

Bullan Mura Conservation Management Plan 2016

Table of Contents

• Draft site management plan	Page 1
• Appendix A ACTMAPi arial photo/cadastral map Block 2 Section 128	Page 14
• Appendix B Yarralumla Block 2 Section 128, Woodland Survey 31 December 2014,	Page 15
• Appendix C Updated 2014-2015 project plan, budget, timeline and report on management actions	Page 18
• Appendix D 31-12-2014 Site visit report	Page 22
• Appendix E 1 March 2015 community engagement activity – weed control work-party	Page 26
• Appendix F Before and After photos of Block 2 Section 128	Page 34
• Appendix G Weed control and follow-up activities, includes works plan and risk assessment	Page 36
• Appendix H	Page 58

Authors: Wally Bell (Buru Ngunawal Aboriginal Corporation); James Pittock (Friends of Grasslands); Sarah Sharp (Friends of Grasslands); Karen Williams (Molonglo Catchment Group). With grateful thanks to Nicki Taws (Greening Australia) for planning and planting assistance and technical advice.

Background

This site management plan is an outcome of the collaborative project “*Enhancing the biodiversity value of Block 2 Section 128 Yarralumla - building Ngunawal engagement in natural resource management*”, part of the 2014 – 2015 ACT Environment grant program. [Updated project plan and budget is attached in Appendix C]

In relation to environmental and landscape elements of Block 2 Section 128 Yarralumla, the aim of the project is to improve the biodiversity value and ecological resilience while enhancing the cultural landscape context (recognising the overlapping Aboriginal, historical and present-day aspects) of a portion of threatened inner city remnant of native woodland habitat, set close to the shoreline of Lake Burley Griffin. With the agreement of National Capital Authority Assets Manager, the adjacent Block 10 Section 128 will be managed in a complementary manner (see map P.3).

With cultural guidance of the Ngunawal community this site management plan will provide a strategy for extending and encouraging broader community involvement in rehabilitation and restoration of remnant woodland habitat in a sustainable way.

The primary objectives of the project are to undertake management actions to improve biodiversity:

1. Protect the threatened understorey of remnant native woodland and a threatened population of nationally endangered Button Wrinklewort that are currently found on this land.
2. Sustain habitat connectivity for birds, animals and plant species between the eastern and western ends of Stirling Park and Lake Burley Griffin.
3. Improve water catchment management in relation to historically documented, remnant quagmire and creek courses which flow across the block from Capital Hill and Stirling Park, directly into Lake Burley Griffin.

The site management plan will address the lack of significant active on-ground management in the past of the woodland in Block 2 Section 128 Yarralumla, complementing restoration work on Stirling Park (NCA managed land), to the west of Block 2. The plan focuses on a combination of rubbish removal, weed control, appropriate replanting of endemic indigenous plants to enhance catchment management, while encouraging collaborative community involvement in the long-term management of the threatened woodland habitat. The area in the southern part of Block 2 which is dominated by grassland, including the declared weed, Chilean Needlegrass *Nassella neesiana*, will continue to be managed for fire mitigation.

Since work began on this site an important Women’s area was discovered on site. In recognition of the significance of this area and generally of the area for Indigenous culture the name ‘Bullan Mura’ (Women’s Pathway) has been assigned, and it is recommended that this name be formally endorsed to refer to Block 2 Section 128 Yarralumla.

Description

Block 2 Section 128 Yarralumla (Bullan Mura) is 2.35 ha, between Alexandrina Drive and Forster Crescent, the Chinese Embassy and Stirling Park (managed by National Capital Authority). Bullan Mura contains woodland, primarily native, but with a moderate to high cover of introduced species in the mid and lower strata. There has been damage as a result of disturbance during the construction of the Chinese Embassy extension. The area is not used for recreation or access, beyond informal use of the track that cuts across the block.

Current ACT Territory Plan designation: Urban Open Space.

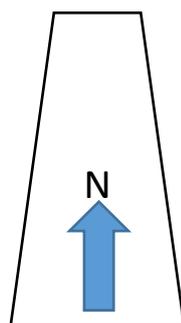
Coordinates of block corners:

Lat.-35.3012
Lon.149.1193

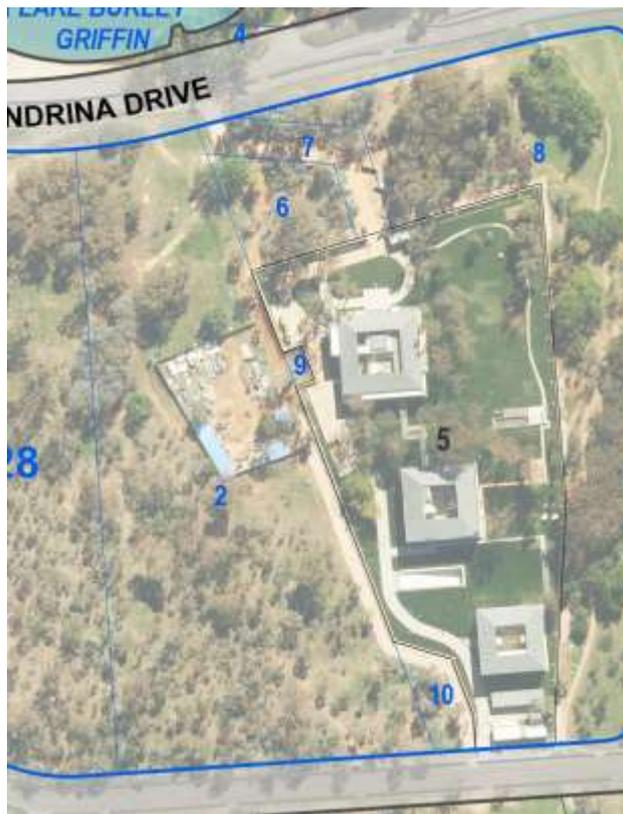
Lat.-35.3011
Lon.149.1198

Lat.-35.3035 Lon.149.1195
35°18’12.4069”S

Lat.-35.3033 Lon.149.1210
35°18’12.0469”S



Land use



The almost triangular block is managed by City Services in the ACT Government. Contiguous with Block 2 is Block 10, Section 128, which is managed by National Capital Authority. In the more recent past there has been some fire hazard reduction work, comprising mainly the cutting of mid-storey vegetation (with subsequent regrowth) within 40 m of the Chinese Embassy and mowing of the area fronting onto Alexandrina Drive and adjacent to the Chinese Embassy

(See Appendix A - ACTMAPi Block 2 Section 128).

Part of the site was also used during the construction of the Chinese Embassy extension as a construction area with subsequent cleaning up including scraping off topsoil (see fenced area in adjacent aerial map).

Values

The project and thus the site management plan recognises the strong cultural significance of the natural environment to the Ngunawal community while reflecting key elements of the ACT Government's vision for a contemporary 'Bush Capital' and the government's responsibilities to protect areas containing threatened species and communities.

Integrating social, cultural and environmental perspectives benefits country and ACT Government sustainability outcomes:

- Natural 'bushland' heritage contrasts and buffers formal gardens of Casey House and neighbouring embassy developments.
- Community involvement in restoring woodlands and waterways provides an inclusive Territory representation in the juxtaposition of Ngunawal, ACT, Commonwealth and International aspects of an otherwise exclusive urban precinct.

Connectivity

Bullan Mura is adjacent to and contiguous with woodland on Stirling Park. It provides a link between Stirling Park and State Circle Woodland to the south-east.

Rehabilitation and restoration work will help strengthen the resilience of the connective corridor between Lake Burley Griffin and Stirling Park, reducing potential weed introduction pathways and creating a more effective urban open space edge with which to buffer encroaching embassy development and public recreational activity.

Ecological communities

An aerial photo taken in the 1940s (page 9) indicates remnant woodland in the southwest corner of the block. Since then the area of woodland has expanded (see P. 3). This area of woodland forms part of the edge of tree line extending along Stirling Park following the middle to upper contours to Capital Hill. The existing woodland contains remnant Yellow Box – Blakely’s Red Gum Grassy woodland. A survey conducted on 31 December 2014 identified 46 native species, 29 of which are forbs (i.e., herbaceous species not including grasses), and, with 15 species deemed to be ‘important’ under EPBC Act criteria for the community, 2 regionally rare species and one threatened species, it easily meets the criteria as the critically endangered community, White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland and Derived Grassland.

The northern, lower slopes of the block are highly modified, having been subject to significant soil disturbance and mounding, planting of non-endemic native trees and exotic trees. The grassland is dominated by Chilean Needlegrass, a declared weed species, with very few native herbaceous species except some speargrasses.

Threatened species

Restoration work will target the understorey of threatened remnant native woodland and a threatened population of endangered Button Wrinklewort *Rutidosia leptorhynchoides*. There were 61 plants located during surveys in December 2014. Since then several additional isolated plants or small patches have been found. It is estimated, therefore, that the population is likely to be in the order of 80 plants. This population forms part of a one of the largest known populations, that occurs

across Stirling Ridge, including within NCA land.



Button Wrinklewort is listed as an endangered species in the ACT and NSW and threatened in Victoria. The species was once widespread in south eastern NSW and western plains of Victoria. In March 2011 parts of Bullan Mura were registered as Button Wrinklewort Habitat, together with other sections of Stirling Park (Yarralumla) and the Military Training area at Majura, the two largest populations (and representing the vast majority of the total plants nationally) of Button Wrinklewort in the ACT. The large size of the population is vital to the long-term viability of the species in the ACT.

Button Wrinklewort

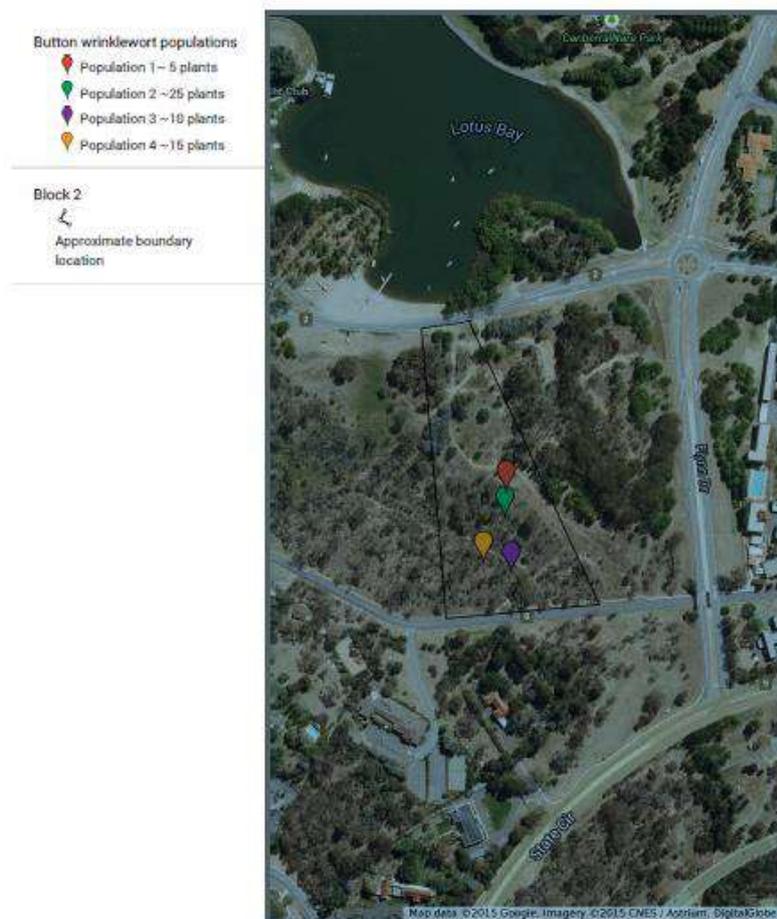
The natural habitat of Button Wrinklewort is primarily Natural Temperate Grassland but it also occurs in the fringe of Yellow Box-Red Gum Grassy Woodland (as it does at Stirling Park), characterised as a ground layer of various native grasses and other forbs, extending into the native grassland nearby. Soils are usually shallow stony red-brown clay loams. Occasionally, Apple Box is also present.

Button Wrinklewort cannot compete amongst the tall, sward-forming grasses. The plant is found in shallower soils that cannot support rapid growing plants that might shade it out or in deeper soils where vegetation is kept short through regular disturbance. It may also be found growing sparsely under trees in woodlands.

In the Yarralumla area the Button Wrinklewort occupies open areas of Yellow Box – Red Gum Grassy Woodland, particularly areas previously disturbed and patches with skeletal soils. Research of the plant’s distribution identified Chilean Needlegrass as a serious threat to the Button Wrinklewort population (Heritage Decision about Registration of Button Wrinklewort Habitat Notice 2011 – p5). Weed control measures have been taken by National Capital Authority and Friends of Grasslands at

the adjacent Stirling Park site, and these need to be continued.

Yarralumla Block 2 s128



Bullan Mura also contains mature eucalypt trees with hollows that are rare in central Canberra and are likely to provide significant roosting and nesting habitat for a range of wildlife. Stirling Ridge, including Bullan Mura, has not been subject to a rigorous wildlife survey. A bird list prepared by local birdwatchers (including Alan Cowan, COG) indicates that a diverse range of woodland birds use the area. [But threatened bird species have not been recorded as yet].

[The adjacent aerial map is from the ACT Heritage registration documentation -11 March 2011] Aerial photograph is from ACTMAPi – sites added on advice of James Pittock and Mel Hillery.

Cultural heritage

Stirling Park is recognised as Ngunawal Land and as a meeting place for a number of Aboriginal groups including the Walgalu, Monero, Yuin & Narigu.

- The area is part of a traditional Aboriginal pathway connecting Black Mountain to the former Capital Hill.
- The area was utilised as a ceremonial and camping ground and continuity endures to this day.
- Evidence includes scarred trees, stone artefacts and stone arrangements.
- The creek line adjacent to Capital Hill was used by Aboriginal women as a birthing place.
- Capital Hill was used as a major meeting place as the pathways from Tuggeranong, Pialligo and Gungahlin diverged at a central point being Capital Hill.
- There are numerous minor pathways along waterways (Ginninderra Creek, Sullivans Creek) and ridgelines (Mt Majura, Mt Ainslie) that lead to this location.

Buru Ngunawal Aboriginal Corporation (BNAC) states:

“Our view is that the social and cultural values for the area hold high importance to us. I know it is not common practice for organisations and Government Departments to accept any information that is not tangible and therefore cannot be substantiated. But it must be remembered that the Aboriginal history is one that was passed from generation to generation orally and by the use of rock art that is in isolated areas and which may never come to light. A little understanding, faith and respect for our cultural values can only be beneficial for all concerned.

We do not recommend that awareness of Indigenous sites be made publicly available due to the sensitive nature of our cultural places, beliefs and values, and perhaps, prevention of vandalism of known Indigenous sites.” (Wally Bell, pers. comm. for this site plan).

The area of Capital Hill and Stirling Park of which Bullan Mura is a part is significant in the Ngunawal story of territory and country, for its environmental and socio-cultural values. Bullan Mura is of particular interest to the family of the now deceased Ngunawal Elder, Don Bell. Bullan Mura is the site of a tributary of the deep creek that once ran from the Red Hill ridge across the base of Capital Hill to an area behind the Hotel Canberra, where it flowed into the Molonglo River. As he travelled about the region as a child with his family, the late Don Bell would quite often camp in the area of the creek where it ran past the site of the Prime Minister's lodge (ca.1930/40s).

