



Map Products

This is a list of the many types of maps the Mapping Team may need to create.

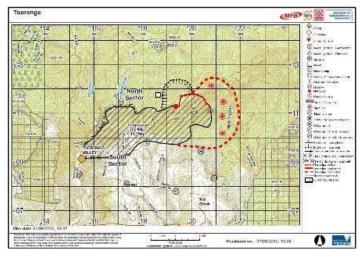
1.1 Operational Maps

Operational maps are prepared at an IMT and are used directly for incident response.

These map types include sector, overview and operations maps. These maps are prepared from the Bushfire Site or ArcGIS – eMap Analyst.



1.1.1 Overview Map (IMT) (Bushfire Site)



Prod No Prod-*** **Product** Overview Map (IMT)

Intelligence/Planning **Unit** Mapping Section

Purpose The overview map is prepared for the Incident Action Plan (IAP). Used to provide situational awareness to field crews. Provides a broad scale picture of the incident. Produced twice daily for the IAP (Generally)

If divisions are in place this map may be an overview of a division.

This map can be prepared using eMap – Bushfire site.

Must have 1km grid & contours.

Can be supplemented with an aerial imagery map.

Scale could go to 1:100K if supported with good detailed sector Maps.

Preferred 1: 25,000 Preferred page A4-A3 (could also be A1 or A0 for Sector and Scale: -1:50.000 **Size:**

Divisional Commanders



Overview / Situation

Security Class For Official Use Only

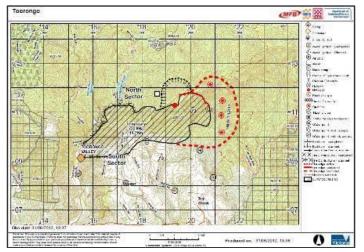
Procedure

Location Produced at IMT

Map Products 2019-20



1.1.2 Sector Map (IMT) (Bushfire Site)



Product Sector Map (IMT) Prod No Prod-***

Section Intelligence/Planning Unit Mapping

Purpose

Used as a detailed map for field crews to plain their tasking. Provides a detailed view of their area of interest. Produced for the Incident Action Plan (Twice Daily)

This map can be prepared using eMap – Bushfire site.

Must have 1km grid & contours, all tactical features.

Can also include features such as escape routes etc. Work with Situation Unit to develop the maps that will meet the requirements.

IMPORTANT – Map must be legible at scale.ie. be able to read road names etc.

Preferred1: 25,000Preferred pageA4-A3 (could also be A1 orScale:-1:50,000Size:A0 for Sector and
Divisional Commanders



Overview / Situation

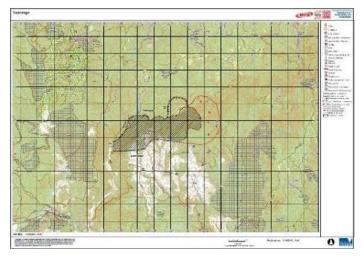
Security Class For Official Use Only

Procedure

Location Produced at IMT



1.1.3 Operational Map (IMT) (Bushfire Site)



Product Operational Map (IMT) Large Format Prod No Prod-*** Overview

Section Intelligence/Planning

Unit Mapping

Purpose

The operational map is prepared for operations and planning units. Generally supplied to IC, Operations, Planning and Air Operations.

Fire situation updates are generally hand drawn onto these maps.

The Mapping Officer should endeavour to transfer these updates into eMap.

Must have 1km grid, Contours, Fire History.

Extent should include the fire area and any relevant tactical features such as planned & constructed control lines.

Preferred

1: 25 000 Preferred page

Scale:

- 1:50000 **Size:**

📥 Create a Standard Map

Overview / Situation

A1-A0

Security Class For Official Use Only

I want to... ▼

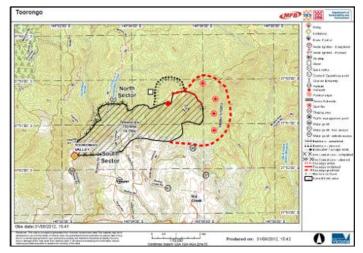
Procedure

Location

Produced at IMT



1.1.4 Air Operations Map (IMT) (Bushfire Site)



Air Operations Map (IMT) Prod No Prod-*** **Product** Intelligence/Planning Section **Unit** Mapping

Purpose The operational map is prepared for operations and planning units. Generally supplied to IC, Operations, Planning and Air Operations.

