recorded.

A search of known records and maps are at Attachment 4. **As these contain sensitive information regarding the specific location of species they are not to be made publicly available.**

The following threatened fauna species are identified within 5km of the proposed pilot trial, listed as **vulnerable** under the TSC Act:

- *Litoria littlejohni* (Littlejohn's Tree Frog)
- *Callocephalon fimbriatum* (Gang-gang Cockatoo)
- *Calyptorhynchus lathami* (Glossy Black-Cockatoo)
- *Ninox strenua* (Powerful Owl)
- *Tyto tenebricosa* (Sooty Owl)
- *Daphoenositta chrysoptera* (Varied Sittella)
- *Petroica boodang* (Scarlet Robin)
- *Petroica phoenicea* (Flame Robin)
- *Dasyurus maculatus* (Spotted-tailed Quoll)
- *Petaurus australis* (Yellow-bellied Glider)
- *Mormopterus norfolkensis* (Eastern Freetail-bat)
- *Kerivoula papuensis* (Golden-tipped Bat)
- *Tyto novaehollandiae* (Masked Owl)
- *Pachycephala olivacea* (Olive Whistler)
- *Petroica rodinogaster* (Pink Robin)
- *Sminthopsis leucopus* (White-footed Dunnart)
- *Phascolarctos cinereus* (Koala)
- *Falsistrellus tasmaniensis* (Eastern False Pipistrelle)
- *Miniopterus schreibersii oceanensis* (Eastern Bentwing-bat)
- *Scoteanax rueppellii* (Greater Broad-nosed Bat)
- *Heleioporus australiacus* (Giant Burrowing Frog)
- *Litoria littlejohni* (Littlejohn's Tree Frog)
- *Ptilinopus magnificus* (Wompoo Fruit-Dove)
- *Hieraaetus morphnoides* (Little Eagle)
- *Petaurus norfolcensis* (Squirrel Glider)
- *Potorous tridactylus* (Long-nosed Potoroo)
- *Falsistrellus tasmaniensis* (Eastern False Pipistrelle)

The following threatened fauna species is identified within 5km of the proposed pilot trial, listed as **endangered** under the TSC Act.

- *Lathamus discolor* (Swift Parrot)

The *Lathamus discolor* (Swift Parrot) species has been assigned to the [Landscape species](#) management stream under the *Saving our Species* program.

The following **endangered fauna population** listed under the TSC Act is identified with 5km of the proposed pilot trial:

- *Petauroides volans* (Greater Glider population in the Eurobodalla local government area)

Ecological communities (endangered ecological communities and regionally significant communities):

Significant ecological communities within the region include:

- Brogo wet vine forest
- Bega dry grassland
- Candelo dry grass forest
- River-flat eucalypt forest
- Montane peatlands and swamps and
- White box, yellow box and Blakely's red gum woodland

Critical habitat declared under the TSC Act:

No critical habitat has been declared along or in the vicinity of the proposed pilot trials.

SEPP 26 littoral rainforest (or equivalent):

There are six overlapping rainforest types within the Far South Coast Escarpment Parks, from warm to cool temperate to dry rainforest. The 6,920 hectares of rainforest occurs mostly in small patches in sheltered locations such as moist south- or east-facing slopes, the heads of gullies or on fertile soils, such as along creeks and on the escarpment. Deua and Monga National Parks contain some of the finest stands of warm temperate rainforest in NSW with the largest known stands of pinkwood (*Eucryphia moorei*) rainforest (cool temperate).

Cool temperate rainforest dominated by pinkwood (*Eucryphia moorei*) is also found in small patches in sheltered gullies between eight hundred and eleven hundred metres elevation in misty environments along the escarpment, with large stands in Monga National Park and at Hanging Mountain in Deua National Park.

There is no littoral rainforest within the meaning of SEPP 26 located along the proposed trail route of the wilderness pilots.

SEPP 44 koala habitat:

No feed trees or core habitat within the meaning of SEPP 44 occur along the proposed track route of the proposed wilderness pilot.

Wilderness (either nominated or declared):

Significant parts of Deua National Park and Monga National Park have been declared wilderness.

The proposed pilot locations pass through the 9,000 hectare Buckenbowra wilderness (in Monga NP), the 27,000 hectare Woila-Deua wilderness and the 18,000 hectare Burra Oulla wilderness (in Deua NP).

Aboriginal cultural heritage:

Aboriginal cultures along the Far South Coast are diverse. Evidence suggests that Aboriginal people have had a long and continuous association with the region for many thousands of years resulting in many rich and varied cultures whose impacts, influence and traditional knowledge have extended to every part of the land and surrounding sea.

Aboriginal people travelled up and down the south coast escarpment along well-worn pathways between the coast and the Monaro Tablelands to attend ceremonies, conduct trade and gather seasonal food.

There was no permanent European settlement impacting directly on the lives of the Aboriginal people of the Eurobodalla area until the late 1820s. However, there was a considerable amount of interaction with Europeans travelling along the coast, for a variety of reasons, in the preceding decades.

Despite the significant changes resulting from European colonisation, tribal identity has been retained and there is considerable interest in retaining links with country and culture. It is recognised that Aboriginal people have a strong attachment through spiritual and cultural links with the whole landscape, and to specific locations within the Bendethera valley.

A desktop survey was undertaken of the Aboriginal Heritage Information Management System (AHIMS).