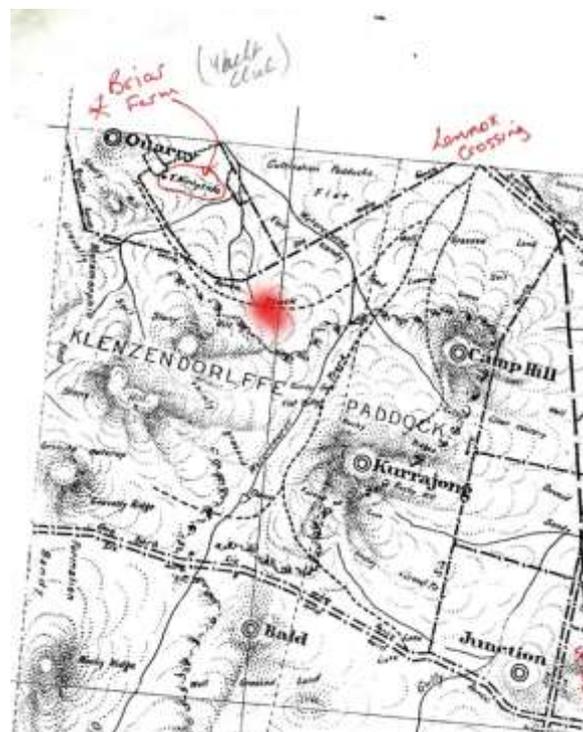
The creeks and quagmire in the area of Bullan Mura and its surrounds were also significant in the lives of the people living in the various workers' camps and settlements of the Westlake area during the 1920s to 1950s. The creeks were later filled with soil and rock from the construction of State Circle, so are not generally visible on the surface. What were then known as Kurrajong Hill and Camp Hill became known as Capital Hill.

A present-day bike path follows the line of part of the large, deep creek, which flowed from Red Hill across the western base of Capital Hill to the Molonglo River and along land now under the Chinese Embassy and extension, and Flynn Drive. The presence of water tolerant plants indicate water still follows contours leading into an old water course on Bullan Mura. Springs are known to have been prevalent in the areas of the South African High Commission on Perth Avenue and surrounding Bullan Mura in historical times and present day (Ann Gugler, personal communication December 2014).

The “the long quagmire” (referenced in 27 July Sanitation Report), a part of which touches the north-west corner of Bullan Mura, continues to take ground water from Block 3 and surface run-off from Stirling Ridge. The quagmire is currently dry but becomes boggy after extended rain.



1940s aerial photograph showing old creek lines, with part of Alexandrina Drive, Forster Crescent and block 2 section 128 (Bullan Mura) approximately outlined and numbered in red. (Details in A Story of Capital Hill by Ann Gugler (Canberra, 2009). Note the small number of mature eucalypts that were present in the 1940s, compared to the current cover and density of trees in the present day see map (P. 3)



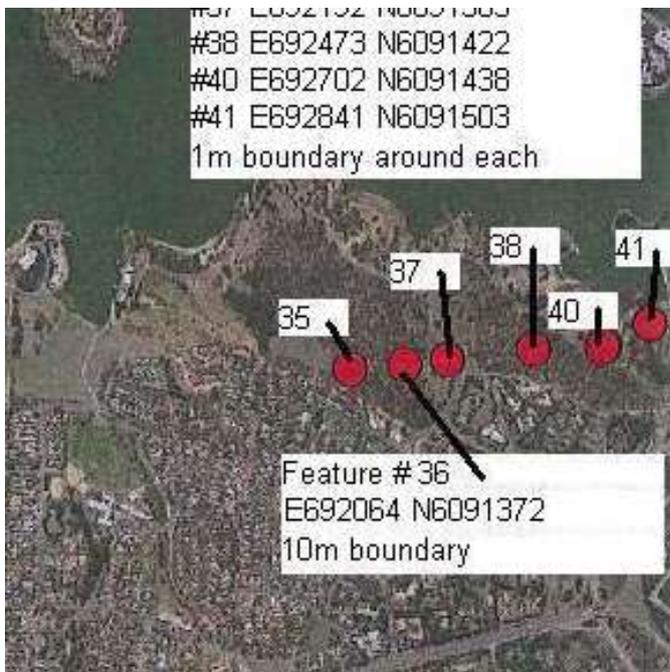
Approximate location of Block 2 Section 128(Bullan Mura) on Territory Feature Map 1913/15 (marked in red). The map is based on Moriarty survey 1912) The area of Kurrajong Hill and Camp Hill is called Capital Hill in the present day.



Bullan Mura is the location of remnant dump site associated with No3 Sewer Camp. The dump was used to divert water from the quagmire. A broken tile and parts of a child's doll - remains of a dump 'burn-up', and pieces of ceramic bowls and brown linoleum were found by Ann Gugler at the dump site and in the quagmire in recent years (Ann Gugler, personal communication, 2014).

Part of a leg and an arm of the doll found at the dump site on Bullan Mura – photo courtesy of Ann Gugler.

Bullan Mura is also the location of one of five access chambers in close proximity to the ventilator in Stirling Park. In 2011, under the ACT *Heritage Act 2004*, part of Block 2 Section 128 (Bullan Mura) was listed in the registration of the heritage place: Canberra's Main Outfall Sewer, Cotter Road, Weston; Lady Denman Drive, Weston Creek; Dunrossil Drive, Yarralumla; and Coronation Drive, Yarralumla.



Canberra's Main Outfall Sewer – Site feature locations [Heritage Registration Documentation Notifiable instrument NI2011-496]



(feature # 40) GDA 94 E692702 N6091438 A 1 metre boundary surrounds this GDA ref. (as marked, in aerial map, above)

Forty-five concrete chambers exist along the outfall sewer. Five of these are included in this registration as representative examples, located adjacent to the Stirling Park ventilator shaft, and within Stirling Park.

The chambers are generally cylindrical in form with an offset conical top to which is attached a concrete ring containing a manhole cover. The offset top on the chamber allows a ladder to run straight down one side from the manhole opening. Some manholes in the Main Interceptor section have drop pipes with a sweeping bend at the bottom cast in to the side opposite the ladder to allow local sewerage reticulation to be connected to the tunnel. Provision was also made closer to the surface on most manholes for the future connection of ventilators.

At certain points in the sewer line a different form of manhole chamber has been employed containing a control device known as a penstock. These chambers are cylindrical the full height and have a circular concrete top of 7 ft [2.1 m] diameter, compared with the 3ft 6in that most chambers are reduced to at ground level.

The original covers have been replaced with modern tight fitting 'gatic' type covers to avoid vandalism and exclude stormwater.

Guidelines: On-ground works with the potential to impact significant fabric (and/or heritage values) shall be guided by appropriate gender specific cultural assessment and conservation policies, relevant to the area or component (Statement of Heritage Effects – SHE).

Visitor and community awareness

The area is generally not visited or used at all. There is no significant active on-ground management of Bullan Mura. According to ACT City Services rangers there are regular inspections and clearance of vegetation under the powerlines, and the northern end of the block is mown from time to time. Several years ago clearance of eucalypts and other species adjacent to the Chinese Embassy was undertaken for fire mitigation. Grass mowing is undertaken in the northern portion of the site, but minimal elsewhere; a small kangaroo population has kept growth to within that which is required for fire mitigation.

Development and promotion of a spatial plan and work program would aid in generating visitor and community engagement.

Building on existing collaborative relationships by encouraging custodianship and a stronger sense of place will increase Ngunawal capabilities and, through them, those of the broader community to actively manage the natural resources of Bullan Mura. The site management plan will complement the restorative work achieved by Friends of Grasslands on Stirling Park and will provide support to further their work into the adjacent Bullan Mura by encouraging other local community groups to become involved.

Key stakeholders

- ACT Government:
 - City Services (general management)
 - Territory and Municipal Services Fire Management Unit (advising on fire mitigation requirements) and
 - Conservation, Planning and Research (threatened biota).
- Molonglo Catchment Group (in partnership with Buru Ngunawal Aboriginal Corporation and Thunderstone Aboriginal Cultural & Land Management Services; strengthening partnerships generally between stakeholders in Yarralumla/Lake Burley Griffin area of the Molonglo Catchment by enhancing community capacity to address NRM issues)
- Buru Ngunawal Aboriginal Corporation and Thunderstone Aboriginal Cultural & Land Management Services (local traditional custodians/carers, Ngunawal cultural heritage management with current involvement in natural resource management of Stirling Park)
- National Capital Authority (neighbour and complementary management arrangements)
- Friends of Grasslands (volunteers for management of the adjacent area, participating group in the MCG grant)
- Save Stirling Park community group (continuing support from initial meeting, but has withdrawn active participation due to time constraints).
- Yarralumla Residents Association (neighbour and participating group in MCG grant)
- Chinese Embassy (neighbour)
- Other stakeholders may include:
 - Southern Cross Club (neighbour)
 - Commonwealth Club (neighbour)
 - Canberra Yacht Club (neighbour)

Visions and goals

Within Bullan Mura (north of the no-mow bollards in Bullan Mura):

- To return this area to an attractive, ecologically diverse woodland that supports a range of native fauna and has a regenerating population of Button Wrinklewort and other native herbaceous species, is free of woody weeds and has a low introduced herbaceous component, and is a reduced fire fuel hazard.
- To manage this area in conjunction and sympathy with the adjoining Stirling Park woodland.
- To seek recognition of the multiple values (cultural, ecological, community) and to gain long-term protection of this area.
- To improve water catchment management in relation to surface and groundwater flows into Lake Burley Griffin from historically documented remnant quagmire and creek courses (that flow across portions of the block).



ACTMAPi Aerial map 2016 showing perimeter boundary (blue) and 40 metre Fire Management Inner Asset Protection Zone and location of "No-Mow" bollards (red).

Management objectives

Ecological

Short-term (2014 – 2016)

- Increase the native composition and structural diversity in the site
- Enhance the areas that are disturbed
- Remove woody weeds
- Eliminate or reduce and contain particular, aggressive herbaceous weeds
- Remove dumped rubbish (being aware of historical dump site)
- Maintain or reduce the current bushfire fuel hazard level

Long-term (to end of 2016)

- Retain the natural values
- Continue monitoring and remove invading or regenerating woody and herbaceous weeds
- Ensure habitat is not disturbed when undertaking fire fuel management.

Indigenous

An important function that must be implemented whilst undertaking these works is the proper management for the protection and conservation of the Ngunawal cultural heritage that is present within the project area.

- As the site contains remnant indications of Aboriginal occupation through the stone arrangements associated with a Women's cultural site, and which are found elsewhere throughout the landscape within Stirling Ridge, it would be considered appropriate that all efforts are made to minimise any impacts that may disturb any of these sites. This would be done through assessment of the area to be impacted and whether these impacts are near any known sites.
- Many of the sites are of a spiritual significance, are gender specific, will have little if any tactile archaeological evidence attached, and would require minimal impact in order to maintain that spiritual significance.

An assessment of the site is a requirement prior to works commencing.

Community, partners, friends and neighbours

- Strengthen custodianship and community sense of place by building on existing social networks between Ngunawal and the broader community.
- Promote a narrative by interpreting changes that have occurred in natural and cultural landscape on and around Bullan Mura. Bullan Mura buffers the edge of Stirling Park which provides a window through the layers of history hidden under the planned and manicured urban landscape of Canberra.
- Invite the embassies of other nations that surround the bushland of Bullan Mura and Stirling Park to come and learn about Ngunawal culture and the spirituality of the connection that Aboriginal people have with the land. Local Aboriginal values would become a very visible presence in the federal capital and amongst international Indigenous communities.
- Increase awareness and understanding of neighbours of the ecological values of the area and involvement in management (e.g. rubbish removal and weeding).

Governance

- Increase awareness of government organisations that manage the site to the values and requirements to retain those values.
- Encourage interagency co-operation between ACT City Parks and NCA for more effective fire and weed management on Bullan Mura and Stirling Park, across Territory and Commonwealth boundaries.

Management issues

Documentation

- Lack of information about the ecological attributes of the site, including birds and other fauna and herbaceous flora that may only be present for short periods, e.g. in spring
- Lack of information about the past Indigenous and post-settlement land use of the site

Loss of ecological values

- Invasion of weeds
- Loss of mid- and ground storey native species
- Modification of habitat for native fauna and reduction in fauna diversity
- Fragmentation of the area

Pest plants and other weeds

- Woody weeds (to be removed)
- St John's Wort (reduce and contain)
- Chilean Needlegrass (reduce and contain)
- African Lovegrass and Serrated Tussock (to be eliminated; risk of reinvasion via mowing and slashing equipment along the roads and IAPZ)
- Blackberry (to be eliminated)
- These weeds will continuously re-invade the site, and therefore long-term maintenance will be required.

Pest animals

- Rabbits and hares
- Indian Mynas
- Bees, cats and foxes are no doubt present but control is impractical

Biomass management and fire fuel mitigation

- Loss of habitat values to reduce fuel due to direct disturbance as well as facilitating weed reinvasion, especially along the roads and IAPZ

Soil disturbance and compaction

- Dumping of soil and rubbish (Being aware of historical dump site)
- Scraping following use of site during construction of Chinese Embassy
- Disturbance and modification of the area in the establishment and maintenance of the powerlines

Community awareness and engagement

- Lack of awareness of the cultural and ecological values of the area and involvement by neighbours.

Management actions

Documentation

- Identify the condition and habitat values of the woodland (vegetation, birds, other fauna).
- Survey for benchmark values (Summer 2014/5).
- Count and GPS Button Wrinklewort population (Summer 2015).
- Map and identify major weed infestations.
- Document pre-disturbance landform (before and after monitoring and evaluation. Special note of potential archaeological value: should be taken of the occurrences of species such as honeysuckle and other plants with potential historical association. Also note location of historical bricks, glass (broken bottles can date an historical site, glass sherds were used by local Aboriginal people as cutting tools); rock arrangements (The rocks, in particular, could be historical garden beds or part of historical construction camp drainage systems or may have Aboriginal cultural origins.

Pest plants and other weeds

- Remove woody weeds and open up the canopy.
- Replant with similar native species that do not increase bushfire hazard to enhance the natural habitat and provide alternative habitat to the removed woody weeds.
- Planting should be well-considered and restrained for the following reasons:
 - a) in the Inner Asset Protection Zone (firebreak) part of s128, TAMS will continually slash and disturb this area;
 - b) previous experience in other parts of Stirling Park has been that if undertaken outside the optimal times (April/May or Aug/Sept) or in sub-optimal seasons, plantings may require additional watering; and
 - c) there are so many weeds on the site that eliminating those first will give the natives a chance to recolonise themselves.
- The focus should be on a smaller number of shrubs and herbaceous plants to go on the cleared lands to the south of the site to reinstate the woodland structure and diversity. Determine species of particular cultural significance (e.g. food plants) to the Ngunawal community.
- Remove weeds surrounding and within the Button Wrinklewort population
- On-ground collaboration with NCA and Friends of Grasslands will ensure cooperative management is undertaken across Stirling Ridge.

