



# Glenthorne National Park – Ityamaiitpinna Yarta Site Plan DRAFT

Friends of Glenthorne

Updated 10/8/2022



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# Section 1: Site Details

## Property Details

|                    |  |
|--------------------|--|
| Park name          | Glenthorne National Park – Ityamaitpinna Yarta                       |
| DEW contact person | Bec Brown  |
| Phone              | 0467 770 173   |
| Email              | <a href="mailto:Rebecca.brown@sa.gov.au">Rebecca.brown@sa.gov.au</a> |
| Postal address     | Glenthorne Ranger Station, Majors Road, O'Halloran Hill              |

## Volunteer Group Details

|                |  |
|----------------|--|
| Group Name     | Friends of Glenthorne  |
| Contact person | Martin Schumacher  |
| Phone          | 0403 804 306   |
| Email          | <a href="mailto:president@friendsofglenthorne.org.au">president@friendsofglenthorne.org.au</a> |
| Postal address |  |

## Plan approval

This plan will remain in draft form to allow the Senior Ranger to make the required updates to the plan contents and directions following consultation with the Friends of Glenthorne President. Updates may be required as facilities are developed, revegetation progresses, and other works are carried out across the site.

| Senior Ranger name | Signature   | Date |
|--------------------|---|------|
| Rebecca Brown      |  |      |
| FoG President name | Signature   | Date |
| Martin Schumacher  |   |      |

## Site Map

### Site map guide









|   |  |
|---|--|
| Map 1<br>Site 1: First dam and seed production<br>Site 2: Schools revegetation 2020<br>Site 3: Exclusion zone<br>Site 4: Creek restoration<br>Site 5: Creek revegetation<br>Site 6: Large dam and lower dam<br>Site Paton: David Paton project site | Map 2<br>Site 7: West end of SA Water desalination pipeline<br>Site 8: Western Gully<br>Site 9: Revegetation<br>Site 10: Creek restoration<br>Site 11: Pasture grass<br>Site 12: Exclusion – Austrostipa and olive grove |
|---|--|

# Map 1 – Glenthorne North

Glenthorne - Friends Plan

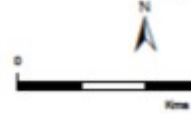


**Legend**

|   |   |   |
|---|---|---|
|  Revegetation                | <b>Glenthorne_Reveg Description</b>   |  Cairns          |
|  Exclusion                   |  Allocasuarina |  Dense Plantings |
|  Revegetation + weed control |  Eucalyptus    |   |
|  Nil                         |   |   |



**Government of South Australia**  
 Department of Environment,  
 Water and Natural Resources



Produced by: Glenn Powell  
 National Resources Adelaide and Mount Lofty Ranges  
 Department for Environment, Water and Natural Resources

Completed: 20 September 2010  
 Project: Lizard Ledge and Munitions  
 Research Station of Adelaide, 1984

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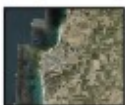
# Map 2 – Glenthorne South

Glenthorne - Friends Plan



## Legend

| Action                      | Glenthorne_Reveg | Description     |
|-----------------------------|------------------|-----------------|
| Revegetation                | Light Blue       | Allocasuarina   |
| Revegetation + weed control | Pink             | Dense Plantings |
| Exclusion                   | Red Hatched      | Eucalyptus      |
| Nil                         | Tan              | Callits         |
| Weed Control                | Green            |                 |



Prepared by: Glenn Peacock  
Natural Resources Adelaide and Mount Lofty Ranges  
Department for Environment, Water and Natural Resources

Completed: 20 September 2010  
Regulation: Landmark Coordinate Code  
Datum: Australian Datum of Adelaide, 1984

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## Section 2: Work to be Undertaken

### DEW policies/procedures relevant to all sites

- Volunteer Safety Framework (VSF) Procedure
- Volunteer Code of Conduct
- Planting Indigenous Species Policy (DEH)
- Native Plant Material Collection Policy (DEH)
- Bush Care Hazard ID checklist – weeding, planting, seed collection
- Working with chemicals SWP
- Brush cutters SWP
- Hand drill use SWP

