

DISASTERWARE PRO[®]

Flood Operations Checklist



2024

Version 7.0



Make better decisions, faster.

DISASTER AWARE PRO

Flood Operations Checklist

Hazards can occur anywhere, and at anytime, requiring fast and effective decision making to protect lives and livelihoods. This procedural checklist is designed to assist emergency and disaster management practitioners in utilizing PDC's DisasterAWARE Pro system to plan for and respond to flood hazard events. It provides guidance on how to use DisasterAWARE early warning and anticipatory insights to ensure effective actions are taken and how to use the system to know where a hazard is likely to occur, who will be impacted, the extent and severity of impacts, and what can be done to save lives and property.



Before using this checklist, make sure you meet the following prerequisites:

1 You are an emergency / disaster management practitioner.

This checklist is designed for emergency and disaster management practitioners who support emergency operations centers.

2 You have registered for a DisasterAWARE Pro user account.

In order to make use of this checklist you must have an active DisasterAWARE Pro user account. To register, visit <https://disasteraware.pdc.org> and create an account.

3 You have completed all DisasterAWARE tutorials and set up your Smart Alert notifications.

To understand where to access key features and functions of the system referenced in this checklist, you will have had to complete the Beginner and Advanced DisasterAWARE tutorials provided at <https://www.disasteraware.org/tutorials>.

Other helpful resources

DisasterAWARE Quick Start Guide

<https://www.disasteraware.org/quickstartguide>

DisasterAWARE Full User Guide

<https://www.disasteraware.org/userguide>

Need help?

Problems logging in?

 disaster@pdc.org

Disaster response support:

 response@pdc.org



Flood Monitoring and Early Warning Checklist

PDC's flood monitoring and early warning leverages near-real-time reports from scientific authorities covering the globe. Within the U.S. and Canada, notifications are provided through the National Weather Service and the Meteorological Service of Canada; and for the remainder of the globe, flood alerting is provided through an innovative partnership between PDC and [NASA's Earth Applied Sciences Disasters](#) program area.



ALERT AND NOTIFICATION - NEW FLOOD HAZARD IDENTIFIED

T = Time of Event

Position Responsible = To be assigned by agency

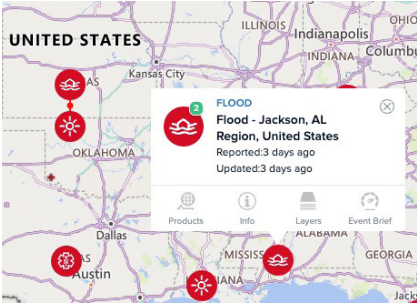
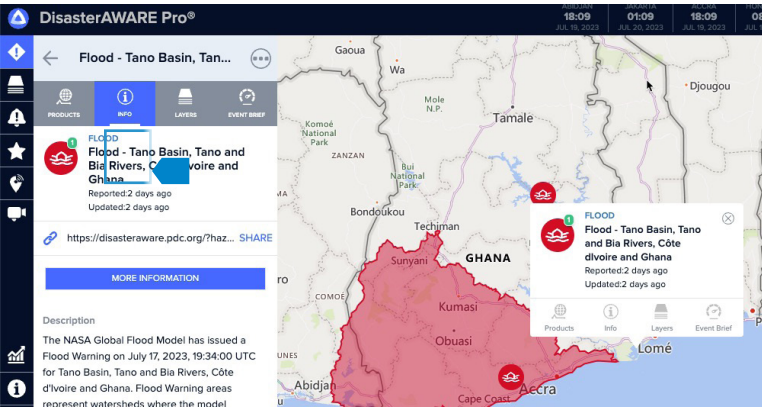
Time Elapsed (Minutes)	Trigger / Activity	Position(s) Responsible
T1+ 0:00	<input type="checkbox"/> New flood hazard / threat identified: DisasterAWARE SmartAlert sends an alert/notification for a new flood hazards in the designated area of responsibility (AOR), or it is identified by the emergency management organization's DisasterAWARE Pro monitoring activities. If there is knowledge of a hazard from another source and it is not shown in DisasterAWARE, contact response@pdc.org to have it added.	