Pest animals

- Identify if pest animals are impacting the site (e.g. rabbits, feral bees).
- Develop approaches to deal with pest animals if warranted.

Biomass management and fire fuel mitigation

- Removing woody weeds on site will significantly reduce fire hazard to neighbouring properties.

Soil disturbance and compaction

- Raise awareness of neighbours to reduce dumping.
- Consider how to rehabilitate scraped area: e.g. planting site for herbaceous native species.

Community awareness and engagement

- Involve neighbours in work parties and discussion of outcomes.
- Facilitate on-going support for future work. The project draws and builds on experience, knowledge and momentum gained from rehabilitation and restoration work achieved on Stirling Park. The proposed work relies on a collaborative planning process to implement small scale, sustainable on-ground activities. Community volunteer input will need to be underpinned by skilled and expert local knowledge from various partner groups.
- Field day to promote awareness of the environmental and cultural values of the Block2 Section 128 as it relates to Ngunawal culture and the surrounding natural and planned landscapes of Canberra.

Contact list of stakeholders

Friends of Grasslands

- Sarah Sharp, 0402 576 412, sarah.sharp@fog.org.au
- NCA site project officer - Jamie Pittock, 0407 265 131, pittockj@yahoo.com

Molonglo Catchment Group

- President - Karen Williams 6299 2409, karen.williams@molonglocatchment.org.au
- CEO – Megan Dixon, phone 6299 2119 (bh) CEO@molonglocatchment.org.au

Yarralumla Residents Association

- David Harvey harvey@asianfinancegroup.com

Buru Ngunawal Aboriginal Corporation -

- Wally Bell (M):0419 425 347 walbell@bigpond.net.au
- Karen Denny phone 6226 1205 (h) kazdenny@hotmail.com.au

Greening Australia (Australia Capital Region)

- Nikki Taws NTaws@greeningaustralia.org.au

ACT Government

- Fire Management - Malcolm Gale malcolm.gale@act.gov.au
- TAMS submitting a works plan and risk assessment to carry out volunteer on- ground works on ACT Government land - Tristan Adrian tristan.adrian@act.gov.au
- ACT Parks and Conservation Volunteer Coordinator (copy Works Plan here when submitting to TAMS) - Phil Selmes Philip.Selmes@act.gov.au
- City Services – Permit for holding field day event on ACT public land
Online application for permit
<https://form.act.gov.au/smartforms/landing.htm?formCode=1030>
Email: - publiclanduse@act.gov.au and/or communityprograms@act.gov.au
- ACT Heritage Unit –Euroka Gilbert euroka.gilbert@act.gov.au (Aboriginal Liaison Officer).
- ACT Environment –Mardie Kearns mardie.kearns@act.gov.au & Darren Chong darren.chong@act.gov.au (Aboriginal Liaison Officer)

National Capital Authority

- Peter Beutel, (Asset Manager), peter.beutel@natcap.gov.au

ACTEW

- Christopher Dare (Manager Environment, Quality and Systems ActewAGL), Christopher.Dare@actewagl.com.au

Appendix A

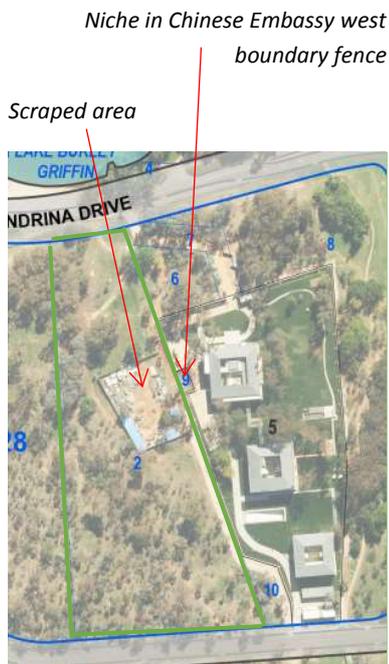
ACTMAPi image of location

Block 2 Section 128 Yarralumla (Bullan Mura) and surrounds showing block boundary (green line,) contours, drainage lines (red arrows) and remnant woodland and general location of quagmire.

Orange line delineates area at north of the block for management by mowing.

Yellow dashed line is the line of ecological change. Northern end of niche in the Chinese Embassy western boundary fence is the marker for the line of ecological change.

ACT Government ACTMAPi November 2014



Detailed views



Appendix B

Yarralumla Block 2 Section 128, Woodland Survey 31 December 2014, Sarah Sharp and Jamie Pittock

	Number of species
Native species	46
Non-grass u'storey sp (excluding trees, shrubs > 2m, grasses)	29
Important species (I)	15
Rare species (R):	2
Threatened species (T)	1
Exotic or non-local species	24
Declared pest species (D)	9

Native species

Y: present; I: Important Box-Gum Woodland species; R: rare

Species	Synonym	Common Name	Life-form	Present
<i>Aristida ramosa</i>		Purple Wire Grass	Grass	Y
<i>Austrostipa bigeniculata</i>	<i>Stipa bigeniculata</i>	Kneed Speargrass	Grass	Y
<i>Austrostipa scabra</i> subsp. <i>falcata</i>	<i>Stipa falcata</i>	Sickle Speargrass	Grass	Y
<i>Bothriochloa macra</i>	<i>Bothriochloa biloba</i>	Redleg Grass	Grass	Y
<i>Cymbopogon refractus</i>		Barbed-Wire Grass	Grass	Y
<i>Anthusachne scaber</i>	<i>Elymus scaber</i> var. <i>scaber</i>	Common Wheat Grass	Grass	Y
<i>Microlaena stipoides</i> var. <i>stipoides</i>		Weeping Grass	Grass	Y
<i>Panicum effusum</i>		Hairy Panic Grass	Grass	Y
<i>Poa sieberiana</i>		A Snowgrass	Grass	Y
<i>Rytidosperma</i> spp.	<i>Austrodanthonia</i> spp.	Wallaby Grasses	Grass	Y
<i>Themeda triandra</i>	<i>Themeda australis</i>	Kangaroo Grass	Grass	I
<i>Acaena ovina</i>	<i>Acaena agnipila</i>	Sheep's Burr	Herb	Y
<i>Asperula conferta</i>		Common Woodruff	Herb	I
<i>Calotis lappulacea</i>		Yellow Burr Daisy	Herb	IR
<i>Chrysocephalum apiculatum</i>		Common Everlasting	Herb	I
<i>Chrysocephalum semipapposum</i>		Clustered Everlasting	Herb	I
<i>Convolvulus angustissimus</i> subsp. <i>angustissimus</i>	<i>Convolvulus erubescens</i>	Pink Bindweed	Herb	Y
<i>Dianella longifolia</i> var. <i>longifolia</i>		Smooth Flax Lily	Herb	IR
<i>Euchiton involucratus</i>	<i>Gnaphalium involucratum</i>	Star Cudweed	Herb	Y
<i>Geranium solanderi</i> var. <i>solanderi</i>		Native Geranium	Herb	Y
<i>Glycine tabacina</i>		Variable Glycine	Herb	I
<i>Goodenia hederacea</i> subsp. <i>hederacea</i>		Ivy Goodenia	Herb	I
<i>Goodenia pinnatifida</i>		Scrambled Eggs	Herb	I
<i>Lomandra filiformis</i> subsp. <i>filiformis</i>		Wattle Matrush	Herb	Y
<i>Lomandra multiflora</i> subsp. <i>multiflora</i>		Many-flowered Matrush	Herb	Y
<i>Oxalis perennans</i>		Grassland Woodsorrel	Herb	Y

Species	Synonym	Common Name	Life-form	Present
<i>Plantago varia</i>		Variable Plantain	Herb	I
<i>Rutidosis leptorhynchoides</i>		Button Wrinklewort	Herb	T
<i>Scleranthus biflorus</i>		Twin-flower Knawel	Herb	I
<i>Thysanotus tuberosus</i> subsp. <i>tuberosus</i>		Common Fringe Lily	Herb	I
<i>Tricoryne elatior</i>		Yellow Rush Lily	Herb	I
<i>Vittadinia cuneata</i> var. <i>cuneata</i>		Fuzzy New Holland Daisy	Herb	Y
<i>Vittadinia muelleri</i>		Narrow-leaved New Holland Daisy	Herb	Y
<i>Wahlenbergia communis</i>		Tufted Bluebell	Herb	Y
<i>Wahlenbergia luteola</i>		Yellowish Bluebell	Herb	Y
<i>Xerochrysum viscosum</i>	<i>Helichrysum viscosum</i>	Sticky Everlasting	Herb	Y
<i>Juncus sp</i>		Australian Rush	Rush	Y
<i>Cheilanthes austrotenuifolia</i>		Rock Fern	Fern	Y
<i>Cassinia longifolia</i>		Shiny Cassinia	Shrub	Y
<i>Hibbertia obtusifolia</i>		Hoary Guinea-flower	Subshrub	I
<i>Acacia implexa</i>		Hickory Wattle	Tree	Y
<i>Acacia mearnsii</i>		Black Wattle	Tree	Y
<i>Eucalyptus blakelyi</i>		Blakely's Red Gum	Tree	Y
<i>Eucalyptus bridgesiana</i>		Apple Box	Tree	Y
<i>Eucalyptus melliodora</i>		Yellow Box	Tree	Y
<i>Exocarpos cupressiformis</i>		Cherry Ballart	Tree	I

Exotic species

Y: present; D: declared pest plant

Species	Synonym	Common Name	Life Form	Present
<i>Briza maxima</i>		Quaking Grass	Grass	Y
<i>Nassella neesiana</i>	<i>Stipa neesiana</i>	Chilean Needlegrass	Grass	D
<i>Conyza bonariensis</i>		Flaxleaf Fleabane	Herb	Y
<i>Echium plantagineum</i>		Patersons Curse	Herb	D
<i>Gamochaeta americana</i>	<i>Gnaphalium americanum</i>	Cudweed	Herb	Y
<i>Hypericum perforatum</i> subsp. <i>veronense</i>		St Johns Wort	Herb	D
<i>Hypochaeris radicata</i>		Flatweed	Herb	Y
<i>Myosotis discolor</i>		Yellow and Blue Forget-me-not	Herb	Y
<i>Petrorhagia nantueilii</i>		Proliferous Pink	Herb	Y
<i>Plantago lanceolata</i>		Ribwort Plantain	Herb	Y
<i>Sisymbrium officinale</i>		Mustard Weed	Herb	Y
<i>Tolpis barbata</i>	<i>Tolpis umbellata</i>	Yellow Hawkweed	Herb	Y
<i>Verbena bonariensis</i>		Purpletop	Herb	y
<i>Lonicera japonica</i>		Honeysuckle	Climber	Y
<i>Acacia baileyana</i>		Cootamundra Wattle	Shrub	D
<i>Cotoneaster franchetii</i>		Grey Cotoneaster	Shrub	D

Species	Synonym	Common Name	Life Form	Present
<i>Cotoneaster glaucophyllus</i>	<i>Cotoneaster lacteus</i>	Large-leaved Cotoneaster	Shrub	D
<i>Ligustrum lucidum</i>		Privet	Shrub	D
<i>Pyracantha angustifolia</i>		Yellow Firethorn	Shrub	D
<i>Rubus fruticosus complex</i>		A blackberry	Shrub	D
<i>Ailanthus altissima</i>		Tree of Heaven	Tree	Y
<i>Quercus robur</i>		Oak	Tree	Y
<i>Ulmus minor</i>		Elm	Tree	Y
		Other woody weeds	Trees/ shrubs	Y

Appendix C

Project plan 2015-2016/17

2016 ACTIVITIES IN RED

Milestones	Activities	Key Dates
Advisory group	<ul style="list-style-type: none"> • Continue to advise TAMS regarding development of all site plans. • Activate advisory group - initiate meeting of stakeholders and project collaborative partners (where appropriate: TAMS – City Services/Parks and Recreation, NCA, ACT PCS, MCG, BNAC, TACLMS, FOG, YRA, Chinese Embassy). Consult with: <ul style="list-style-type: none"> ○ ACT PCS – Fire, Forests & Roads to comply with fire mitigation plan. ○ ESDD - Conservation Planning & Research to comply with protection of endangered species requirements. ○ NCA to ensure proposed work complements / complies with NCA Management Plan (2009). ○ TAMS – City Services about mowing requirements. ○ Advisory committee to meet as required to monitor project delivery and to develop an appropriate collaborative plan for on-going government/community management of site. 	August 2014 to December 2015
Biodiversity Monitoring and Evaluation	<ul style="list-style-type: none"> • Biodiversity survey: Identify and map weed distribution and native vegetation. Triage Assessment • Establish monitoring plan for on-going community engagement in the site throughout the project and following its completion. • Monitoring of the survey site and photo-monitoring points annually. 	December 2014 November 2015, 2016, 2017
Weed Control	<ul style="list-style-type: none"> • Undertake herbicide and other weed control treatment as specified by the advisory committee <ul style="list-style-type: none"> ○ Cut/dab woody weed ○ Herbaceous weed control ○ Hand weeding as appropriate ○ Completion of woody weed removal ○ Clearing of woody weeds to the north of the area (outside the woodland) ○ Clean-up of regenerating weeds 	February 2015 Initiate hand weeding from March 2015, September October November December 2015
Revegetation	<ul style="list-style-type: none"> • Monitoring biodiversity and weed control success. Continue on an annual basis. • Follow-up weed (herbicide) control. • Strategic thinning of eucalypt regrowth close to the embassy (reduce fire risk and open canopy) • Planting event (women's area and other areas) 	September October November December 2015 Autumn 2016
Community awareness and information activities	<ul style="list-style-type: none"> • Field Day – environmental/cultural walk and talk, monitoring process, what is/was learnt and outcomes. 	Autumn 2016
Final Report	<p>Complete and submit final report</p> <p>Note final report for 2014/15 ACT Environment grant (updated Feb 2015) is due in March 2016.</p>	July 2016

Financial Report for acquittal of 2014-15 ACT Environment Grant

EXPENDITURE ITEMS	ACT Environment Grant (GST exclusive) \$	ACTUAL ACT Environment Grant (GST exclusive) \$	Recipient's Contrib \$	Actual Recipient's Contrib \$
Herbicide	500	536.11		
Herbicide Contractors	2,430	3,604.51		
Supervisor	2,000	2,000.00		
Sundry Incidentals	400	8.48		
CVA team engagement	820	0	Replaced by Green Army at no charge. Note: CVA weed control was replaced by Ngunawal team ACT Gov. informed verbally in Dec 2015.	0
Volunteer monitoring plot design, Plant ID and supervision, and Advisor group meetings contract administration.			3hrs x \$28.50/hr x 10 sessions x 5 people 4,275	Design & monitoring March & June 2015 2 hrs x 5 people x \$28.50/hr + green army training @ 2hrs x 9 people x \$28.50/hr Advisory group November, December 2014 & April 2015 @ 19 people x 10 hrs x \$28.50/hr Total \$6,213
Volunteer weed control			3 hrs x \$28.50 x 2 sessions x 5 people 1,140	1 March, June, July 2015 52 people x 12.25hrs x \$28.50 Total \$18,155
Volunteer maintenance			4 hrs x \$28.50 x 5 sessions x 5 people 2,850	October 2015 9 people x 5.75 hrs x \$28.50 (1 more session required in Autumn 2015) Total \$1,475
Volunteer tools			5 Sets cutting tools, cut& daub 600	600
Field Day, promotional and admin costs	358	358.90		
Community Engagement (includes project management) excludes 1X field day and 1x follow-up weeding day & Ngunawal plant book donation All transferred to 2016			50hrs x \$28.50/hr 1,425 800	65 hrs x \$28.50/hour Total \$1,853
TOTAL	6,508	6,508	11,090	28,296

