

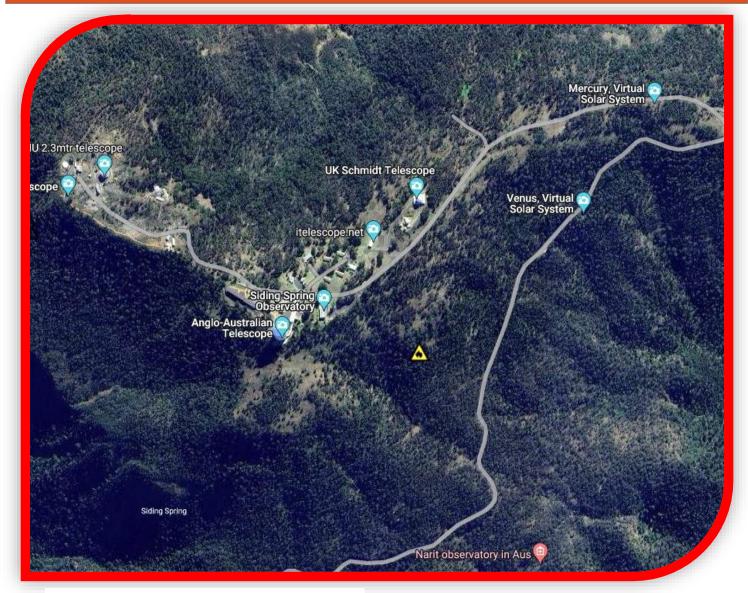
AUSTRALIAN NATIONAL UNIVERSITY



SIDING SPRINGS OBSERVATORY

418 Observatory Road, Coonabarabran, NSW 2357

BUSHFIRE EMERGENCY MANAGEMENT & EVACUATION PLAN



Prepared by: Building Code & Bushfire Hazard Solutions P/L (02) 9457 6530 June 2024 Ref: 240353B Final

Issue / Revision	Issue Date	Prepared by	Accepted / Commented by
Final	11/06/2024	Dave McMonnies	Brad Condon – Satellite Sites Manager

The NSW Rural Fire Service (RFS) document "A guide to developing Bush Fire Emergency Management and Evacuation Plan" has been used as the basis for this emergency management document. Reference has also been made to Australian Standard AS3745 "Planning for emergencies in facilities" – 2010 for the purposes of providing a Warden management structure. AS3747 does not address bushfire emergencies.

The Siding Springs Observatories (SSO) existing 'Emergency Response Procedures' (ERP) has been referred to as the base data for this document. This document should be read in conjunction with the current 'Bushfire Section' of the ERP for specific ANU policy advice.

A copy of this <u>Bushfire Emergency Management & Evacuation Plan</u> should be provided to local Coonabarabran Fire Services, the Council's 'Local Emergency Management Committee' and be easily available to all staff with a copy at the reception office within Visitors Centre and the AAT Telescope S33 building.

Whilst the final decision to evacuate the SSO rests with the Chief Warden, the primary emergency function is to ensure all staff, students & visitors are safe. Initially all students and visitors are to be assembled in the Visitors Centre building to maintain tenable conditions and to be easily accounted for prior to any staged evacuation. Staff will initially assemble in the AAT Telescope building and await further instructions.

The next revision of this document should occur annually or following any bushfire impact affecting the SSO to ensure that the content and recommended actions within this document remain relevant and fit for purpose.

Prepared by:

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1.0 Introduction

Since opening in 1964, The Australian National University has operated the SSO site hosting research telescopes from the ANU's Research School of Astronomy and Astrophysics (RSAA), Las Cumbres Observatory (LCO) and many other institutions from around the world.

The SSO is located on the plateau of Mount Woorut (at a height of 1165m) approximately 25 kilometres west of the town of Coonabarabran, NSW, bordering the eastern edge of the Warrumbungle National Park. The ANU land holding covers an area of approximately 151 hectares and includes the Observatory Precinct on the summit of Mt Woorut as well as some of surrounding steep slopes to the north and south.

The only SSO access is via a steep, winding, dual lane sealed all weather road (Observatory Road). The road is sign posted off Timor Road adjacent No 2285 Timor Road. The road is approximately 4.0km long from the Visitors Centre down to the Timor Road intersection and passes through heavily forested area. Heavy vehicles such as fire appliances and busses can negotiate the road although driver care is required. The road is highly susceptible to fallen trees.

Vehicular access to and from the SSO via Observatory and Timor Road's may prove difficult in times of significant bushfire impact due to smoke and ember impact and possible tree falls along Observatory Road. Caravans are not permitted on Observatory Road.

Currently the SSO can accommodate up to 50 persons including SSO staff & visitors. However, on the October long weekend "*Open Day*" visitor numbers could be as high as 2000 persons during the day.

The SSO is staffed seven days a week from 08:30am to 4:00pm. Any students residing at the SSO's Lodge building or Cabins will be required to follow their SSO Induction.

The Chief Warden will be the duty "Site Officer" of the SSO. When the Chief Warden is not on-site responsibilities shall pass to their nominated deputy. Early relocation of SSO occupants to Coonabarabran is the optimum bushfire safety measure provided **adequate time** permits this to occur safely.