Search results and maps are at Attachment 3. **As these contain sensitive information regarding the specific location of species they are not to be made publicly available.**

Several sites were in proximity of the trial location, comprising artefacts and scarred trees, but are considered to be at low risk of adverse impact due to the nature of the activity and its confines to the existing management trail.

National/state/local natural or cultural heritage values:

The entire area of Deua National Park is listed on the Register of the National Estate (RNE). The RNE no longer operates. No state heritage register listings apply to the area proposed for the pilot routes.

The Eurobodalla Local Environment Plan (LEP) lists several heritage items in the vicinity of the national park estate in the Bendethera area, including the bridle track network.

The first record of Europeans travelling through the district dates from 1822, followed in 1828 by a Government Surveyor, Robert Hoddle, who traced the Shoalhaven River to the swamps at its source, on what is now the western boundary of Deua National Park.

Bendethera Station on the Deua River was set up around the 1860s, with all materials and stock carried in along a bridle track that follows the Burra Creek valley. While there is little left of the farm buildings these days, the track known as Georges Pack Track can still be followed for much of its route. Many of these tracks were originally shown to Europeans by Aboriginal people and can be found in Wadbilliga, Deua and Monga National Parks

The local community has expressed considerable interest in the cultural heritage of bridle tracks. These tracks were used for transporting produce and moving stock from one location to another and are the most tangible historical link with the first Europeans in the area. Tracks, such as the one taken by WD Tarlinton (around 1828) when he travelled from Braidwood to the coast via Breakfast and Woila Creeks to Belowra, then down the Tuross River to where it meets Wandella Creek and on to Cobargo, remained in use for many years. The Corn Trail is another historic track that was used in the mid-1800s to link the Bolaro valley with Nelligen and the Braidwood and Araluen areas. Gold prospectors and farmers moving produce and stock from the coast to the tablelands used the track that had been originally established by Aboriginal people.

Further information on the history and heritage values of the bridle tracks is discussed below.

The property Bendethera, settled in the 1860s, had limited access to Moruya via a bridle track that was used to transport produce to and from the markets. Bridle tracks, such as the one along the Deua River to Araluen, were used to supply the goldfields with food grown at Bendethera.

Wyanbene Cave, the Big Hole and Bendethera Cave were important to early tourism and leisure activities in the area.

The idea for a national park for the Deua River was probably first discussed in 1920 when Myles Dunphy and Roy Davies walked through the region on their way to the Victorian high country. But it was not until the 1960s that a coherent proposal was put together: the National Parks Association's 'Deua-Tuross National Park Proposal'.

Vegetation of cultural landscape value:

(e.g. gardens and settings, introduced exotic species, or evidence of broader remnant land uses)

The Bendethera homestead area and landscape is historically significant as one of the earliest inland farming properties of the south coast on the Deua River. Bendethera Valley contains the remains of the old homestead and the surrounding area which has a variety of artefacts, structures and features which relate to gold and silver mining, grazing and tourism. NPWS has prepared a Conservation Management Plan for Bendethera, documenting the heritage significance of this place and the cultural landscape.

Deua and Monga National Parks contains a number of known sites and landscapes that are related to the use of the region since colonisation. Some of the sites are conspicuous, including gravesites and old fence lines, but others are places where structures or relics are no longer obvious, but which still are significant in terms of their past use. Most of these sites have not yet been formally recorded and their full significance is unknown.

Important phases of the history of the region which are directly reflected by sites in the park include:

- original surveying and clearing for grazing;
- mining for gold and to a lesser extent silver and other minerals; and
- transport or movement of stock through the area between the coast and the tablelands

No vegetation or landscape item of cultural heritage significance is located along the proposed trail route of the proposed wilderness pilot.

Other cultural heritage values:

The wilderness pilot locations include use of a historic convict-built bridle track, the Shoebridge Track in Monga National Park, and on historic bridle tracks traversing the Burra-Oulla and Woila-Deua wilderness areas. These date back to the 1800s and were probably based on tracks used by local Aboriginal people.

Shoebridge Track is an historic bridle track, which has been the subject of an extensive heritage study prepared for NPWS in 2004. Thomas Shoebridge is credited with the initial surveying and construction of the track. It served his local store as well as being an all-weather route between the port of Nelligen and the Araluen goldfields. It became a busy thoroughfare with teams of pack horses loaded with supplies travelling the route daily. The heavy use meant maintenance and upgrades over time. However, it fell into decline as use of the road to Moruya increased.

The **WD Tarlinton Track** was pioneered by William Duggan Tarlinton in the 1830s. The Tarlinton were among the earliest settlers in the upper Shoalhaven, with a land grant near the junction of the Shoalhaven River and Jerrabattgulla Creek. They later acquired land near Cobargo and pioneered a route to take their cattle overland to their new properties. The track was also used by other early pioneers of the upper Shoalhaven such as the Curlewises and Coghills. It also became the convenient route for travelling to the coast from the upper Shoalhaven and Monaro. It was used by John Lambie when carrying out a survey of occupied properties of the Monaro in 1840.

The **Georges Pack Track** is named after the George family of Bendethera. They would sometimes use the Zig Zag Track or the Deua River track, but their main connection with the outside world was via what is known as George's Pack Track, which ultimately connected with Moruya and coastal shipping. It was along this track they drove their farm stock.

