

Appendix D All Hazard Features and Symbols

Category #ID	Symbol (Feature)	Theme	Geometry	System Symbol	Hand-drawn	Hand Symbol	Status	Definition (inc source)	Guidelines and examples	Symbol Origin
Incident										
1.1	Incident (generic)	General	Point		Y		Unconfirmed Confirmed	An event, accidentally or deliberately caused, which requires a response from one or more of the statutory emergency response agencies. (EMA)	1) Label with Location; Name; DTG 2) Use at Event/Incident to Jurisdictional levels eg. aircraft crash	FGDC Status created
1.2	Bomb Threat	Criminal	Point		Y		Possible Probable Confirmed	A warning of the possible presence of a bomb or expression of the intention to detonate a bomb. (FGDC)	1) Label with Location; Name; DTG 2) Use at Event/Incident to Jurisdictional levels	FGDC
1.3	Bomb	Criminal	Point		Y		Possible Probable Confirmed	An explosive device fused to detonate under specific conditions. (Source: International military definition) (FGDC)	1) Label with Location; Name; DTG 2) Use at Event/Incident to Jurisdictional levels	FGDC
1.4	Insect Plague	Biological	Point		Y		Unconfirmed Confirmed	Insect Infestation (Infestation) - A harassing or troublesome invasion of insects. (Source: derived from the definition of "infestation" found in the FactMonster.com dictionary) (FGDC)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels eg. for Aust Plague Locust	created
1.5	Animal Health	Biological	Point		Y		Unconfirmed Confirmed	Outbreak of disease that jeopardise the health of livestock, the production of livestock products or have public health implications (adapted from AUSVETPLAN 3.0)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels eg. for Foot & mouth	created
1.6	Plant Health	Biological	Point		Y		Unconfirmed Confirmed	Emergency plant pest or disease incursion affecting the Australian plant industries (adapted from PlantPlan 2.0)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels eg. for Citric canker	created
1.7	Fire	Fire	Point		Y		NA at this time	Fire Incident An incident reported as a fire to a fire agency and requiring a response. (Vic DPC). STATUS: - not applied at this time	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC - NZ adapted
1.8	Fire Origin	Fire	Point		Y		Unconfirmed Confirmed	Location of where the fire started (FGDC)	1) Label with DTG 2) Use at Event/Incident to Jurisdictional levels	FGDC – NZ – AIIMS adapted
1.9	Fire Hot Spot	Fire	Point		Y		NA	An area of intensified fire activity and increased heat or a particularly active part of a fire (FGDC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	FGDC and AIIMS adapted
1.10	Spot Fire	Fire	Point		Y		NA	Isolated fires started ahead of the main fire by sparks, embers or other ignited material, sometimes to a distance of several kilometres (AFAC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	FGDC and AIIMS adapted
1.11	Burnt Area	Fire	Polygon		Y		NA	Area comprehensively burnt by recent fire activity (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS adapted
1.12	Fire Perimeter/ Boundary	Fire	Line		Y		NA	Fire Perimeter or Fire Boundary. The entire outer boundary of a fire area. (AFAC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS adapted - grey
1.13	Fire Edge	Fire	Line		Y	same	Predicted Active Contained	Any part of the boundary of a fire at a given time. (AFAC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	ACT/ NSW BCC adapted

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1.14	Hazardous Material Incident	Hazardous Material	Point		Y		Unconfirmed Confirmed	Incident involving a substance or material which has been determined by an appropriate authority to be capable of posing an unreasonable risk to health, safety and property. (adapted from EMA)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC – NZ adapted
1.15	Oil Spill	Hazardous Material	Point		Y		Unconfirmed Confirmed	An incident involving the accidental or intentional release of oil into the marine environment, or the slick produced by such an incident. (EMA)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC adapted
1.16	Gas Leak	Hazardous Material	Point		Y		Unconfirmed Confirmed	Uncontrolled or potentially dangerous presence of a gas which may afford a hazard to human health (adapted from FGDC)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	Adapted from FGDC Toxic Gas
1.17	Radioactive Material	Hazardous Material	Point		Y		Unconfirmed Confirmed	Materials which spontaneously emit ionizing radiation (AEM_Glossary).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC
1.18	Tropical Cyclone	Natural Event	Point		N		NA	Large scale closed circulation systems in the atmosphere with low barometric pressure and strong winds that rotate counterclockwise in the northern hemisphere and clockwise in the southern hemisphere. The system is referred to as a 'cyclone' in the Indian Ocean and South Pacific, 'hurricane' in the western Atlantic and eastern Pacific and 'typhoon' in the western Pacific (AEM_Glossary).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC adapted
1.19	Earthquake	Natural Event	Point		N		NA	The vibrations of the Earth caused by the passage of seismic waves radiating from some source of elastic energy (AEM_Glossary).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC adapted
1.20	Flood	Natural Event	Point		N		NA	The overflowing by water of the normal confines of a stream or other body of water, or the accumulation of water by drainage over areas which are not normally submerged (AEM_Glossary).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC adapted
1.21	Flooded Area	Natural Event	Polygon		Y	same	Predicted Confirmed	Area of water inundation (TBC)	1) Label with Location; Name; DTG 2) Use at Event/Incident to Regional levels	Created
1.22	Landslide	Natural Event	Point		Y		NA	A general term for a wide variety of processes and landforms involving the down slope movement under the force of gravity of masses of soil and rock material (FGDC)	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC adapted
1.23	Thunderstorm	Natural Event	Point		N	same	NA	Atmospheric disturbances involving perturbations of the prevailing pressure and wind fields, on scales ranging from tornadoes (1 km across) to extra-tropical cyclones (2000-3000 km across) (AEM_Glossary)..	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC adapted
1.24	Storm Surge	Natural Event	Point		Y		NA	The difference between the actual water level under influence of a meteorological disturbance (storm tide) and the level which would have been attained in the absence of the meteorological disturbance (ie. astronomical tide). Syn. 'storm wave' and 'storm tide' (AEM_Glossary).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	Created
1.25	Tsunami	Natural Event	Point		N		NA	A great sea wave produced by an earthquake or volcanic eruption, characterized by high speed of propagation, long wavelength, long period, and low observable amplitude on the open ocean (FGDC).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC

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1.26	Air Incident	Transportation	Point		Y		Unconfirmed Confirmed	An event involving aircraft resulting in damage, bodily injury, death, or the disruption of transportation service (FGDC).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC
1.27	Marine Incident	Transportation	Point		Y		Unconfirmed Confirmed	An event involving a boat or ship resulting in damage, bodily injury, death, or the disruption of transportation service (FGDC).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC
1.28	Rail Incident	Transportation	Point		Y		Unconfirmed Confirmed	An event involving train resulting in damage, bodily injury, death, or the disruption of transportation service (FGDC).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC
1.29	Vehicle Incident	Transportation	Point		Y		Unconfirmed Confirmed	An event involving a wheeled or tracked vehicle resulting in damage, bodily injury, death, or the disruption of transportation service (FGDC).	1) Label with Location; Name; DTG 2) Use at Regional to Jurisdictional levels	FGDC

Assets										
2.1	Asset (Generic)	General	Point	   	Y	same	No status Potential defensible Defendable Not defensible	Assets and infrastructure that provide the basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions including schools, post offices, and prisons. (adapted from FGDC). The status of the asset is defined by the judged ability to counter the known threat of an active incident. I.e Potential defensible:(AIIMS) Defendable:(AIIMS) Not defensible:(AIIMS)	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	FGDC adapted, black rectangle, transparent Status is adapted from AIIMS
2.2	Indigenous Site	General	Point		N		NA	Site of indigenous artifacts or cultural importance that emergency responders need to be aware of to minimise impact. (TBC)	1) Use at Event/Incident to Regional levels	created
2.3	Hazardous Material Storage	General	Point		N		NA	A storing location for a substance or combination of substances that because of quantity, concentration, physical, chemical, radiological, explosive, or infectious characteristics poses a potential danger to humans and/or the environment (FGDC)	1) Use at Event/Incident to Regional levels	FGDC
2.4	Historic Site	General	Point		N		NA	Site of historical significance that emergency responders need to be aware of to minimise impact. (TBC)	1) Use at Event/Incident to Regional levels	created
2.5	Significant Flora	General	Point		N		NA	Site of significant flora that emergency responders need to be aware of to minimise impact. (TBC)	1) Use at Event/Incident to Regional levels	created
2.6	Significant Fauna	General	Point		N		NA	Site of significant fauna that emergency responders need to be aware of to minimise impact. (TBC)	1) Use at Event/Incident to Regional levels	created
2.7	Fire Sensitive Asset	Fire	Point		Y		NA	Asset that may be destroyed or significantly damaged by fire. Emergency responders need to be aware of to minimise impact. (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS adapted

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2.8	Machine Sensitive Asset	Fire	Point		Y		NA	Asset that may be destroyed or significantly damaged by vehicles or heavy equipment. Emergency responders need to be aware of to minimise impact. (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS adapted
2.9	Threatened Asset	Fire	Point		Y		NA	Asset identified at risk of being destroyed or significantly damaged by wildfire. (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	NSW BCC - ACTRFS adapted