At present the AAT Telescope building S33, is notified as the local '*Community Refuge*' by the SSO management. The AAT Telescope building can accommodate up to 150 persons. Alternatively, the Visitors Centre can be used as a <u>temporary</u> "Safe Refuge" and assembly area and is capable of accommodating over 100 persons.

PBP does require compliance with Section 2.4 'Acceptance Criteria' and Appendix A 'Design Considerations' of the document "Design and Construction of Community Bushfire Refuges" as produced by the Australian Building Codes Board – 2014 (ABCB). The AAT should be compliant as possible being an existing brick building.

The SSO region is mapped as being subject to bushfire impact. The areas around the SSO buildings are in the main very well maintained with mowed lawns, formed gardens, and access pathways and the main access road extending up to western portion of the site.

All SSO structures or buildings are within 100m of the forested area surrounding the site. All SSO buildings are subject to extensive wind driven ember and smoke impact.

During forecast days of declared '*Extreme*' and '*Catastrophic*' bushfire danger the SSO will be closed to all visitors and tradespersons. All students will be asked to '*Relocate Early*' off site where possible. Where sufficient time is NOT available to safely relocate, a '*Shelter-in-Place*' option can be used at the ATT Telescope building S33 or Visitors Centre.

The SSO currently has a bushfire warning zone of 25km around the site via the "Hazards Near Me" app. Bushfire emergency plans will be actioned for all bushfires within this warning zone.

1.01 Purpose

The purpose of this BEMEP is to provide ANU Administration, Warrumbungle Shire Council, the NSW Rural Fire Service and other relevant parties, an understanding of possible bushfire relocation, evacuation or shelter in place measures which could be undertaken for the protection of the SSO's occupants (students, staff and visitors) and to provide a basic incident management tool for staff.

Reference is made to the ANU SSO document "Emergency Response Procedures" of August 2023 for internal policy and other directives.

By way of information, a simple distinction between an internal building fire and an external bushfire is that for an internal building fire it's typically "*everybody out*", but for external bushfire impact it's "*leave early*" (relocate) OR "*everybody inside*" (*shelter in place*)".

The latter option allows for an opportunity for initial accounting of all SSO occupants after which the designated **Chief Warden** may still choose to evacuate the SSO based on available information **or** to remain within the relative safety of the AAT Telescope building or Visitors Centre.

The term <u>evacuation</u> infers the rapid but temporary movement of all occupants from a building or incident area to an external place of relative safety where <u>very little time is</u> <u>available</u> before impact.

The term <u>relocation</u> relates to all occupants having adequate time to calmly prepare and move to predetermined safer locations outside a building or the SSO / incident area. In other words, to leave early well before any direct bushfire impact occurs.

Three options are available to the Chief Warden;

- 1. Controlled **relocation** to an external safer place being a defined Neighbourhood Safer Place (NSP) other safer locations clear of the Warrumbungle region.
- 2. Coordinated evacuation (by emergency services) to a nominated safer place, or
- 3. Remain within a designated "safe refuge" building being the AAT Telescope building S33 and or the Visitors Centre. (**Shelter in Place**)

Where an evacuation is considered, <u>very careful consideration must be given to the time</u> available to undertake such an evacuation, also to the logistics required to safely

accomplish an evacuation. That is, availability of sufficient busses or private vehicles for the immediate transport of students, visitors and staff, ensuring external roads are safe to travel on that is clear of responding fire services and more importantly, clear of bushfire smoke and ember attack which can dramatically reduce driver awareness and visibility.

Whilst a Neighbourhood Safer Place (NSP) can be noted as the AAT Telescope building, once occupants clear the SSO environs they are free to travel to other safer locations freely should they so desire. In this case the safest optional location is Coonabarabran.

1.02 Aim and Objective

The aim of this BEMEP is to provide basic and reasonable preplanning advice for the possible relocation, evacuation or shelter-in-place options for all SSO occupants.

In most circumstances where <u>adequate time</u> permits, these relocations or evacuations would be to external locations well away from the SSO, likely being to Coonabarabran.

An objective is to ensure that when the <u>safe time</u> for early relocation has lapsed the BEMEP also includes instructions on how to "*shelter-in-place*" within the AAT Telescope building S33 or within the Visitors Centre.

Australian National University SIDING SPRINGS OBSERVATORY COONABARABRAN

The primary action to follow under <u>early warning</u> of serious bushfire is to:

Relocate from the SSO Grounds

Name of Premises:	Siding Springs Ob	oservatory	
Street address:	418 Observatory	Road, Coonabara	abran NSW 2357
<u>Council:</u>	Warrumbungle Sh	ire Council	
Contact Persons:			
Chief Warden:	Brad Condon Tel:		Mob: 0419 511 046
Dep Chief Warden:	Martin Gordon Tele	:	Mob: 0473 150 590
Dep Chief Warden:	Gerard Hutchinson	Tele:	Mob: 0457 174 659
Comms Officer:	Adam Gaudry Tele:		Mob: 0428 607 086
ANU Security:	Duty Officer Tele:	612-52249 (press 1	for emergency)
Type of Facility:	Astrophysics Rese	arch Facility	
No of Buildings or Sti	ructures: 28 b	uildings or structu	res
Approximate max occ	cupant level: 2050) persons (October (Open Day figures)
Access:	Main Entry – Observa Sealed, dual lane, ste		or Road.
Transport:	Generally, all ANU or Buses only where vis	-	esent.
Council / NSW RFS	'Neighbourhood S	Safer Places'	
		Oval, Chappell Ave.	Coonabarabran – open
		scope building S33 Centre building S15	
Date of Plan:	June 2024	Date of Review:	June 2025