Fire situation updates are generally hand drawn onto these maps.

The Mapping Officer should endeavour to transfer these updates into eMap. Must have Geographic Graticule..

Preferred 1: 25 000 Preferred page A3 - 1:50000 Scale: Size:



Security Class For Official Use Only

Procedure

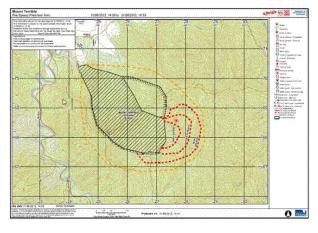
Produced at IMT Location

File Name

Overview / Situation



1.2 Fire Spread Prediction Map (Bushfire Site)



ProductFire Spread Prediction MapProd NoProd-***SectionIntelligenceUnitMapping

Purpose The fire spread prediction map is prepared for the Fire Behaviour Analyst / Situation Officer to show hourly fire spread and or fire impact zone.

Must haves: 1km Grid, contours, fire history, logging history (If applicable).

Can also provide an aerial image background as a supplementary map.

This map can be prepared using eMap – Bushfire site.

Preferred Scale: 1: 25 000 Preferred page A1-A0 Size:



Security Class For Official Use Only

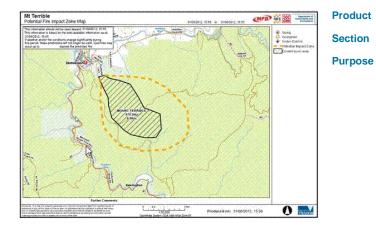
Procedure

Location Produced at IMT/SCC

Map Products 2019-20



1.3 Potential Impact Zone (Bushfire Site)



Product

Section

Potential Impact Zone

Prod No Prod-***

Intelligence

Unit Mapping

The map is prepared for the Public Information Unit and contains:

- □ A fire impact zone digitised by the Mapping Officer ... or
- □ Automated output from the Phoenix model.

This map needs to be approved by an Incident Controller / State Controller before public release.

IMPORTANT: There is to be no operational information to be placed on these maps. Eg. Active Fire Edge, Sectors, Ops Points etc).

This product is to be produced on the approved template and style.

Preferred Scale: 25k -

Preferred page Size:

A4-A3

250k



Security Class

For Official Use Only

Procedure

Location

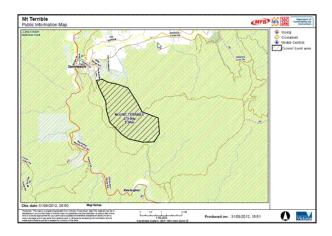
Produced at IMT/SCC

Map Products 2019-20



Printed 21/11/2019 - 11:06

1.4 Public Information Map (Bushfire Site)



Prod No Prod-*** **Product** Public Information Map

Section Intelligence **Unit** Mapping

Purpose The map is prepared for the Public Information Unit and contains a current burnt area digitised by the Mapping Officer.

> This map needs to be approved by either the Incident Controller / State Controller before being released onto the public website.

> There is a process now to release the burnt area to the Vic Emergency website, and this map is the first step in that process. See Section 10.5 for information/instructions. **IMPORTANT:** There is to be no operational information to be placed on these maps. Eg. Active Fire Edge, Sectors, Ops Points etc)

> .** You can also create this map from ArcGIS - for redundancy if needed. Templates are available so as the maps look the same.

This product is to 25k -Preferred page A4-A3 be produced on Size:

the approved template and style

Preferred Scale:



Security Class For Official Use Only

Procedure

Produced at IMT/SCC Location

File Name

Page 9 of 42



1.5 IMT/SCC Custom Maps – Linescan quickprint



Linescan Quickprint **Product** Prod No Prod-*** Section Intelligence **Unit** Mapping

Purpose This map can be produced to show the latest linescan information before the linescan

interpretation is done.