**Priority weed control** – an expanded table can also be found in the Vegetation Management Plan completed by EBS. The majority of the weeds will be targeted using contractors, however everyone should be observant for emerging weeds.

| Weed species  | Nature of Infestation at Glenthorne   | Preferred Control Methods   |
|---|---|---|
| African Boxthorn<br>(Lycium ferocissimum)<br>WoNS                                   | Scattered shrubs in all vegetated areas of Glenthorne, in particular along the riparian area.   | Mechanical removal (seedlings)<br>Cut and swab (non-selective)<br>Drill and fill (non-selective)  |
| Bathurst Burr<br>(Xanthium spinosum)<br>Declared                                    | Isolated patches  | Spot spray with herbicide during growing phase (non-selective) (summer) before flowering.<br>Mow, slash or grub plants to prevent burr formation. |
| Boneseed<br>(Chrysanthemoides monilifera)<br>WoNS                                   | Only occurs around the Heritage buildings. Clump on eastern side of Old Main South Road near large, cleared area. Target for removal. Monitor.  | Manual removal (tree popper) – ensure tap root is removed.  |
| Brooms:<br>Scotch Broom<br>(Cytisus scoparius)<br><br>Montpellier Broom<br>(Genista | Two isolated plants observed (one of each species). One at Old Main South Road entrance, and one within the Mallee Box revegetation plot on the western boundary.<br><br>Monitor for outliers | Manual removal of seedlings or established bushes (tree popper), follow up to ensure regenerating seedlings are removed.                          |

| Weed species   | Nature of Infestation at Glenthorne   | Preferred Control Methods   |
|--|---|---|
| monspessulana)<br>WoNS                               |   |   |
| Olive<br>(Olea europaeus)<br>Declared                | Requires immediate, repeated and ongoing efforts to minimise infestation and prevent further establishment. Large infestations will be initially controlled with contractors. | Seedlings / young plants:<br>pull or grub (winter / moist soil)<br>Trees / larger plants (Nov-Feb):<br>Drill and fill<br>Cut and swab<br>Saplings and smaller plants (Spring, Sept-Nov)<br>Basal bark spray (20-25°C, on unstressed plants) |
| Variegated Thistle<br>(Silybum marianum)<br>Declared | Occurs in several isolated patches within Glenthorne and extensively on western slopes (east facing), where contour plough lines follow the hill ridges.                      | Spot spray dense infestations<br>Clip and remove seed / flower heads before maturity  |

Note: Spray isolated weeds rather than targeting large infestations. While it is desirable to remove all weeds across the site, some weeds are fulfilling roles such as habitat or soil binding. Working from the good vegetation outwards will encourage recruitment. Refer to EBS vegetation report for maps of the above table.

## Non site-specific activities

### Non site-specific activities

- Bird surveys across the park - data to be entered into BDBSA collect app.
- Seed collection for propagation of plants to go into revegetating the property.
- Weed control – hand weed in dense plots as required. Contractors will provide support for spraying.
- Revegetation works 2021-22 - the Friends group will be Team Leaders for community planting days and play a vital role in engaging the broader community with Glenthorne National Park. Two dense planting plots at the Munition sheds have been nominated for the group to plant out with plants supplied by DEW.
- Trail maintenance – as the trail network develops within the park the Friends group may be able to assist in trail maintenance activities such as pruning overgrown vegetation, weeding and monitoring visitor usage.
- Guided tours if requested by interest groups and if deemed appropriate by the Senior Ranger
- Other work as requested – as visitor facilities develop within the park, the Friends group will assist in other park maintenance and engagement activities as discussed with the Senior Ranger (and Project Officers through liaison with the Senior Ranger).
-

## Non site specific revegetation

Non site specific sites include all dense plot areas including the small squares and rectangles where dense trees will be planted in 2022. To compliment this work, friends can propagate understory species that replicate a grassy woodland. This should include grasses such as Themeda, lomandras, and cymbopogon. Other species to consider are herbs and forbs. Sparse shrubs including Rhagodias can also be included, however no Acacia paradoxa is to be planted. Bursaria spinosa would be an appropriate choice to add structure for small birds in replace of Acacia paradoxa 1 or 2 would be enough in each 2022 dense tree plot. Additional tree planting is not encouraged as we want to allow natural open space and reduce tree canopies touching to reduce fire behaviour across the site. Small shrubs and grasses can be planted next to existing scattered trees but should be planted in close proximity to ensure it doesn't interfere with any maintenance of the site.

