

Detection

Evaluation

Decision

RAIN & FLOOD

Execution

Logging

Review/restart

1. DETECTION: Identify developing imminent rain/flood risk early enough to act.

Meteorological inputs

- Radar-based precipitation intensity (mm/h)
- Accumulated rainfall over defined time windows (e.g. 30 / 60 / 120 min)
- Forecast persistence (expected continuation or training cells)

On-site observations

- Pooling on paths, plazas, tent roofs
- Run-off forming along slopes or service roads
- Drainage capacity visibly exceeded

Technical & human sensors

- Rain gauges, ground saturation sensors (if available)
- Staff reports (parking, backstage, sanitation, medical access)

Trigger Logic (example)

- Intensity × duration exceeds predefined site threshold **OR**
- Local pooling/run-off reported in ≥2 critical locations **OR**
- Drainage failure at safety-relevant infrastructure

2. EVALUATION: “Translate rainfall into site-specific operational impact”.

Impact Assessment

Ground conditions

- Loss of bearing capacity (mud, slip risk)
- Risk of vehicles or equipment getting stuck

Water dynamics

- Direction and speed of surface run-off
- Potential for water accumulation in low points

Operational exposure

- Parking areas (especially grass / gravel)
- Audience routes (ingress, egress, emergency access)
- Vendor zones, FOH, power distribution, cable trenches

Key Questions

- Which areas will deteriorate first?
- Can the situation worsen within the next operational cycle (30–60 min)?
- Which functions are at immediate risk: access, power, medical, evacuation?

→ **Risk classification (e.g. Green / Yellow / Amber / Red)**

3. DECISIONN: Decide *what must change operationally—and how fast*.

Typical Decision Options

Close affected parking areas

- Activate pre-defined alternative parking zones
- Redirect arriving traffic

Routing

- Close flooded or unstable paths
- Activate safer routing (hard surfaces, elevated routes)

Operations

- Restrict vehicle movements on site
- Suspend build-up or dismantling activities

Protection Measures

- Order immediate vendor protection actions
- Secure electrical and technical infrastructure

Decision Principles

- Early, preventive decisions are preferred over reactive ones
- Protect access for emergency services at all times
- Avoid audience movements through degrading ground

→ **Decision confirmed by responsible person**

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4. COMMUNICATION: Ensure all stakeholders receive *clear, unambiguous instructions*.

Internal Communication

Control room → operations, traffic, security, production

Clear instructions:

What is closed

What is open instead

From when

External Communication

Audience messaging (if affected)

Parking changes

Route changes

Safety advice (footwear, reduced mobility support)

Vendor & crew communication

Protection instructions

Movement restrictions

Communication Standards

- Simple language, no meteorological jargon
- Consistent wording across all channels
- Repeat critical messages at defined intervals

5. EXECUTION : Implement decisions safely and consistently on site.

Operational Actions

Close and secure parking areas

Deploy signage and staff for re-routing

Establish physical barriers for flooded zones

Support vendors with:

Elevation of goods

Water diversion (temporary channels, pumps if available)

Adjust staffing:

More stewards at critical routes

Increased monitoring of ground conditions

Coordination

Continuous feedback from field teams to control room

Immediate reporting of deviations or escalation

6. LOGGING : Create a transparent and defensible decision record.

What to Log

- Time and source of detection
- Evaluation findings and risk classification
- Decisions taken and by whom
- Communication measures initiated
- Execution status and field feedback

Why Logging Matters

- Supports later review and learning
- Provides evidence for duty-of-care compliance
- Enables reconstruction of decision logic

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7. REVIEW : Ongoing Review

- Has rainfall intensity changed?
- Is pooling increasing or decreasing?
- Are alternative routes functioning as intended?
- Are new vulnerable areas emerging?

Possible Outcomes

- Maintain current measures
- Escalate (additional closures, further restrictions)
- De-escalate (reopen areas once safe)

Post-Event Review

- Compare thresholds vs. real impacts
- Identify bottlenecks or communication gaps
- Update site-specific rain & flood thresholds

Output

→ Improved preparedness for future events