2.0 Background Information

The Siding Spring Observatory (SSO) is on the edge of the Warrumbungle National Park near Coonabarabran, NSW and is Australia's premier optical and infrared astronomical observatory. Since opening in 1964, The Australian National University has operated the SSO site hosting research telescopes from the ANU's Research School of Astronomy and Astrophysics (RSAA), Las Cumbres Observatory (LCO) and many other institutions from around the world.

The site is located on a high plateau (1164m asl) on Mount Woodrut in the Warrumbungle Ranges. The site area is approximately 51ha bounding the Warrumbungle National Park being accessible by a single narrow road (Observatory Road)

The SSO is used for short and long-term research projects and undergraduate / post graduate field trips. The SSO can also cater for visitors and holds an Open Day in October each year.

Currently the SSO can accommodate up to 50 persons including SSO staff and up to 2050 persons on the Open Day.

The SSO is staffed 24 hours a day seven days a week. Students and visitors can be accommodated in several Cabins or 'The Lodge' building (S25). Any students or guests residing at SSO will be required to follow Warden's instructions or liaise with ANU Security during times of emergency.

The SSO does not have any dedicated buses, all transportation is via ANU staff or private vehicles. Chartered buses may be present on special day visits.

There is no local '*Neighbourhood Safe Refuge*' (NSP) building in the region, the closest being in Coonabarabran. The AAT Telescope building is of sufficient size to accommodate all persons within the ANU grounds excluding on 'Open Days'. It provides suitable internal shelter, amenities and communications. Alternatively, the Visitors Centre can also be used.

All buildings remain subject considerable bushfire impact from wind driven embers and smoke impact due to the mountain top location.

In times of possible bushfire impact, Chief Warden needs to consider an early relocation (several hours beforehand) of all occupants (students, visitors, staff, tradespersons) Alternatively where time doesn't permit the safe relocation of all occupants, the Chief Warden may decide to direct all occupants into the AAT Telescope or Visitors Centre buildings for refuge.

The Chief Warden will be the duty 'Site Officer' of the SSO. A deputy Chief Warden should also be appointed. All ANU staff will automatically become Wardens. When no site staff are available, the Chief Wardens responsibilities shall pass to the ANU Duty Officer who is contactable through ANU Security.

On declared days of -	Extreme Bushfire Danger	Catastrophic Bushfire Danger
The SSO will be:	Open to staff only, under continuous fire watch conditions.	Closed to all persons including staff

Where a bushfire incident occurs within the grounds or a bushfire is reported to be within the 25km '**watch zone**' the Chief Warden will evaluate the situation and then decide upon early relocation, evacuation or a shelter-in-place options.

As evidenced in 2013, direct bushfire impact is highly likely on Extreme and above bushfire danger days.

It is also acknowledged that Fire Services may take some time to arrive at the SSO therefore initially ensuring all students, visitors and staff are safe inside the AAT Telescope or Visitors Centre building will be priority. It is from these locations that further actions may be decided upon by the Chief Warden based on available information.

3.0 Roles and Responsibilities

All facilities where non-related persons work for commercial or other reasons and paid staff are involved require an Emergency Management Plan under the NSW State Work Health and Safety Act. Additionally, The ANU requires that an Emergency Management Plan (EMP) is developed for all its facilities. These EMP's should be based on Australian Standard AS 3745 "Planning for emergencies in facilities – 2010" which provides information on the development of a Warden management system. However, the standard whilst addressing several types of emergency incident does not address bushfire safety.

Notwithstanding, the formation of an Emergency Planning Committee (EPC) and the Emergency Control Organisation (ECO) is the same for all facilities the difference being the size of the facility and hence the size and scope of the EPC and ECO.

The head of the ECO is known as the Chief Warden. In this case this person can also be known as the 'Satellite Sites Manager'. The Chief Warden shall monitor the NSW RFS web page for 'Fire Weather Ratings' within the 'Northwestern and Upper Central Regions' during the summer months. The highest rating will be used for any decisions.

(https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans)

Additionally, the Chief Warden shall monitor or arrange to be monitored the forest area surrounding the SSO for a 25km radius. Any bushfire within this radius shall be carefully monitored and will trigger this plan where it is travelling towards the SSO otherwise it will be regularly monitored at 1-2 hourly intervals.

The Chief Warden is responsible to monitor, manage and direct all occupant movements during bushfire impact until the arrival of the first emergency service. The Chief Warden is to delegate Staff (Wardens) to assist as required including any Office staff who will be essential for initial communications both within the SSO and to outside emergency services.

