South West Slopes Region

Benambra National Park & Tabletop Nature Reserve

Fire Operations Map

2005

Version: May 2005 ISBN: 1 74137 340 9 DEC: 2005/181

This Map should be used in conjunction with air photos and ground reconnaissance during incidents and the development of incident action plans.

OPERATIONAL GUIDELINES

ACTIVITY	OPERATIONAL GUIDELINES
Command, control and firefighting arrangements Fire Response (FMM 4.1 & 4.2)	· First fire personnel of any agency on site may assume control of the fire, but must ensure the relevant land management agency is promptly notified. · On arrival of other fire agencies, the initial incident controller will consult with the other agencies on the ongoing command, control and incident management team requirements as per the relevant BFMC Plan of Operations. · The use of earth-moving equipment, retardants and aerial suppression must be approved by a senior NPWS officer.
Aircraft Operations (NPWS FMM 4.4 & 4.8)	· Aerial water bombing and aerial ignitions are permissible in this reserve, however can only be used and commenced on the instruction of the incident controller or senior NPWS officer. · Water bombing operations should support containment operations by aggressively attacking flanks, hotspots, spot-overs and head fires where required. · Where possible, foams should be used to increase the effectiveness of water, however limit use within 50m of watercourses and dams. · The use of water bombing aircraft without the support of ground based suppression crews should be limited to specific circumstances as determined by the senior NPWS officer. · Ground crews must be briefed and alerted to aerial ignition and water bombing operations
Back burning (NPWS FMM 4.8)	· All backburning operations must be approved by a senior NPWS officer. · All crews must be briefed on the sequence and safety precautions of the operation. · Generally, burning should commence when the humidity rises in late afternoon or early evening and spotting is minimal. With a low FDI, burning may be safely undertaken during the day. · Where practicable, clear 1m radius around dead and fibrous barked trees adjacent to containment lines prior to burning, or wet down these trees as part of the backburn ignition preparation.
Control lines (NPWS FMM 3.9)	· Existing constructed or natural fire control advantages should be used, wherever possible, to contain bushfires.
Earth moving machinery (NPWS FMM 4.3)	· Strategies involving earth-moving equipment must be approved by the senior NPWS officer before implementation. · Earth-moving equipment must be supervised and guided by an experienced NPWS officer or a person recognised to be appropriately experienced. · All earth-moving equipment employed in fire operations must be accompanied by a support vehicle that has equipment available to contact support personnel in an emergency. Plant involved in direct or parallel attack must be accompanied by either a slip-on or a fire tanker for safety purposes. · At the commencement of shifts, all operators and guides must be briefed on safety consideration and actions to prevent damage to sensitive natural and cultural heritage. · Where possible, control lines running along valley areas should be constructed 20-50 from gullies to avoid severe erosion.
Fire suppression chemicals (NPWS FMM 4.9)	· Wetting and foaming agents (surfactants) are permitted for use in wildfire suppression. · Use of retardants must be authorised by the senior NPWS officer. · Retardants should be ammonium sulphate based and should not be used where reasonable alternatives are available. · As far as possible, exclude the use of surfactants and retardant within 50m of watercourses and dams. · Use surfactants and retardants where natural advantages provide the most effective applications of the chemicals.
Post fire rehabilitation (NPWS FMM 5.1)	· The rehabilitation process should be addressed in incident action planning.
Smoke management (NPWS FMM 3.4)	· The potential impacts of smoke and possible mitigation tactics must be considered when planning for wildfire suppression and prescribed burning operations. · Where smoke has the potential to be a hazard on local roads or highways the police, RTA, local shire council and relevant media must be notified. · Monitor local roads and access for smoke hazards and install road safety/warning signs where necessary. Traffic control must comply with RTA Traffic Control at Worksites Manual requirements.

FIRE SEASON INFORMATION

The critical fire season occurs between December and March, when the potential for fire events is at its highest. Particular care and monitoring is required during periods of prolonged drought when strong negative Southern Oscillation Indices occur. During these times fires may exhibit high intensity behaviour in windy conditions and exceed current rate of spread indices.
Any proposed prescribed burning should be undertaken before late autumn precipitation occurs. The best period for prescribed burning is March. Any fire in spring should be avoided.

