

Sr. No	Stages		Disaster Management Authority / EOC	IMD	CWC	WRD
1	Monsoon Period		To arrange regular meeting with all concerned departments during Monsoon Period	Issue of weather bulletin for forecasting rainfall	<p>To coordinate with the neighbouring states of Gujarat for rainfall and inflow forecast for inter state rivers.</p> <p>To issue inflow forecast and flood level forecast warning in the reservoir. Warning to be issued to the focal officer of the projects of the basin and concerned officers of WRD.</p>	<p>To coordinate with the concerned Water Resources officers of the neighbouring states in the event of Heavy rainfall in the catchement, release of water from the upstream dams alongwith upstream reservoir position.</p> <p>To plan for operation of reservoir w.r.t. outflow from the reservoir to be decided and to inform concerned Revenue authority by way of Flood warning.</p> <p>Appropriate warning message to be sent to Revenue Dept and if deemed fit for broadcasting on All India Radio and Doordarshan.</p> <p>Place the Disaster Management Plan 2021 on wrd.guj.nic.in/dam for open access.</p>
2	Heavy Rainfall			Issue of weather bulletin for forecasting rainfall of various durations Issue of Special Bulletins	<p>To coordinate with the neighbouring states of Gujarat for rainfall and inflow forecast for inter state rivers.</p> <p>To issue inflow forecast and flood level forecast warning in the reservoir. Warning to be issued to the focal officer of the projects of the basin and concerned officers of WRD,</p>	<p>Dam authority monitors the dam situation during monsoon. When any unusual condition or incident is noticed the information / emergency level is communicated to the disaster management authorities responsive actions to save the dam and minimize impact to life, property and the environment. CWC guidelines Emergency Action Plan for dams (CDSO_GUD_DS_01_v2.0) in this regard may be referred for more details.</p>
3	Reservoir Storage position					
	a.	Storage more than 70% and upto 80% (Warning Stage)		-	-	To inform concerned District Adminstration falling in the downstream likely flood affected village / town in writing for the position of reservoir. Clearly mention the Storage percentage and Warning stage on the Depatmental website wrd.guj.nic.in/dam Open Access Reports.
	b.	Storage more than 80% and upto 90% (Alert Stage)		-	-	
	c.	Storage more than 90% (High Alert)		-	-	

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages		Disaster Management Authority / EOC	IMD	CWC	WRD
	d.	Release of Flood Water from the Reservoir				<p>Issue the Flood warning before release of water from the reservoir to revenue authority / police dept concerned with downstream affected areas / village / town by the Focal Officer of the Project / Basin in standard proforma stipulated in Disaster Management Plan stating likely affecte villages / towns, quantum and time for release of water, warning signal etc.</p> <p>Concerned Executive Engineer of the dam shall inform on the appropriate decision to the Focal officer of the river basin. The Focal officer in turn shall intimate to the District Collector and the Flood Control Cell (WRD) Gandhinagar.</p> <p>The details of focal officer for the respective basins are provided in the Disaster Management Plan.</p>
4		Main Rivers (Damanganga, Tapi, Narmada, Mahi, Sabarmati and Banas) Flowing at danger level			<p>To coordinate with the neighbouring states of Gujarat for rainfall and inflow forecast for inter state rivers.</p> <p>To issue inflow forecast and flood level forecast warning in the reservoir. Warning to be issued to the focal officer of the projects of the basin and concerned officers of WRD.</p>	<p>To inform concerned District Adminstration / Police dept falling in the riverine areas with the details of location of the Gauge site.</p> <p>Appropriate warning message to be sent to Revenue Dept and if deemed fit for broadcasting on All India Radio and Doordarshan.</p> <p>Concerned Executive Engineer of the dam shall inform on the appropriate decision to the Focal officer of the river basin. The Focal officer in turn shall intimate to the District Collector and the Flood Control Cell (WRD) Gandhinagar.</p> <p>The details of focal officer for the respective basins are provided in the Disaster Management Plan.</p>