3.01 Preparation for Bushfire Impact:

Following advice of a bushfire within the 25km radius region, the Chief Warden shall:

- Advise all Wardens of the possibility of bushfire impact and from what direction if possible.
- Advise all visitors to assemble at the Visitors Centre and prepare to leave the SSO.
- Ask Wardens to isolate / turn off any LPG gas bottles attached to buildings.
- Ensure all external fire hydrants can be freely accessed.
- Check that all external fire hose boxes are ready for use.
- Check the electrical generator for the water supply pumps and treatment plant has fuel for minimum 4 hours operation.
- Check the diesel fire pump has a minimum 4-hour fuel supply.
- Check the fire trailer has a full water tank and the fire pump is fully fuelled and runs.
- Close off all doors on the maintenance shed / fuel store.

- Check and confirm all residential buildings are secured against ember entry.
- Check and confirm the AAT Telescope building is available for personnel refuge.
- Check and confirm the Visitors Centre is available for temporary refuge.
- Arrange to have the site personnel register available and updated.
- Advise Coonabarabran RFS District Office of preparations and if any RFS brigades will be attending the SSO.
- The Chief Warden shall then advise ANU Crisis Management Team of the situation.

Warning: Any solar panel arrays will remain 'LIVE' up to the first isolation switch.

3.02 Approaching Bushfire: The Chief Warden shall;

- a) On notification of an approaching bushfire or the smell of bushfire smoke the Chief Warden shall.
 - Advise all staff of the presence of a bushfire and any details which may be available at that time and that they are to assume the role of Wardens.
 - Attempt to assess the <u>direction and colour of the smoke</u> then advise or arrange to advise the Fire Services via the 000 emergency telephone system of details.
 - Confirm that Fire Services are being responded to the SSO.
 - Advise the NP&WS of the bushfire and what is being undertaken by them (NP) to control the outbreak.
 - Advise Warden/s to ensure that:
 - All external windows and doors are closed in all buildings including the AAT Telescope and Visitor Centre buildings.
 - Where time permits, direct all visitors to the Visitors Centre building S15.
 - o Observatory and Timor Roads are clear by checking with Police.
 - Where roads are clear, advise all visitors to depart the SSO and relocate to Coonabarabran immediately.
 - All trades persons working within the SSO are directed to 'make safe' their work area and depart the SSO immediately.
 - All flammable liquids and gas bottles (BBQ's) are secured / isolated
 - All split system air conditioning systems remain switched on.
 - Where provided, check that any local Emergency Kits are at the ready.
 - Any radio or televisions inside the AAT Telescope or Visitor Centre buildings are on and regularly monitored for further bushfire advice.
 - Where bushfire impact is likely, arrange to locate all staff and students inside the AAT Telescope building S33 or Visitor Centre S15 and await further instructions.
 - Advise Fire Services and or Police of your actions.
 - Advise ANU Crisis Management Team of your actions.
 - Advise ANU security of your actions.

b) Early Relocation / Evacuation of Staff & Students

Where it is considered that <u>sufficient time</u> (several hours) is available for the safe relocation / evacuation of all staff and students to a declared '<u>neighbourhood safer</u> <u>place'</u>, the Chief Warden shall:

- Carry out the previous functions, (3.01a) above and,
- Direct all students and staff to exit the SSO grounds to Coonabarabran in their private vehicles.
- Direct Warden/s to double check the AAT Telescope building has been properly secured externally.
- Direct Warden/s to double check the accommodation cabins and The Lodge to ensure guests have departed and all external windows and doors are closed.
- Ring '000' and advise the Fire Services that the SSO is being evacuated and that no persons will be left on site.
- Arrange to have the main gate closed once all Staff & students have departed.
- Arrange to have the access gate at the Timor & Observatory Roads closed on final exit of remaining Wardens and the Chief Warden.
- Advise ANU Crisis Management Team of your actions.
- Advise ANU security of your actions.

Note: The early relocation / evacuation may take considerable time (several hours) to organise and implement. Continued monitoring for bushfire direction and intensity must be arranged and any changes relayed back to the Chief Warden.

3.03 Early Relocation – Open Day

The SSO will be closed to all visitors where bushfires are within the 25km of the SSO. Where a bushfire commences during the Open Day and due to possibly large numbers of visitors attending, early visitor relocation is paramount in ensuring their safety and reducing Warden workloads later if staff and students are required to relocate / evacuate later.

The Chief Warden shall arrange:

- a) Visitors to be assembled inside or outside, in the car park of the Visitors Centre. The Chief Warden or their delegate will provide advice as to:
 - The current and predicted bushfire movement and situation.
 - How and in what order all SSO visitors will be relocated. (buses then cars)
 - Ask any bus / coach drivers to gather their passengers and depart the SSO immediately confirming the narrow, winding nature of Observatory Road.
 - Advise bus / coach drivers to allow four or more bus / coach lengths between buses where bushfire smoke maybe impacting the road.
 - Advise visitors in private vehicles to follow on after the buses depart allowing 2 or more vehicle spaces along Observatory Road.
- b) Staff & Students
 - Advise Staff and students of the situation and possible future actions.
 - Arrange to have a Warden verify / update the site personnel / student register.
 - Carefully monitor local conditions and all bushfire advisory systems.