Transparency applied to Linescan layer

Could show current fire extent to provide context to active/running edge. (from the image)

Preferred Scale: Best Fit A1-A0 Preferred page

Size:

Create a print map

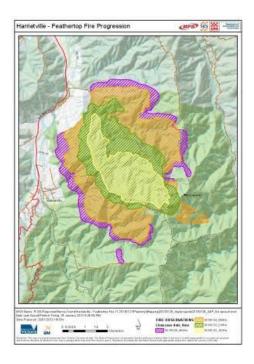
For Official Use Only Security Class

Procedure

Location Produced at IMT/SCC



1.6 IMT/SCC Custom Maps – Fire Progression



Product Fire Progression Prod No Prod-***

Section Intelligence **Unit** Mapping

Purpose This map can be produced to using eMap Analyst. Fire extent at different observation times shown. Depending on length of campaign, could be 4-6 hourly, or daily.

Useful for providing situational awareness and context for incoming IMT personnel and

crews, as well as up to ministers and officials.

Preferred Scale: Best Fit Preferred page A3-A0

Size:

Security Class For Official Use Only

Procedure

Location Produced at IMT/SCC

Map Products 2019-20



1.7 Consequence-Impacts Mapping (Bushfire Site)



Consequence Map & Report Prod Prod-*** No

Section Intelligence **Unit** Mapping

Purpose This map and associated report is to show communities and assets that might be potentially impacted by the Fires Potential Impact area, or a hand drawn area of the users choice. There are a range of reports available through here now that meet

the a range of purposes.

Preferred A3/A4 Best Preferred Scale: Fit. page Size:

Security For Official Use Only Class

Procedur For eMap - Bushfire site

Click the Printing & Reporting Tab – Click Consequence

Select the type of report you wish to run. Choice is either IMT/SCC (Life and Property Impacts) or BRRAT report (Public Land Impacts)

Select the layer you wish to base the report on either Current Burnt Area (black lines), Potential Impact Zone - Phoenix Rapidfire (organise dashes) or Sketch an Area.

Enter the Report Title (For Sketch an area & PIZ). Click Next.

Draw the shape, click OK.

The result is a summary view & more detailed information of

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what is at potential risk.

A HTML file is created, which can then be saved as PDF file (print)

As a redundancy:

For MXD use: see instructions

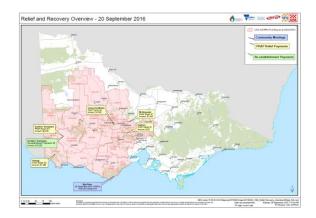
R:\EM-Drive\50-SCC\05-

StatePlanningSection\Mapping_Extra\Bushfire_Consequence s_Toolbox\ How To - do quick consequence analysis.pdf (same process as per instructions year)

Location IMT/SCC



1.8 Relief and Recovery Map



Relief and Recovery Map Prod Prod-*** **Product** No

Section Relief & Recovery **Unit** Mapping

Purpose This map shows where grants have been supplied and how much,

as well as Community meetings (if any) for each day.

Preferred Best Fit. Preferred page A3/A4

Scale: Size:

Security Class For Official Use Only

This map will be produced when Relief and Recovery are in the **Procedure** SCC & activated. A range of funding may have been distributed

as well as the community meetings for a particular day are included.

Information sources for the funding grants are from Relief & Recovery (through to DHHS), community meetings could be from the Intell summary – (or Relief and

Recovery personnel)

^{**} This map will be included in the map pack **



IMT/SCC Location

File Name

1.9 Map Pack (SCC)





Product Map Pack Prod No Prod**

Section Intelligence **Unit** Mapping

> This product contains a number of maps. It might include a range of different types of maps from a State Area of Interest Overview Map showing those incidents of interest for the now, and then Individual Maps per incident. There may also be some recovery maps. The pages are combined together into a multi-paged PDF and posted onto EM-Portal. In campaign events, maps are updated twice daily (9am & 5pm) unless otherwise specifically advised.

Preferred Scale: Best Fit. Preferred page АЗ Size:

Map Products 2019-20



Create Map Pack Folders

Copy Base Projects

Copy blank or previously made templates/incident status shape file.