There is a strong social and cultural heritage connection with the tracks proposed for the pilot routes. A majority of submissions received to the public exhibition of the plan of management amendments noted these historical connections.

The NPWS has prepared a regional cultural heritage strategy for the Far South Coast. The strategy identifies priorities, desired conservation management outcomes and strategies for conserving historic heritage places and landscapes within the region, including bridle tracks across several parks.

A desktop survey was undertaken of the NPWS Historic Heritage Places Register (HHIMS). Search results and maps are at Attachment 3. **As these contain sensitive information regarding the specific location of species they are not to be made publicly available.**

Recreation values:

Visitor use of Deua and Monga National Parks includes a diverse range of recreational activities consistent with park values, ranging from picnicking, camping, bushwalking, bird-watching, 4WD and trail bike touring, canoeing, cycling, mountain biking, horse riding, canyoning, caving and recreational fishing. Swimming is also popular in the Deua and Shoalhaven rivers during summer, particularly near the camping and picnic areas.

There are six camping areas in Deua National Park. Camping with horses is allowable at Bendethera camping area.

No camping is allowable in the declared wilderness areas.

Recreational horse riding is a popular activity undertaken on historic bridle tracks, roads and management trails within the park. Key horse riding trails include the Corn Trail in Monga National Park and the Deua River valley and Bendethera in Deua National Park. Local recreation groups have taken an active interest in the history of the bridle tracks and their management, with many horse riders expressing a strong historic connection to the Escarpment Parks as a result of horse riding activity.

Scenic and visually significant areas:

The aesthetic qualities of the area are exceptional and diverse. These include the beauty of the mountains, scenery and of the caves (karst) areas. The amenity of the place stems from a mix of topographic features including steep-sided river valleys, old growth forests and rugged landscape of deep gorges and valleys, steep escarpments and limestone karst country. In particular, the high scenic and visual quality of rainforests including some of the finest stands of warm temperate rainforest in NSW with the largest stands of pinkwood rainforest.

Wilderness areas of the national park are deeply valued for cultural, spiritual and aesthetic reasons.

Education and scientific values:

There is great potential for both scientific and education activities within the area. The surrounding bushland offers unique opportunities for the study of a variety of flora and fauna.

Interests of external stakeholders (e.g. adjoining landowners, leaseholders):

The park is generally surrounded by adjacent landholders predominantly of land-uses for agricultural purposes, such as grazing, and forestry. The park is valued for its bushland backdrop, providing high quality visual amenity.

Matters of National Environmental Significance under the EPBC Act:

Deua and Monga National Parks contain nationally listed species listed under the EPBC Act. A search of listings was undertaken using the EPBC Act protected matters search tool and a copy is available at Attachment 4.

8. Impact assessment

This part of the REF provides an analysis of all possible impacts from the proposed activity and a description of any proposed mitigation measures. Section 3.7 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance on impact assessment and mitigation measures.

8.1 Physical and chemical impacts during construction and operation				
Section 3.8 of <i>Proponents Guidelines for the Review of Environmental Factors</i> provides further guidance				
	Applicable?*	Impact level (negligible, low, medium or high; negative or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment and proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. Is the proposal likely to impact on soil quality or land stability?	<input checked="" type="checkbox"/>	Low Negative	Increased use of the trails has the potential to impact on soil quality due to compaction and erosion. Trail incision, trail width, water ponding, siltation	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Maximum 20 horses. No camping permitted in wilderness. Access closures consistent with standard park management practice. Implement the monitoring framework and initiate identified management interventions if monitoring thresholds are triggered. Interventions may range from rider education, to rehabilitation or trail closure
2. Is the activity likely to affect a waterbody, watercourse, wetland or natural drainage system?	<input checked="" type="checkbox"/>	Low Negative	The proposed pilot route crosses existing streams and watercourses. Impacts may arise due to bank trampling and depositing of waste materials.	As per Issue 1 above. In addition, horse riders are encouraged to abide by the Code of Conduct, which includes guidance on stream crossings.
3. Is the activity likely to change flood or tidal regimes, or be affected by flooding?	<input type="checkbox"/>	N/A	N/A	
4. Is the activity likely to affect coastal processes and coastal hazards, including those projected by climate change (e.g. sea level rise)?	<input type="checkbox"/>	N/A	N/A	

8.1 Physical and chemical impacts during construction and operation





Section 3.8 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Impact level (negligible, low, medium or high; negative or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment and proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
5. Does the activity involve the use, storage, or transport of hazardous substances or the use or generation of chemicals, which may build up residues in the environment?	<input type="checkbox"/>	N/A	N/A	
6. Does the activity involve the generation or disposal of gaseous, liquid or solid wastes or emissions?	<input checked="" type="checkbox"/>	Low Negative	Small amounts of manure will be deposited on the trail during the trial period.	Group size limits and the remote nature of the location will reduce the risks of large amounts of manure being produced. The monitoring framework includes a focus on weeds, which may be attributable to manure deposit.
7. Will the activity involve the emission of dust, odours, noise, vibration or radiation in the proximity of residential or urban areas or other sensitive locations?	<input type="checkbox"/>	N/A	N/A	No construction is proposed for the pilot. The proposed trail utilises bridle tracks which will require some routine maintenance to ensure they are safe, accessible and distinguishable (e.g. removal of debris). Any maintenance will be undertaken using hand tools only.