Financial report as per 2015/2016 ACT Environment grant acquittal

EXPENDITURE ITEMS	ACT Environment Grant (GST exclusive) \$	ACTUAL ACT Environment Grant (GST exclusive) \$	Recipient's Contrib \$	Actual Recipient's Contrib \$
Ngunawal Supervisor	2,400.00	2,400.00		
Greening Australia volunteer coordinator	1,275.00	1,275.00		
Vegwatch Volunteer			2 volunteers x5hrsx\$35/hr = \$350.00	2x5hrsx\$35.00/hr = \$350.00
FOG Planning			1 volunteer x 2hrsx\$35/hr = \$70.00	1 volunteer x 4hrs x \$35/hr = \$140.00
Volunteers			6 volunteers x3 sessions x4hrs x\$28.50/hr = \$2,052.00	23 volunteers x 21hrs x\$28.50/hr = \$13,765.50 Project Management 50hrs x \$35.00/hr =\$1,750 Combined total = \$15,515
Travel			27 x 30km @\$0.66/km hrs=\$616.00	23 x 30km @\$0.66/km = \$455.00
Tube Stock (Greening Aust)	200.00	200.00		
Cartons/Stakes (Greening Aust)	70.00	70.00		
Ngunawal plant book donation All transferred from 2015 and Donations from community engagement activities			(MCG) 476.00 (FOG) 400.00 Gold Coin donations 47.27	923.27 Committed to Greening Australia (Nicki Taws) for propagating seeds for screening plants and foraging garden in women's cultural site (Autumn planting 2017)
TOTAL	3,945.00	3,945.00	4003.27	17,383.27

Report on Management Actions as at 5 March 2016

Documentation

- Identify the condition and habitat values of the woodland (vegetation, birds, other fauna): **complete**
- Survey for benchmark values (Summer 2014/5) **complete**
- Count and GPS Button Wrinklewort population (Summer 2015): **complete**
- Map and identify major weed infestations: **complete**
- Document pre-disturbance landform (before and after monitoring and evaluation. **Done as part of triage assessment on 31-12-2014. (requires condition report based on results of triage assessment?)**
Special note of potential archaeological value: should be taken of the occurrences of species such as honeysuckle and other plants with potential historical association (**Still requires GPS**). Also note location of historical bricks, glass (broken bottles can date an historical site, glass sherds were used by local Aboriginal people as cutting tools); rock arrangements (The rocks, in particular, could be historical garden beds or part of historical construction camp drainage systems or may have Aboriginal cultural origins **(these have been assessed and registered as Aboriginal sites by ACT Heritage)**).

Pest plants and other weeds

- Remove woody weeds and open up the canopy (**contracted spraying of St John's Wort was done 10-13 February 2015, prior to woody weed control work-party of 1 March 2015**).
- Replant with similar native species that do not increase bushfire hazard to enhance the natural habitat and provide alternative habitat to the removed woody weeds (**consultation with Ngunawal women (led by Karen Denny) during woody weed removal activities on 1 March has resulted in the recommendation to plant native (bush tucker) plants to screen a number of culturally significant trees in the women's area of the remnant woodland, follow-up planting scheduled in Autumn 2016**).
- Planting should be well-considered and restrained for the following reasons:
 - d) in the Inner Asset Protection Zone (firebreak) part of s128, TAMS will continually slash and disturb this area, **Note Chilean Needlegrass degradation defining line**.
 - e) previous experience in other parts of Stirling Park has been that if undertaken outside the optimal times (April/May or Aug/Sept) or in sub-optimal seasons, plantings may require additional watering.
 - f) there are so many weeds on the site that eliminating those first will give the natives a chance to recolonise themselves.
- Suggested focus should be on a smaller number of trees to go on the cleared lands closer to Alexandrina Drive to reinstate the woodland structure and also shade and reduce some of the grassy and other understory weeds. Determine tree and shrub species of particular cultural significance to the Ngunawal community that could be a good focus.
- Delays in project implementation means that any planting will require placing an order with a grower fairly soon.
- Remove weeds surrounding and within the Button Wrinklewort patches.

Pest animals

- Identify if pest animals are impacting the site (e.g. rabbits, feral bees)

Biomass management and fire fuel mitigation

- Removing woody weeds on site will significantly reduce fire hazard to neighbouring properties.

Soil disturbance and compaction

- Raise awareness of neighbours to reduce dumping

- Consider how to rehabilitate scraped area: eg planting site for herbaceous native species

Community awareness and engagement

- Involve neighbours in work parties and discussion of outcomes
- Facilitate on-going support for future work. The project draws and builds on experience, knowledge and momentum gained from rehabilitation and restoration work achieved on Stirling Park. The proposed work relies on a collaborative planning process to implement small scale, sustainable on-ground activities. Community volunteer input will need to be underpinned by skilled and expert local knowledge from various partner groups.
- Field day to promote awareness of the environmental and cultural values of the Block2 Section 128 as it relates to Ngunawal culture and the surrounding natural and planned landscapes of Canberra.

Appendix D

Photo Record of Bullan Mura during Site Visit - 31 December 2014, 10am – 12.30pm

The following is notes from discussions during the visit.

Note: images of culturally sensitive sites have been removed from this site visit photo record, prior to general circulation. Any questions should be directed to Wally Bell, Buru Ngunawal Aboriginal Corporation, (M):0419 425 347 walbell@bigpond.net.au

Ecological

Note: Ecological change line is marked by niche in Chinese Embassy west boundary fence and Oak Tree standing in centre of Bullan Mura.



North West corner of Bullan Mura



Line of Blakelyi Red Gum that appears on 1940s aerial photo located on block 3 and lining watercourse and area of quagmire adjacent to Bullan Mura.



Northern half of Bullan Mura and looking east towards centre of block showing oak seedlings.

Brown area in middle/centre of photo at right is St John's Wort)



Looking south-east toward from western boundary of Bullan Mura



Looking east from western boundary of Bullan Mura



Looking north from southern boundary of Bullan Mura



Centre of block looking east towards Chinese Embassy annex showing scraped area in middle-background that is located above the line of ecological change shown as yellow dashed line here, and drawn on ACTMAPi aerial photo (above).



Kangaroos on Block 2 watching me photograph one of the cultural sites on Bullan Mura.



Some of the native herbaceous plants found in scraped area at the ecological change line



Regeneration occurring in scraped area (detailed in photos, above)

Cultural



Honey suckle ('dunny vine') location of toilets associated with Westlake camps towards south-west corner of Bullan Mura.



ACT Heritage registered Sewer access is located on western boundary of Bullan Mura. Right photo is Sewer access hole (ACT heritage registered)

Note that Aboriginal Cultural sites and features have been recorded by the ACT Heritage Unit but photographs are not included in this report for reasons of heritage protection and cultural protocol.

Appendix E

Event Flyer and Report for Weed control work-party 1 March 2015

Enhancing the biodiversity value of Block 2 Section 128 Yarralumla – building Ngunawal engagement in natural resource management

Call for work party volunteers – weed control

Block 2 Section 128

Yarralumla



The Molonglo Catchment Group is partnering Friends of Grasslands and the Ngunawal traditional custodians to restore a modest block of ACT Government owned woodland at the eastern end of Stirling Park. A large population of the endangered Button Wrinklewort and some important cultural sites will benefit from our work. This land has been largely neglected and hosts many weeds. Our restoration work will focus on rubbish and woody weed removal.

The weeding work will be followed by a bbq lunch and presentations by
Wally Bell - Buru Ngunawal Aboriginal Corporation
Sarah Sharp – Friends of Grasslands
Karen Williams – Molonglo Catchment Group

Talk with our presenters as they interpret the Ngunawal and biodiversity significance of Block 2 Section 128, and neighbouring Stirling Park, in the context of the surrounding landscape of past and present Canberra.

We need all the help that we can get so please consider participating in this special work party.

Activities: Cutting and daubing woody weeds, rubbish removal, talks – fun!

When: Sunday 1st March. **Work:** 9am to 12 noon. **Lunch:** 12 noon to 1 pm.

Where: Dirt car park on the south side of Alexandrina Drive, Yarralumla, opposite Lotus Bay (midway between Flynn Drive and Mariner Place).

Bring: Water, hat, sunburn cream, solid shoes.

Note: The event will be cancelled in the unlikely event of a total fire ban day or if the forecast is for temperatures of 35°C or more.

RSVP: Please register for catering purposes: Jamie Pittock, 0407 265 131; Jamie.pittock@fog.org.au by 27 February 2015

Photos taken by Ann Gugler for the 1 March 2015 work-party activity on Block 2 Section 128 (Bullan Mura)



Ngunawal Elder Ruth Bell





Promotion of Event -

A flyer was emailed via Molonglo Catchment Group contact list compiled during 2013-14 and 2014-15 Ngunawal walks and talks series, and Thunderstone and Buru Ngunawal contact lists. We also tapped into the environment/ecology network of contacts through Fiona Dyer (University of Canberra) and Environment/Indigenous network via Darren Chong (ACT Environment). With Block 2 being on the watershed between Molonglo Catchment Group and Southern ACT Catchment Group we enlisted Southern Catchment's help in contacting Landcare groups in and around the Red Hill and Yarralumla area. We also asked Yarralumla Resident's Association publicised the event).

The event was not registered with Clean-up Australia Day events (same day) because we were aiming to achieve a special interest group of participants who might be more likely to stay connected with the work on Block 2 (and Stirling Park) for the long-term.

The email that accompanied the flyer explained that we needed all the help we could get, and in exchange for their help, participants would be provided with a bbq lunch while they listened to presentations about interpreting the Ngunawal and Biodiversity significance of the site in the context of the surrounding cultural landscape.

"You may have already enjoyed some of our Ngunawal walks and talks series, here is a chance to put some of what you learnt about the cultural significance of the natural environment into practice. Help us help the Ngunawal community build a stronger local engagement in natural resource management. Please send this flyer out through you networks."

32 people signed the attendance sheet, with 7 others indicating by email they would like to be notified of future events.

Protocols for best practice:

Having found a number of culturally sensitive areas during our assessment of the block on 31-12-2015, the Ngunawal Elders (with on-ground support of Wally Bell) were given over-sight of what was happening on site. Wally met the weed spray contractor on site prior to starting spraying, and Wally supervised the treatment of St John's Wort and Blackberry in the lead up to 1 March. (The timing of the spraying was dictated by the short window of opportunity when the St John's Wort was in flower.)

Prior to 1 March, having received the event flyer, ACT Environment Aboriginal Liaison Officer asked if it was appropriate to invite the broader Aboriginal community to participate in the 1 March activities (he said that he knew of a group of young people that were interested in training). Following proper protocols, the email request was forwarded to Wally in his capacity of Ngunawal supervisor of operations on the site, who replied that he thought:

"it was a good opportunity to engage with the Aboriginal community and in particular the youthful element as it would be a good way to get them thinking about culture and environment. So Darren you have my OK to go ahead and organise participants. Note that they will have to go through the registration process for WHS reasons and catering."

One of the significant cultural sites found during our assessment on 31-12-2015 was associated with women's business. That meant that Ngunawal women were to be present on site and would supervise the work in that area during 1 March weeding activities. Elder Ruth Bell, her daughter Karen Denny and granddaughter Tegan Denny performed the role of overseeing the work done in the area women's site.

Prior to beginning work on 1 March, we began the morning by conducting a briefing to explain to everyone how to avoid disturbing the plants or features that were culturally or ecologically significant. This involved a short walk about the block showing people what to look out for. The Button Wrinklewort was still flowering, which helped make the otherwise innocuous plant stand out among the other herbaceous and grass plants. Sarah and Jamie had previously tagged mapped with GPS areas with plastic tape the critical areas where they had found clusters of Button Wrinklewort.

The weeding in the women's area was done by women who volunteered during our briefing session when the question was asked. A mix of men and women weeded the rest of the block. Men were very respectful and chose to remain outside the women's area.

Lunchtime on 1 March 2015



What does it mean when we say the natural environment is culturally significant? –

Some thoughts about working on Bullan Mura and the activities of 1 March weeding work-party:

Sarah Sharp:

Working in the women's area in our first work party was a great privilege. As we removed woody weeds, stones clearly not naturally occurring in this site became visible and the native understorey plants became more prominent, as we gave them room to breathe again. Elements of past lives and activity were around us, as we

tended the area as it has been in the past, over thousands of years. Coming out of the women's area at the end of the morning was like walking into another world.

Already there is a difference in how the site feels and looks. This project is empowering, as it brings together people, the past, present and future, science, history, culture, and acknowledgement and respect for different uses and values. It engenders understanding and trust and fosters new friendships.

Jamie Pittock:

It is inspiring to be part of a group of Indigenous and non-Indigenous people working to conserve and enhance the cultural and environmental values of this important site. Unfortunately, the land has not been actively managed for many years. It is a joy to see this country come reinvigorated with the weeds and rubbish removed. It is a joy to see young and older people, local residents and those from father away, and Ngunawal and other Canberra residents working together, appreciating others' perspectives, and restoring our common heritage.

Wally Bell:

Traditionally, the Dreaming plays a central part in the lives of Aboriginal Australians. It provides a spiritual connection with the land and connections between people, groups, land, animals and plants. It also provides people with the Law, which tells people how to look after the land and the rules for social behaviour.

This project area is a strong spiritual place of connection as is evident by the many stone arrangements, site areas and women's business area that lie within the landscape.

Aboriginal people belong to the land of their ancestors, which we call their Country or our 'Belonging Place'. Country, and everything in it, is part of our spiritual identity.

Aboriginal Australians believe that the Ancestral Beings created our Country during the Dreaming and that the Ancestral Beings continue to inhabit it. We have a responsibility to manage the land and its resources. Dreaming stories teach people the best ways to do this. This is called 'Caring for Country'.

For more than 50 000 years, Aboriginal Australians lived in harmony with their Country. We understood and managed it closely. We took only the resources we needed from the land. We ensured that the land and the environment would not be damaged. Rivers, waterholes and springs were also carefully managed to ensure they were not damaged for future generations. Aboriginal people deliberately lit fires, known as fire-stick farming, in order to manage the environment. We burned undergrowth regularly to reduce the risk of uncontrolled bushfires and to encourage the growth of plants.

Many Aboriginal Australians living on their Country continue to hunt and gather traditional foods as well as buying food from shops. Today we tend to use modern fishing equipment or other modern tools, but we often use them in a traditional way. We make sure our children continue to learn the Dreaming knowledge of their Country and learn the skills required for looking after Country

The traditional custodians of Australia's capital cities are very significant. Our significance is recognised through the acknowledgement of our cultural heritage.

