



HANG GLIDERS ASSOCIATION OF WESTERN AUSTRALIA

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APPENDIX 1

Environmental Management Plan for Flying Sites: Leeuwin-Naturalist National Park

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1.0 **Yallingup**

The Rabbit Hill launch site (Figure1) is located approximately 130m north of the Yallingup town site northern carpark. The Yallingup flying site is a premier flying location on the Cape to Cape Coast. The launch site provides gliding access to spectacular sea-cliff soaring which runs north for approximately eight kilometers to Sugarloaf Rock (Photo 3).

The existing launch site is stable and does not show signs of erosion. No additional development or disturbance is required for the future use of this site. However, the placement of a launch platform (as for the Shelley Beach flying site) is proposed to provide added site stability and to improve the quality of experience for both pilots and members of the public.

1.1 **Site Data**

Launch Site Location: E 326 512; N 6 200 511 and 25 m amsl¹

Launch Direction: West to South West

Most Suitable Seasonal Launching:

Level of Pilot Expertise: Restricted Licence or higher

History of Site Usage: The launch site has been in use for about 30 years.

Landing Site: On the beach below the launch

1.2 **Existing Environment**

The launch site (Photo 1) is located on a formal walking track which is one of several CALM-developed walking trails for the locality (Yallingup/Smiths Beach Walking Trails). The Rabbit Hill location is within short walking distance of a formal bitumen-sealed car park.

Soils and vegetation. Soils are grey, loose calcareous sandy soils of varying depth overlying limestone pavement. Surrounding vegetation is low dense coastal heath to 1m. Loose sandy soils are stabilised by vegetation which can easily be destabilised by human activities. Sand boarding and informal tracks have previously de-stabilised fragile dune vegetation assemblages. De-stabilised areas along the northern walking track have been

¹ Eastings and Northings are given in GDA94.

closed off to sand boarding and CALM, in conjunction with the local community group, have instigated a rehabilitation program that appears to be successful.

Car Park A formal bitumen-sealed car park to north of Yallingup town site with space for 36 cars is located within a short distance of the launch site. The car park is used by surfers, walkers and sightseers.

Access to launch site A formal walking track, stabilised with lateritic gravel heads north from the car park as part of local walking trails.

Pedestrian pathways and tracks A wooden viewing platform (Photo 3) is located immediately to the north of the carpark. There is a formal walking track between the viewing platform and the beach (Photo 4).

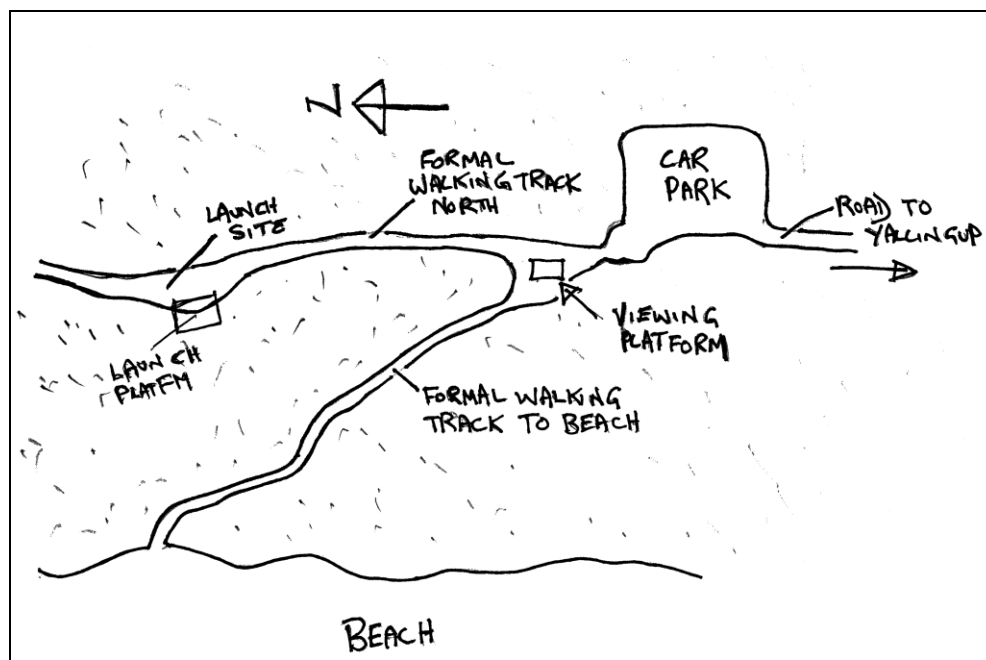


Figure 1: Rabbit Hill Launch Site and surrounds.