SUPPRESSION STRATEGIES

Current FFDI	Forecast FFDI	OPERATIONAL GUIDELINES
Low - Mod	**Low - Mod**	· Undertake direct, parallel or indirect attack along existing containment lines. · Where practicable, consider maximising the fire area in accordance with the requirements of any proposed prescribed burns in the fire planning strategy and Bushfire Management Committee agreements.
Low - Mod	**High or >**	· In order to minimise the fire area and secure the flanks as soon as possible, undertake direct, parallel or indirect attack along the closest containment lines. · Pay particular attention to the flank on the next predicted down wind side. · Consider fall back containment strategies
High or >	**High or >**	· Undertake indirect attack along existing or newly constructed containment lines. · Secure and deepen containment lines along the next predicted downwind side of the fire. · Allow sufficient time to secure containment lines to avoid wasted effort and potential failure. · Prepare and implement fall back containment strategies.

Note: Always ensure there is sufficient time to secure containment lines prior to the fire impacting upon them.

LIFE & PROPERTY GUIDELINES

Visitor safety (NPWS FMM 3.6)	· Visitors in or adjacent to the fire ground will not be permitted unless authorised by the Incident Controller. The presence of visitors should be reported to the incident controller immediately, who will arrange for an evacuation if necessary. · 'Park closed' or 'smoke hazard' signs must be placed in areas used by visitors prior to undertaking prescribed burning. · Notify media that wildfire or prescribed fire exists within the reserve/area.
Asset Protection (FMM 4.11)	· Use AP Zones to assist fire suppression activities. · High priority assets include the communications tower on Tabletop NR and the Automatic Weather Station & RTA radio station on the southern boundary of Benambra NP.

NATURAL HERITAGE GUIDELINES

CODE	SPECIES	GUIDELINES
FA	Threatened Fauna	Where possible; · minimise the size and intensity of fire. · protect mature, hollow bearing trees and avoid tree felling in hatched areas. · avoid ground disturbance, especially in gully lines and water courses.
FL 1	Yass Daisy	· Little to no impact expected from fire. · Where possible, avoid ground disturbance (dozer lines & hand tool lines cause high impact).
FL 2	Rasp Wort Wooly Ragwort	Where possible; · avoid frequent (<10 years apart) & high intensity fire. · avoid ground disturbance, (dozer lines & hand tool lines may cause high impact).

CULTURAL HERITAGE GUIDELINES

THEME	GUIDELINES
Aboriginal & Historic Heritage (FMM 4.11)	· Brief personnel involved in control line construction and vehicle based fire suppression operations on site locations and the required management strategies for site protection. Include in Incident Action Plans. · Liaise with the relevant heritage officer and or representative where considered necessary.
Scarred trees A 1	· Clear fuels, with hand tools, from tree base and/or foam base to 3m up tree trunk. · Do not clear or fell trees. · Where practicable, avoid new trail construction within 20m of trees and construct trails on the advancing fire side of the tree. · Hazard reduction or back burning operations should minimise the potential threat of radiant heat on the tree.
Rock arrangements, rock engravings, bora rings, etc A 2	· Avoid new trail construction or ground disturbance within close proximity of site. Where possible, ensure site is protected by constructing trails or hand tool lines on the advancing fires side. · Clear, by hand, excess fuels from the site. · Avoid direct attack methods (including aerial water bombing) at known sites. Surfactants and retardants in aerial line drops may be used adjacent to, but not directly on sites. · Hazard reduction or back burning operations should minimise the potential threat of radiant heat and smoke (carbon deposition) on sites.
Art sites and over-hangs A 3	· Avoid new trail construction or ground disturbance within close proximity of site. Where practicable, ensure site is protected by constructing trails or hand tool lines on the advancing fire side. · Clear, by hand (whipper snippers, brush cutters, mowers), excess fuels from the site. · Avoid direct attack methods on sites. · Avoid aerial water bombing, use of foams and or retardants at known sites. Use of foam or aerial line drops may be used adjacent to, but not directly on sites. · Hazard reduction or back burning operations should minimise the potential threat of radiant heat and smoke (carbon deposition) on the site.
Open camp sites A	· Avoid ground disturbance at or within close proximity of the site (30m). Earthmoving blades should be raised in these locations to avoid damage to sites on trails, unless a "Consent to Destroy" has been attained. · Avoid direct attack methods (including aerial water bombing) at known sites. Use of foam or aerial line drops may be used adjacent to, but not directly on sites.
Morgan's Cave HS 1	· Minimise the potential damage of radiant heat on the site. · Avoid disturbing conglomerate material at or within 100m of cave. · Avoid directly aerial water bombing. Line or spread water drops may have less impact. · Avoid the use of foams or retardants within close proximity of the cave.
Timber lined pits HS 2	· Remove fuels or vegetation by hand. Use whipper snippers and brush cutters and clear away debris. · Exclude back burning operations from close proximity of the site. · Avoid directly aerial water bombing. Line or spread water drops may have less impact. · Foams may be applied to form a protective buffer around sites.