Choose one of the two options below (either a or b) depending on whether you are creating a fresh Map Pack or if you are updating a previously created Map Pack.

a) If creating a fresh Map Pack

1.	Copy the required base projects located in R:\EM-Drive\60-Reference\Mapping_Templates\map_products\map_pack\projects\	
2.	Select the StateViewofFires and either or both of either the portrait or landscape ICC incident managed maps and paste the mxds in R:\50_SCC\ 22-MappingC:_EMDrive_download\\ <yyyymmdd>\ map_pack\<am or="" pm="">\projects\</am></yyyymmdd>	
3.	Rename the MXD names accordingly.	

b) If updating a previously created State Overview Map

1.	Copy folders and MXDS from the previous day and/or time period C:\ EMDrive_downloadR:_\50-SCC\22-\Mapping\ <yyyymmdd>\projects\Map_pack\<am or="" pm=""></am></yyyymmdd>
2.	Rename the MXD names accordingly

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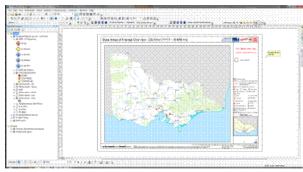


Create State Areas of Interest Overview

Open MXD

1. Open the required StateViewofFires mxd.

2. Should open to layout view.



Map Products 2019-20



Create the Definition Query

1.	From the Incidents (Feature Service) create a definition query on the incident/s you want to appear on the state map.
2.	Export the data that is appearing on the map as shapefile (for backup if we need to re-create the map) The reason for this is if we want to re-print a map (not from the PDF), 6 months down the track, the data feed would not be truly reflective. Right click on the incident feed → Data → Export Data to shapefile.

Create Callout Boxes

1.	Copy and paste the call out to the appropriate locations
2.	Update Incident name and size (in Ha)
3.	This information will be provided from the Intelligence Unit.



If map doesn't display edits, hit Refresh View button.



Update Title Information

1.	Update date and time at the title of the map. (Map Title date/time)
2.	Example: Top (Map Title): DD Mmm YYYY - HHMM hrs = 22 Jan 2016 – 0900 hrs
3.	The Date printed will automatically update to now - which will basically be the time you printed the map.

Map Products 2019-20





The top time reflects the currency of the information in the map:

□ I.E. The Required Map Title – Date/Time. .

The bottom time is the approximate time the map was printed.

Create Incident Maps

Open MXD

1. Open the required incident mxd. (either landscape or portrait) for best fit.

2. Should open to layout view.





3. Zoom to the extent of the incident

Map Products 2019-20



Create Callout Boxes

4.	4. Copy and paste the call out to the appropriate locations	
5.	Update Incident name, size (in Ha) and Incident Statue (ie. Going, Contained, Controlled) Note: Once an incident is declared as safe, it can be removed from the map.	
6.	This information will be provided from the Intelligence Unit.	



If map doesn't display edits, hit Refresh View button.



Update Title Information

4.	Update date and time at the title of the map. (Map Title date/time)
5.	Example: Top (Map Title): DD Mmm YYYY - HHMM hrs = 22 Jan 2016 – 0900 hrs
6.	The Date printed will automatically update to now - which will basically be the time you printed the map.

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Print and Export

Export to PDF settings. 1.

Resolution:	150dpi
Ratio:	1:1
Filename:	Same as mxd
Filesize:	1.5MB (w mapscape; vector only smaller)



Make sure "Embed All Document Fonts" is ticked.

2. Save all map images in the following location...

R:\50-SCCc:\EMDrive_download-\22-Mapping\<YYYYMMDD>\Map_pack\<AM or PM>\maps

Then upload them to the equivalent location on EM-Drive in EM-Drive\50-SCC\22-Mapping\<YYYYMMDD>\Map_pack\<AM or PM>\maps

Print copies for the centre table & the State Control Team Incident Wall. (A3) 3.