Operations										
Category #ID	Symbol (Feature)	Theme	Geometry	System Symbol	Hand-drawn	Hand Symbol	Status	Definition (inc source)	Guidelines and examples	Symbol Origin
3.1	Access Points	General	Point		Y		NA	To be defined (TBC)	1) Use at Event/Incident Regional levels	created
3.2	Area of Interest	General	Polygon		Y	Same	NA	The extent and location anticipated at being at risk from a particular incident or event. Syn: Area of Concern. (TBC)	1) Label with DTG 2) Use at Event/Incident Regional levels	SA DEH
3.3	Assembly Area	General	Point		Y		NA	A designated location used for the assembly of emergency-affected persons. The area may also incorporate an emergency relief centre (AEM_Glossary)	1) Use at Event/Incident to Regional levels	AIIMS
3.4	Base Camp	General	Point		Y		NA	A location where personnel are accommodated and fed for a period of time. A camp usually contains catering, ablution and accommodation facilities, a water supply and a lighting system., and may include other facilities such as car parking, maintenance and servicing (AIIMS)	1) Use at Event/Incident to Regional levels	NSW BCC
3.5	Control Area	General	Polygon		Y	Same	NA	A declared area in which defined conditions apply to the movement into, out of, and within, of specified animals or things. Conditions applying in a control area are of lesser intensity than those in a restricted area. The limits of a control area and the conditions applying therein may be varied rapidly according to need (AEM_Glossary).	1) Label with DTG 2) Use at Event/Incident to Regional levels	SA DEH adapted
3.6	Control / Operations Point	General	Point		Y		NA	To be defined (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS
3.7	Declaration Area	General	Polygon		Y		NA	A defined tract of land for the time being subject to emergency management restrictions (adapted from Declared Area in AUSVETPLAN 3.0)	1) Label with DTG 2) Use at Event/Incident to Regional levels	SA DEH adapted
3.8	Escape Route	General	Point		Y		NA	A pre-planned route away from danger areas at a fire (AFAC)	1) Use at Event/Incident to Regional levels	NSW BCC - ACTRFS adapted
3.9	Escape Route	General	Line		Y		NA	A pre-planned route away from danger areas at a fire (AFAC).	1) Use at Event/Incident to Regional levels	created
3.10	Evacuation Route									
3.11	Evacuation Area	General	Point		Y		Planned Established	A predetermined place where patients, visitors and staff are taken or are assembled in the event of an evacuation. Syn. 'evacuation assembly area' (AEM_Glossary).	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	created

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3.12	Evacuation Centre	General	Point		Y		Planned Established	Centre that provides affected people with basic human needs including accommodation, food and water. In addition, to enhance the recovery process, other welfare/recovery services should also be provided (AEM_Glossary).	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	created
3.13	Animal Shelter									
3.14	Refuge	General	Point		Y		NA	A community fire refuge is a building where people may seek shelter from the danger of wildfire. A building constructed or designated as a fire refuge should have consideration given to its vulnerability to wildfire, parking for users, availability of water, telephone and electric power, and location and accessibility in relation to its service area (AEM_Glossary).	1) Use at Event/Incident to Regional levels	AIIMS adapted
3.15	Incident Command/Control Centre	General	Point		Y		Planned Established	The location where the incident controller and, where established, members of the incident management team provide overall direction of response activities in an emergency situation. Syn. emergency operations centre (AEM_Glossary).	1) Label with DTG for status 2) Use at Event/Incident to Jurisdictional levels	FGDC adapted
3.16	Division Boundary	General	Point		Y		NA	Division: A portion of the fire perimeter comprising of two or more sectors. The number of sectors grouped in a division should be such as to ensure effective direction and control of operations. Divisions are generally identified by a local geographic name (AEM_Glossary).	1) Use at Event/Incident to Regional levels	AIIMS
3.17	Division Command	General	Point		Y		NA	Location at an incident from which the Division Commander of that division operates (AIIMS)	1) Use at Event/Incident to Regional levels	NSW BCC - ACTRFS adapted
3.18	Sector Boundary	General	Point	00000	Y	00000	NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	AIIMS adapted
3.19	Sector Command	General	Point		Y		NA	Location at an incident from which the Sector Commander of that section operates (AIIMS)	1) Use at Event/Incident to Regional levels	NSW BCC - ACTRFS adapted
3.20	Staging Area	General	Point		Y		NA	A location close to the incident where personnel and equipment are available (AFAC).	1) Use at Event/Incident to Regional levels	NSW BCC
3.21	Portable Weather Station	General	Point		Y		NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	AIIMS adapted
3.22	Portable Radio Repeater	General	Point		Y		NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	AIIMS adapted
3.23	Wind Observation	General	Point		Y		NA	Observation of the direction from which the wind blows and speed in knots. Barb points to direction that wind is coming from. (adapted from www.weather.gov)	1) Label with DTG 2) Use at Event/Incident to Regional levels	WMO
3.24	Fire Direction	Fire	Point		Y	Same	NA	To be defined (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	ACT adapted
3.25	Aerial Ignition	Fire	Point		Y	Same	Planned Completed	The igniting of fine fuels for prescribed purposes by dropping incendiary devices or materials from aircraft (AFAC)	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	NZ adapted
3.26	Back Burn	Fire	Line		Y		Planned Completed	A fire started intentionally along the inner edge of a fireline to consume the fuel in the path of a wildfire (AFAC)	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	AIIMS adapted

