Title Fire Extent and Severity Mapping (FESM) 2019/20 Alternative FESMv3 title(s) **Abstract** Fire severity is a metric of the loss of biomass caused by fire. In collaboration with the NSW Rural Fire Service, DPE Remote Sensing & Regulatory Mapping team has developed a semi-automated approach to mapping fire extent and severity through a machine learning framework based on sentinel 2 satellite imagery. The statewide severity map has standardised classes to allow comparison of different fires across the landscape. The FESM severity classes include: unburnt, low severity (burnt understory, unburnt canopy), moderate severity (partial canopy scorch), high severity (complete canopy scorch, partial canopy consumption), extreme (full canopy consumption). This dataset represents the 2019/20 fire year including all wildfires >10ha with a fire start date between July 2019 and June 2020. Resource locator Show on SEED Name: Show on SEED Web Map Web Map Protocol: WWW:DOWNLOAD-1.0-http--download Description: Display dataset on SEED's map Function: download **Data Quality** Name: Data Quality Statement **Statement** Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for Fire Extent and Severity Mapping (FESM) Function: download **NSW Fire Extent** Name: NSW Fire Extent and Severity Mapping (FESMv3) Factsheet and Severity **Mapping** Protocol: WWW:DOWNLOAD-1.0-http--download (FESMv3) Function: download Factsheet **Data Download** Name: Data Download Package Package Protocol: WWW:DOWNLOAD-1.0-http--download Description: FESM v3 - data in ESRI GRID format + ESRI Layer file Function: download Name: Data Download Package **Data Download Package** Protocol: WWW:DOWNLOAD-1.0-http--download Description: FESM v3 - data in IMG and TIFF format Function: download Name: ArcGIS REST Service **ArcGIS REST Service** Protocol: WWW:DOWNLOAD-1.0-http--download Description: An ArcGIS Server web service represents a GIS resource—such as a map, locator, or image—that is located on an ArcGIS Server site and is made available to client applications. Depending on the layers enabled, this web service allows a user to

query its features and/or visualise the dataset. This service is aimed at advanced

geographical information users, and will require access to geographical information system (GIS) software such as ArcGIS/ArcMap. Function: download Unique resource identifier Code f7eb3f73-5831-4cc9-8259-8d1f210214ac Presentation Map digital form Edition FESMv3 **Dataset** English language Metadata standard Name ISO 19115 2016 Edition **Dataset URI** https://datasets.seed.nsw.gov.au/dataset/f7eb3f73-5831-4cc9-8259-8d1f210214ac Purpose Bushfire response planning and analysis by land and environmental managers **Status** Completed Spatial representation grid type Spatial reference system Code identifying 4283 the spatial

reference system

Spatial

resolution

10 m

Topic category

Keyword set	
keyword value	HAZARDS-Fire
	ECOLOGY-Ecosystem
	ECOLOGY-Habitat
	VEGETATION
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	140.273438
East bounding longitude	155.083008
North bounding latitude	-36.354774
South bounding latitude	-27.999058
NSW Place Name	NSW
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	2019-01-01
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Not planned
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
Responsible party role	pointOfContact

Lineage

Layer was developed with a semi-automated approach to mapping fire extent and severity through a machine learning framework based on sentinel 2 satellite imagery. The severity maps have standardised classes to allow comparison of different fires across the landscape.

Originally the layer was produced as an Lamberts Conic Conformal projection IMG TIFF file (but converted to a 10m Esri GRID in in line with internal EES spatial convention for storage on P and SDE).

Limitations on public access

Responsible party

Contact position Data Broker

Organisation name NSW Department of Climate Change, Energy, the Environment and Water

Telephone number 131555

Email address <u>data.broker@environment.nsw.gov.au</u>

Web address https://www.nsw.gov.au/departments-and-agencies/dcceew

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Metadata date 2024-09-16T23:18:20.135658

Metadata language