Action	Time Elapsed (Minutes)	Description	Position(s) Responsible
1	T+ 0:05	<input type="checkbox"/> Determine hazard severity (WARNING/WATCH/INFORMATION) in DisasterAWARE via the flood hazard icon color on the map: Outside the United States and Canada Note: Flood hazards outside the United States and Canada were developed in partnership with NASA and are predictive. Warning (Red): Flooding is anticipated to occur and may impact populations and infrastructure. Monitor closely and be prepared to act if necessary. United States and Canada Warning (Red): Flooding is imminent or occurring with severe impacts to population and infrastructure. Watch (Yellow): Conditions are favorable for flooding to occur with the potential to impact population and infrastructure. Information (Blue): Significant flooding has recently occurred with severe impacts to population or infrastructure. Agencies are responding. No additional threat anticipated.	


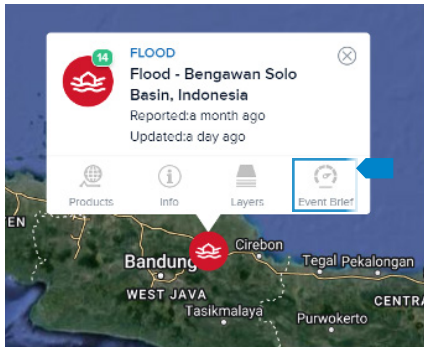
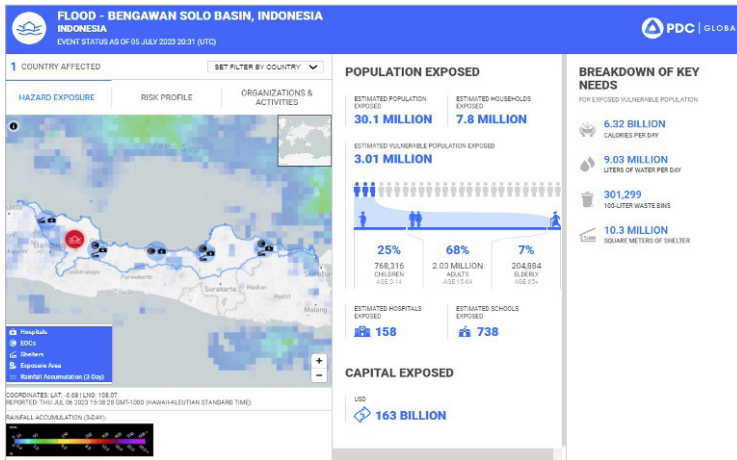


Continued... ALERT AND NOTIFICATION - NEW FLOOD HAZARD IDENTIFIED

Action	Time Elapsed (Minutes)	Description	Position(s) Responsible
2	T+ 0:20	<div><div><input type="checkbox"/></div><div><p>Review key hazard information in DisasterAWARE:</p><p>Click on the hazard icon of interest. A hazard icon tooltip will pop-up. Click the Info link in the tooltip for the hazard description, when it was reported, last updated, and for a quick summary about the potential hazard impacts.</p><div></div><p>Use the hazard tooltip to quickly access the following information: Number of products available, type of hazard, location of hazard, first report and updated time record, links to products, information, hazard-specific layers, and PDC's Event Brief.</p><p>Click on the Info Icon in the hazard icon tooltip. The SmartAlert notification area will be outlined on the DisasterAWARE base map, and the Info panel will appear with a description of the flood hazard.</p><div></div></div></div>	