*Values:* Provides critical habitat structure to link the riparian zone to the western boundary and allows free movement of fauna between areas.

*Work objectives:* Propagate understory plant species to create dense grassy woodlands.

*Weeds of concern:* spot spraying prior to planting may be required. Thistles, phalaris and olives should be monitored and controlled. Sugar gums are likely to emerge as the years progress.

*Approved volunteer activities:*

- Planting approved understory plants within mapped areas of dense trees.
- Plant shrubs or grasses next to scattered trees
- Spot spraying
- Hand weeding
- Tree guard removal

Approved plants

- |                         |                                     |
|-------------------------|-------------------------------------|
| - Acaena echinata       | - Lomandra multiflora ssp. Dura     |
| - Astroloma humifusum   | - Lomandra sororia                  |
| - Austrostipa           | - Maireana enchylaenoides           |
| - Arthropodium strictum | - Olearia ramulosa                  |
| - Bulbine bulbosa       | - Pimelea humilis                   |
| - Bursaria spinosa      | - Pultenaea largiflorens            |
| - Calostemma purpureum  | - Rhagodia parabolica               |
| - Cymbopogon ambiguous  | - Stackhousia monogyna              |
| - Cymbopogon obtectus   | - Themeda triandra                  |
| - Dianella brevicaulis  | - Vittadinia gracilis               |
| - Dianella revolute     | - Wahlenbergia gracilentia          |
| - Gonocarpus mezianus   | - Wahlenbergia stricta ssp. stricta |
| - Goodenia geniculate   |                                     |
| - Hibbertia exutiacies  |                                     |
| - Lomandra densiflora   |                                     |

*Access:* multiple opportunities across the property to participate in easy to access locations. Some sites are located further south but accessing the site from the south provides good access.

## Site 1: First dam and seed production

This site encompasses the dam and the seed production area located to the east. Extensive civil works has occurred upstream of the dam and will require ongoing maintenance of weeds. Additional planting may be required. Weed control within this site has involved removal of Bulrush which should continue as this rush can impact the effectiveness of the dam and outcompete other desirable natives.



The inclusion of lignum will add some messy habitat for smaller bird species. Hand weeding or the use of selective herbicides in the seed production area should be considered to maintain the resource. If the desire is to not maintain this, removing it could be an option but maintaining this resource is encouraged.

*Values:* Community revegetation, bird and small fauna habitat, seed resource

*Work objective:* Assist in preventing weeds from encroaching on riparian zones and maintain grass production area

*Weeds of concern:* Dog rose, boxthorn, bulrush, artichoke thistles, wild oats.

*Approved volunteer activities:*

- Hand weeding
- Brush-cutting around native vegetation around the dam and native grass enclosure (only for nominated volunteers as approved by FoG PresidentBec and must adhere to Safe Work Practices)
- Plant approved plants at the appropriate densities as approved by the Senior Ranger.

Approved plants

- Carex breviculmis
- Cheilanthes austrotenuifolia
- Cyperus vaginatus
- Dichondra repens

Access:

- This site is south of the visitor hub and a short walk from the ranger station. Using the bird trail will provide a gentle gradient, alternatively walk through paddock 2.

## Site 2: Schools revegetation 2020

This site was planted with approximately 1900 seedlings scattered across the ~8Ha site in September 2020 by three school groups and a Glenthorne Action Team event. Some weed control occurred during site prep and participants mulched around many plants. The site will require ongoing weed control and may have in-fill plantings in 2021 as part of the 2021/22 revegetation project to replace lost seedlings.