* If yes, all columns need to be completed. If no, write 'N/A' in the second and third columns



8.2 Biological impacts during construction and operation

Section 3.9 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. Is any vegetation to be cleared or modified? (includes vegetation of conservation significance or cultural landscape value)		Negligible	Small-scale trail maintenance is required to ensure the trails are free from debris, and safe and distinguishable. This will by necessity involve removal of fallen timber and some minor, small-scale trimming of encroaching vegetation.	Maintenance will be undertaken using hand held tools only and limited to the minimum needed to ensure safe access along the trail length.
2. Is the activity likely to have a significant effect on threatened flora species, populations, or their habitats, or critical habitat? [refer to threatened species assessment of significance (7-part test)]		Low Negative	Threatened species of flora have been identified within 5km of the area. No critical habitat has been identified in the area of the pilot routes.	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice. Implement the monitoring framework and initiate identified management interventions if monitoring thresholds are triggered. Interventions may range from rider education, to rehabilitation or trail closure
3. Does the activity have the potential to endanger, displace or disturb fauna (including fauna of conservation significance) or create a barrier to their movement?		Low Negative	Threatened fauna species have been identified in the area. The activity has a small potential to disturb fauna.	The proposed activity is unlikely to have a significant impact on fauna species, due to the transitory and casual nature of the activity. Group size limits, no camping, and the monitoring program will also reduce potential fauna impacts.
4. Is the activity likely to have a significant effect on threatened fauna species, populations, or their habitats, or critical habitat? (refer to threatened species		Low Negative	Threatened fauna species have been identified in the area.	See Point 3 above.

8.2 Biological impacts during construction and operation

Section 3.9 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
assessment of significance (7-part test))				
5. Is the activity likely to impact on an ecological community of conservation significance?		Low Negative	The wilderness landscape is of significant conservation value. Horse riding may impact on these values.	The activity has been designed to be consistent with the management principles for wilderness areas. Refer also to the measures in Point 2 above.
6. Is the activity likely to have a significant effect on an endangered ecological community or its habitat? (refer to threatened species assessment of significance [7-part test])	<input type="checkbox"/>	N/A	The activity is to only occur on existing management trails. No EECs are in the immediate vicinity of the proposal or likely to be impacted.	
7. Is the activity likely to cause a threat to the biological diversity or ecological integrity of an ecological community?		Low Negative	The activity is to occur on existing and historical bridle tracks, which have previously been subject to use and horse access. This will assist in minimising any threats to the biological diversity or ecological integrity of an ecological community.	Refer also to the measures in Point 2 above.

8.2 Biological impacts during construction and operation





Section 3.9 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
8. Is the activity likely to introduce noxious weeds, vermin, feral species or genetically modified organisms into an area?	<input checked="" type="checkbox"/>	Low Negative	Additional visitor use of the area, and introduction of horses, may increase the potential for the introduction of weeds and pathogens into the area	<p>Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails.</p> <p>Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice.</p> <p>Implement the monitoring framework and initiate identified management interventions if monitoring thresholds are triggered. Interventions may range from rider education, to rehabilitation or trail closure</p> <p>In addition, horse riders are encouraged to abide by the Code of Conduct, which provides guidance on reducing risk of weed introductions.</p>
9. Is the activity likely to affect critical habitat?	<input type="checkbox"/>	N/A	N/A	
10. Is the activity consistent with any applicable recovery plans or threat abatement plans?	<input checked="" type="checkbox"/>	Low	The proposed activity, supported by detailed environmental safeguards, will have no adverse impacts on recovery strategies or actions for these species as detailed in the Saving Our Species program.	
11. Is the activity likely to affect any joint management agreement entered into under the TSC Act?	<input type="checkbox"/>	N/A	N/A	

* If yes, all columns need to be completed. If no, write 'N/A' in the second and third columns

8.3 Community impacts during construction and operation

Section 3.10 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. Is the activity likely to affect community services or infrastructure?		Low Positive	Horse riding wilderness pilot will increase opportunity for local community horse riding groups to experience the park and wilderness environment, supporting local cultural connections to the area.	<p>One of the primary reasons these locations were selected for the pilot was due to community interest in further horse riding opportunities in this locality.</p> <p>The pilot trails provide access to areas of community heritage value, supporting horse riding traditions of great significance to local people.</p> <p>The monitoring framework includes a social component to assess visitor and user experiences.</p>
2. Does the activity affect sites of importance to local or broader community for their recreational or other values or access to these sites?		<p>Low Positive</p> <p>Low Negative</p>	<p>The bridle tracks are of significant community heritage value. The provision of access to the trails supports community understanding of these values, allowing people to experience and appreciate that heritage first hand.</p> <p>The tracks may be used by bushwalkers, although numbers will be very low. There is some potential for conflict with horse riders however direct interaction is unlikely.</p>	<p>The use of remote cameras will provide data on the frequency and intensity of trail use by horse riders and others.</p> <p>The social component of the monitoring framework will assist in determining any impacts (positive or negative) on park visitor experiences associated with the trial. In addition, NPWS will maintain existing communication channels with horse riders and other user groups</p>
3. Is the activity likely to affect economic factors, including employment, industry and property value?		Low Positive	Horse riding wilderness pilot will increase opportunity for local horse riding groups to experience the park environment, supporting local cultural connections.	Local businesses may benefit from passing tourist trade and increased recreational visitors to the park.
4. Is the activity likely to have an impact on the safety of the community?		Low Negative	<p>Parts of the trails are rugged and challenging.</p> <p>Interactions between horse riders and other users may create some risks.</p>	<p>Information material will be provided on the OEH web advising riders of the nature of the trail.</p> <p>The social component of the monitoring framework will</p>