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Map Products 2019-20



1.10 Significant Incident Map (SCC)





Preferred Scale: Statewide Preferred page Size:

The Significant Incident map is made up of two components. A map with the incident locations, and an associated spread sheet with the details of losses & impacts. It is a product that will be maintained for the entire financial year, with counts being included for that time period.

The reason for the word document being separate from the map – is to keep the map clean, and the textual and detailed information in the word document.

Process

1.	If creating the map for the first time, copy the YYYYMMDD_HHMM_StateImpactOverviewMap_A3L,mxd from R:\EM-Drive\60-Reference\Mapping_Templates\map_products\map_pack\projects to your C:\EMDrive_download R:\50-SCC\22-Mapping\YYYYMMDD\projects.
Rename the MXD to the appropriate name. (date/time)	
3.	Open MXD. It will open to the layout view.
4.	Ensure you have a shapefile for the day to add any "New" incidents to. Add the appropriate type of event that has been declared to be significant.

Version



5. Copy and paste the text boxes into the map and populate with the incident name. Ensure all the counts and areas are updated in the map.(see information sources) 20162018-17-19 Fire & Flood/Storm Summary Grass & Bushfires: Count Source from Intelligence Hectares Burnt: Count from eMap Mapped burnt areas (add areas). Make sure it's only the Burnt area attributes included. Losses: Summary of total (build up from word doc page) RFAs: Source from Intelligence/SES Building Damage: Source from Intelligence/SES Tree Down: Source from Intelligence/SES Flooding: Source from Intelligence/SES Rescue: Source from Intelligence/SES Statewide Flood/Storm Severe Weather Summary Event Name & Dates event occurred: Source from Intelligence/SES **Water Safety** Formatted: Font: Bold Formatted: No bullets or numbering From Intelligence: As reported in Life Saving Victoria (LSV) IMS Formatted: Font: Bold Heatwave Formatted: No bullets or numbering From Intelligence: requested through DHHS Emergency Management Branch Formatted: No bullets or numbering and/or throughout the season in State Incident Report C:\Users\smiles\Downloads_Mapping_Team_Operational_Manual\2019-20 May Products.docx Page 23 of 42
Unless stamped "CONTROLLED COPY" in RED, then when printed this document is uncontrolled. Printed 21/11/2019 - 11:06

Export Map to PDF R:\50-SCC\22-Mapping\yyyymmdd\maps

6.



Map Pack Creation (SCC-Map-Pack.pdf)

- Once all maps have been created, select all the maps and Right click and create a document. (you need to have PDF writer on your PC) Order the maps as 1. needed with perhaps the state overview and all other maps needed.
- Save the new multi-paged document as **SCC-Map-Pack.pdf** (NOTE: the file MUST be called that name) 2.

Upload Map Pack to EM-COP - Desktop

Map Products 2019-20



Copy the SCC-Map-Pack.pdf to the following location R:\50-SCC\60-Movelt-FTP-Files.

This folder is polled every ten minutes and will upload the map to EM Desktop.

Wait for up to 10 minutes, check the Desktop to ensure the file is available. (EM-COP - Desktop). Click to open to ensure the map pack has update correctly.

If there are any problems with the upload to EM-COP, notify an SCC EM Support Officer or Team Leader who can upload the file to EM-COP Desktop using the redundancy process. This year 2017/18 there has been a change to uploading of the map pack.

Once you are logged into EM-COP go to desktop; click sections, scroll down to find Administration, and Mapping Docs Update.

Click on the link;

Password is <<MAPS>>





















Room



Summary



Flood Intel

Report

SCC

Map Pack Messages

2000

Aviation

Docs Update

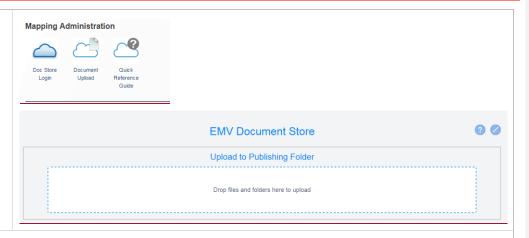
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Map Products 2019-20



Under Mapping Administration there is the Document Upload button. Click that.

Then drag and drop the SCC-Map-Pack.PDF into the Drop files and folders here to upload part.