*Values:* Community schools revegetation, trails, munition sheds & planned interpretation

*Work objective:* Assist in preventing weeds from encroaching on plantings and control weeds around munition sheds.

*Weeds of concern:* Kikuyu, Mustard weed, bathurst burr, variegated thistle and other broadleaf weeds. Caltrop along Munition shed track.

*Approved volunteer activities:*

- Hand weeding
- Brush-cutting around scattered trees (only for nominated volunteers as approved by FoG President/Senior Ranger and must adhere to Safe Work Practices)
- Spread mulch around scattered trees
- Remove tree guards and transport to shed in heritage zone

Approved plants

- |                         |                                     |
|-------------------------|-------------------------------------|
| - Acaena echinata       | - Lomandra multiflora ssp. Dura     |
| - Astroloma humifusum   | - Lomandra sororia                  |
| - Austrostipa           | - Maireana enchylaenoides           |
| - Arthropodium strictum | - Olearia ramulosa                  |
| - Bulbine bulbosa       | - Pimelea humilis                   |
| - Calostemma purpureum  | - Pultenaea largiflorens            |
| - Dianella brevicaulis  | - Rhagodia parabolica               |
| - Dianella revolute     | - Stackhousia monogyna              |
| - Gonocarpus mezianus   | - Themeda triandra                  |
| - Goodenia geniculate   | - Vittadinia gracilis               |
| - Hibbertia exutiacies  | - Wahlenbergia gracilenta           |
| - Lomandra densiflora   | - Wahlenbergia stricta ssp. stricta |

Access: This site is located in the paddocks south of the Ranger Station leading up to the Munition Sheds, between the track leading to the Munition sheds and the creek line. The paddocks are reasonably flat on the western side, with an increasing slope downhill to the creek line. The site is a ~200m slightly uphill walk from the Ranger Station car park. Can be very muddy and slippery in the wetter months and directly following rainfall events.

### Site 3: Exclusion zone

This site has been planted sparsely with semi mature trees to allow a see through structure. Additional planting in this area should be limited to only ground covers to allow for maintenance slashing.

*Values:* Open space and low grass for foraging birds.

*Work objective:* Monitor for weed invasion

*Weeds of concern:* Variegated thistle, Horehound, Artichoke thistles, Caltrop, other broadleaf weeds

*Approved volunteer activities:*

- Planting of approved species only by prior arrangement
- Brush-cutting
- Spot spraying
- Other activities as discussed with Senior Ranger

Approved Plants

- Austrostipa
- Arthropodium strictum
- Bulbine bulbosa
- Calostemma purpureum
- Lomandra densiflora
- Lomandra multiflora ssp. Dura
- Lomandra sororia

Access: This site is located in the area designated as the Park Visitor Hub and only a short walk from the current ranger station.

### Site 4: Creek restoration

South of the desalination track to the main dam represents established creek restoration work. Continued efforts to maintain this section will ensure the long term success of any restoration work within the creek line. Water naturally spreads across this area before creating a channel into the main dam. The spreading of water over the surface represents what the lower section of the creek should mimic. The main works in site 4 is prevent weed invasion from woody weeds and phalaris.

*Values:* provides valuable habitat with natural regeneration of some species. Many historical volunteer hours spent to ensure the success of this area. This area needs to be conserved.

*Work objective:* Remove woody weeds and reduce weedy grasses. Encourage natural recruitment of native vegetation.

*Weeds of concern:* Juvenile olives, other woody weeds and phalaris.

*Approved volunteer activities:*

- Hand weeding, popping olives
- Cut and swab olives.
- Brush-cutting if required (only for nominated volunteers as approved by FoG President/Senior Ranger and must adhere to Safe Work Practices)
- Spot spraying phalaris in summer after brush-cutting.

Approved Plants

- Carex breviculmis
- Cheilanthes austrotenuifolia
- Cyperus vaginatus
- Dichondra repens

Access: access along War Horse drive and Munitions. Formed tracks with uneven surfaces. Approx. 800m from the ranger station. Access will be considerably easier once the visitor hub car parking is finished. Walking along the bird trail will also provide easy access.