8.3 Community impacts during construction and operation

Section 3.10 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
				<p>assist in determining any impacts (positive or negative) on park visitor experiences associated with the trial. In addition, NPWS will maintain existing communication channels with all user groups.</p> <p>Also, consistent with standard approaches and codes of conduct, it is expected that all trail users will be respectful of one another and give way in appropriate circumstances. NPWS will implement compliance and enforcement steps in accordance with standard operational practice.</p>
5. Is the activity likely to cause a bushfire risk?	<input type="checkbox"/>	N/A		NPWS will advise the local RFS that the trail is in use by horse riders for the two year period.
6. Will the activity affect the visual or scenic landscape? This should include consideration of any permanent or temporary signage (eg. signs advertising an event and related sponsorship.	<input checked="" type="checkbox"/>	Negligible Negative	Small scale, discrete signage will be used for remote cameras and trails (where necessary) and baseline monitoring sites will be marked by pegs and stakes.	No specific measures required. These have been designed to be discrete, consistent with preserving the wilderness values and visitor experience.
7. Is the activity likely to cause noise, pollution, visual impacts, loss of privacy, glare or overshadowing to members of the community, particularly adjoining landowners?	<input checked="" type="checkbox"/>	Low Negative	Increase use of the trails may impinge on the sense of isolation	Group size limits and the remote nature of the location mean it is unlikely that significant numbers of horse riders will be present at any one time. In addition, the length of the trails (39 km) means that substantial opportunities will remain for visitors to experience privacy and solitude.

8.3 Community impacts during construction and operation


Section 3.10 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
				The social component of the monitoring framework will assist in determining any impacts (positive or negative) on park visitor experiences associated with the trial

* If yes, all columns need to be completed. If no, write 'N/A' in the second and third columns

8.4 Natural resource impacts during construction and operation

Section 3.11 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. Is the activity likely to result in the degradation of the reserve or any other area reserved for conservation purposes?		Negligible Negative	The proposed activity involves the increased usage on an area, therefore there is potential for minimal impact.	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice. Implement the monitoring framework and initiate identified management interventions if monitoring thresholds are triggered. Interventions may range from rider education, to rehabilitation or trail closure
2. Is the activity likely to affect the use of, or the community's ability to use, natural resources?	<input type="checkbox"/>	N/A	N/A	
3. Is the activity likely to involve the use, wastage, destruction or depletion of natural resources including water, fuels, timber or extractive materials? This should include opportunities to utilise recycled or alternative products.	<input type="checkbox"/>	N/A	N/A	

8.4 Natural resource impacts during construction and operation

Section 3.11 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
<p>4. Does the activity provide for the sustainable and efficient use of water and energy?</p> <p>Where relevant to the proposal, this should include consideration of high efficiency fittings, appliances, insulation, lighting, rainwater tanks, hot water and electricity supply.</p>	<input type="checkbox"/>	N/A	N/A	

* If yes, all columns need to be completed. If no, write 'N/A' in the second and third columns


8.5 Aboriginal cultural heritage impacts during construction and operation

Section 3.12 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance. Addressing matters 1-5 will assist in meeting requirements set out in OEH's 'Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW'..

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. Will the activity disturb the ground surface or any culturally modified trees?	<input type="checkbox"/>	N/A	N/A	No construction is proposed for the pilot. The proposed trail utilises existing or historical bridle tracks.
2. Does the activity affect known Aboriginal objects or Aboriginal places? Include all known sources of information on likely presence of Aboriginal objects or places, including AHIMS search results.	<input checked="" type="checkbox"/>	Negligible Negative	Recorded Aboriginal sites exist within the vicinity of the trail route, but impacts are avoidable and unlikely	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice.
3. Is the activity located within, or will it affect, areas containing the following landscape features? <ul style="list-style-type: none"> • within 200m of waters*; • within a sand dune system*; • on a ridge top, ridge line or headland; • within 200m below or above a cliff face; or • within 20m of or in a cave, rock shelter or a cave mouth. 	<input checked="" type="checkbox"/>	Low negative	The proposed activity passes through various landscape features, including on a ridge top and 200m of water.	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice.

8.5 Aboriginal cultural heritage impacts during construction and operation

Section 3.12 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance. Addressing matters 1-5 will assist in meeting requirements set out in OEH's 'Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW'..

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
*see REF Proponents Guide for definitions.				
4. If Aboriginal objects or landscape features are present, can impacts be avoided?		Negligible Negative	Recorded Aboriginal sites exist within the vicinity of the trail route, but impacts are avoidable and unlikely	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice.
5. If the above steps indicate that there remains a risk of harm or disturbance, has a desktop assessment and visual inspection^ been undertaken (refer to the Due Diligence Code)? <i>^ for activities proposed by OEH, at a minimum this should be undertaken by a OEH employee with Aboriginal Site Awareness training and relevant practical experience, as approved by an Area Manager</i>	<input type="checkbox"/>	N/A	There is no residual risk of harm that is not adequately addressed by the stated safeguards and mitigation measures	
6. Is the activity likely to affect wild resources or access to these resources, which are used or valued	<input type="checkbox"/>	N/A	N/A	

8.5 Aboriginal cultural heritage impacts during construction and operation

Section 3.12 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance. Addressing matters 1-5 will assist in meeting requirements set out in OEH's 'Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW'..