Continued... ALERT AND NOTIFICATION - NEW FLOOD HAZARD IDENTIFIED

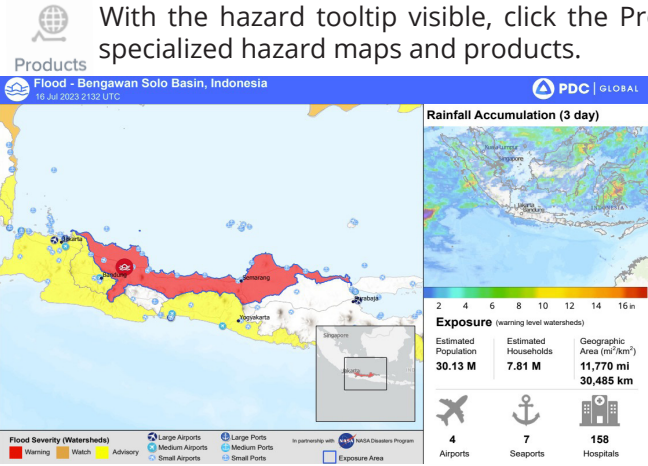
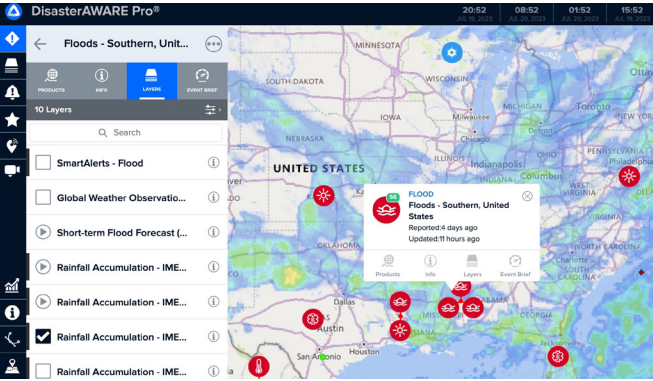
Action	Time Elapsed (Minutes)	Description	Position(s) Responsible
3	T+ 5:00	<div> <input type="checkbox"/> <p>Review Event Brief:</p> <p>PDC's Event Brief is a hazard-specific report which routinely updates and provides the latest information on the severity and potential impacts of a hazard. Event Brief is available when the population and infrastructure exposed meet the minimum threshold for reporting. When not available, click the More Information icon in the Info panel.</p> <p> With the hazard icon tooltip visible, click the Event Brief icon.</p>   <p>Event Brief will automatically load in a new browser tab. At the top of the report, the number of affected countries is shown alongside a dropdown menu that can be filtered by country. Review the following key pieces of information from the report:</p> <ul style="list-style-type: none"> • Population exposed including vulnerable groups • Potential impacts to critical infrastructure (e.g. hospitals, schools...) • Capital exposure (estimated value of exposed infrastructure) • Breakdown of potential key needs • Risk profiles • Easy access to related products • Other information such as weather and historical hazards </div>	



Continued... ALERT AND NOTIFICATION - NEW FLOOD HAZARD IDENTIFIED

T = Time of Event

Position Responsible = To be assigned by agency

Action	Time Elapsed (Minutes)	Description	Position(s) Responsible
4	T+ 8:00	<div data-bbox="370 422 407 457"><input type="checkbox"/></div> <p>Review Hazard Products:</p> <p>With the hazard tooltip visible, click the Products link to review specialized hazard maps and products.</p>  <p>The screenshot shows a map of the Bengawan Solo Basin in Indonesia. It displays flood severity with a color scale from yellow (Warning) to red (Warning). It also shows exposure areas for airports, seaports, and hospitals. The map includes a legend for flood severity (Warning, Watch, Advisory) and exposure areas (Airports, Seaports, Hospitals). The map is titled 'Flood - Bengawan Solo Basin, Indonesia' and 'Rainfall Accumulation (3 day)'.</p>	
5	T+ 15:00	<div data-bbox="370 947 407 982"><input type="checkbox"/></div> <p>Use data to support daily operational readiness, impact assessment, and reporting:</p> <ul style="list-style-type: none"> Note receipt of the hazard alert (Information, Advisory, Watch, or Warning) in daily operations event log. With the hazard tooltip visible, click the Layer icon to turn on hazard-specific layers as needed. <p>Layers</p>  <p>The screenshot shows the DisasterAWARE Pro app interface. It displays a map of the United States with flood layers. The left panel shows a list of layers including SmartAlerts - Flood, Global Weather Observations, Short-term Flood Forecast, Rainfall Accumulation - IME, and Rainfall Accumulation - IME. The map shows flood severity with a color scale from yellow (Warning) to red (Warning). The map is titled 'Floods - Southern, United States'.</p> <ul style="list-style-type: none"> Be sure to also check for additional relevant data in the Layers panel (left menu) to further enhance your situational awareness (e.g., terrain, weather observations, risk and vulnerability, critical infrastructure, and regional and country-specific layers). Utilize the Bookmark feature to save and share specific layers / maps with partners and senior leaders. Create drawings to add key information to be shared with partners and senior leaders. Use the Print feature to save and email/print maps or products. Use the above features and products to keep Senior Leadership informed as required by your emergency management organization's Standard Operating Procedures (SOP). 	