## Site 5: Creek revegetation

Broken up into three main sections, these sites offer opportunities for creek and gully restoration through targeted weed control and revegetation. All areas should concentrate on sedges with no phragmites or bulrush planted close to the dams. These can become weedy and cause sedimentation and upstream flooding. Phragmites could be planted in the upper reaches of site 5.2 in the bowl area within MZ 3. 5.3 should be planted dense with sedges but also provides an opportunity for a large Gahnia patch to support butterflies. Discuss options with planting these areas with Sam and Bec.

Values: creek restoration opportunities where results will be seen and habitat for butterflies will encourage.

Work objectives: improve creek and drainage lines by planting sedges and riparian species to support butterfly populations.

Weeds of concern: Olives, thistles, phalaris, horehound.

Approved volunteer activities:

- A plan must be discussed prior to planting in these areas.
- approved species once a plan has been discussed with the Senior Ranger or restoration ecologist and endorsed.
- Brush-cutting and spot spraying
- Drill and fill olives
- Hand weed olives

Approved plants

| Site 5.1  | Site 5.2   | Site 5.3   |
|---|--|--|
| <ul style="list-style-type: none"> <li>- Carex breviculmis</li> <li>- Cyperus gymnocaulos</li> <li>- Gahnia sieberiana</li> </ul> | <ul style="list-style-type: none"> <li>- Eucalyptus camaldulensis ssp. Camaldulensis</li> <li>- Cyperus gymnocaulos</li> <li>- Cyperus vaginatus</li> <li>- Juncus pallidus</li> <li>- Lobelia anceps</li> <li>- Malva preissiana</li> <li>- Phragmites</li> </ul> | <ul style="list-style-type: none"> <li>- Carex breviculmis</li> <li>- Cyperus gymnocaulos</li> <li>- Gahnia sieberiana</li> <li>- Malva preissiana</li> <li>- Eucalyptus camaldulensis ssp. Camaldulensis</li> <li>- Melaleuca lanceolata</li> </ul> |

Access: 900+m from the current ranger station. Access will improve and only be 50m from the visitor carpark to 5.1. Other areas are further to walk, however access through gate 4 could be arranged once construction is complete and the weather is fine.

## Site 6: Large dam and lower dam

Plans are in place for engineering works on the large dam to improve environmental flows through the park and into the Field River system so Friends activities in this area will be adapted as the site changes. Following the creek line to the north of the dam connects to site 4, 5 and 1 and these sites may be worked on together as they are connected by the creek line and activities such as removing woody weeds and spot spraying can be achieved through all riparian areas.

Values: The dam supports a number of native fauna species including the Long-neck tortoise, several frog species, and various waterbirds. The riparian vegetation throughout the creek line contains a healthy population of habitat-providing River Red Gums. The Glenthorne Masterplan highlights this area as a point of interest for visitors, with walking trails and interpretation to enhance the visitor experience.

Work objective: To manage weeds along the riparian zone to allow the native vegetation to thrive and support native fauna populations, particularly bird life.

Weeds of concern: Olives, variegated thistle, phalaris.

*Approved volunteer activities:*

- Hand weeding
- Brush-cutting if required (only for nominated volunteers as approved by FoG President/Bec and must adhere to Safe Work Practices)
- Drill and fill olives (only for nominated volunteers with the appropriate training and approved by FoG President/Senior Ranger and must adhere to Safe Work Practices)

*Access:* Requires a moderate level of fitness and being able to walk a kilometre or so along the Loop Trail and then along the creek line on uneven terrain.

## **Site Paton: David Paton project site**

Site information and activities to be completed when David P has put forward his proposal to continue the next stage of works. Current lease allows David to monitor the site only, and in a conversation with him in mid-2020 he discussed his wish to continue revegetating the site with ground cover species. David will contact the Senior Ranger when he has a proposal for the next stage and will gain the appropriate approvals to begin work.

David has made contact with the Friends of Glenthorne and they have already assisted with the removal and disposal of tree guards from the matured plantings. Access to this site requires an ability to walk a fair distance across paddocks/uneven terrain, and climb over a fence around the site.