Launch Site The launch site is located on a widened section of the walking track about 130 m north of the carpark. The launch site occupies approximately 20m of the length of the track and is approximately 10m wide. This area is stabilised by lateritic gravel. The seaward and landward extent of the launch site has been partially overgrown when inspected in October 2005. Consequently the re-growth has degraded the quality of the site for launching because paragliders become entangled in the vegetation growing through the edges of the laterite path..

Landing Sites. There is a bottom-landing site on the beach below the launch site which also serves as the landing area for this flying site.

Access between landing site and launch site The formal walkway between the viewing platform and the beach (Photo 4) is available to pilots to walk back up to the launch site.

Other facilities Toilets, gas barbeques, public telephones, food outlet, camping and short-stay accommodation available in the Yallingup town site.

1.3 Site Assessment

The following are key management objectives that relate to the sustainable use of a given site in terms of vegetation and landforms, ensuring that the use does not intrude on the landscape, that there is equity of use.

➤ *Ensuring visitor safety*

The existing launch site and proposed improvements could not have any impact on visitor safety because the predominant ridge soaring area is to the north, away from pedestrian usage. Insofar as the landing area is concerned, the HGAWA Operations Manual requires strict separation of airborne gliders and members of the public.

➤ *Protection of the environment.*

The launch site (Photo 1) is stable and does not appear to be causing erosion or damage vegetation.

Issue: Launching pilots, if taking a run in a seaward direction, could run beyond the edge of the stabilised area. Also, pilots have complained of catching canopy structure on the vegetation on the landward side of the site.

Option1: Do nothing as there is little evidence of soil erosion at the launch site.

Option 2: Widen the launch site into the landward side and extend seawards using laterite gravel for greater site stability to provide more room for launching.

Option 3: A wooden launch ramp could be constructed on the seaward side of the walkway with the ramp away from the edge of the path. This would largely overcome the problem of re-growth on the launch site.

Recommendation: Option 3 would considerably improve the quality of the launch site, ensure greater protection of vegetation and substrate and take launches off the walking trail. Additional gravel could be added to the launch site as well.

Yallingup



Photo 1: Rabbit Hill Launch Site: Located on an gravel-surfaced walking track. Both the inland and seaward extent of the site have been overgrown. A launching platform on the seaward side would create an enhanced launch with greater security for landscape stability.



Photo 2: Yallingup Flying Site: Launch Site is to the right. Flying area is on the left created over cliffs running to Sugar Loaf Rock in the distance.

Issue: Introduction of dieback disease: The launching site is located on a heavily used pedestrian pathway that directly connects to the parking area. Pilots will land on the beach below the launch site, using a constructed pathway to return to the parking area. Consequently the use of the launching site represents no greater risk of disease introduction than that presented by considerably larger number of other users of the location

- *The site has adequate capacity to cope with the predicted use;*

The site is mostly used by local pilots and visitors on holidays. The local facilities and launch site are more than adequate to deal with current usage.

- *Provision of adequate facilities*

Issue: Limited parking. The launch site may attract up to four or five glider pilots at a time. The parking area is also used by bathers, surfers, sightseers and walkers. There should be no exclusion of use by any one group over another.

In terms of usage of the car park, the principle of first come first serve should apply – there is no reason why any group; surfers, walkers, sightseers, bathers or glider pilots should have precedence. It is not anticipated that glider pilots would even approach the frequency and numbers seen by surfers for instance.

Visual impact of use is minimal. The recommended development choice for the launch site (above) is consistent with the existing facilities in the locality which in turn have been provided with sensitivity to environment of the park.

- *Equity of use*

Issue: The pedestrian path north of the northern car park is part of a system of CALM-developed walking trails. Without doubt, a degree of courtesy would apply in allowing walkers to pass or for walkers to wait 30 seconds or so while a pilot launches. It would be more likely that walkers would prefer to stand and watch a launch. However, the provision of a launch ramp would create greater space for launching.