Flood Monitoring and Early Warning Checklist



Continued... ALERT AND NOTIFICATION - NEW FLOOD HAZARD IDENTIFIED

T = Time of Event

Position Responsible = To be assigned by agency

Action	Time Elapsed (Minutes)		Description	Position(s) Responsible
6	T+ ...	<input type="checkbox"/>	Hazard monitoring: <ul style="list-style-type: none"> Continue to monitor hazard impacts in AOR using DisasterAWARE Pro's automated updates, including alert level changes, Event Brief anticipated impact reports, and potential resource requirements needed for response operations. Use information in SA products as needed. Continue to update Senior Leadership as required. If authorized, upload situational awareness products as updates occur.³ Continue monitoring until the hazard expires in DisasterAWARE Pro or monitoring is no longer required. 	
7	T+ ...	<input type="checkbox"/>	Supervisory oversight: <p>Ensure checklist tasks have been completed or are in progress as appropriate. Ensure daily operations event log is up to date with all:</p> <ul style="list-style-type: none"> Hazard and weather-related information received. Notifications and reports to Senior Leadership as required. Continue until hazard expires in DisasterAWARE Pro or monitoring is no longer required. 	

³Approved organizations only. For more information or to request a product be uploaded, contact response@pdc.org.



Flood Monitoring and Early Warning Checklist



FLOOD HAZARD REQUIRES EMERGENCY RESPONSE ACTIVATION

T = Time of Event

Position Responsible = To be assigned by agency

Time Elapsed (Minutes)		Trigger / Activity	Position(s) Responsible
T2+ 0:00	<input type="checkbox"/>	Flood hazard's severity reaches need for Emergency Response Operation: Senior Leadership activates Emergency Response Operations as provided for by the emergency management organization's SOP.	



Action	Time Elapsed (Minutes)		Description	Position(s) Responsible
8	T+ 10:00	<input type="checkbox"/>	Prepare initial incident brief: <ul style="list-style-type: none"> Review Event Brief updates and hazard layers to include in initial incident briefing materials. 	
9	T+ 20:00	<input type="checkbox"/>	Conduct initial incident briefing: <ul style="list-style-type: none"> Provide initial incident brief to Incident Command/Senior Leadership. 	
10	T+ ...	<input type="checkbox"/>	Monitor/gather data/report/keep records: <ul style="list-style-type: none"> Continue to monitor hazard in DisasterAWARE Pro for automatic updates, impacts in AOR, and potential resource requirements needed for response operations under changing conditions. Use information in SA products and briefings for Incident Command, Senior Leadership, the Media, etc. as needed. If authorized, upload situational awareness products as updates occur.² Continue for duration of incident. 	
11	T+ ...	<input type="checkbox"/>	Incident timeline oversight: Ensure checklist tasks have been completed or are in progress as appropriate. Ensure organization records and DisasterAWARE Pro Hazard product file (as appropriate) are up to date with: <ul style="list-style-type: none"> Hazard and weather-related information received. SA products issued. Briefings for Incident Command/Senior Leadership as provided for by emergency management organization's SOP. Continue for duration of incident.	

²Approved organizations only. For more information or to request a product be uploaded, contact response@pdc.org.

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