- If conditions deteriorate, instruct all staff and students to relocate immediately.
- Advise all Wardens to progressively relocate the SSO after confirming with the Chief Warden.
- Advise Fire Services and or Police of your actions.
- Advise ANU Crisis Management Team of your actions.
- Advise ANU security of your actions.

3.04 Immanent Bushfire Impact:

Bushfire movement in the plateau region of the SSO is likely to be very rapid. Larger bushfires will tend to generate their own winds. This effect combined with the very steep slopes may dramatically accelerate bushfire progression particularly by 'spotting' well ahead of the main fire front.

Where bushfire impact is or is likely to occur, the Chief Warden shall:

- Carry out Items 3.02a & 3.02b.
- Confirm that all SSO staff and students and visitors who did not relocate / evacuate earlier are located inside the AAT Telescope building S33 or Visitors Centre S15.
- Confirm with local Fire Services via the '000' emergency network that bushfire impact is or has occurred and to what aspects of the SSO.
- Advise '000' the number of staff, students and visitors who are seeking shelter in the SSO and if any medical assistance is required.
- Confirm that Fire Services are responding the SSO.
- Ensure any emergency kits are made available in the ATT Telescope building and or the Visitors Centre.
- Monitor all media outlets where possible for bushfire information.
- Advise ANU Crisis Management Team of your actions.
- Advise ANU security of your actions.
- Await the arrival of emergency services
- Where possible use mobile phone to maintain communications between the refuge buildings.

3.05 Recovery

Bushfire recovery can be as simple as checking for impact damage, finding none and reopening the SSO. Conversely dependent upon asset damage, any occupant injuries and safe road access availability, the site may not re-open for a period of time. Having regard to the easing or cessation of direct bushfire impact the Chief Warden shall:

- Where the fire front has past by or died down, direct that 2 Wardens travel in pairs (for their safety) & undertake a brief inspection of the AAT Telescope building and report back.
- Repeat the assessment process for all residential accommodation buildings and cabins if considered safe to do so.

• Allow staff and students who sheltered inside the AAT Telescope or Visitors Centre building to exit.

Warning: Bushfire smoke can be hazardous to health. Consideration must be given to the amount of smoke present before allowing movement outside the AAT Telescope or Visitors Centre buildings.

- Following discussions with any attending Fire Services, and on positive advice from Wardens inspecting all buildings and grounds, the Chief Warden will determine if students and staff can return to their normal activities.
- The Chief Warden shall then advise ANU Crisis Management Team of the situation.
- Advise ANU security of your actions.

The triggers for recovery following a bushfire emergency:

Trigger	Chief Warden Actions
Advice of or seeing a bushfire smoke column or cloud dissipate and cease or where actual burning vegetation dies down or ceases to burn.	 Arrange a brief examination of the AAT Telescope & Visitors Centre buildings and grounds checking for any damage, spot fires or retained embers and extinguish same if considered safe to do so. Arrange to carry out a detailed safety inspection of all accommodation buildings. Arrange the reconnection of any LPG gas, electricity and water supplies. Check private cars parked in open space for damage. Check local roads are clear by either driving on and then returning or seeking Police advice. Advise ANU Crisis Management Team management of actions. Advise ANU security of the situation.
Advice from Fire Services	As above

4.0 Evacuate or Shelter-in-Place Procedure

4.01 Evacuate or Shelter-in-Place:

 The Chief Warden shall, after considering all options available at the time, decide to either evacuate or to 'Shelter in Place'. Any decision to evacuate must be made as early as possible to ensure the safe passage for all SSO students, staff and visitors to neighbourhood safer places and all without hindering access for attending fire and emergency service vehicles on the narrow local access roads. These roads may themselves be impacted by bushfire.

Timing will be critical.

 Attending Fire Service's or the NSW Police <u>may instruct</u> that all SSO students and staff are to be evacuated, in which case the Chief Warden, following a local SSO assessment of available resources and timing, may follow such instruction if deemed safe to do so. The risk being that with minimal time available, bushfire impact may occur during the evacuation process thus risking lives either within the SSO or on external public access roads. Further discussion with the Fire Service's or Police is highly recommended prior to any evacuation agreement.

Warning:

Caution must be used in moving occupants about the Campus grounds at any time during bushfire impact due to possible heavy bushfire smoke restricting vision and generating respiratory issues or direct impact from wind driven embers.

4.02 Chief Warden

On being advised of a rapidly approaching bushfire or on the sighting or smelling smoke, the Chief Warden shall immediately notify the Fire Service and seek urgent confirmation of any bushfire burning in the local area.

Where smoke can be seen the Chief Warden should advise the Fire Service of the following;

- The observed location of the smoke (west / south / north / east of the SSO).
- Direction of travel of the bushfire smoke (toward or away from the SSO).
- The colour of the smoke, (light grey / brown / heavy black).
- The approximate number of visitors, students and staff at the SSO at that time.
- How long it would take to relocate or evacuate all the SSO occupants.
- What other actions are being undertaken to safeguard SSO occupants.

Proposed actions should include:

- Items 3.02 3.04 above, and
- Where provided in the AAT Telescope & Visitors Centre buildings, ensure that 'split system' air conditioning systems are turned on.
- Confirm all students, staff and visitors are accounted for.