FMM - NSW National Parks and Wildlife Service Fire Management Manual (December 2004).
For the purposes of public exhibition, some information will not be displayed due to obligations under the Freedom of Information Act 1989, regulations and amendments, and Memorandum of Understanding between the Department of Environment and Conservation and Aboriginal Communities.

CONTACT PHONE NUMBERS

NATIONAL PARKS AND WILDLIFE SERVICE

SWS Regional Office	6947 7000
SWS Region Fax	6947 4170
SWS Operations Room	6947 7007
Incident Answering Service (A/H)	1800 629 104

RURAL FIRE SERVICE

Hume Zone Fire Control Centre	6023 1999
Hume Zone FCC Fax	6023 1245
Zone Manager (24 hr number)	6023 1999

EMERGENCY SERVICES 0 0 0

POLICE - Holbrook	6036 2434
AMBULANCE	13 12 33
SES Albury Division HQ	6040 6093
SES Holbrook	6036 3037
Fire Brigade - Holbrook	6036 2255
Fire Brigade - Culcairn	6029 8202

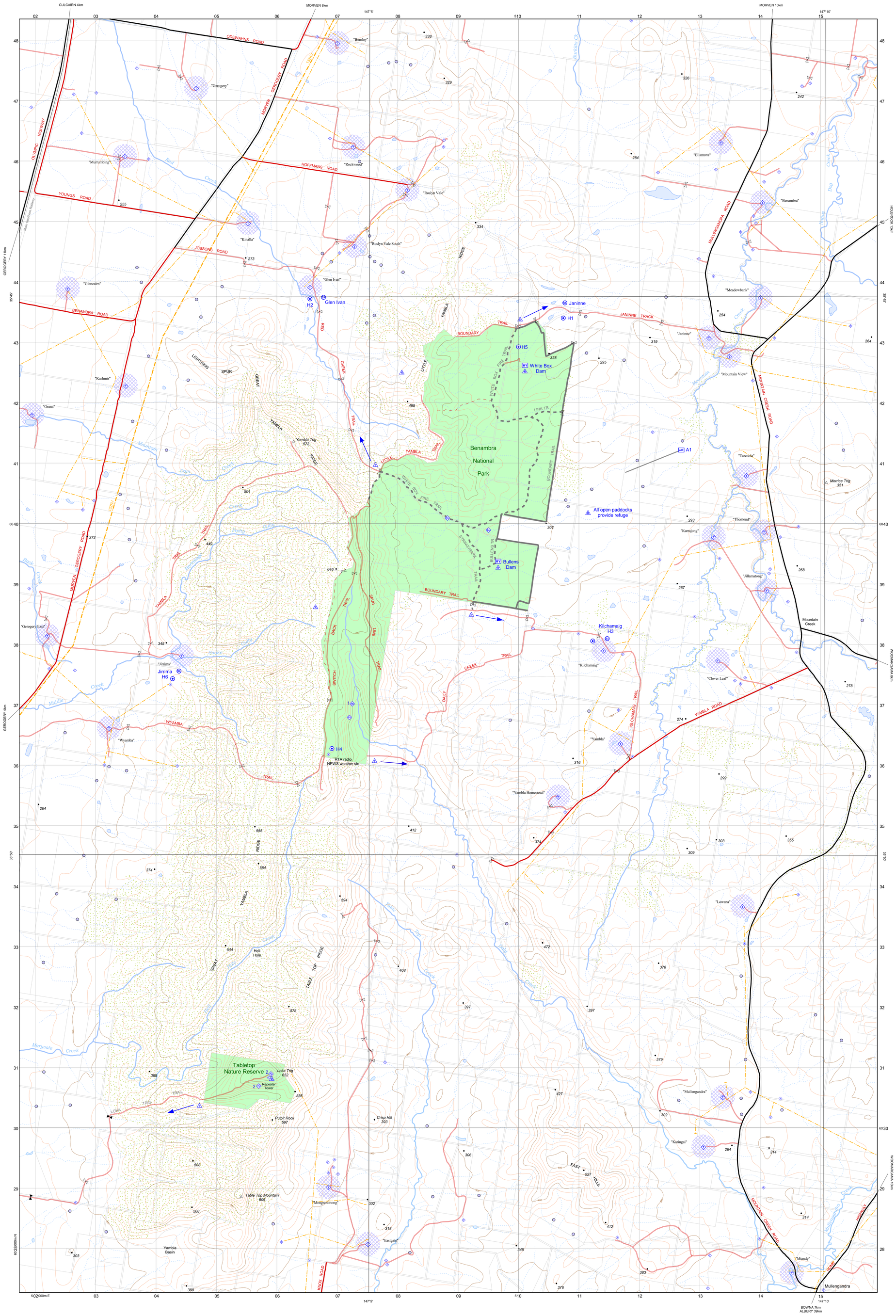
GREATER HUME SHIRE COUNCIL

Culcairn Shire Office	6029 8588
Holbrook Shire Office	6036 0100

NEIGHBOUR INFORMATION
Consult SWS Region databases

RADIO COMMUNICATIONS

AGENCY/RESOURCE	CHANNEL	FREQUENCY	NOTES
NPWS (VHF)	**2**	MRX 77.6375 MTX 80.1375	Jingellic - transmission/reception may be marginal in some areas of these reserves.
NPWS (VHF) FIRE GROUND	**17**	MTX & MRX 82.3875	Channel to be determined by ground crews, crew leaders, Division commanders etc. Any changes will be noted in IAP.
	18	MTX & MRX 79.8375	
	19	MTX & MRX 79.9625	
RFS (UHF)	**72**	MRX 418.3750 MTX 408.9250	Primary channel
	71	MRX 418.7500 MTX 408.9000	Secondary channel - depending on locality
	74	MRX 418.6625 MTX 409.2125	Secondary channel - depending on locality
AIRCRAFT COMMUNICATIONS (Fire Communication Traffic Advisory Frequencies F-CTAF)		119.10 Mhz 120.80 Mhz 122.80 Mhz 123.45 Mhz 128.70 Mhz 132.75 Mhz	State wide State wide State wide Pilots (chit chat) "The Numbers" channel State wide State wide