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages	Disaster Management Authority / EOC	IMD	CWC	WRD
5	Dam Failure	To keep constant watch over the situation and send Rapid action force or Airforce as per necessity in the flooded areas fo evacuation of the affected people.			<p>In the event of breach in the embankment, heavy uncontrolled leakages from spillway / gates - concerned revenue authorities / district administraion be informed immediately with likely affected areas. Dam authority should immediately inform the Focal Officer and Senior WRD oficals too.</p> <p>Appropriate warning message to be sent to Revenue Dept and if deemed fit for broadcasting on All India Radio and Doordarshan.</p> <p>Concerned Executive Engineer of the dam shall inform on the appropriate decision to the Focal officer of the river basin. The Focal officer in turn shall intimate to the District Collector and the Flood Control Cell (WRD) Gandhinagar.</p> <p>The details of focal officer for the respective basins are provided in the Disaster Management Plan.</p>
6	Disaster Preparedness for Flood	To finalise and review Disaster Management Plan for each Department	To issue weather bulletin	To issue inflow forecast / Level forecast for six rivers.	To implement model action plan as per Annex 3 A
		Warning			Inform Revenue Dept - Taluka level, District level and State Level intimation
		Alert			Inform Revenue Dept - Taluka level, District level and State Level intimation
		High Alert			Inform Revenue Dept - Taluka level, District level and State Level intimation- details like Release of Water to be made, likely villages to be affected by concerned Focal / Sub focal Officer.
		Ready to Shift			Inform Revenue Dept, (Taluka level, District level and State Level intimation.
		Post Damage			Appropriate actions w.r.t Damage Control, Relief of Dam / Irrigation Infrastructure
Levels of Incidence					

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages		Disaster Management Authority / EOC	IMD	CWC	WRD
Dam			To arrange emergency meeting with all line Department and intimate situation to all concerned. Maintain constant touch with Airforce, Army and Navy.	Provide information about probable rainfall in the area which may be affected due to emergency situation of the dam.	Provide flood forecast and probable levels in the river.	Dam authority/operator keeps monitoring the dam situation continuously during monsoon. When any unusual condition or incident is noticed the information regarding emergency level is communicated to the disaster management authorities and will act to save the dam and minimize impact to life, property and the environment. CWC guidelines in this regard may be referred for more details. Follow Rule levels as per Anexure 1 c (page 34) and Circular 2 clause 17 (p74) for filling of dams
River / Canal / Drains						WRD Authorities act as per Chapter 4 , (Maintanance of Flood Embankments, p81) and Annexure 4-A (p82) covering maintainance of Flood Embankments. (In event of Drain Overflow or Breaches in banks - Concerned Executive Engineer shall act as Focal Officer and Dy. Ex Engr as subfocal Officer)
Mild		Small Breaches in Canal, Small disturbance in Earthern Bunds, Slopes and Pitching	Warning			Timely repairs,
		Canal / Drain Inundation Indundation in 1 Village				Timely repairs
Medium						Inform Revenue Dept, (Taluka level, District level and State Level intimation Project / Scheme Exeutive Engineer to take appropriate actions
		Heavy Inundataion More than 1 Village				Inform Revenue Dept, (Taluka level, District level and State Level intimation. Mechanical Unit Fighter Squad to alerted
Riverine Flooding						Inform Revenue Dept, (Taluka level, District level and State Level intimation). Mechanical Unit Fighter Squad to alerted
Major		Major	Cracks, Failures			Inform Revenue Dept, (Taluka level, District level and State Level intimation). Central Designs Organisation Visit and Problem Solving by CDO and Field Officers
			Heavy Leakages			Inform Revenue Dept, (Taluka level, District level and State Level intimation.) Central Designs Organisation Visit and Problem Solving by CDO/ Mechanical Wing and Field Officers