The map will update immediately in the SCC Map Pack – on the Desktop Tab.

Notify via email to Situation and Intelligence that the map pack has been updated.

Briefings & Reports









Briefing









Map Pack











Map Products 2019-20



1.11 SES Flood/Storm Map Templates

Over past few years SES have produced a number of static products and have created a number of products that can be found in the following location on the R drive.

R:\EM-Drive\50-SCC\18-Flood-Analysts\Reference\Flood_Mapping\

There is a range of products available here and would more than likely be the starting point for any map requests that are needed. In fact these might be used instead of requiring a custom type product.

If there was a requirement to do some "custom" mapping by the mapping team, then perhaps these below might be a good starting point (Based on previous experience of Flood mapping for the SES in the SCC.)

The maps would be produced with the ArcGIS Standalone base project - flood_storm_base_1031_mxd.

The maps that might be produced include:

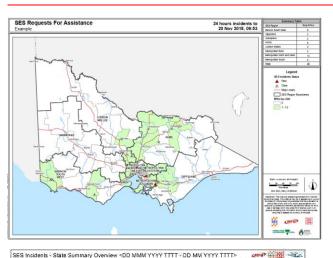


1.11.1 Request for Assistance (RFA) — either by SES Response Zone or LGA

1.11.1 This product can now be produced via eMap Water, and would be a better starting point. There will be more flexibility in the tools down the track to specify a particular time period.

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Prod No Prod-*** **Product** Request for Assistance (RFA) - Recent

Section Intelligence **Unit** Mapping

Purpose

State or Region Level. Two ways to produce this map - if it's last 24 hours, you could use the live Incident feed in the flood, storm, base mad

Or, you will be able to extract the data from eMap to include in for use ArcGIS. (for further analysis) Currently shows requests for assistance for the past 24 hours.

Created from a standard template. More time periods will be developed.

An old MXD could be used as a redundancy or if something isn't quite right with time

frames at this point in time.

Security Class For Official Use Only

Procedure

See detailed instructions: EM-Drive\60-

Reference\Mapping_Templates\map_products\SES_RFA_Maps\ SES RFAs map

instructions.docx (Redundancy)

Location

Em-Drive\60-Reference\Mapping_Templates\map_products\SES_RFA_Maps



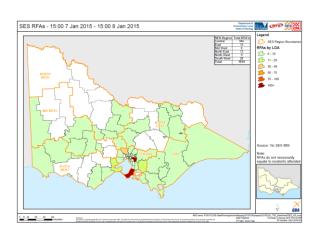


1.11.2 Request for Assistance (RFA) – by LGAs.

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Map Products 2019-20





Request for Assistance (RFA) - by LGA Prod No Prod-*** **Product**

Section Intelligence **Unit Mapping**

If there a number of SES RFAs over a period of time, this might be the type of map you **Purpose**

information from SES IMS through to the map production and join.

For Official Use Only **Security Class**

See detailed instructions: R:\60-**Procedure**

Reference\Mapping_Templates\map_products\SES_RFA_Maps\ SES RFAs map

instructions.docx

Location R:\60-Reference\Mapping_Templates\map_products\SES_RFA_Maps

File Name StateViewOfSES_A3L_template.mxd

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_Locations affected or at risk of flooding (Current & 1.11.31.11.2 Predicted)





Prod No Prod-*** Towns affected of at risk of flooding **Product** Section Intelligence **Unit** Mapping

State/Regional/Incident Level **Purpose**

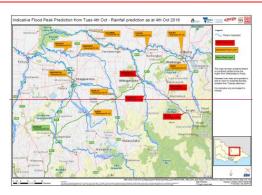
Towns affected or at risk of flooding

Security Class For Official Use Only

Information is sourced from Water Specialists and marked on maps. Current views and comments are added. These maps, when produced are included in the map pack. **Procedure**

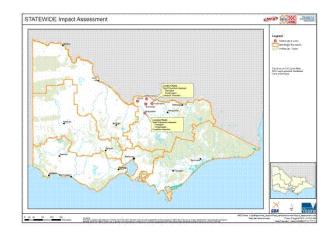
Location







1.11.41.11.3 Flood Impacts / Damages



Product Flood Impacts / Damages Prod No Prod-***

Section Intelligence Unit Mapping

Purpose State/Regional/

Shows towns impacted, and damage/loss noted.