As the Custodians for our Country we feel privileged that non-Aboriginal people work alongside us showing respect and gaining an understanding of our cultural beliefs and our connection to country. This understanding stands us in good stead for the future not only of our culture but also for the natural environment in which we live together.

Karen Williams:

Working alongside others in the women's weeding work-party on Block 2 the conversation, more than once, came around to expressing a sense of privilege to be working with the natural environment while under the guidance of Ngunawal Elders and cultural knowledge holders. Each of us in our own way was consciously merging two agendas: one an ecological, the other socio-cultural. With both sets of considerations, we worked in close collaboration with the Ngunawal custodians, negotiating sometimes conflicting priorities.

For example, with seasonal time constraints, and the limit set of just working till lunchtime, we were targeting a particular type of woody weed - those growing rampant and by nature being deciduous. If we were to have any lasting effect with poisoning, being March already, we needed to get to those plants before their growing cycle closed down for winter. We cleared plants that were sometimes two and a half to three metres tall and spread just as broadly. An instantaneously gratifying effect, but that is when cultural concerns began to emerge.

The Ngunawal women were worried that completely clearing the problem plants would expose the cultural aspects that the weed presence was shielding. An exposed cultural site was prone to damage by humans, as well as by animals. After a brief discussion we agreed to continue clearing the woody weed that would otherwise spread more prolifically into newly cleared areas, but with the added intention of a discrete planting of appropriate indigenous plants with a replacement screening function (such as a quick growing wattle) in time to catch this autumn's growing season.

On one level this weeding activity was a very physical cutting and daubing exercise; reconnecting with our subsistence past, gardening with purpose, practicing a Landcare ethic, ecological sustainability, call it what you will. We were working towards some improvement in the biodiverse integrity of this 2.35 hectare piece of ACT land, and of that land across the block's boundary - National Capital Authority (Commonwealth owned) land - the ridge and remnant woodland known as Stirling Park, part of an otherwise fractured landscape of intensely urbanised design. We were looking through an ecological window that had been preserved, almost through neglect, defined by the edges of the parliamentary triangle, a belt of International embassies, and a gentrified Lake Burley Griffin.

On another level every woman was aware that they were working together, within this particular area of Block 2, in the presence of a particular suite of trees. The women were there because they had chosen to be; because they wanted to learn. We made and shared discoveries as we cleared the weeds. As women we could feel, think and share a common sense of knowing and understanding.

During the morning this group of women helped tend a place where others before them had formed a strong connection through their own activities. Ngunawal women, having been displaced, were again experiencing life, affected by the waters provided by springs and creek channels that flowed into the Molonglo River, now under the embassies and the lake. Once, the women had tended the land that provided them with food, medicinal ingredients and shelter that helped them survive. We were now working in an environment recognised to be the same place, yet different; under canopies of trees with ages counted by centuries.

As a whole, the results of the morning's weeding work reflected the commitment and enthusiasm people felt about what they were doing. It was like the land and the plants could breathe again. The feeling was like we could breathe again in the space that we had created. We could see what was there. The place felt alive with renewed energy, almost tingling with vibrancy, as we walked back through the areas where the densest stands of woody weed had once choked the wattles and young sapling gums and the, now, precious Button Wrinkle Wort.

I know I can speak for others when I say that at the end of the day we were excited at having actively participated in Ngunawal caring for country; and we felt empowered by new personal insight into what is meant when the natural environment is said to be culturally significant.

There are many ways to talk about what we did and express what we experienced. Endangered species and endangered culture - Landcare and weed removal done in an ethical and culturally meaningful way - biodiversity and caring for country. Gender, place and culture - encouraging community engagement in the present-day context of an ancient ecological relationship - gender equity, empowerment of women and men (and girls and boys) - engendered indigenous natural resource management - closing the empowerment gap between women

and men, between Aboriginal people and people who are not Aboriginal. Ngunawal men's and women's culture was addressed, men and women Landcarers participated. All of those perspectives were addressed on site as part of the one activity and we all learnt about the subtleties and protocols of a women's site and its associated woodland features.

Appendix F

Before and After 1 March 2015



Before 1 March 2015



After 1 March 2015



Before 1 March 2015



After 1 March 2015

Appendix G

30 June Green Army weeding day

Green Army Team supervised by Brian Butler

Ngunawal Cultural Advice and supervision -Wally Bell.

Project Manager -Karen Williams

Friends of Grasslands -Sarah Sharp and Joanna de Burgh

Activity: 8.30am - 2.15pm (public land use permit 13440)

Weed control mainly cutting and daubing Cotoneaster and cutting Cootamundra wattle.

10 Participants in total.

Green waste stacked on Forster Crescent for collection by TAMS Fyshwick Depot.

Wally provided oversight on the block – liaising with Brian prior to the day to discuss appropriate weeding activities. Once the team arrived for the day Wally led a walk over the block to explain cultural significance in terms of the site's location in the landscape and the cultural features of the block.

Karen, Sarah and Joanna continued on previous weeding work in the women's site areas with the two female green army team members.

Wally, Brian and the male green army team worked in the areas outside the Women's area.

Nicki Taws (Greening Australia) dropped by just before lunch to see what had been achieved in terms of weeding and to confirm the details for the women's planting day – 10 July. She said she had five species totalling 50 plants and some Chocolate Lilly bulbs.

Karen Denny (Ngunawal traditional custodian) arrived just after lunch to see where we were up to and discuss the site in terms of 10 July. I told Karen that the final decisions about what and plants were going where was being left to her. Nicki would be part of the planting team next week and that I had left decision-making to the two of them. Karen also had an opportunity to observe the Green Army team from the working on the block, especially the two young women working in the Women's area.

The team gained an appreciation of the cultural aspects of NRM practice especially the experience of respecting Ngunawal protocols, working within gender specific culturally sensitive areas, and working in sites of cultural features and artefacts. Brian said that the team was learning much more through this experience than they would be from just reading a text book.

The team members were showed respect of the protocols – particularly respecting the gendered boundaries of the various parts of the block. The young women showed enthusiasm about working in the women's area and handled their weeding tasks with great sensitivity. Sarah and I both witnessed what I would term an approach of nurturing compassion to woody weed removal in keeping with an area of woodland that provided the sheltered environment for Ngunawal 'Women's business' associated with a birthing place.

Sarah Sharp gave much appreciated direction on weeding priorities –weeding activities focused on Cotoneaster and Cootamundra wattle.

Sarah also provided morning tea.

We confirmed arrangements for Women's planting day on 10 July before leaving for the day (at around 1pm). The planting team will be drawn from Greening Australia's women's weeding group and, under special arrangement, the two young women from the Green Army team who were keen to join us in the regeneration aspect of our project.

10 July 2015 Women's Planting day

(public land use permit 13441)

Activity: 10am-12:30pm.

Project manager Karen Williams

Greening Australia project manager Nicki Taws and GA's women's weeding group (three members).

Friends of Grasslands Sarah Sharp

Karen and Teagan Denny (Ngunawal women's cultural advice and supervision).

Green Army female members (supervised by Brian Butler).

10 participants in total.

Both Karen Williams and Karen Denny provided a brief introduction for the women gathered on site. Karen D. welcomed the women to country and Karen W. speaking of the significance of the site in terms of the integration of land care and Ngunawal caring for country – how the group were gaining first-hand experience of what is meant by working with the cultural significance of the natural environment.

General area of proposed planting for screening of Women's cultural site is outlined in orange.



The area to be planted was discussed in 2014 with ACT PCS – Fire, Forests & Roads and complies with fire mitigation plan and TAMS mowing requirements. Species list also complies with those requirements and conforms to protection of the cultural values of the site.

Species List for planting as screening around the women's cultural site was proposed by Nicki Taws Greening Australia. The plants sourced from Greening Australia were a mix suited to propagating a foraging garden on the block. Plant list is based on availability and consisted of about 50 plants.

20 *Solanum linearifolium*, 10 *Acacia dealbata*, 20 *Rubus parvifolius*, *Bulbine bulbosa* and *Dichopogon fimbriatus*, *Microseris lanceolata*

With temperatures hovering around 10 degrees Celsius the already keen enthusiasm of the women only increased when the low cloud/fog lifted and changed to higher cloud and drizzling rain. The soil had been made much easier to dig with overnight rain and some drizzle throughout the early morning making the planting job easier. The plants were mainly placed as a screen from the street, across the site. It was noticed by the group that people were beginning to walk cross the site when they accessed the block from Forster Crescent, cutting in close to the trees. To encourage people way from the central areas of the site, the placement of plants was used to outline a vague path directing walkers away from the trees. Other plants were randomly placed around the base of critical trees to help provide an inner screen. There will need to be more 2-3metre shrubs planted for that purpose. Planting and water were completed by around 12 noon. With much pleasure, in both the job done and the promise of a warm shower, the women departed for the day.

Images from 10 July Women's planting day.





13 October 2015 Green Army Vegwatch training and weed control activity



Bullan Mura is now being used by the Green Army program as a cultural awareness training opportunity for new teams. The new green army team met Sarah Sharp (Friends Of Grasslands) and Karen Williams (MCG) to do some follow-up weeding, and hear about the complexity of working on this particular block.

Issues discussed included:

- the mix of cultural stories associated with the site
- cultural protocols of working with a traditional Aboriginal Women's site
- working near endangered species
- the Vegwatch program to monitor the patch of Button Wrinkle Wort.

27 December 2015 follow-up weed control

Wally reported that he led a team of Ngunawal men and women to do some follow-up weed control work. They sprayed blackberry, St John's Wort and briar rose, and carried out small amount of cut and daub of regrowth, covering the whole block including the women's area. The team will continue with some follow-up weed control in autumn around the time we are due to do the plantings. We agreed that incorporating that work with community activities would be a good thing.

This is the first activity on the block where we have used TAMS internal Works Plan process to approve activities on this now 'high profile' site. Working with the Volunteer Coordinator and using this method of approval has made the approval process much more efficient.

As follows:

Works Plan

Molonglo Catchment Group

Block 2 Section 128 Yarralumla - woody weed control follow-up

WORKS PLAN NUMBER 2015-b2s128-1

Date: 27 December 2015

Work Area: Block 2 Section 128 Yarralumla

Author: Karen Williams

Plan Completed

Land Manager Approval

Kristie Dawes / / MCG Program Manager

Comment:

Wally Bell Buru Ngunawal Aboriginal Corporation (BNAC) - Co-ordinator

Buru Ngunawal Aboriginal Corporation Ngunawal - Traditional Custodian (site cultural NRM)

Comment:

FINAL SIGN OFF



Karen Williams 22/12/2015 Project Manager

/ / PCL Area Manager

Works Plans are required if one or more of the following triggers exist;

Trigger	Activities
Chemical use	<input type="checkbox"/> All weed control works except those covered by a Weed Project Brief and Contract <input type="checkbox"/> All Bushfire Operations Plan works involving chemical control of regrowth <input type="checkbox"/> All vertebrate pest control works
Construction	<input type="checkbox"/> New fences, log barriers and/ or bollards <input type="checkbox"/> New dams <input type="checkbox"/> New walking trails or section of trail <input type="checkbox"/> New infrastructure including car-parks, sheds, toilets etc particularly where these do not trigger a DA or PA
Road works	<input type="checkbox"/> New roads or tracks <input type="checkbox"/> All road maintenance works (including: grading, cleaning of mitre drains and table drains; cleaning out of culverts)
Vegetation management	<input type="checkbox"/> All Bushfire Operations Plan works involving physical fuel reduction and fuel reduction grazing <input type="checkbox"/> All works involving problem / dangerous trees <input type="checkbox"/> Slashing / mowing of areas that have not been slashed / mowed by PCL previously <input type="checkbox"/> Grazing of areas that have not been grazed by PCL previously <input type="checkbox"/> All roadside grazing <input type="checkbox"/> All new landscaping works <input type="checkbox"/> All forestry operations (including ground preparation and debris removal), silvicultural or harvesting works
Legislative	<input type="checkbox"/> All works that have the potential to impact on declared threatened species or associations <input type="checkbox"/> All works requiring Nature Conservation Act licenses <input type="checkbox"/> All works requiring Dial before you Dig approval, <input checked="" type="checkbox"/> All works requiring Environmental Authorisations, <input type="checkbox"/> All works requiring Waterways Work Licenses <input checked="" type="checkbox"/> All works requiring Environmental Management Plans <input type="checkbox"/> All works requiring National Capital Authority Works Approval <input checked="" type="checkbox"/> All work on heritage sites (eg hut maintenance, work on Aboriginal art sites etc)
Aerial Operations	<input type="checkbox"/> All work involving aerial operations (including aerial spraying, baiting or culling)
Others	<input type="checkbox"/> All new erosion control works <input checked="" type="checkbox"/> All consultancy works <input type="checkbox"/> All works involving the culling or movement of native animals (except the urban wildlife program) <input type="checkbox"/> All works involving volunteers (eg CVA Green Corp) except Park Care <input checked="" type="checkbox"/> All works where supervising Manager requests a Works Plan to be completed

WORKS PLAN

WORKS PLAN NUMBER: 0001

Section 1. Outline

Management Program	Reserve / Area	District	Territory Plan Classification	Objectives
MCG Improving Biodiversity and Aboriginal NRM	Block 2 section 128	Yarralumla	Urban Open Space	Follow up previous woody weed control – back-pack spray and cut and daub

Section 2. Area Description

Hectares or Meters Affected	Vegetation	Slope	Aspect	Land use	Sites of significance
2.35 ha	The block contains woodland, primarily native, but with a moderate to high cover of introduced species in the mid and lower strata.	0-5 degrees	North	Urban Open Space	Aboriginal: cultural European: N/A Fauna: N/A Flora: N/A Endangered species: Button Wrinklewort Riparian zones: N/A.

Section 3. Approvals and Clearances

District/CPOS	Research and Monitoring	Fire Mgt	EPA	NCA	Heritage	Dial before you dig
N/A	approved	approved	approved	N/A	approved	N/A

This woody-weed control provides necessary follow-up to works carried out in March, June and July 2015 and is funded by ACT Environment grant. The work is conducted under guidance of an expert project advisory committee made up of all relevant stakeholders.

The project is managed by Molonglo Catchment Group in partnership with Friends Of Grasslands and Buru Ngunawal Aboriginal Corporation. The project activities are arranged in close consultation with various ACT Government rangers and are subject of an approved project plan (attached).

Wally Bell is co-ordinator and supervisor of all on-ground works and cultural site NRM.

ACT Planning & Development Act 2007	N/A
--	-----

Environment Protection and Biodiversity Conservation Act	
---	--

Section 4. Site Establishment Plan

Work sheds	
Material Storage Areas	
Method of Demolition	
Waste Management Procedures	
Vehicle Access	
Tree Protection	
Verge Landscaping	

Section 5. Scope of works

Field supervisor:

Task	Responsibility	Specification	District Input	Environmental / Heritage constraints
Spray / Cut and Daub weed control	Contractor	Glyphosphate		Keep glyphosphate away from marked areas containing endangered species.