Mobile Phone Coverage-	coverage may be marginal in some areas of these reserves.		



Legend

- Assembly Area
- Base Camp
- Control Centre
- Staging Area
- Airbase
- Water Point - Helicopter
- Water Point - Vehicle
- Helipad
- Refuge Area
- Escape Route
- Farm Dam
- Spotheight
- Survey Landmark
- Gate
- Locked Gate
- Homestead Complex
- Threatened Asset
- Primary Trail
- Secondary Trail
- Sealed Road
- Main Unsealed Road
- Minor Unsealed Road
- Trail
- Dormant Trail
- Railway
- Landing Ground
- Major Power Line (With Voltage)
- Minor Power Line
- River
- Creek
- Drainage Line
- Waterbody
- Cadastre
- 100m Contour
- 20m Contour
- State Border
- Benambra NP (1,399 ha) Tabletop NR (104 ha)
- Other NPWS Estate
- Crown Land
- State Forest
- Exotic Plantation
- Asset Buffer Zone
- Karst Area
- Timbered Area
- Recently Burnt Area

SCALE 1:25 000

1 0 1 2 Kilometres

Projection: AMG 66 - Zone 55 Grid Numbers are given in full at the South West corner of the map.

NOTE: THIS MAP IS NOT GDA COMPLIANT

Location

Air Photo and Map Index

NPWS Radio Coverage

Benambra National Park - Waypoints

Name	Ref No	Description	Easting	Northing	Longitude	Latitude
A1	A1	Airstrip	512500	6040950	147° 08' 18"	35° 46' 31"
Janinne	H1	Staging Area, Remote Helipad	510740	6043400	147° 07' 08"	35° 45' 12"
Glen Ivan	H2	Staging Area, Remote Helipad	506550	6043720	147° 04' 21"	35° 45' 02"
Kilchamaig	H3	Staging Area, Remote Helipad	511230	6038060	147° 07' 27"	35° 48' 05"
H4	H4	Remote Helipad	506910	6036275	147° 04' 35"	35° 49' 03"
H5	H5	Remote Helipad	510000	6042920	147° 06' 38"	35° 45' 27"
Jirrima	H6	Staging Area, Remote Helipad	504380	6037560	147° 02' 55"	35° 48' 22"
Bullens Dam		Waterpoint - Vehicle	509660	6039370	147° 06' 25"	35° 47' 22"
White Box Dam		Waterpoint - Vehicle	510105	6042620	147° 06' 42"	35° 45' 37"