## **Site 7: West end of SA Water desalination pipeline**

Site 7 includes the historical revegetation along the western boundary of the property. This planting is dominated by woodlot planting and lacks mid-story species and ground covers. These areas would benefit from planting some sparse shrubs and dense grasses or herbs.

*Values:* Provides significant habitat and buffers the expressway providing an important link from the hills to the coast.

*Work Objectives:* Monitor for olives and revegetate to provide additional plant diversity.

*Weeds of concern:* Olives, boxthorn, broom, sugar gums.

*Approved volunteer activities:*

- Planting mid-story and ground covers. Plant selection needs to be approved.
- Hand weeding
- Drill and fill (only for nominated volunteers with the appropriate training and approved by FoG President/Senior Ranger and must adhere to Safe Work Practices)
- Cut and swab (only for nominated volunteers with the appropriate training and approved by FoG President/Senior Ranger and must adhere to Safe Work Practices)

*Access:* an easy walk along the boundary fire track from the ranger station but it's a long walk. Internal tracks are uneven and have significant slope on the west of the desal track.

## **Site 8: Western Gully**

This site provides an opportunity in the future to do some burning in small stages to encourage natural regeneration. It is expected the fire will stimulate seeds, however the disturbance will likely encourage a flush of broadleaf weeds which will need to be managed intensely. Planting prior to burning and creating a Redgum forest with a sedge/Gahnia understory would benefit this site. Ensure all revegetation remains outside of the fire breaks.

*Values:* provides a link of vegetation that has different diversity compared to the surrounding landscape.

*Work Objectives:* revegetate the gully to create a red gum sedge land.

*Weeds of concern:* Broom, Olives, thistles, phalaris, horehound, Caltrop

*Approved volunteer activities:*

- Planting sparse red gums
- Planting large patches of sedges. This could include Gahnia.
- Hand weeding

- Drill and fill (only for nominated volunteers with the appropriate training and approved by FoG President/Senior Ranger and must adhere to Safe Work Practices)
- Cut and swab (only for nominated volunteers with the appropriate training and approved by FoG president/Senior Ranger and must adhere to Safe Work Practices)

#### Approved plants

- Eucalyptus camaldulensis ssp. Camaldulensis
- Cyperus gymnocaulos
- Cyperus vaginatus
- Juncus pallidus
- Lobelia anceps
- Malva preissiana
- Phragmites

## Site 9: Revegetation

Four areas remain with no trees planted within them to ensure open space is kept to support a variety of species into the future. Although it is likely these spaces will become weedy, no overstory tree canopy should be planted to provide opportunities for future species relocations. These areas would benefit from adding native grasses and herbs such as themeda, lomandras, wallaby grass, Bulbine etc. Any open space created through the loss of trees should be kept as open space.

*Value:* open habitat structure for various fauna to utilise for foraging or refuge. Value add to an open grass land with native grasses.

*Work objectives:* plant only ground covers and leave as open space.

*Weeds of concern:* Olives, horehound, caltrop, thistles, boxthorn and dog rose.

*Approved volunteer activities:*

- Planting of grasses from the list provided which includes lomandas
- Spot spraying
- Hand weeding
- Direct seeding using hand broadcasting and scraping.

#### Approved plants

- Bulbine bulbosa
- Calostemma purpureum
- Dianella brevicaulis
- Dianella revolute
- Austrostipa
- Lomandra densiflora
- Lomandra multiflora ssp. Dura
- Lomandra sororia
- Stackhousia monogyna
- Themeda triandra

*Access:* best access from the south of the property.

## Site 10: Creek restoration

Two locations in the southern creek line have extensive sedge populations and one listed as vulnerable within the AMLR (*Schoenoplectus pungens*). Hand weeding, broad leaf selective herbicides and brush-cutting can allow these populations to increase and become thicker. Brush-cutting the phalaris with follow up spot spraying will reduce competition for the sedges. Additional planting of Carex and sedges can complement the work, however allowing the sedges to expand naturally is encouraged.

*Values:* important sedge species listed as vulnerable with in the AMLR.