NOTE: The statewide view could be the Significant Incident Map.

Security Class For Official Use Only

Procedure

Location



1.11.51.11.4 Flood Extent Map - Predicted

Prod No Prod-*** Product Flood Extent - Predicted

Section Intelligence **Unit** Mapping

Purpose Region/Incident Level.

> Present the estimated/likely flood extent based on BOM predictions. Appropriate design or historic flood extents used to estimate potential impacts and inform operational considerations. Note that the availability of this map is dependent on pre-existing flood information. Layers to be turned on – with advice perhaps from the flood specialists.

Security Class For Official Use Only

Procedure

Location



1.11.61.11.5 Flood Travel Time

Flood Travel Time Prod No Prod-*** Product

Section Intelligence **Unit** Mapping

Purpose Region/Incident Level.

Summarises the timing of expected flood peaks for at risk locations and where information is available summarises the timing of onset flooding (ie. Minor flooding or

above expected)

Security Class For Official Use Only

Procedure

Location



1.11.71.11.6 Flood Consequence Map

Prod No Prod-*** Product Flood Consequence Map

Section Intelligence **Unit** Mapping

Purpose State/Region/Incident Level.

Shows potential range of consequences based on BOM prediction. Summarises the key flood consequences for likely, possible and worst case scenarios and for flood consequences that have already occurred. May include detail of the predicted/actual

timing of flood consequence if known.

Security Class For Official Use Only

Procedure

Location



1.11.81.11.7 Flood Extent - Actual

Prod No Prod-*** Flood Extent Actual Product

Section Intelligence **Unit** Mapping

Purpose State/Region/Incident Level.

Shows the actual flood extent at a fixed point in time. (when the data was captured) Could be linescan interpretation.

Security Class For Official Use Only

Procedure

Location



1.11.91.11.8 Flood Warning Predictive Map

Prod No Prod-*** Flood Warning Predictive Map Product

Section Intelligence **Unit** Mapping

Purpose State/Region/Incident Level.

Displays the current predicted flood warnings for river gauges in Victoria. It would only

show the gauge point,

Security Class For Official Use Only

Procedure

Location



1.11.10 Strategic Flood Risk Map

Flood Warning Predictive Map Prod No Prod-*** Product

Intelligence **Unit** Mapping Section

Purpose State/Region Level.

Provide an overview of the impacts to critical infrastructure. Align to critical infrastructure

as defined on Fire Hazard Maps.

Security Class For Official Use Only

Procedure

Location

Map Products 2019-20



1.12 Hazmat (CBNRe) Templates

There a couple of map templates available for use if required. A base project is setup and ready for use if maps are ever needed to be created on behalf of a scientific officer. There could be a range of different "types" of products; however you will be advised on titles and text requirements from the scientific officer. However for now the base template requirement will be the same. This is the beginning and will be future development to come.



Prod No Prod-*** **Product** Hazmat (CBNRe) Template

Section **Unit** Mapping Intelligence

Purpose State Level (at this point)

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Procedure Use the CBNRe.mxd template, and apply the template. There is a database by which

extra observations can be drawn as required. Apply template, (either Landscape or

portrait) and alter text information as required and advised.

Location

Map Products 2019-20



1.13 Marine Pollution

- Pre-made PDFs are available through EM-COP library. (under Hazard Marine Pollution)
- Link is http://cop.em.vic.gov.au/sadisplay/nicsUl.seam?ws=1&v=c77ab847#library and scroll down to find information Oil Spill Response Atlas (OSRA) Maps

1.131.14 Other Standard Maps

There are many other less commonly requested standard maps. And are more than likely a number not listed.

There are no templates available for the maps listed below. And the expectation should be managed that such map requests may take longer to produce.

To produce these maps use the ArcGIS standalone and eMap Analyst Add In.

- Image Map
- Facilities
- Rehabilitation and Recovery
- □ Air Operations
- Communications

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