Section 6. Rehabilitation of Site

Task	Responsibility

Section 7. Timeline

Onsite inspection	Works commence on site	Works completed
1 December 2015	27 December 2015	27 December 2015

Section 8. Consultation

Community Engagement	Letter box drop	Park Care Group Other community groups	Individual residents	Media
ongoing consultation with government, landcare groups, expert panel of advisors and Ngunawal community.		Molonglo Catchment Group		

Section 9. Risk Management

Public safety	Work crew safety Induction	Communications	Access/ Emergency Access

Appropriate signage as necessary	Prior to work commencing on the day	Refer to Contractor risk management plan	Forster Crescent and Alexandrina Drive Yarralumla
----------------------------------	-------------------------------------	--	---

Check for asbestos	Risk Assessment		
N/A	Refer to attached assessment		

Section 10. Emergency Evacuation Plan

Mobile Phone Contact	<input type="checkbox"/> Reception quality mobile phone reception available <input type="checkbox"/> Operator Contact No <input type="checkbox"/> Contractor Contact No: Wally Bell 0419 425 347 <input type="checkbox"/> PCL Supervising Officer Contact No. <input type="checkbox"/> Radio Channels
Emergency Evacuation Point	<input type="checkbox"/> Gate entrances located on Alexandrina Drive and Forster Crescent ends of Block 2. Grid Coordinates/UBD Reference http://maps.googleapis.com/maps/api/staticmap?markers=-35.30090541603449,149.12113334140008&zoom=16&size=900x900&sensor=false <input type="checkbox"/> Mobile Phone Reception available
Ambulance Procedures	<input type="checkbox"/> Call 000 <input type="checkbox"/> Ask for the ACT Ambulance Service <input type="checkbox"/> Tell the operator the nearest suburb and location details of Emergency Evacuation Point <input type="checkbox"/> Tell the operator the nature of the injury <input type="checkbox"/> Provide any contact details that could be helpful (eg. : Wally Bell 0419 425 347)

Section 11. Attachments

Works Plan Risk Assessment

Maps of work area

Detailed plan (mud maps)

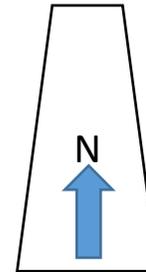
Section 12. Operational map attached



Coordinates of block corners:

Lat.-35.3012
Lon.149.1193

Lat.-35.3035
Lon.149.1195



Lat.-35.3011
Lon.149.1198

Lat.-35.3033
Lon.149.1210



Section 13. OPERATIONAL RECORD SHEET

ESTIMATED START OF OPERATION:

ESTIMATED FINISH OF OPERATION:

DATE	COMMENTS
	PRE WORKS PHOTO'S
	NOTIFY RELEVANT DISTRICT
	APPROVALS
	INITIAL BRIEFING OF CREWS AND SITE INSPECTION
	SITE INDUCTION
	COMMENCE OPERATIONS
	<i>SIGNIFICANT ISSUES OR EVENT</i>
	<i>SIGNIFICANT ISSUES OR EVENT</i>
	<i>SIGNIFICANT ISSUES OR EVENT</i>
	COMPLETION OF OPERATIONS
	POST WORKS PHOTO'S

RISK ASSESSMENT

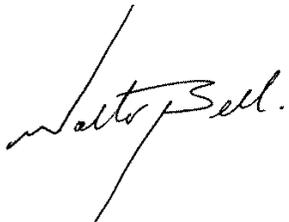
Project Name / Block 2 Section 128 Yarralumla weed control activity – 27/12/2015

Work Activity / Task: weed control by use of backpack spray unit

Prepared by: Wally Bell (Buru Ngunawal Aboriginal Corporation(BNAC)) - Co-ordinator

Wally Bell, Buru Ngunawal Aboriginal Corporation Ngunawal - Traditional Custodian (site cultural NRM)

Signature:



Date: 1 December 2015

Class 1: (High Risk): Does the hazard have the potential to - kill, permanently disable create a major impact on the environment, have a negative impact on 25% of budget or public / political scrutiny leading to an inquiry?

Class 2: (Medium Risk): Does the hazard have the potential to - cause a serious injury, or illness (temporarily disable you), the environment is compromised, have a negative impact of 5%-10% on budget or internal/external scrutiny on decisions?

Class 3: (Low Risk): Does the hazard have the potential to - cause a minor injury (not disable), a negative impact on the environment, a negative impact of 1%-5% on budget or internal review required due to decision-making.

	Uneven ground	2	<p>Supervisors to provide a briefing of hazards associated with the event including animal & vegetation hazards and a plan for evacuation/emergency vehicle access.</p> <p>A first aid trained person and first aid kit to be present for the duration of the activity.</p> <p>Mobile phone to be on site for the duration of the activity.</p> <p>Coordinator to provide a briefing of hazards associated with tools and equipment.</p> <p>Participants to be briefed in use of hand tools.</p> <p>Use of chain saw by qualified operator.</p>	3	<p>The Co-ordinator/Ngunawal traditional custodian (site cultural NRM)</p>
	<p>Dangerous flora and fauna</p> <p>Snake/Spider bite, insect Stings</p>	2	<p>A first aid trained person and first aid kit to be present for the duration of the activity.</p> <p>Mobile phone to be on site for the duration of the activity.</p> <p>Coordinator to provide a briefing of hazards associated with use of hazardous chemicals. Activity</p>		<p>The Co-ordinator/Ngunawal traditional custodian (site cultural NRM)</p>

			<p>supervised by Chem. Cert qualified person.</p> <p>Safety Data Sheets (SDS) to be onsite.</p>	3	The Co-ordinator/Ngunawal traditional custodian (site cultural NRM)
	Hand held tools including chain saw	2	<p>Ensure all participants fill out sign on and off sheets at the beginning and end of an activity</p> <p>A First Aid Officer is to be present for the duration of the activity and have the required kit to be able to administer First Aid if required.</p> <p>This person is to be identified at the initial briefing and to be made known and visible to all participants.</p>	3	The Co-ordinator/Ngunawal traditional custodian (site cultural NRM)

	Herbicide	3			
	Accidental Injury	3		3	The Co-ordinator/Ngunawal traditional custodian (site cultural NRM)

Appendix H

Report on Management Actions as at 5 March 2016 (from draft site management report)

Documentation

- Identify the condition and habitat values of the woodland (vegetation, birds, other fauna): **complete**
- Survey for benchmark values (Summer 2014/15) **complete**
- Count and GPS Button Wrinklewort population (Summer 2015): **complete**
- Map and identify major weed infestations: **complete**
- Document pre-disturbance landform (before and after monitoring and evaluation. **Done as part of triage assessment on 31-12-2014. (requires condition report based on results of triage assessment?)**)

Special note of potential archaeological value: should be taken of the occurrences of species such as honeysuckle and other plants with potential historical association (**Still requires GPS**). Also note location of historical bricks, glass (broken bottles can date an historical site, glass sherds were used by local Aboriginal people as cutting tools); rock arrangements (The rocks, in particular, could be historical garden beds or part of historical construction camp drainage systems or may have Aboriginal cultural origins **(these have been assessed and recorded as Aboriginal sites by ACT Heritage)**).

Pest plants and other weeds

- Remove woody weeds and open up the canopy (**contracted spraying of St John's Wort was done 10-13 February 2015, prior to woody weed control work-party of 1 March 2015**).
- Replant with similar native species that do not increase bushfire hazard to enhance the natural habitat and provide alternative habitat to the removed woody weeds (**consultation with Ngunawal women (led by Karen Denny) during woody weed removal activities on 1 March has resulted in the recommendation to plant native (bush tucker) plants to screen a number of culturally significant trees in the women's area of the remnant woodland, follow-up planting scheduled in Autumn 2016**).
- Planting should be well-considered and restrained for the following reasons:
 - g) in the Inner Asset Protection Zone (firebreak) part of s128, TAMS will continually slash and disturb this area, **Note Chilean Needlegrass degradation defining line**.
 - h) previous experience in other parts of Stirling Park has been that if undertaken outside the optimal times (April/May or Aug/Sept) or in sub-optimal seasons, plantings may require additional watering.
 - i) there are so many weeds on the site that eliminating those first will give the natives a chance to recolonise themselves.
- Suggested focus should be on a smaller number of trees to go on the cleared lands closer to Alexandrina Drive to reinstate the woodland structure and also shade and reduce some of the grassy and other understory weeds. Determine tree and shrub species of particular cultural significance to the Ngunawal community that could be a good focus.
- Delays in project implementation means that any planting will require placing an order with a grower fairly soon.
- Remove weeds surrounding and within the Button Wrinklewort patches.

Pest animals

- Identify if pest animals are impacting the site (e.g. rabbits, feral bees)

Biomass management and fire fuel mitigation

- Removing woody weeds on site will significantly reduce fire hazard to neighbouring properties.

Soil disturbance and compaction

- Raise awareness of neighbours to reduce dumping
- Consider how to rehabilitate scraped area: eg planting site for herbaceous native species

Community awareness and engagement

- Involve neighbours in work parties and discussion of outcomes
- Facilitate on-going support for future work. The project draws and builds on experience, knowledge and momentum gained from rehabilitation and restoration work achieved on Stirling Park. The proposed work relies on a collaborative planning process to implement small scale, sustainable on-ground activities. Community volunteer input will need to be underpinned by skilled and expert local knowledge from various partner groups.
- Field day to promote awareness of the environmental and cultural values of the Block2 Section 128 as it relates to Ngunawal culture and the surrounding natural and planned landscapes of Canberra.

Completion of remaining updated project plan post-March 5 2016

Review of actions required 2016-2017, Bullan Mura (Block 2 Section 128 Yarralumla) 12/8/16

Present on site: Karen Denny, Wally Bell, Nicki Taws, Karen Williams, Sarah Sharp

Table Updated 6/10/2016

Item	Actions	Main players
Planting	<p>More plants to screen the part of the block where the women's site is located from the road and track, including for example Clematis Define what constitutes a foraging garden. \$876 (MCG& FoG) <i>Ngunawal Book sale money in budget to be used for new plants.</i> <i>Agreed by KW and SS by email 19-8-2016</i></p> <p><i>This is follow up to the current project and will be done in the 2016/17 stage of the project</i></p>	Nicki and Karen D
Weeding	<p>A couple of smallish woody weeds and climbers to be removed in the women's area Serrated Tussock, St John's Wort, Chilean Needlegrass, Some remaining woody weeds (mostly Cootamundra Wattle), not many Remind TAMS they were going to remove Oaks seedlings. Check all area for regrowth and seedlings</p> <p><i>This is follow up to the current project and will be done in the 2016/17 stage of the project.</i></p>	Work party ?? to organise work parties

Survey	<p>Resurvey for BWW and GPS locations Annual monitoring in Vegwatch site - report and timeline Resurvey veg in the entire site Establish photopoint monitoring for ongoing annual comparisons Birds??? (Nicki, would this be worthwhile, we have a pretty comprehensive list from Stirling Park (I couldn't do this. SS)</p> <p><i>This is follow up to the current project and will be done in the 2016/17 stage of the project</i></p>	Sarah, MCG. with others if they wish
Block 10	<p>Find out if it is C'th or Territory Land. <i>Peter Beutel confirms that it is.</i> Check out if we can include this area, in which weeding will be the main issue (St John's Wort, some euc seedling regrowth). <i>Peter Beutel happy for us to work on block 10 provided we give him notice a couple of weeks prior, to advise the Chinese Embassy. (Email response received from Peter Beutel 18-8-2016)</i></p> <p><i>This is follow up to the current project and will be done in the 2016/17 stage of the project</i></p>	Sarah
Fire mgmt.	<p>Measure out 40 m distance from the Chinese Embassy fence to determine exactly the designated fire mitigation zone. <i>Done. See aerial map of site</i></p> <p><i>Follow up MOU with TAMS and their new volunteer coordinator</i></p>	Sarah
ACTEW	<p>Discuss issue of ACTEW paying to have disturbed area rehabilitated and planted. Suggest alternative plantings along powerlines to reduce need for future disturbance.</p> <p><i>This is follow up to the current project and will be done in the 2016/17 stage of the project.</i></p>	On-site meeting 17/8/16 t
Communication	<p>Hold an event for Territory and NCA personnel, Yarralumla Residents and community groups to demonstrate what has been done, launch the new name and launch the larger landscape project: media (??) Prepare a short video of project. Prepare an article for publication in FOG newsletter, probably elsewhere</p> <p><i>This is follow up to the current project and will be done in the 2016/17 stage of the project</i></p>	MCG Karen W has begun the video

Summary of actions arising from site meeting to discuss and confirm areas of concern with current mowing operations on Block 2 Section 128 Yarralumla - Friday 13 May, 10am. (Final consolidated notes)

Present:

TAMS staff: Malcolm Gale (representing the TAMS Fire Unit); Rachel Tokely (TAMS Central Operations Support); Julie Garbode (TAMS Central Area Manager); Phil Selmes (PCS ParkCare and Volunteer Coordinator); Euroka Gilbert (ACT Heritage Unit); Sarah Sharp (Friends of Grasslands [FOG]); Karen Williams (Molonglo Catchment Group [MCG]).

Apologies:

Meaghan Russell (ACT Heritage Unit); Wally Bell and Karen Denny (Buru Ngunawal Aboriginal Council).

Key issues discussed were related to the management of current mowing operations:

1. Fire Management of inner asset protection zone (adjoining the western boundary of the Chinese Embassy).
2. Agreement to cover fuel management (this will address requirements and specify appropriate triggers for stakeholders)

General points emerging from discussion

- The inner asset protection zone 40m buffer from the Chinese Embassy fence line is required to be maintained to a specific level between 1 Oct and 30 March. How that evolves and is achieved is not the issue.
- An agreement between MCG and TAMS to cover vegetation management requirements (for fire mitigation and conservation) could potentially be modelled on an existing MOU arrangement between Friends of Grassland (FOG) and NCA concerning Stirling Park (attached). That MOU is based on a renewable process and is reviewed every 3 years. TAMS are currently developing a generic MOU to be implemented this year for all volunteer groups undertaking works on Public Urban Open space areas. TAMS prefer to review works plans and MOU's annually.
- An MOU arrangement for Block 2 could potentially be used to frame an agreement between MCG, Buru Ngunawal Aboriginal Corporation (BNAC) and TAMS that defines policy for insurance, communication, and would be based on the existing site management plan. Most of these details such as insurance are covered in the TAMS 2015 draft volunteer policy. Specific issues can be developed and included in the MOU for block 2 section 128 Yarralumla.
- The MOU could potentially be a model for TAMS to use for urban coordination, guiding rolling responsibility and management plans, defining what is done by whom, when, where and timing, specifying triggers for stakeholders. TAMS are currently developing a set of guidelines MOU for use between all catchment coordinators and the urban open space work sites they manage and TAMS.
- The MOU would identify MCG in collaboration with BNAC as responsible for knapsack spray weed control for a period of 12 months. Any weed control operations to be undertaken on TAMS urban open space areas should be undertaken as per TAMS Standard Operating procedures including reporting of spray activities.
- TAMS would supply support when required. Request for TAMS support should be via the public landuse team public landuse event permits at least 1 month prior to required activities.