*Work objectives:* encourage sedges to expand within the creek line and restore flow across the creek rather than narrow channels.

*Weeds of concern:* Thistles and Phalaris, Willows, Couch Grass.

*Approved volunteer activities:*

- Brush-cutting
- Spot spraying using broadleaf selective
- Spot spraying when conditions are dry on phalaris.
- Hand weeding
- Planting sedges to disperse water and join patches of sedges together. Do not plant phragmites or bulrush.

*Approved plants*

- Carex breviculmis
- Cyperus gymnocaulos
- Cyperus vaginatus
- Malva preissiana
- Muehlenbeckia florulenta
- Schoenoplectus pungens

*Access:* Best access from the southern gates, following fire tracks.

## Site 11: Pasture grass

These three sites are valuable grass structure and should be maintained as such. The two sites on the east are dominated by pasture grass which is positive as there is less broadleaf weeds to compete with. These areas should be maintained as pasture grass with scattered trees. The inclusion of dense Calitris pines will add some structure but the site will not require any additional planting. Planting in the gully between these two sites is encouraged and the remove of large olives a priority.

*Values:* Important open space and rare spear grass in the southern section.

*Work objectives:* improve species diversity in the gully and maintain areas as novel grasslands.

*Weeds of concern:* Olives, Phalaris (in spear grass area), Caltrop, Horehound

*Approved volunteer activities:*

- Planting in the gully with an approved plan
- Hand weeding

*Approved plants*

- Eucalyptus camaldulensis ssp. Camaldulensis
- Cyperus gymnocaulos
- Cyperus vaginatus
- Juncus pallidus
- Lobelia anceps
- Malva preissiana

*Access:* best to access from the southern part of the park or when conditions are dry, driving on established fire tracks.

## Site 12: Rare Spear grass and olive grove

This site is where the rare spear grass, Austrostipa gibbosa has been identified. It is likely more will emerge between the olive grove, however removing the olives will be done in a staged approach with some sparse planting to occur prior to their removal. No work should be carried out in this area without consulting with the Senior Ranger and the restoration ecologist.

*Values:* significant vegetation to be conserved and expanded where possible.

*Work Objectives:* Conserve the population of spear grass.

*Weeds of concern:* Olives, Phalaris, Caltrop, Horehound, boxthorn, Artichoke thistles, variegated thistles.

*Approved volunteer activities:*

- Hand weeding juvenile olives
- Spot spraying thistles and broadleaf weeds using selective herbicide
- Hand weed other woody weeds
- Limited seed collection – NEEDS APPROVAL

Access: southern grates and on fire tracks.

## **Future potential projects as raised by the Friends**

Ideas to be developed with the support of the Friends of Glenthorne President and committee, in consultation with the Senior Ranger in order to apply for suitable grants.

- Native seed production site
- bird hides for the large dam area
- ‘Stage 2’ heritage works not currently funded under Glenthorne project budget e.g. glasshouse restoration
- partnerships with school/scout groups etc.
- windmill
- blacksmith shop
- butterfly garden
- heritage garden
- old farm machinery
- shearing shed museum

## **Training wish list**

Some members have received the following training previously, but they have many new members who are limited to performing activities not requiring training.

- Safe chemical handling
- Olive control methods: basal bark and drill & fill – requires Safe Chemical Handling training
- Bush care
- Brushcutter use and maintenance
- First Aid – will be provided to members requiring this training, and updated as needed
- Chainsaw (currently not an approved activity)

## **Risk Management**

Personal Protective equipment (PPE): Sturdy shoes, hat, gloves, long pants and sleeves, other PPE as directed by SWP’s.

Other safety considerations (please refer to Bush Care Hazard ID checklist and other VSF forms for comprehensive risk analysis):

- Uneven surface and potential for holes in ground
- Covid 19 requirements e.g. social distancing and personal hygiene
- Work must not be undertaken on days of ‘Extreme’ or higher fire danger (as forecast by the Bureau of Meteorology). Please note that it is your responsibility to check the fire danger ratings during the Fire Danger Season and manage/cancel work accordingly.





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