Summary: Use of the launch site presents very little in the way of environmental impact or conflict with other users. The provision of a launch ramp would improve the quality of the launch site and reduce the possibility of congestion



Photo 3: Viewing Platform and landing area



Photo 4: Rabbit Hill Walking Track: The track is from the viewing platform to the beach and is engineered to prevent erosion. Pilots would use this track for access between the beach and launch

1.4 Alternative Launch Sites

Approximately two hundred metres or more further along the walking trail from the Rabbit Hill launch site, the trail intersects a 20m wide fire break cut into dense coastal heath. This firebreak runs from the beach to the top of the coastal hills over looking Yallingup. A possible launch site exists on the upper slope of the firebreak which has a nearly consistent slope of approximately 1:15. To the south of the firebreak, above the Rabbit Hill launch site, is a limestone outcrop that is also a potential launch site. However, to reach the outcrop, a track would have to be cut south from the firebreak through dense coastal heath. Both sites would have to be assessed by HGAWA Senior Safety Officers as suitable launch sites before a proposal would be forwarded to CALM

Nominally called the Mt Duckworth sites, these can be accessed only by 4WD via Hemsley Road. For both hang gliding and paragliders, the distance to the limestone outcrop would be too far to carry gear from the existing gate above the firebreak

2.0 Injidup Beach

The site is located on the bay immediately to the north of Point Clairault. Above the beach the terrain consist of coastal limestone ridges and overlying dunes. This site serves as an alternative when other locations present unsuitable conditions for gliding. Paragliders may launch from the beach on the north of the carpark for SW launching (Photo 6) or walk south from the carpark for a northerly launch (Photo 5). This is a popular surfing beach that also attracts sightseers and fishers.

No disturbance or development is needed for the future use of this site for gliding activities as all required facilities are already present. Glider launching and landing activities will not result in erosion or disturbance to the terrain as both launching and landing will take place from the beach.

2.1 Site Data

Launch Site Location:. Beach Launching at any location

Launch Direction: NNW to South West

Most Suitable Seasonal Launching: All year

Level of Pilot Expertise: Restricted Licence or higher

History of Site Usage: The launch site has been in use since about 1996

Landing Site: On the beach

2.1 Existing Environment

Soils and vegetation. On landscapes above the beach the soils are grey, loose calcerous sandy soils at varying depth overlaying limestone pavement or calcerous beach sands in dune formations. The car park and formal access walkway to the beach are through dense tea tree forest up to five metres height in places. Beaches are gently sloped to where the high tides or storm surges undercut the dunes that rise steeply from the landward beach perimeter. Except for the blowout on the southern side of the bay, dunes are generally stabilised by vegetation almost to the beach undercut.

Car Park (Photo 7). The locality is served by a formal bitumen-sealed car park. The car park is accessed via Wyadup Road from Caves Road and then by turning left into Point Clairault Road.

Access to launch site A formal walking track, over limestone pavement and grey calcerous sands, leads south from the car park to the beach. There is also a viewing platform (Photo 8) on the northern side of the car park and a wooden stairway to the beach from the centre of the car park.

Injidup Beach



Photo 5: Injidup Beach looking South from the viewing platform. Cape Clairault to the right. Blowout on the south of the beach with steep vegetated dunes undercut by storms and high tides.



Photo 6: Injidup Beach looking North from the viewing platform.

Pedestrian pathways and tracks As above, either the southern walking track or stairway provide access across fragile landscapes.

Launch Site This is a paragliders' beach-launch site; there is no launch capability for hang gliders. The technique is for the pilot to kite the canopy overhead and then to walk backwards to the edge of the dune where the up draught will vertically launch canopy and pilot.

Landing Sites. The entire beach is a landing area. Dunes would not be used for landing as the compression zone lies over the beach. The existing walkways would be used by pilots moving between the carpark and beach.

Other facilities Toilets are located on the south side of the car par (Photo 7).

2.2 Site Assessment

The following are key management objectives that relate to the sustainable use of a given site in terms of vegetation and landforms, ensuring that the use does not intrude on the landscape and that there is equity of use.