- Mowing zones could be marked by signage saying something like ‘No Mowing unless otherwise directed’, to help stop spread of weeds beyond the ecological boundary line that defines the area of native grasses and introduced species. This project is in hand. TAMS have developed a standard “conservation area” marker post to be used throughout urban open space areas in the ACT with conservation value. It is anticipated this will start to be used in the field by September 2016. A meeting will need to be set up with MCG project advisory group and TAMS to identify the location of the marker post/s for the Yarralumla Site.
- Consultation with CPR on issues of species, spraying and mowing, and to determine application of appropriate standards for Box Woodland would be required as part of the MOU agreement process. Agree.
- Strong communication policy and procedures are critical for covering changes in TAMS staff and MCG staff/contractors/ volunteers. It was suggested that:
 - TAMS would look at developing active layer polygon on relevant base maps, with appropriate directions to on-ground-staff. This should include directions not to remove fallen branches that have been placed as bollards near cultural sites.
See TAMS revised mowing maps below for the site in Yarralumla indicating no mow zone in the indentation in the fence line, conservation mow area to the south and fire reduction mowing area to north. Conservation area must be maintained to fire fuel reduction standards but there are specific requirements in place to protect this area eg mowers operating in the fire reduction mow area must enter and exit from the northern access gate (Alexandrina Drive), mowers working in the conservation area must enter with a clean mower.. Bush Fire Operations Plan (BOP) work plan has included clause not to collect fallen branches outside the Asset Protection Zone.
 - Heritage Unit would facilitate appropriate information for a heritage layer to be included on TAMS and Fire Management maps. TAMS are awaiting for this advice from Heritage Unit.
 - Sarah Sharp to send GIS of Button Wrinklewort locations for TAMS maps.
 - Sarah Sharp CPR and Fire Management should visit Block 2 to discuss maintenance strategy and mapping. Current requirements have been included in BOP for 16-17
 - MCG would maintain current information on its in-house database, and would provide a current map of with GIS coordinates of MCG works sites to link to TAMS GIS layer. Thankyou. Please supply this information to Alan Bendall TAMS GIS officer allan.bendall@act.gov.au
- ACTEW is scheduled to carry out maintenance of the easement under powerlines this year. Concern for potential damage to cultural sites was discussed and the appropriate ACTEW contact is being sort. Please contact Christopher.Dare@actewagl.com.au as a point of contact. He may be able to provide a relevant ACTEW point of contact to raise these concerns with.

Outcomes

- The MOU arrangement could be used to develop management procedures/trial a standard for use in a high conservation area. This trial could include:
 - appropriate signage could be used to warn service operators
 - volunteer monitoring of management
 - TAMS urban management base map could potentially be used to trigger referral to TAMS management using Red, orange, green management signals. This trigger is included in the map below.
 - MCG internal database would provide site management information and relevant contacts
- MCG project advisory group to coordinate MOU process.



Discovering a forgotten woodland and rediscovering Ngunawal culture

Field day and barbecue to celebrate Ngunawal caring for country and local Landcare. Living history, as told by a remnant corner of woodland, a tiny button Wrinklewort plant and an Ngunawal family who camped on a creek on the site of present-day Capital Hill before the building of Canberra.

Start time: 9.30 am
End time: 12.30 pm
Cost: Gold coin donation



Supported by



With assistance from the ACT Government under the ACT Environment Grants Program

9 April 2016 Event Report:

For this event we had some extra assistance so feedback forms were managed well. The feedback from this event reflects community's general enthusiasm for the project, and demand for more of the same. The event was small and intimate. Initially slow bookings. Three booked by the Wednesday prior to the event, nine booked by Friday morning. The eventual total attendance was 16 with three presenters. One cook and someone to marshal people and paperwork - all occurred seamlessly.

The walk/talk activity took two hours over an area of 2.38 ha. Time passed quickly, people were really engaged with hearing about the current project activities, the cultural and natural discoveries made during the course of preparing project plans. They particularly enjoyed the experience of present-day 'caring for country', hearing the environment and the cultural history being interpreted in a landscape context. People came up at the close of the talk asking where they could sign up to volunteer for future Landcare activities on the block.

Discovering a Forgotten Woodland and Rediscovering Ngunawal Culture - 9/4/2016									
V. Dissatisfied-1	2	3	4	V. Satisfied- 5	How did you hear about the event?	Previous attendance	Liked Most	How can we improve this event?	Final Comments on the Festival?
			✓		Molonglo Catchment Group	Yes	1. Presentation/info on natural environment. 2. Presentation/info on cultural environment/heritage	More walking, Less Talking	
				✓	Yarralumla Residents Assoc. Newsletter	No	1. Indigenous Cultural History. 2. Historical significance of site.		Very enjoyable and informative
				✓	Festival Lift-out in newspaper	Yes	1. Deep History and Landscape evolution.	?	Enjoyed this event very much.
				✓	other	No	1. The speakers depth of knowledge. 2. The work that the speakers do and their generous sharing of this.	Run more of these vents	Fantastic programs! Keep up the good work!
				✓	Word of mouth	No	1. Teaching by Ngunawal people. 2. Teaching by informed geologists.	A few vegies/salad with the sausages/veggie patties.	This event was fabulous. It would be great to keep holding - and expand - events with Aboriginal custodians of Canberra land.
				✓	Word of mouth	No			It was great!
				✓	Festival Lift-out, Advertising Flyer for event, word of mouth.	Yes	1. Indepth understanding of presenters about both cultural and natural heritage. 2. Focus on developing a deep understanding of a particular site.	Maybe could have shortened it a bit.	Great event each year.

Planting and Weeding for Reconciliation - Our History, Our Story, Our Future

Molonglo Catchment Group in partnership with Friends of Grasslands and Buru Ngunawal Aboriginal Corporation is conducting a Community planting and weed control activity associated with ACT Environment Grant project that involves working with community Landcare and the Ngunawal Aboriginal community to improve the biodiversity and cultural value of Block 2 Section 128 Yarralumla.

This activity has been timed to coincide with Reconciliation Week. A lunchtime sausage sizzle will be held to thank volunteers who have participated in the planting and weeding activity, providing an opportunity to hear Ngunawal custodians - Wally Bell and Karen Denny - tell us more of the Ngunawal history and story, and about how Landcare can best work for the future of Ngunawal country.

Call for work party volunteers –planting (women’s group) and weed control (men and women group)

Saturday 28 May 2016

Where: Dirt car park on the south side of Alexandrina Drive, Yarralumla, opposite Lotus Bay (midway between Flynn Drive and Mariner Place).

Bring: Water, hat, sunburn cream, solid shoes.

Start time: 9.00 am

End time: 1.00 pm



RSVP: Please register for catering purposes: Karen Williams, k_g_williams@hotmail.com by 4pm Friday 27 May 2016

Supported by



With assistance from the ACT Government under the ACT Environment Grants Program

28 May 2016 cont'd

Autumn Planting event (women's cultural area) and continuation of general weed control



Looking north east across block from Forster Crescent



Looking east across block from middle of west boundary



Cootamundra wattle cleared from beneath the gums at northern end of block



Green waste piled beside area of weed control at northern end of block



Wally Bell clearing the cuttings for green waste collection



Karen Denny (right background) clearing the cuttings for green waste collection



Cootamundra Wattle cleared, oak seedlings (in middle ground) still to be dealt with.

28 May 2016 'WEEDING AND PLANTING FOR RECONCILIATION' Event Report

Eight people participated in the event, representing Buru Ngunawal Aboriginal Corporation, Molonglo Catchment Group and Friends Of Grasslands, and individual interests. It was unfortunate that the event clashed with other event dates, but for the numbers in attendance, an immense amount of work was achieved. Approximately 110 cubic metres of green waste was piled, and about 80% of the tube stock was planted into the ground. (the remaining 20% was planted over the next week or so, with some welcome solid rain in the intervening period).

Plants supplied from Greening Australia consisted of:

20 Acacia dealbata, Silver Wattle; 10 Acacia rubida, Red-stemmed Wattle; 10 Kurrajong;

10 Indigofera adesmiifolia; 30 Microseris, Yam Daisy; 20 Bulbine Lilies; 3 boxes of Chocolate lilies.

Permit number (office use only)

Application to Use a Public Place for Events - submission confirmation

Thank you for your application.
Your application will now be reviewed by the Land Use Unit.
If you have any concerns, please contact the Land Use Unit on 02 6205 8794 and quote your unique reference number.
Following receipt of all required documentation, the review time for applications is generally 28 days.

Date and time	Form submission ID	Tracking code
<input type="text" value="19 May 2016 4:04:30 PM"/>	<input type="text" value="50011020160519168013"/>	<input type="text" value="H85LY4"/>

To save a copy of the completed form and receipt, from the File menu select "Save a copy". To print a copy use the Print icon.

Territory and Municipal Government Directorate
ASN 57 817 989 373 OPD 800 062
Canberra City ACT 2601 Tel: 02 6205 8794

Office use only

Approved Not approved

Approved from date: Approved to date:

Additional conditions

Signature

Issued under Public Unleased Land Act 2013 Division 3.3.

WORKS PLAN NUMBER 2016-b2s128-2

Date: 28 May 2016

Work Area: Block 2 Section 128 Yarralumla

Author: Karen Williams

Plan Completed Land Manager Approval

Bernie Bugden / / MCG Program Manager (Operations)

Comment:

Wally Bell / Karen Denny Buru Ngunawal Aboriginal Corporation(BNAC) - Co-ordinator
Buru Ngunawal Aboriginal Corporation Ngunawal - Traditional Custodian (site cultural NRM)

Comment:

FINAL SIGN OFF



Karen Williams 16/5/2016 Project Manager

/ / PCL Area Manager

Works Plans are required if one or more of the following triggers exist;

Trigger	Activities
Chemical use	<input type="checkbox"/> All weed control works except those covered by a Weed Project Brief and Contract <input type="checkbox"/> All Bushfire Operations Plan works involving chemical control of regrowth <input type="checkbox"/> All vertebrate pest control works
Construction	<input type="checkbox"/> New fences, log barriers and/ or bollards <input type="checkbox"/> New dams <input type="checkbox"/> New walking trails or section of trail <input type="checkbox"/> New infrastructure including car-parks, sheds, toilets etc particularly where these do not trigger a DA or PA
Road works	<input type="checkbox"/> New roads or tracks <input type="checkbox"/> All road maintenance works (including: grading, cleaning of mitre drains and table drains; cleaning out of culverts)
Vegetation management	<input type="checkbox"/> All Bushfire Operations Plan works involving physical fuel reduction and fuel reduction grazing <input type="checkbox"/> All works involving problem / dangerous trees <input type="checkbox"/> Slashing / mowing of areas that have not been slashed / mowed by PCL previously <input type="checkbox"/> Grazing of areas that have not been grazed by PCL previously <input type="checkbox"/> All roadside grazing <input type="checkbox"/> All new landscaping works <input type="checkbox"/> All forestry operations (including ground preparation and debris removal), silvicultural or harvesting works
Legislative	<input type="checkbox"/> All works that have the potential to impact on declared threatened species or associations <input type="checkbox"/> All works requiring Nature Conservation Act licenses <input type="checkbox"/> All works requiring Dial before you Dig approval, <input checked="" type="checkbox"/> All works requiring Environmental Authorisations, <input type="checkbox"/> All works requiring Waterways Work Licenses <input checked="" type="checkbox"/> All works requiring Environmental Management Plans <input type="checkbox"/> All works requiring National Capital Authority Works Approval <input checked="" type="checkbox"/> All work on heritage sites (eg hut maintenance, work on Aboriginal art sites etc)
Aerial Operations	<input type="checkbox"/> All work involving aerial operations (including aerial spraying, baiting or culling)
Others	<input type="checkbox"/> All new erosion control works <input checked="" type="checkbox"/> All consultancy works <input type="checkbox"/> All works involving the culling or movement of native animals (except the urban wildlife program) <input type="checkbox"/> All works involving volunteers (eg CVA Green Corp) except Park Care) <input checked="" type="checkbox"/> All works where supervising Manager requests a Works Plan to be completed

WORKS PLAN

WORKS PLAN NUMBER: 2016-b2s128-2

Section 1. Outline

Management Program	Reserve / Area	District	Territory Plan Classification	Objectives
MCG Improving Biodiversity and Aboriginal NRM	Block 2 section 128	Yarralumla	Urban Open Space	Continuation of ongoing work outside 40m Inner Asset Protection Zone – including planting in Aboriginal Women’s Cultural Site (southwest corner of Woodland area and overall follow up of woody weed control.

Section 2. Area Description

Hectares or Meters Affected	Vegetation	Slope	Aspect	Land use	Sites of significance
2.35 ha	The block contains woodland, primarily native, but with a moderate to high cover of introduced species in the mid and lower strata.	0-5 degrees	North	Urban Open Space	Aboriginal: cultural European: N/A Fauna: N/A Flora: N/A Endangered species: Button Wrinklewort Riparian zones: N/A.

Section 3. Approvals and Clearances

District/CPOS	Research and Monitoring	Fire Mgt	EPA	NCA	Heritage	Dial before you dig
N/A	approved	approved	approved	N/A	approved	N/A

Plantings of species endemic to the area are to restore a sensitive Aboriginal Women's cultural site, replacing weed species removed during previous weed control works. Follow-up woody-weed control continues works carried out in March, June, July and December 2015 and is funded by ACT Environment grant. The work is conducted using a mix of contract and volunteer activities under guidance of an expert project advisory committee, made up of all relevant stakeholders. The project is managed by Molonglo Catchment Group in partnership with Friends Of Grasslands and Buru Ngunawal Aboriginal Corporation. The project activities are arranged in close consultation with various ACT Government TAMS rangers and are subject of an approved project plan. Wally Bell is co-ordinator and supervisor of all on-ground works and he and Karen Denny oversee cultural site NRM activities.

ACT Planning & Development Act 2007	N/A
--	-----

Environment Protection and Biodiversity Conservation Act	
---	--

Section 4. Site Establishment Plan

Work sheds	
Material Storage Areas	
Method of Demolition	
Waste Management Procedures	
Vehicle Access	
Tree Protection	
Verge Landscaping	

Section 5. Scope of works

Field supervisor: Wally Bell and Karen Denny

Task	Responsibility	Specification	District Input	Environmental / Heritage constraints
Spray / Cut and Daub weed control	Contractor	Glyphosphate		Keep glyphosphate away from marked areas containing endangered species.
Planting	Volunteers			Native tube stock and bulbines endemic to the area limited to south west corner of Woodland area and outside of 40m Inner Asset Protection zone.