	Applicable?*	Likely impact (negligible, low, medium or high negative or positive; or N/A)	Reasons (describe the type, nature and extent of the impact, the nature of the receiving environment and any proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
by the Aboriginal community?				
7. Does the activity affect areas subject to Native Title claims?	<input type="checkbox"/>	N/A	N/A	

* If yes, all columns need to be completed. If no, write 'N/A' in the second and third columns

Notes:

- if the above assessment indicates that there is still a reasonable risk or potential that Aboriginal objects, Aboriginal places or sensitive landscape features could be adversely affected by a proposal, then consistent with the precautionary principle it should either be re-considered or further detailed investigations undertaken.
- if it is concluded that an activity will have unavoidable and justified impacts on Aboriginal objects or Aboriginal places then the proponent should consider applying for an AHIP under Section 90 of the NPW Act.

8.6 Other cultural heritage impacts during construction or operation

Section 3.13 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

	Applicable?*	Likely impact (negligible/ maintenance, minor, major, contentious; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. What is the impact on places, buildings, landscapes or moveable heritage items?	<input checked="" type="checkbox"/>	Minor Positive	The pilot includes the use of historic bridle tracks known to be of local community heritage significance. The provision of access supports continuation of horse riding traditions and will promote greater understanding and appreciation of the heritage values of the tracks.	Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails. Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice. Implement the monitoring framework and initiate identified management interventions if monitoring thresholds are triggered. Interventions may range from rider education, to rehabilitation or trail closure
2. Is any vegetation of cultural landscape value likely to be affected (eg. gardens and settings, introduced exotic species, or evidence of broader remnant land uses)?	<input type="checkbox"/>	N/A	N/A	

*If yes, all columns need to be completed. If no, write 'N/A' in the second and third columns

8.7 Matters of national environmental significance under the EPBC Act

Section 3.14 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance. Also refer to guidelines produced by the Commonwealth Department of Sustainability, Environment, Water, Population and Communities

	Applicable?*	Impact level (negligible, low, medium or high; negative or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/Mitigation Measures
1. Is the proposal likely to impact on matters of national environmental significance under the EPBC Act, as follows:				
<ul style="list-style-type: none"> Listed threatened species or ecological communities 	<input checked="" type="checkbox"/>	Low Negative	Threatened species listed under the EPBC Act (1999) have been identified in the vicinity of the proposed pilot area. Refer Attachment 4D. No significant impacts are likely given the nature of the activity and the safeguards applied.	<p>Bridle tracks have a history of past use and modification. Riders will be required to stay on the trails.</p> <p>Group size limit of 20. No camping permitted in wilderness. Access closures consistent with standard park management practice.</p> <p>Implement the monitoring framework and initiate identified management interventions if monitoring thresholds are triggered. Interventions may range from rider education, to rehabilitation or trail closure</p>
<ul style="list-style-type: none"> Migratory species protected under international agreements 	<input type="checkbox"/>	N/A	N/A	
<ul style="list-style-type: none"> Ramsar wetlands 	<input type="checkbox"/>	N/A	N/A	
<ul style="list-style-type: none"> Commonwealth marine environment 	<input type="checkbox"/>	N/A	N/A	
<ul style="list-style-type: none"> World heritage properties or national heritage places 	<input type="checkbox"/>	N/A	N/A	

Note: referral to the Commonwealth may be required if the activity is likely to have a significant affect of matters of national environmental significance. Refer to the Significant Impact Guidelines at: <http://www.environment.gov.au/epbc/publications/neg-guidelines.html>

9. Proposals requiring additional information

Only complete the following sections if **applicable** to the proposal.

9.1 Lease or licence proposals under s.151, NPW Act

Section 2.2 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance

Proponents must complete and submit a **Sustainability Assessment** together with the REF. This also applies where OEH is the proponent for projects of the kind listed in s.151A, NPW Act.

For information on the sustainability assessment criteria and guidelines, including assessment templates, go to: <http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm>

Note that for **minor activities and uses** (usually events and similar proposals involving less than 400 people) a streamlined and combined REF and Sustainability Assessment template is available (**Template 1**).

Sustainability assessment attached as follows:

- ☐ Special activities and uses (involving more than 400 people) – Sustainability Assessment **Template 2**
- ☐ Built structures and facilities – Sustainability Assessment **Template 3**

9.2 Telecommunications facilities (s.153D, NPW Act)

Section 2.2 and Appendix 1 of *Proponents Guidelines for the Review of Environmental Factors* provide further guidance

1. Are there feasible alternative sites for the facility on land that is not reserved under the NPW Act?	
2. Does the site of any above ground facility cover the minimum area possible?	
3. Is the facility to be designed and constructed to minimise risk of damage to the facility from bushfires?	
4. Has the site and construction of the facility been selected to, as far as practicable, minimise visual impacts?	
5. Is it feasible to use an existing means of access to the site?	