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3.27	Machine Cut Track	Fire	Line		Y		NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	AIIMS
3.28	Fire Control Line	Fire	Line		Y		Planned Completed	A natural or constructed barrier, or treated fire edge, used in fire suppression and prescribed burning to limit the spread of fire (AFAC)	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	NSW BCC adapted
3.29	Fire Engine/ Vehicle	Fire	Point		Y		NA	The location of any motor vehicles that carry firefighters and equipment to a fire and support extinguishing operations (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS
3.30	Water Point	Fire	Point		Y		NA	Natural or artificial water storage of value in fire operations. Generally indicated by a signpost with 'W', 'WP' or 'WATER' (AEM_Glossary).	1) Use at Event/Incident to Regional levels	AIIMS
3.31	Water Point Helicopter	Fire	Point		Y		NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	AIIMS
3.32	Water Point Vehicle	Fire	Point		Y		NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	ACTRFS /NSW BCC adapted
3.33	Sand Bag Levee	Flood	Line		Y		NA	A levee constructed from sandbags that is used to confine streamflow within a specified area along the stream or to prevent flooding due to waves or tides. (adapted from EMA_Glossary)	1) Use at Event/Incident to Regional levels	SA DEH
3.34	Police Vehicle	Law Enforcement	Point		Y		NA	The location of police vehicles. (TBC)	1) Label with DTG 2) Use at Event/Incident to Regional levels	AIIMS
3.35	Ambulance Location	Medical	Point		Y			The location of medical transport located at the disaster site but in a safe location. (TBC)	1) Use at Event/Incident to Regional levels	ACTRFS /NSW BCC adapted
3.36	First Aid Station	Medical	Point		Y		NA	An area located at the disaster site but in a safe location for undertaking triage, emergency treatment of casualties prior to transport away from the disaster scene. (AEM_Glossary) Syn: Patient Treatment Post; Triage	1) Use at Event/Incident to Regional levels	Created
3.37	Potential Victim	Search & Rescue	Point		N		NA	The location of any known or potential victim. (www.reliefweb.int/undac/documents/insarag/guidelines)	1) Label with DTG 2) Use at Event/Incident to Regional levels	INSARAG adapted
3.38	Victim Location Confirmed	Search & Rescue	Point		Y		NA	The location of a victim has been confirmed either visually, vocally or hearing specific sounds which would indicate a high probability of a victim. (www.reliefweb.int/undac/documents/insarag/guidelines)	1) Annotate underneath with the letter "L" with a number to denote the number of live victims 2) Label with DTG 3) Use at Event/Incident to Regional levels	INSARAG adapted
3.39	Victim Located Dead	Search & Rescue	Point		Y		NA	The location of a victim has been confirmed either visually, vocally or hearing specific sounds which would indicate a high probability of a victim. Only dead victim(s) remain. (www.reliefweb.int/undac/documents/insarag/guidelines)	1) Annotate underneath with the letter "D" with a number to denote the number of dead victims 2) Label with DTG 3) Use at Event/Incident to Regional levels	INSARAG adapted
3.40	Victim Extracted Alive	Search & Rescue	Point		Y		NA	Symbol to indicate that the last live victim has been extricated from that location. (www.reliefweb.int/undac/documents/insarag/guidelines)	1) Annotate underneath with the letter "L" with a number to denote the number of live victims 2) Label with DTG 3) Use at Event/Incident to Regional levels	INSARAG adapted
3.41	Victim Extracted Dead	Search & Rescue	Point		Y		NA	Symbol to indicate when all dead victims have been removed. (www.reliefweb.int/undac/documents/insarag/guidelines)	1) Label with DTG 2) Use at Event/Incident to Regional levels	INSARAG adapted

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3.42	Airbase	Transport	Point		N		NA	An area of land or other hard surface, excluding water, that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any. (FGDC)	1) Use at Event/Incident to Jurisdictional levels	NZ
3.43	Helibase	Transport	Point		N		NA	A site within a landing zone that contains one or more points for helicopters to land. (FGDC)	1) Use at Event/Incident to Jurisdictional levels	NZ adapted
3.44	Helipad	Transport	Point		Y		NA	To be defined (TBC)	1) Use at Event/Incident to Regional levels	GISSOP adapted
3.45	Road Closure / Traffic Control Point	Transport	Point	 	Y		Planned Active	Road check point or barricade to maintain compliance with movement control restrictions (AEM_Glossary).	1) Label with DTG for status 2) Use at Event/Incident to Regional levels	UN Military Symbol Handbook adapted