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages		Disaster Management Authority / EOC	IMD	CWC	WRD
			Mechanical Gate Problems			Inform Revenue Dept, (Taluka level, District level and State Level intimation.) Central Designs Organisation Visit and Problem Solving by Design Mechanical Wing and Field Officers
Coordination with Adjoining State					Coordinate with Water Resources Department, Forecasting and Monitoring data Sharing mechanism in place.	Coordinate with Central Water Commission Forecasting and Monitoring mechanism in place.
					Intimation to State Emergency Operations and Concerned Disaster officers of adjoining States.	Intimation to State Emergency Operations and Concerned Disaster officers of adjoining States.
Relief Measures						WRD Dept takes up relief measures for its Irrigation infrastructure. WRD Circle offices shall regularly send report of the Flood Damages WRD infrastructure to Central Flood Cell, Gandhinagar

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

y of Disaster Response Departments - Monsoon 2023 (Water Year 2023-24)

Sr. No	Stages		Disaster Management Authority / EOC	Revenue Dept / EOC	Urban Authority	Roads and Building	Railway Authority	Home Dept	Energy
1	Monsoon Period		To arrange regular meeting with all concerned departments during Monsoon Period	To take appropriate action for alerting and evacuating the people likely to be affected in accordance with the warning and threat perception along with relief measures. In demanding situation if deemed fit messages for broadcasting on All India Radio and Doordarshan.	To take appropriate action for alerting and evacuating the people likely to be affected in urban areas in accordance with the warning and threat perception.	To take appropriate action for safety of bridge, causeways roads and traffic	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrastructure for maintaining power supply in the affected areas.
2	Heavy Rainfall			To take appropriate action for alerting and evacuating the people likely to be affected in accordance with the warning and threat perception along with relief measures. In demanding situation if deemed fit messages for broadcasting on All India Radio and Doordarshan. Alert Central Assistance agencies on need basis.	As above and be prepared for responding to likely Flooding situation	As above	As above	As above	As above and be prepared for responding to likely Flooding situation
3	Reservoir Storage position								
	a.	Storage more than 70% and upto 80% (Warning Stage)		Warning message to Collectors for awareness of the affected people	Warning message to Municipal Commissioners for awareness of the affected people				
	b.	Storage more than 80% and upto 90% (Alert Stage)		Alert message to collectors for awareness of the affected people	Alert message to Municipal Commissioners for awareness of the affected people				
	c.	Storage more than 90% (High Alert)		High Alert message to collectors for awareness of the affected people	High Alert message to Municipal Commissioners for awareness of the affected people				

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages		Disaster Management Authority / EOC	Revenue Dept / EOC	Urban Authority	Roads and Building	Railway Authority	Home Dept	Energy
	d.	Release of Flood Water from the Reservoir		To take appropriate action for alerting and evacuating the people likely to be affected in accordance with the warning and threat perception. In case of natural calamities and grave emergencies liaison with Airforce authority, Military authoirity for thier assistance	To take appropriate action for alerting and evacuating the people likely to be affected in urban areas in accordance with the warning and threat perception.	To take appropriate action for safety of bridge, causeway roads and traffic	To keep constant watch over the situation and mobilse teams.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasructure for maintaining power supply in the affected areas.
4		Main Rivers (Damanganga, Tapi, Narmada, Mahi, Sabarmati and Banas) Flowing at danger level		To take appropriate action for awarness, alerting the people likely to be affected in accordance with the threat perception.	To take appropriate action for awarness, alerting the people likely to be affected in accordance with the threat perception.	To take appropriate action for safety of bridge, causeway, roads and traffic	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages	Disaster Management Authority / EOC	Revenue Dept / EOC	Urban Authority	Roads and Building	Railway Authority	Home Dept	Energy
5	Dam Failure	To keep constant watch over the situation and send Rapid action force or Airforce as per necessity in the flooded areas for evacuation of the affected people.	To take appropriate action for awareness, alerting the people likely to be affected in accordance with the threat perception.	To take appropriate action for awareness, alerting the people likely to be affected in accordance with the threat perception.	To take appropriate action for safety of bridge, causeway, roads and traffic	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrastructure for maintaining power supply in the affected areas.
6	Disaster Preparedness for Flood	To finalise and review Disaster Management Plan for each Department	To implement model action plan as per Annex 3 A of WRD Disaster Management Plan 2021. Refer the District Disaster Management Plan of respective districts.	To implement model action plan as per Annex 3 A of WRD Disaster Management Plan 2021. Refer the District Disaster Management Plan of respective districts.	To implement model action plan as per Annex 3 A of WRD Disaster Management Plan 2021. Refer the District Disaster Management Plan of respective districts.		To implement model action plan as per Annex 3 A of WRD Disaster Management Plan 2021. Refer the District Disaster Management Plan of respective districts.	To implement model action plan as per Annex 3 A of WRD Disaster Management Plan 2021. Refer the District Disaster Management Plan of respective districts.
		Warning						
		Alert	Preparatory actions - Logistics readiness				Appropriate actions as per their protocol and Revenue Dept instructions	
		High Alert	Public intimation, inter-departmental co-ordination				Appropriate actions as per their protocol and Revenue Dept instructions	
		Ready to Shift						
		Post Damage	Relief, Rescue, Rehabilitation related actions	Relief, Rescue, Rehabilitation related actions	Damage Control, Repairs	Damage Control, Repairs	Rescue, Relief, Security related actions	Damage Control, Repairs
Levels of Incidence								