- Use any available security cameras to keep a '**fire watch**' outside for any 'spot fires'.
- Arrange to extinguish any spot fires with fire hose reels. (if considered safe to do so by Wardens)

4.03 Shelter in Place triggers

The triggers for sheltering in place are:

Trigger	Chief Warden Actions
Advice of or seeing a rapidly approaching bushfire or smoke column over the general plateau / valley system or the SSO itself.	Activate this Plan. Advise all SSO staff, students & visitors. Arrange to have all external windows and doors closed in the AAT Telescope & Visitors Centre building and all accommodation buildings. Arrange to have any A/C turned on in the AAT Telescope & Visitors Centre building. Ensure adequate drinking water is available in the AAT Telescope & Visitors Centre building. Arrange to have any Emergency Kits ready at AAT Telescope & Visitors Centre building.
Advice of possible bushfire impact in very near future from NSW Rural Fire Services, National Parks and Wildlife Service, Fire Rescue NSW or Media bulletins	As above: Confirm with Fire Services the direction of the bushfire and possible impact time. Advise all staff and students of the situation. Relocate all staff and students to the AAT Telescope building S33 or Visitors Centre S15. Ring '000' and advise the Fire Service of your actions. In both the AAT Telescope & Visitors Centre building - Arrange to test all internal fire hose reels. Fill buckets or other containers with water and place near external doors only.

5.0 Ordered Evacuation Procedures:

In the event that a bushfire evacuation <u>has been ordered by</u> the NSWRFS, Fire Rescue NSW or NSW Police, the Chief Warden shall firstly confirm that local access roads are freely accessible. If not, the Chief Warden should advise that all visitors, students and staff intend to stay in the AAT Telescope or Visitors Centre buildings due to extreme risk of 'fire over-run' or vehicular accidents if driving on the local access roads and importantly <u>that the time required</u> to arrange an immediate and safe evacuation is not attainable.

Where the Chief Warden does decide to *comply with the evacuation instructions* the following should be carried out:

- a) Advise & Prepare
 - Advise all Wardens, staff and students of the pending situation.
 - Where possible, arrange to close and lock all external windows and doors on all buildings.
 - Ensure all ancillary machinery and equipment is turned off.
 - Ensure all gas supplies or LPG bottles are turned off and fuel lines isolated.
 - Ensure all building electrical supplies are turned off where possible, excluding the AAT Telescope & Visitors Centre building buildings.
 - Instruct a Warden to ensure the main gate is locked open.
 - Advise ANU Crisis Management Team Management of the situation.
 - Advise "000" / Fire Services or Police of where you intend to direct SSO occupants to go and that the AAT Telescope building will be vacated but not necessarily secured against unauthorised entry.

b) Evacuate

- Brief all staff and students and Wardens about the situation and what is to be done. Situations can change rapidly so be vigilant in regards to monitoring the ever changing situation, particularly in high wind periods.
- Confirm with Wardens that all building external doors and windows are closed.
- Advise all persons about the dangers of traveling along Observatory Road and Timor Road during bushfire impact.
- Instruct all staff and students to evacuate the SSO site and proceed to an NSP's in Coonabarabran or away from the oncoming bushfire threat.
- Instruct all Wardens to evacuate when the last of the staff and students depart.
- The Chief Warden shall continue to liaise with Emergency Services to determine when staff and students can return to the SSO.
- The Chief Warden is to update ANU Crisis Management Team Management of the situation.

- c) Recovery
 - The Chief Warden shall, in conjunction with ANU Critical Response Team and on advice from the Fire Services that the SSO is no longer threatened, proceed back and investigate if the SSO and its buildings can be safely re-occupied.

Warning: Local road traffic may still be chaotic on the return trip and care should be taken at all times when driving back to the SSO.

5.01 Neighbourhood Safer Places (NSP's)

Neighbourhood Safer Places are a **last resort** only. NSP's are not a guarantee of complete safety in times of bushfire, nor can any guarantee be given that other persons in the local area or region have not already gone to the same NSP location thereby restricting free access by SSO students and staff and limiting any on-site amenities.

Where Wardens and students can relocate or evacuate to other '*safer locations*' outside the area within an adequate time frame, the use of the designated NSP's will not be required. An example is an air-conditioned shopping centre.



Image 01 – Bushfire Emergency 'Neighbourhood Safer Places' Noting The 'AAT Telescope building is not a registered NSP. (Ack: NSW Rural Fire Service)

5.02 Triggers for Evacuation

The triggers for evacuation are:

Trigger	Chief Warden Actions
Directions from Police or Fire Services	Activate this Plan
Chief Warden decision based on available local information	Activate this Plan

5.03 Emergency Warning Advice

General emergency warning advice shall be via the local media, either by television announcements or by commercial or government radio or television announcements.

It is possible that local area mobile and landline telephones will be provided with an overriding '*emergency warning tone*' and / or a recorded message.

NSW Police and SES have a functional role in evacuation. They will issue evacuation instructions generally on the advice of the Fire Services, this will typically be done on-site.

Where possible all staff should monitor the NSW Rural Fire Service's mobile telephone application – "Hazards Near Me".