➤ *Ensuring appropriate visitor safety*

Current use of the site by pilots has in no any impact on visitor safety. Although pilots may fly over the beach while other users are present, the HGAWA Operations Manual requires strict separation between airborne gliders and members of the public.

➤ *Protection of the environment.*

Except for the blowout, dunes have not been destabilised by human activities; walkways and viewing platforms have created stable access paths across fragile terrain. Launching does not present issues apart from the requirement that pilots do not walk over or on dune faces. The locality is managed by a community volunteer group in consultation with CALM that oversees rehabilitation issues.

➤ *The site has adequate capacity to cope with the predicted use*

The site is mostly used by local pilots and visitors on holidays. The local facilities and launch site are more than adequate to deal with current usage.

➤ *Provision of adequate facilities*

Issue: Limited parking. The launch site may attract small groups of glider pilots from time to time. The parking area is also used by surfers, fishers, sightseers and walkers. There should be no exclusion of use by any one group over another.

Resolution. In this case the Code of Conduct (Appendix 4) applies – *no parking beyond the boundaries in approved car parks*. In terms of usage of the car park, the principle of *first come first serve* should apply.

➤ *Visual impact of use is minimal*

There are no visual impact implications for this site, as launching takes place from the beach at any spot convenient to the wind direction.

➤ *Equity of use*

Issue: Apart from parking space, conflicts of usage or interest do not appear to occur for this site.

Site development: No site development issues arise for this site..

Summary: Injidup Beach presents no issues in regard to either environment or conflicts with other users. HGAWA recommends that this location be retained as a flying site within the Park.

Injidup Beach



Photo 7: Injidup Beach Parking Area. Toilets on left. Walking trail to beach to the right of toilets.



Photo 8: Injidup Beach Viewing Platform

3.0 Conto's Springs

The Conto launch site (Figure 2) is located immediately to the west of the Conto Camp Ground on a ledge overlooking the ocean some 70 m above sea level. The flying site is one of the most spectacular coastal flying sites in Western Australia, ranking easily with Horrocks north of Geraldton, Shelley Beach in the West Cape Howe National Park or the Sandpatch site at the Albany wind-turbine farm. The launch site has been used by hang gliders since the early 1970s when the sport was yet in its infancy. Unfortunately development and rehabilitation of the Park has bypassed the gliding sports; substantial rehabilitation of the Conto's locality has encompassed the needs of fishers, hikers, surfers and sightseers. At present there are no formal parking facilities for the Conto launch site. The access track to the launch site has been heavily used as a short cut to the beach by other park users. If sensitively developed, Conto's would provide a world-class, sustainable flying location and an alternative to other South West ocean flying sites during peak summer holiday times.

In view of the history and high value of this flying site, the existing launch site should be retained as minimal disturbance will be required to ensure long-term sustainability. The provision of a parking area in accordance with CALM guidelines is recommended. The option of providing both a launching platform and a viewing platform are suggested to achieve the most equitable and sustainable use of the site. It is proposed that the launch site access track be upgraded and the informal short cut to the beach be either closed or upgraded to an approved walking track to prevent any further degradation of this locality.

3.1 Site Data

Launch Site Location: 316 074 E 6 226 960 N and 70 m amsl

Launch Direction: WSW - WNW

Most Suitable Seasonal Launching: Mostly during summer

Level of Pilot Expertise: Restricted Licence or higher

History of Site Usage: The launch site has been in use since 1971

Landing Site: On the beach below the launch

3.2 Existing Environment

The launch site is located on a stable limestone ledge some 70 m above sea level (Photo 9). The access track to the launch site is off the Beach Road, the entrance being approximately 50m to the south of where the Camp Ground access track meets the Beach Road (Photo 11).

Launch Site Location.

Access: Conto Road is bitumen-sealed between Caves Road and the Conto Camp Ground. To reach the launch site, turn off Caves Road onto Conto Road and then left where the sign directs to the Conto Camping Ground. Drive past the entrance to the Camping Ground along a compacted limestone road towards Conto Beach. The walking track to the launch site is about 50m after where the walking track from the Conto camp ground intersects the Beach Road. The Bibbulman Track joins the Beach Road about 30 m north of the Conto Camp Ground access track.