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages		Disaster Management Authority / EOC	Revenue Dept / EOC	Urban Authority	Roads and Building	Railway Authority	Home Dept	Energy
Dam			To arrange emergency meeting with all line Department and intimate situation to all concerned. Maintain constant touch with Airforce, Army and Navy.	To take appropriate action for alerting and evacuating the people likely to be affected in accordance with the warning and threat perception. In case of natural calamities and grave emergencies liasion with Airforce authority, Military authoirity for their assistance	To take appropriate action for alerting and evacuating the people likely to be affected in urban areas in accordance with the warning and threat perception.	To take appropriate action for safety of bridge, causeway roads and traffic	To keep constant watch over the situation and mobilise teams.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasustructure for maintaing power supply in the affected areas.
River / Canal / Drains									
Mild		Small Breaches in Canal, Small disturbance in Earthern Bunds, Slopes and Pitching	Warning		To take appropriate action for awareness, Alerting and the people likely to be affected in accordance with the threat perception.				
		Canal / Drain Inundation Indundation in 1 Village							
Medium				Public intimation, inter-departmental co-ordination, Relief as deemed fit	To take appropriate action for awarness, alerting and the people likely to be affected in accordance with the threat perception.	Ensure accessiblity to the Village Gamtal	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasustructure.
		Heavy Inundataion More than 1 Village		Assesment and Relief coordination	To take appropriate action for awarness, alerting and the people likely to be affected in accordance with the threat perception.	Ensure accessiblity to the Village Gamtal	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasustructure.
Riverine Flooding				Assesment and Relief coordination	To take appropriate action for awarness, alerting and the people likely to be affected in accordance with the threat perception.	Ensure accessiblity to the Village Gamtal	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasustructure.
Major		Major	Cracks, Failures	Assesment and Relief coordination	To take appropriate action for awareness, alerting and the people likely to be affected in accordance with the threat perception.	Ensure accessiblity to the Village Gamtal	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasustructure.
			Heavy Leakages	Assesment and Relief coordination	To take appropriate action for awareness, alerting and the people likely to be affected in accordance with the threat perception.	Ensure accessiblity to the Village Gamtal	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasustructure.

Role Matrix : Responsibility Matrix for Various Departments during Monsoon 2023

Sr. No	Stages		Disaster Management Authority / EOC	Revenue Dept / EOC	Urban Authority	Roads and Building	Railway Authority	Home Dept	Energy
			Mechanical Gate Problems	Assesment and Relief coordination	To take appropriate action for awareness, alerting and the people likely to be affected in accordance with the threat perception.	Ensure accessiblity to the Village Gamtal	To take appropriate action for safety of railway bridge, tracks and rail traffic.	To take appropriate action in consultation with revenue dept.	To take appropriate action for safety of transmission infrasructure.
Coordination with Adjoining State				Coordinate response with various agencies					
Relief Measures				Revenue dept shall Coordinate efforts by various departments and various departmenal Control rooms shall manage gather information of flood damage and response.					