Alert Levels

During a bush fire, Alert Levels are used to give you an indication of the level of threat from a fire.

Remember – don't wait for a warning. Some fires start and spread so quickly there may not be any time for a warning. If you get a Bush Fire Alert, you must take it seriously. Failure to take action can result in death or injury to you or your family members.

There are three levels of Bush Fire Alerts:



Advice

A fire has started. There is no immediate danger. Stay up to date in case the situation changes.



Watch And Act

There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family.



Emergency Warning

An Emergency Warning is the highest level of Bush Fire Alert. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

For some fires, you may hear a warning message over your radio or television, such as a siren, or you may receive an Emergency Alert text message or phone call. Other fires may start so quickly that there will be no time for any warning at all.

> Image 02 – NSW Bushfire Alert Levels (Ack: NSW Rural Fire Service)

6.0 Emergency Contacts

6.01 The following contact details can be used in a bushfire emergency.

Contact Name	Organisation	Telephone Number
	ANU Security	6125 2249
	Bushfire Emergency	000
	Fire Rescue NSW	000
	NSW Ambulance	000
	NSW Bush Fire Emergency	1800 679 737
	Information Line	
		00.40.0000
	Warrumbungle Shire Council	6849 2000
	State Emergency Convises	400 500
	State Emergency Services	132 500
	RMS Road Closures	132 701
	RMS Road Closules	132 701
	Coonabarabran Police Station	6842 7299
		00427233
	Coonabarabran Health Service	6849 1600
	Hospital	
	Fire Rescue NSW - Coonabarabran	6822 9164
	NSW Rural Fire Service	6842 2645
	Coonabarabran District Office	
	Timor Rural Fire Brigade	000
	Timor Road, Coonabarabran	
	14/10 = 0	0077.0000
	WIRES	8977 3333
	Table 00 Contact Dataile	

- 6.02 Staff and Visitors can consult the NSW Rural Fire Service's website or the 'Hazards Near Me' application for up-to-date bushfire location and safety information. Search <u>www.rfs.nsw.gov.au</u>
- 6.03 Local Road traffic conditions can be monitored on the NSWRMS web site: Search <u>www.livetraffic.com</u>

7.0 Plans and Maps

7.01 Local Area Map

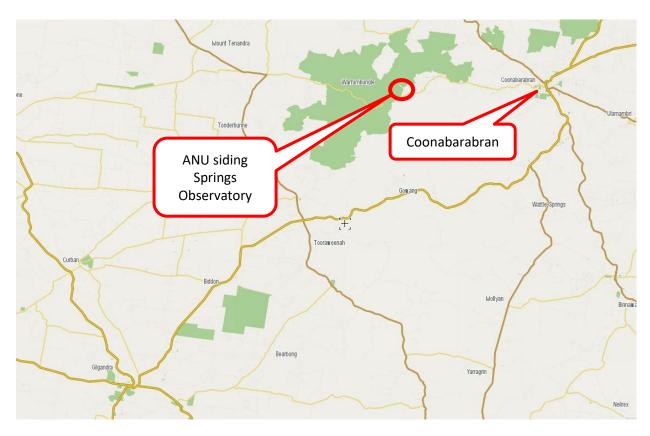


Image 02 – Location of ANU "Siding Springs Observatory SSO", Coonabarabran NSW. (Ack: - Sydway)

7.02 NSW ePlanning's - Bushfire Prone Land Map – local regional area

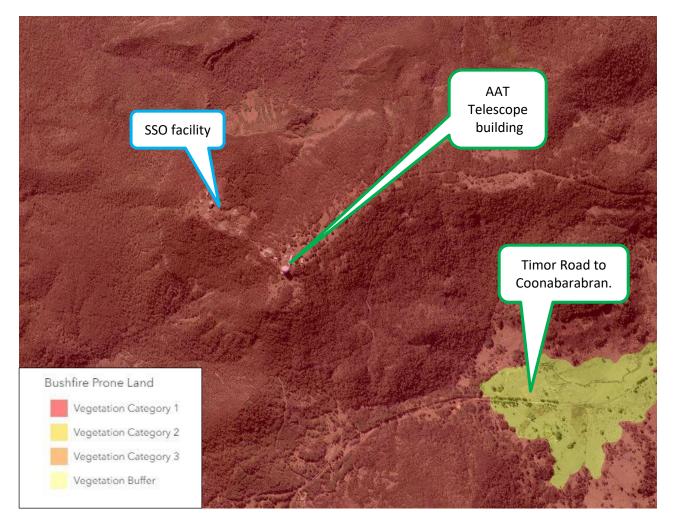


Image 03 — ANU Siding Springs Observatory SSO - Bush Fire Prone Land Map (Ack: NSW ePlanning's spatial viewer)

Alert Levels

During a bush fire, Alert Levels are used to give you an indication of the level of threat from a fire.



Remember – don't wait for a warning. Some fires start and spread so quickly there may not be any time for a warning. If you get a Bush Fire Alert, you must take it seriously. Failure to take action can result in death or injury to you or your family members.

There are three levels of Bush Fire Alerts:



Advice A fire has started. There is no immediate danger. Stay up to date in case the situation changes.



Watch And Act

There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family.