Section 6. Rehabilitation of Site

Task	Responsibility

Section 7. Timeline

Onsite inspection	Works commence on site	Works completed
12 May 2016	28 May 2016	28 May 2016

Section 8. Consultation

Community Engagement	Letter box drop	Park Care Group Other community groups	Individual residents	Media
<p>Ongoing consultation with government, landcare groups, local residents, expert panel of advisors and Ngunawal community</p> <p>Communications via appropriate websites, email and newsletter</p> <p>Barbecue lunch on site following work activities to commemorate Reconciliation Week.</p>		<p>Molonglo Catchment Group</p> <p>Friends of Grasslands</p> <p>Buru Ngunawal Aboriginal Corporation</p> <p>Yarralumla Resident's Association</p>		

Section 9. Risk Management

Public safety	Work crew safety Induction	Communications	Access/ Emergency Access
<p>Appropriate signage as necessary</p> <p>Refer to attached risk management plan</p>	<p>Prior to work commencing on the day</p>	<p>Refer to Contractor risk management plan</p>	<p>Forster Crescent and Alexandrina Drive, Yarralumla</p>

Check for asbestos	Risk Assessment		
---------------------------	------------------------	--	--

N/A	Refer to attached assessment		
-----	------------------------------	--	--

Section 10. Emergency Evacuation Plan

Mobile Phone Contact	<input type="checkbox"/> Reception quality mobile phone reception available <input type="checkbox"/> Operator Contact No <input type="checkbox"/> Contractor Contact No: Wally Bell 0419 425 347 / Karen Williams 0427 803 896 <input type="checkbox"/> PCL Supervising Officer Contact No. <input type="checkbox"/> Radio Channels
Emergency Evacuation Point	<input type="checkbox"/> Gate entrances located on Alexandrina Drive and Forster Crescent ends of Block 2. Grid Coordinates/UBD Reference http://maps.googleapis.com/maps/api/staticmap?markers=-35.30090541603449,149.12113334140008&zoom=16&size=900x900&sensor=false <input type="checkbox"/> Mobile Phone Reception available
Ambulance Procedures	<input type="checkbox"/> Call 000 <input type="checkbox"/> Ask for the ACT Ambulance Service <input type="checkbox"/> Tell the operator the nearest suburb and location details of Emergency Evacuation Point <input type="checkbox"/> Tell the operator the nature of the injury <input type="checkbox"/> Provide any contact details that could be helpful (eg. : Wally Bell 0419 425 347)

Section 11. Attachments

Works Plan Risk Assessment

Maps of work area Yellow boundary line

Detailed plan (mud maps) Red trapezoid shape is area of planting

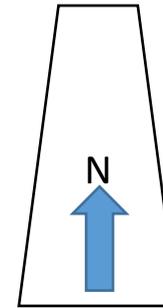


Section 12. Operational map attached

Coordinates of block corners:

Lat.-35.3012
Lon.149.1193

Lat.-35.3035
Lon.149.1195



Lat.-35.3011
Lon.149.1198

Lat.-35.3033
Lon.149.1210



Section 13. OPERATIONAL RECORD SHEET

ESTIMATED START OF OPERATION:

ESTIMATED FINISH OF OPERATION:

DATE	COMMENTS
	PRE WORKS PHOTO'S
	NOTIFY RELEVANT DISTRICT
	APPROVALS
	INITIAL BRIEFING OF CREWS AND SITE INSPECTION
	SITE INDUCTION
	COMMENCE OPERATIONS
	<i>SIGNIFICANT ISSUES OR EVENT</i>
	<i>SIGNIFICANT ISSUES OR EVENT</i>
	<i>SIGNIFICANT ISSUES OR EVENT</i>
	COMPLETION OF OPERATIONS
	POST WORKS PHOTO'S

RISK ASSESSMENT

Project Name / Block 2 Section 128 Yarralumla planting and weed control activity – 28/5/2016

Work Activity / Task: planting of tube stock and bulbines and weed control by use of backpack spray unit/cut and daub

Prepared by: Karen Williams – Molonglo Catchment Group

Signature:

A handwritten signature in black ink, appearing to read 'K Williams', followed by a horizontal line.

Date: 17 May 2016

Class 1: (High Risk): Does the hazard have the potential to - kill, permanently disable create a major impact on the environment, have a negative impact on 25% of budget or public / political scrutiny leading to an inquiry?

Class 2: (Medium Risk): Does the hazard have the potential to - cause a serious injury, or illness (temporarily disable you), the environment is compromised, have a negative impact of 5%-10% on budget or internal/external scrutiny on decisions?

Class 3: (Low Risk): Does the hazard have the potential to - cause a minor injury (not disable), a negative impact on the environment, a negative impact of 1%-5% on budget or internal review required due to decision-making.

	Dangerous flora and fauna	2	hazards and a plan for evacuation/emergency vehicle access.	3	MCG/FOG/Ngunawal traditional custodian (site cultural NRM) Co-ordinators
	Snake/Spider bite, insect Stings	2	A first aid trained person and first aid kit to be present for the duration of the activity. Mobile phone to be on site for the duration of the activity.	3	MCG/FOG/Ngunawal traditional custodian (site cultural NRM) Co-ordinators
	Hand held tools including chain saw	3	Coordinator to provide a briefing of hazards associated with tools and equipment. Participants to be briefed in use of hand tools. Use of chain saw by qualified operator. A first aid trained person and first aid kit to be present for the duration of the activity. Mobile phone to be on site for the duration of the activity. Coordinator to provide a briefing of hazards associated with use of hazardous chemicals. Activity supervised by Chem. Cert qualified person.	3	MCG/FOG/Ngunawal traditional custodian (site cultural NRM) Co-ordinators
	Herbicide	3	Safety Data Sheets (SDS) to be onsite.	3	MCG/FOG/Ngunawal traditional custodian (site cultural NRM) Co-ordinators

	Accidental Injury	3	<p>Ensure all participants fill out sign on and off sheets at the beginning and end of an activity</p> <p>A First Aid Officer is to be present for the duration of the activity and have the required kit to be able to administer First Aid if required.</p> <p>This person is to be identified at the initial briefing and to be made known and visible to all participants.</p> <p>A portable barbecue will be set up within the northern boundary of the block, nearest Alexandrina drive. A non-flammable mat will be used under the barbecue equipment, a fire extinguisher and 2 x 20 litre containers of water will be placed beside the barbecue.</p>	3	MCG/FOG/Ngunawal traditional custodian (site cultural NRM) Co-ordinators
	Barbecue lunch				

ACTEW Fire Management meeting notes 17/8/2016

Present: Chris Dare (ACTEW), Joel Kelly (TAMS – Parks and Conservation - Bollard Project), Wally Bell & Karen Denny (Buru Ngunawal), Sarah Sharp (FoG), Nicki Taws (Greening Australia), Karen Williams (MCG).

Item	Actions	Main players
Fire management. designated fire mitigation zone	<p>Convenient markers for 40 m distance from the Chinese Embassy fence</p> <ol style="list-style-type: none"> 1. The metal end (closest to the ground) of the tensioning cable that is attached to the power pole. 2. A large piece of hemispherical concrete pipe lying on ground near the centre of the block. 	<p>TAMS Chris Troth was involved in developing fire management plan for block.</p> <p>Chris Troth -Fire Management Officer Phone : 0414109612 Fax : 02 62075366 Email : christopher.troth@act.gov.au Parks and Conservation Service Fire Management Unit Environment and Planning Directorate</p>
Threatened Species	ACTEW would appreciate GPS points of threatened species	Karen W and Sarah to send copy of reports and GPS points of plants and cultural sites to Chris Dare.
"No Mow" Bollards	<p>A line of bollards complete with conservation area sticker on them will be placed across the block. (marked on aerial photo) .They will align between a point about one meter north of the northern corner of the niche in the Chinese embassy fence and with the Oak tree on the opposite side of the block. The bollards will also be placed across the eastern side of the post-contact site.</p> <p>Bollard with conservation sticker will be placed near gate on Forster Crescent. Gate will be locked.</p>	<p>TAMS Joel Kelly Joel.Kelly@act.gov.au Joel is only leading the bollards project.</p> <p>A new Volunteers coordinator will start soon (September?), standing in for Rachel Tokely who is on 12 months leave. That coordinator will be the point of contact.</p> <p>TAMS Tristan Adrian is interested in what is happening on Block 2. Joel said Tristan would have liked to attend this meeting, but was otherwise committed. Joel also suggested Tristan will be a good contact. Tristan.Adrian@act.gov.au Tristan Adrian Email tristan.adrian@act.gov.au Central Support Officer 6207 2521</p>
Power lines	<p>Suggest alternative plantings along powerlines to reduce need for future disturbance.</p> <p>ACTEW requires min 1.5m -3m clearance beyond the outside lines.</p> <p>The aim is to minimise impact of burning (low temperature). Roads at either end of block are regarded as buffer.</p> <p>ACTEW will only need to clear the easement under the lines if there is something contributing to a potential impact present.</p> <p>Proposal is that the trees/saplings beneath the lines contributing to potential issues be removed and</p> <p>KW, KD & SS have discussed use of low shrub (max 1m). KD is keen to see a thin screen of Eucalypt saplings remain between Power line easement and main trees in women's area.</p>	<p>Sarah/Nicki/Karen D/Karen W, Provide species list for new plants.</p> <p>Chris Dare to talk to Michael Brise (spelling???) (TAMS) about tree removal.</p>

Power pole rehabilitation planting of disturbed area	Nicki and Sarah suggested that native grasses would be best rehabilitation of bared area around pole.	Karen W/Sarah/Nicki/Wally Inform Chris Dare of ideas for best species and method for seeding the area.
Screening Plants	More screening plants needed around outside of women's area. Along west edge of track from Forster Crescent gate, and along block fronting Forster Crescent. Low shrubs will be used to help screen northern side of women's area, and to protect stone arrangement at north of women's area.	KarenD/Nicki/Sarah/Karen W
Block 10	Provide Peter Beutel (NCA) notice of a couple of weeks prior to works commencing. He will send the Chinese embassy a heads up so we don't inadvertently create a diplomatic incident.	All Peter Beutel JP Manager, Lake & Dam Mobile: 0412 517 484 peter.beutel@natcap.gov.au]
Community awareness activity	Let Chris Dare (ACTEW) about any community awareness activities so he can inform ACTEW staff of cultural awareness opportunity.	Karen W/Wally/Karen D ACTEW contact: Chris Dare Manager Environment, Quality and Systems Christopher.Dare@actewagl.com.au T: 02 6293 5719 M: 0427 077 95



Bullan Mura Video Brief

My intention is to make a video recording using the visuals, voices and environmental sounds connected with the Block 2 Section 128 Yarralumla project to tell a story about Bullan Mura. The voices will be of Wally Bell (BNAC), Karen Denny (BNAC), Sarah Sharp (FoG), Nicki Taws (GA) and Karen Williams (MCG) to provide narrative and different perspectives throughout the video. I'm only intending to use our voices, so don't worry unnecessarily if you don't want to appear on camera.

As previously agreed we will meet on site on Monday 12 September. My plan is to record voices and sound to be used as a source to 'voice-over' and narrative for the landscape/environmental visuals that will be recorded throughout the coming weeks (as weather permits). Hopefully we will have some spring growth to record too.

There is no preparation involved, apart from thinking about what you want to say in response to the following questions. I will simply ask the questions on the day and we would record your answers. Because the video will only run for 7-10 minutes maximum, we will need to limit the length of the answers/statements of each person to about 2 minutes total.

Here is the list I will draw questions from to ask you.

1. What is your name, position and the organisation you are associated with?
2. How has your organisation been involved in the Bullan Mura project?
3. Tell me the story of why Block 2 became known as Bullan Murra?
4. What did you personally do in the project?
5. What is your vision for Bullan Mura?
6. How will has project affected the endangered Button Wrinkle Wort?
7. What other rare or endangered species? How?
8. Tell me a story about the scrape that led to rare species re-establishing.
9. What are the management issues of Bullan Mura?
10. What are your short-term management objectives?
11. What are your long-term management objectives?
12. What were the protocols for best practices?
13. Why have we started planting a foraging garden here?
14. What Ngunawal culture did we discover on Bullan Mura?
15. How will Ngunawal culture be protected?
16. How will Bullan Mura affect the community?

Summary of Audio recording session 12-9-2016.

Audio recording was done in the morning because there is a possible shower or two predicted, most likely in the afternoon and evening. Videoing will be done in coming weeks and edit the sound and images. Times: 10:00 -Nicki, 10:30 – Sarah, 11:00 – Wally, 11.30 – Karen W, 12:00 -Karen D.

November 2016 photo record plantings / before and after photos: 2014 (appendix D)/Oct-Nov 2016



March 2015



Oct 2016



Dec 2014



Oct 2016 -TAMS Conservation Area bollard



Dec 2014



Nov 2016



Dec 2014



March 2015



Oct 2016



Oct 2016



Dec 2014



Oct 2016 showing one of conservation area bollards



scraped area in Dec 2014 (see also page 28) and in 2016, below (*exotic species).



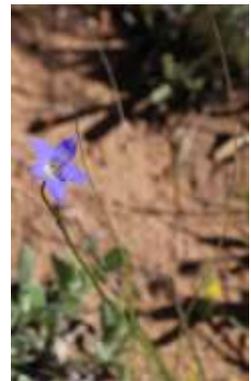
*Capeweed (*Arctotheca calendula*)
*Clover species (*Trifolium* spp)
*Hair grass (*Aira* sp)



*Red Bartsia (*Parentucellia latifolia*)



Bartsia, Capeweed, Clover



Bluebell (*Wahlenbergia* sp)



Fuzzweed (*Vittadinia muelleri*)



Common Everlasting (*Chrysocephalum apiculatum*)



Dwarf Sunray (*Triptilodiscus pygmaeus*)





*Suckling clover (*Trifolium dubium*)



*Common Vetch (*Vicia sativa*)



Yellow Burr-daisy (*Calotis lappulacea*)

Oct 2016 woodland area



Scrambled Eggs (*Goodenia pinnatifida*)



*Sheep's Burnet (*Sanguisorba minor*)



*Proliferous Pink (*Petrorhagia nanteuillii*)



Bulbine Lily (*Bulbine bulbosa*)





Silver Wattle (*Acacia dealbata*)



Red-stemmed Wattle (*Acacia rubida*)



Black-anthered Flax-lily (*Dianella revolute*)



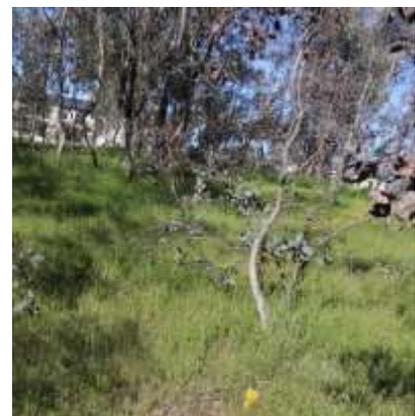
Tick Indigo (*Indigofera adesmiifolia*)



*Quaking Grass (*Briza maxima*)



Blakely's Red Gum (*Eucalyptus blakelyi*) with Bulbine lilies (*Bulbine bulbosa*) and exotic grasses in the understorey



showing veg watch plot stake



Common Woodruff (*Asperula conferta*)



Kangaroo Apple (*Solanum linearifolium*)



Kurrajong (*Brachychiton populneus*)



Smooth Flax-lily (*Dianella longifolia*)



Yam Daisy (*Microseris lanceolata*)



Bluebell (*Wahlenbergia* sp.) and Common Everlasting Daisy (*Chrysocephalum apiculatum*)



Spiny-headed Mat-rush (*Lomandra longifolia*)



Sticky Everlasting Daisy (*Xerochrysum viscosum*)



Eastern Grey Kangaroo