Soils and vegetation. Vegetation in the locality of the launch site is dense coastal heath 1 to 2m in height over shallow, loose, grey calcareous sandy soils which overlie rocky limestone pavement. Due to the steep terrain in places, soils are easily disturbed if vegetation is removed or damaged by human activities; soil erosion then leads to further loss of vegetation.

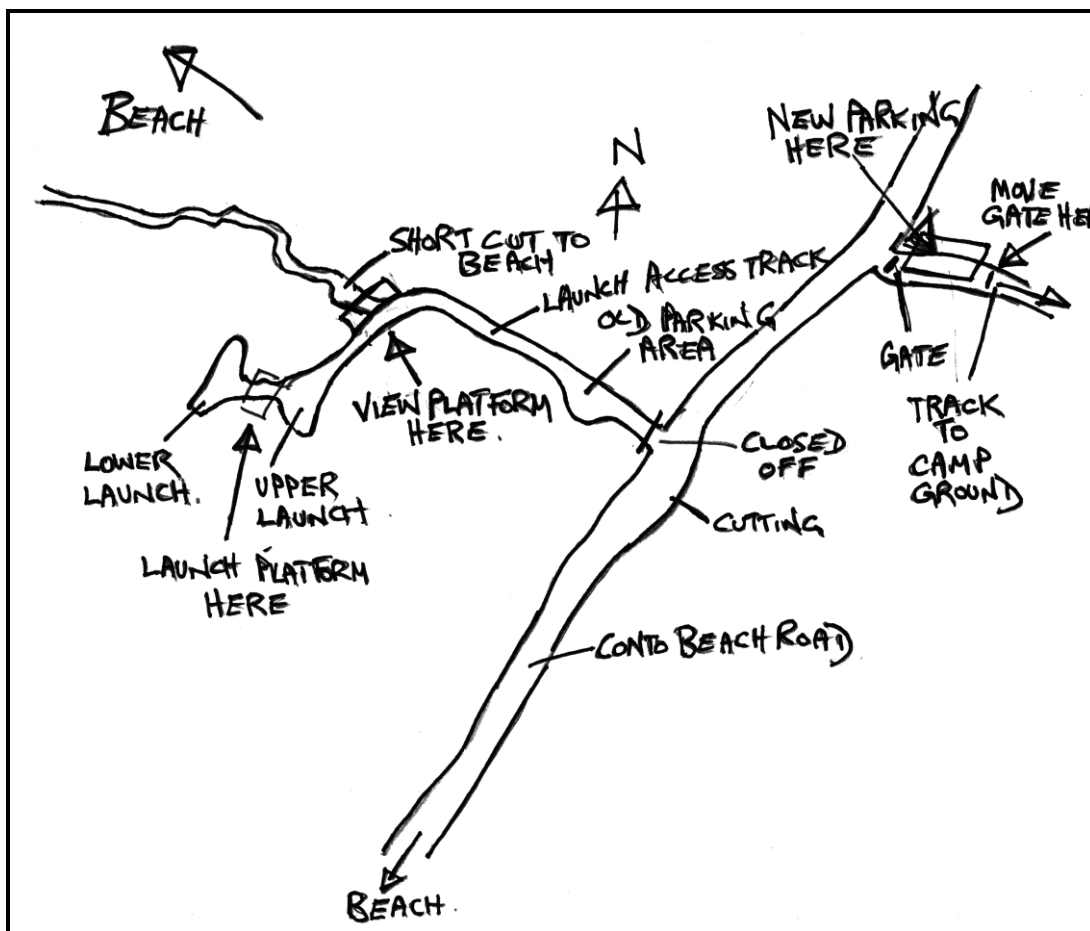


Figure 2: Conto Launch Site and Surrounds

Car Park At this time there is no formal car park associated with the launch site. There is a cutting into the hillside on the landward side of the Beach Road opposite the Launch Site access track (Photo 11) which can provide space for a few cars. An informal car park at the entrance to the Launch Site access track has now been closed off by CALM. The track to the camp ground, near the launch site access track, has been gated (Photo 12) to prevent vehicle movement along this track.

cut to the beach from the Camp Ground. The short-cut to the beach exits the Launch Site access track after about 70m, turning right and down a steep gradient (Photo 11). Use of the short cut has eroded the launch site access track and has damaged the very steep hillside. The remainder of the track to the launch site is stable and is on relatively level ground and unlikely to be a source of erosion.