6. Is the facility essential for the provision of telecommunications services for land reserved under the NPW Act or for surrounding areas to be served by the facility?	
7. Will the facility be removed and the site restored as soon as possible after the facility becomes redundant (eg. due to changes in technology)?	
8. Has the site been selected after taking into account the objectives set out in any plan of management relating to the land?	
9. If feasible, will the facility be co-located with an existing structure or located at a site that is already disturbed by an existing lease, licence, easement or right of way?	

If co-location is proposed, please indicate if:

- ☐ The proponent will be the owner of the facility
- ☐ The proponent will be a co-user of the facility

9.3 Activities within the Sydney Drinking Water Catchment

Activities within the catchment are subject to the provisions of the Drinking Water Catchments REP No.1

1. Does the activity incorporate any current recommended practices and performance standards endorsed or published by the Sydney Catchment Authority that relate to the protection of water quality?	
2. If the activity does not do so, how will the activity achieve outcomes not less than these?	
3. Will the activity have a neutral or beneficial effect on water quality?	

10. Threatened species assessment of significance (7 part test)

Address each of the factors set out in s 5A EP&A Act to decide whether there is likely to be a significant effect on threatened species, populations, ecological communities or their habitats, as set out below, or alternatively address the factors in a separate document. In preparing this section, refer to any relevant guidelines published by the DECCW.

Threatened species, populations and communities and critical habitats listed under both the *Threatened Species Conservation Act 1997* and *Fisheries Management Act 1994* should be included. Those listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) should not be included. Impacts on EPBC listed species should be addressed in section 8 above, or in a separate attached assessment. The proponent will still need to separately consider whether referral to the Commonwealth is required.

When you have completed the threatened species assessment of significance (7-part test), include the findings in Biological Impacts section.

List the species, populations and ecological communities, or their habitats which are likely to be affected by the proposal:

The following threatened species have been identified within 5 km of the trial location. Profiles for each species are included at Attachment 4A.

Flora

- *Eucalyptus kartzoffiana* (Araluen Gum)
- *Correa baeuerlenii* (Chef's Cap Correa)
- *Pomaderris gilmourii* var. *cana* (Grey Deua Pomaderris)
- *Monotaxis macrophylla* (Large-leafed Monotaxis)
- *Eucalyptus parvula* (Small-leaved Gum)

Fauna

- *Litoria littlejohni* (Littlejohn's Tree Frog)
- *Callocephalon fimbriatum* (Gang-gang Cockatoo)
- *Calyptorhynchus lathami* (Glossy Black-Cockatoo)
- *Ninox strenua* (Powerful Owl)
- *Tyto tenebricosa* (Sooty Owl)
- *Daphoenositta chrysoptera* (Varied Sittella)
- *Petroica boodang* (Scarlet Robin)
- *Petroica phoenicea* (Flame Robin)
- *Dasyurus maculatus* (Spotted-tailed Quoll)
- *Petaurus australis* (Yellow-bellied Glider)
- *Mormopterus norfolkensis* (Eastern Freetail-bat)
- *Kerivoula papuensis* (Golden-tipped Bat)
- *Tyto novaehollandiae* (Masked Owl)
- *Pachycephala olivacea* (Olive Whistler)
- *Petroica rodinogaster* (Pink Robin)
- *Sminthopsis leucopus* (White-footed Dunnart)
- *Phascolarctos cinereus* (Koala)
- *Falsistrellus tasmaniensis* (Eastern False Pipistrelle)
- *Miniopterus schreibersii oceanensis* (Eastern Bentwing-bat)
- *Scoteanax rueppellii* (Greater Broad-nosed Bat)
- *Heleioporus australiacus* (Giant Burrowing Frog)
- *Litoria littlejohni* (Littlejohn's Tree Frog)

- *Ptilinopus magnificus* (Wompoo Fruit-Dove)
- *Hieraaetus morphnoides* (Little Eagle)
- *Petaurus norfolcensis* (Squirrel Glider)
- *Potorous tridactylus* (Long-nosed Potoroo)
- *Lathamus discolor* (Swift Parrot)

Fauna endangered population

- *Petauroides volans* (Greater Glider population in the Eurobodalla local government area)

(a) in the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

The activity is considered unlikely to place any viable local populations of the above species at risk of extinction. As designed, the trial will not involve habitat removal or loss or other actions that could impact habitat or local environmental conditions necessary to support these species.

Some of the listed species are subject to threats that may potentially arise from horses:

- *Eucalyptus kartzoffiana* (Araluen Gum) – browsing of seedlings and saplings
- *Calyptorhynchus lathami* (Glossy Black-Cockatoo) – grazing degradation of foraging habitats
- *Sminthopsis leucopus* (White-footed Dunnart) – modification and disturbance of habitat by camping and recreational activities
- *Petroica boodang* (Scarlet Robin) – habitat modification from grazing and reduction of native ground cover in favour of exotic grasses
- *Tyto novaehollandiae* (Masked Owl) – grazing
- *Litoria littlejohni* (Littlejohn's Tree Frog) – loss of streamside vegetation, changes to water quality and pathogens

However, given the focus of the trial on existing management trails, group size limits, no camping, and the monitoring framework, the activity poses a very low risk to survival of local populations of these species.

(b) in the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.

The Greater Glider population in the Eurobodalla LGA is restricted in dispersal due to topographical constraints (rivers), the Princes Highway and cleared areas of land. Key threats to the population are reduction in habitat extent and quality due to urban development, and habitat fragmentation.