Emergency Warning

An Emergency Warning is the highest level of Bush Fire Alert. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

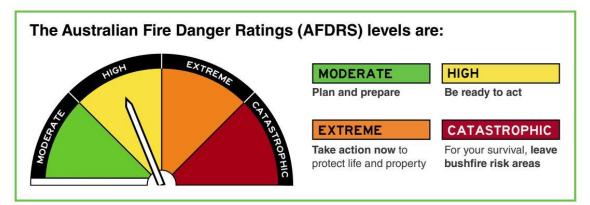
For some fires, you may hear a warning message over your radio or television, such as a siren, or you may receive an Emergency Alert text message or phone call. Other fires may start so quickly that there will be no time for any warning at all.



Image 04 – Bushfire Alert Levels (Acknowledgements to the NSW Rural Fire Service)

Image 04 – Typical Australian Bushfire Danger Rating Sign

A new Fire Danger Rating system has now come into operation as from September 2022. The system now only consists of only 4 levels rather than the previous 6 levels as shown next.





FIRE DANGER RATING	WHAT YOU SHOULD DO
CATASTROPHIC	 For your survival, leave bush fire risk areas. These are the most dangerous conditions for a fire. Your life may depend on the decisions you make, even before there is a fire. Stay safe by going to a safer location early in the morning or the night before. Homes cannot withstand fires in these conditions. You may not be able to leave and help may not be available.
EXTREME	 Take action now to protect your life and property. These are dangerous fire conditions. Check your bush fire plan and ensure that your property is fire ready. If a fire starts, take immediate action. If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts. Reconsider travel through bush fire risk areas.
HIGH	 Be ready to act. There's a heightened risk. Be alert for fires in your area. Decide what you will do if a fire starts. If a fire starts, your life and property may be at risk. The safest option is to avoid bush fire risk areas.
MODERATE	Plan and prepare. Stay up to date and be ready to act if there is a fire.
NO RATING	Fire danger ratings are used on days when you need to take action. On days of minimal risk, 'No Rating' will be issued.

Image 06 - New NSW RFS Fire Danger Rating level system. (Ack: to NSW RFS & Australian and New Zealand National Council for Fire & Emergency Services)

APPENDIX

This BEMEP should be read in conjunction with:

"Emergency Response Procedures - Siding Spring Observatory" August 2023

Referenced documents:

- Australian Building Codes Board
 - Design and Construction of Community Bushfire Refuges- 2014
- NSW Rural Fire Services documents:
 - Planning for Bush Fire Protection 2019
 - A Guide to developing a Bush Fire Emergency Management and Evacuation Plan – 2014
- o AS3745-2010 'Planning for emergencies in facilities.'
- Siding Springs Observatory 'Emergency Response Plan' and the separate 'Emergency Plan' of August 2023.
- North West Region, Bushfire Risk Management Plan 5 "Warrumbungle National Park"



Photograph 01 - View of Visitors Centre and Assembly area with the AAT Telescope Dome in background.



Photograph 02 - View of the 'AAT Telescope' S33 bushfire refuge building and the northern pavement grounds



Photograph 03 - View of the 'Firefighting trailer' near fuel store.

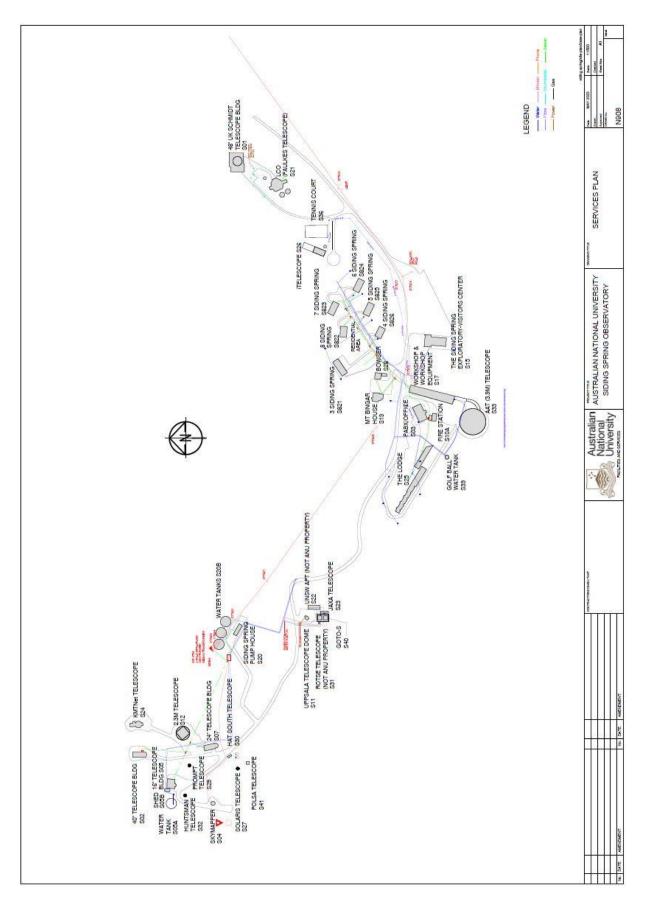


Image 07 - Current Siding Springs Observatory site plan

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