Pedestrian pathways and tracks There is a formal road over limestone pavement, now decommissioned, between the Conto Camp Ground and the Beach Road. As stated above, the launch site track is being used as a short cut to the beach, causing erosion along its length. The approved walk to the beach is a longer route down the Beach Road. Naturally, some walkers prefer the shortest route, even if this is down extremely steep terrain.

Launch Site The launch site is located on a stable limestone platform. There is a second lower platform located some 2m down a minor limestone screed on a much narrower ledge. The screed appears to have been formed by disturbance of the substrate between the upper and lower launch sites.

Landing Sites. There is a bottom-landing site on the beach below the launch site which also serves as the only landing area.

Access between landing and Launch Site. The only authorised return path from the beach landing area is along the Conto Beach Road. The Code of Conduct requires that only this route be used by pilots returning from the beach.

Other facilities Toilets, barbeques and camping sites available in the Conto Camp Ground. Toilet facilities are also available at the beach to the south of the launch site.

Conto's Springs



Photo 9: Conto Launch Site: This is the upper platform; there is a scree between this and the lower platform about 2m below. A launch platform would increase the quality of launching and stability of the site.



Photo 10: Short Cut to beach. View from the junction of the launch site access track. The beach landing area below. This is the proposed location for a viewing platform

3.3 Site Assessment

The following are key management objectives that relate to the sustainable use of a given site in terms of vegetation and landforms, ensuring that the use does not intrude on the landscape and that there is equity of use.

- *Ensuring appropriate visitor safety*
 - *Protection of the environment*
 - *The site has adequate capacity to cope with the predicted use*
 - *Provision of adequate facilities*
 - *Visual impact of use is minimal*
 - *Consistency with other management objectives, including equity of use*
-
- *Ensuring appropriate visitor safety*

The ridge soaring areas are located well away from areas used by visitor. As far as the landing area is concerned, the HGAWA Operations Manual requires strict separation between airborne gliders and members of the public.

The safety of pilots crossing the road, at the point where the launch site access track departs beach road, is worth considering. However, it should be noted that the Cape to Cape Walking trail and also the Bibulmin trail intersect CALM park roads at many places. Invariably signs have been erected warning of hikers crossing ahead. The Cape to Cape walking trail intersects the Beach Road not more than a few metres north of the launch site access track. Consequently a sign erected for the walking track would serve a dual purpose for pilots crossing the road at that location.

Conto's Springs



Photo 11: Cutting on Beach Road: “Parking area” opposite the access track to the launch site. This does not meet CALM guidelines for parking area development.



Photo 12: Track to Camp Area: By moving the gate back, this area could be developed for parking both for a proposed public viewing platform and also the launch site.

➤ *Protection of the environment.*

Use of the upper platform as a Launch Site does not appear to be causing erosion or damage to vegetation. However, access to the lower platform for launching could cause a minor destabilisation of a short section of the cliff face. Although this disturbance is not significant, it is important that the launch site be used in a sustainable manner.

Issue: Manage the launch site in a sustainable manner.

Option 1: Do nothing – the launch area shows very little impact considering that it has been used for up to thirty years. The site is unlikely to be degraded significantly in the near or distant future if used for launching.

Option 2: The upper platform to be retained as a launch site. The lower platform to be closed for launching. The provision of a wooden launch ramp with the floor level with the upper launch site platform would prevent and remove the necessity of using the lower platform for launching. This would also considerably improve the quality of the launch site and prevent any possible disturbance of the terrain.

Issue: Use of the access track to the launch site as a short cut to the beach has destabilised the access track and caused erosion between the access track and the beach.

Option 1: Stabilise the beach short cut into a formal walking trail. This option would require considerable resources in view of the length and gradient of the existing short cut. The benefit would be marginal considering that a road to the beach is available. However, if walkers are determined to use the shortest distance to the beach, providing this option might be the only alternative for protecting the cliff face from further erosion.

Option 2: Close off the short cut at the junction of the short cut and access track.

Issue: The first part of the launch site access track is showing signs of erosion and is likely to deteriorate further due to pedestrian traffic to the beach.