The activity is considered unlikely to place the Greater Glider population at risk of extinction. As designed, the trial will not involve habitat removal or loss or other actions that could impact habitat or local environmental conditions necessary to support the population.

The focus of the trial on existing and historical bridle tracks, group size limits, no camping, and the monitoring framework, also support this conclusion.

(c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:

- is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or**
- is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction**

There are no EECs or critical EECs in the immediate vicinity that are likely to be affected.

(d) in relation to the habitat of a threatened species, population or ecological community:

- (i) **the extent to which habitat is likely to be removed or modified as a result of the action proposed, and**
- (ii) **whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and**
- (iii) **the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality**

The activity is unlikely to involve any significant habitat removal, modification or fragmentation. The remoteness of the location combined with group size, no camping, and the focus of access along existing trails, will limit the prospect of habitat impacts to very low levels. The monitoring program will assist in early identification of any impacts in key locations and implementation of management responses.

While some maintenance is required to ensure the trails are safe, distinguishable and accessible, it will be small-scale and targeted to clearing of debris on the trails or trimming of encroaching vegetation. Only the minimum level of maintenance work needed to ensure safe and appropriate access will occur, and only using hand tools.

- (e) **whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).**

Not applicable. There is no critical habitat in the vicinity.

- (f) **whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.**

The proposed activity, supported by the detailed environmental safeguards, will have no adverse impacts on the recovery strategies or actions for these species as detailed in the Saving Our Species program

- (g) **whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.**

Not applicable. The activity is not part of a key threatening process nor will it contribute to the operation of or exacerbate a key threatening process.

11. Summary of impacts

Summarise the impacts and consider the cumulative impacts of the activity based on the classification of individual impacts as low, medium or high adverse, negligible or positive.

Section 3.15 of *Proponents Guidelines for the Review of Environmental Factors* provides further guidance.

Category of Impact	Significance of impacts		
	Extent of impact	Nature of impact	Environmentally sensitive features
Physical and Chemical	Low	Negative	Low-Med
Biological	Low	Negative	Low-Med
Natural Resources	Negligible	Negative	Low
Community	Low	Positive	Low
Cultural Heritage	Low	Positive	Low

12. Conclusions

In conclusion indicate if:

- there is likely to be a significant effect on the environment and an environmental impact statement is required?



No



Yes

Reason(s):

The location of the activity on existing or historic bridle tracks, combined with controls on group sizes, no camping, and the monitoring framework, will avoid risks of significant environmental impact. Where impacts arise the monitoring framework allows for early intervention and management response.

- there is likely to be a significant effect on threatened species, populations, ecological communities or their habitats and a species impact statement is required?



No



Yes

Reason(s):

The location of the activity on existing or historic bridle tracks, combined with controls on group sizes, no camping, and the monitoring framework, will avoid risks of significant environmental impact. Where impacts arise the monitoring framework allows for early intervention and management response.

The species and populations present or potentially present in the area are unlikely to be impacted by the activity, either by direct or indirect impacts.

- the activity is in respect of land that is, or is part of, critical habitat and a species impact statement is required?



No



Yes

Reason(s):

Critical habitat not present

- the activity will require certification to Building Code of Australia or Australian Standards in accordance with the OEH *Construction Assessment Procedure*?



No



Yes

Reason(s):

Not applicable

13. Supporting documentation

Please provide details of documentation included with this application. Supporting information may include, but is not limited to, a Sustainability Assessment (for proposals requiring a lease of licence under s.151A NPW Act), threatened species assessment of significance (7 part test), LEP land use tables, AHIMS search, engineering plans, maps, specialists studies, etc.

Document Title	Author	Date
1. Adopted amendments to Far South Coast Escarpments Parks Plan of Management	NPWS	February 2014
2. Submissions analysis report for plan of management amendments	NPWS	October 2013
3. OEH HHIMS & AHIMS (Heritage Items) and maps This contains sensitive site information and is not available for public release	NPWS	March 2014
4. OEH Wildlife Atlas (Fauna & Flora) and maps – 4A and 4B This contains sensitive site information and is not available for public release	NPWS	January 2014
4C. Threatened species profiles	OEH	Various
4D. EPBC Act search reports	Commonwealth	March 2014
5. Draft monitoring framework	NPWS	February 2014
6. Baseline monitoring methods	NPWS	February 2014

14. Fees

Proponents are required to pay an initial fee of \$170 (a final fee is also required before determination of the REF).

If the activity consists of environmental remediation and the proponent is a community group, OEH may waive the fees on request.

<input type="checkbox"/>	\$170 payment/cheque for initial fee is enclosed
<input checked="" type="checkbox"/>	A waiver of fees is requested. Please provide reasons:
	Internal REF application by OEH/NPWS.

15. Signature of proponent

The REF must be certified by the proponent – not the consultant(s) where consultant(s) are used.

Signature	<i>Endorsed Melinda Murray</i>	Signature	
Name (printed)	Melinda Murray	Name (printed)	
Position	Director, Park Services and Strategy	Position	
Date	31.3.2104	Date	

Seal (if signing under seal):

OEH USE

- **External proponent REF or major REF**
 - ▶ proceed to prepare determination report and determination notice
- **Internal minor REF**
 - ▶ proceed to prepare determination notice (no determination report required)

Determination report templates, determination notices and model conditions are available at: **<http://deccnet/epa/REFGuidelines.htm>**