Resolution: The launch site access track should be stabilised using treated pine reinforced stairs and crushed limestone.

The site has adequate capacity to cope with the predicted use

The launch site and access track is more the adequate to cope with possible use; this being mostly local pilots with visitors on holidays.

Issue: Introduction of dieback disease: The launching site is located on a heavily used pedestrian pathway that is used as a short cut between the road and the beach below. Pilots will land on the beach below the launch site, using existing roads to return to where cars are parked. Consequently the use of the launching site represents no greater risk of disease introduction than that presented by considerably larger number of other users of the location using the short-cut to the beach.

➤ *Provision of adequate facilities*

Issue: There is no formal parking area available for the launch site. If the launch site is to be developed, then approved parking facilities for pilots will be required.

Option 1: Pilots to park their cars within the Conto Camp Ground in an area designated by CALM on the western side of the camp. The distance from the Conto Camp Ground is probably too far to carry heavy equipment with return trips for other needs. It would probably not be appropriate for the Conto Camp Ground to be used as a car park unless pilots are allowed to take their cars along the old road which is now a walking track between the camp and Beach Road to a prepared parking area to the east of the existing gate.

Option 2: Re-open the old parking area at the top of the launch site access track: The available cleared area would be too limited in size. Expanding the area would unnecessarily require clearing of vegetation in a on the crest of a coastal hill site and may not be consistent with the Park Management Plan guidelines for parking areas:

Option 3: Expand the existing cutting into the hillside on Beach Road (Photo 11) and stabilise the substrate. This location is not consistent with CALM's guidelines for coastal parking development.

Option 4: Move the gate on the Camping Ground access track (Photo 12) further back (i.e. east) along the track and widen the track to allow for parking. This would allow a parking area to be provided on previously disturbed ground. This site has the potential for expanding the width of the existing track without causing an unacceptable impact on the aesthetic appeal of the locality. The proposed car park would be set back from the road with adequate shielding vegetation from the road

➤ *Equity of use*

Issue: Provision of a car park for glider pilots would provide a facility for a single sector of Park users and encourage unauthorized use of the launch site access track by other park users with the risk of further use of the short cut to the beach.

Recommendation: The Conto cliffs present spectacular cliff and seascape views but at present there is no specific elevated ocean viewing site for the Conto

location. Only the Cape to Cape Walking Track provides these views; however, this track is not well known and there are no parking facilities if this track is to be used for viewing. Provision of a viewing platform on the launch site access track at the junction of the access track and beach short cut (Photo 11) would attract other park users besides glider pilots to the proposed car park. A viewing platform in this location would block the short cut to the beach. The viewing platform would also provide an outstanding location for any members of the public who wish to observe glider flights and also a place for friends and family of pilots to be safely located away from the launch site in a stable area.

➤ *Visual impact of use is minimal*

The recommended viewing platform and launch platform would be consistent with other wooden structures presently located within the Park; viewing platforms have already been placed at strategic locations and have been sensitively designed and placed to minimise unpleasant intrusion into the landscape. The proposed parking area (above) would be in an already disturbed location well hidden from view, be located well back from the crest of coastal cliffs and would not degrade the aesthetics of the locality. The platform would not be visible from the beach and would blend against the grey limestone background when viewed from the walking trail which enters Beach Road to the north of the launch area.

Summary: The present status of the Conto flying site is poor both in terms of facilities for pilots and for sustainable long-term use; this is unfortunate, considering the unsurpassed quality of the flying site itself. The Launch Site access path has been degraded by other park users; there has been little degradation to those aspects of the site used only by glider pilots over the previous thirty years. There is an historical precedence that this site be preserved and developed for future gliding activities, which can only add to the richness of a National Park experience both for pilots and also for members of the general public. A launching platform is suggested to ensure the sustainability of the launch site. It is also suggested that a viewing platform be built to provide an additional year-round use for the car park. In any event, a viewing site is a facility clearly missing at this spectacular location until now. Other park users may be able to observe launches when these take place but the platform would be available at all times to take in the splendour of the coastal cliff scenery.

3.4 Alternative Launch Sites

There are no alternative launch sites without extensive cutting of new tracks to other ledge sites.