

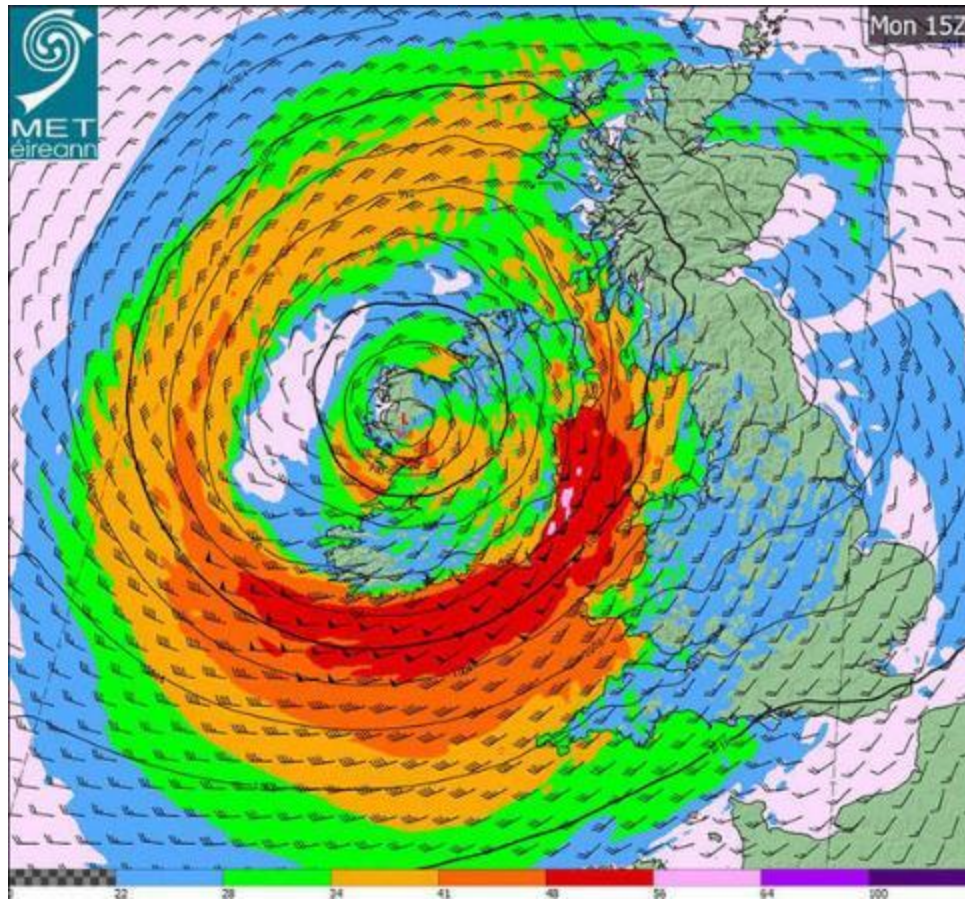
# Contingency Planning for Storms



Ciara McMahon (EPA)

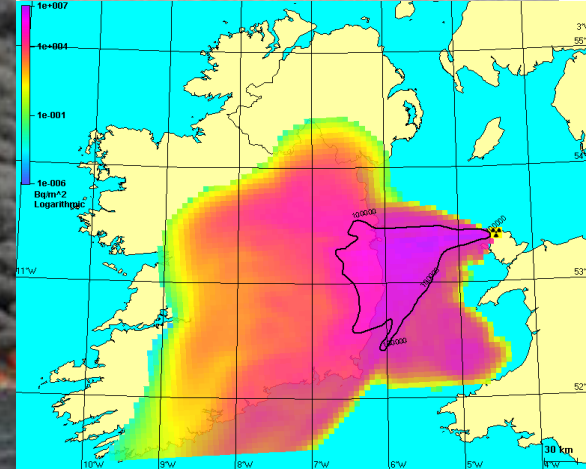
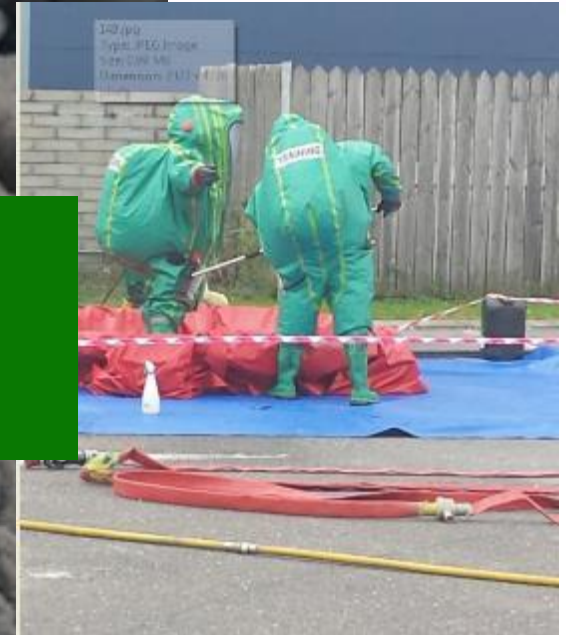
National Water Event, 21 June 2018

# Planning for Storms





# Contaminated Water Warning



# 5-Stage Planning Paradigm



# Hazard Analysis

1. What could happen?
2. What could that lead to?
3. What would that mean for my plant's operation?



Snow  
Ice  
Low Temp...



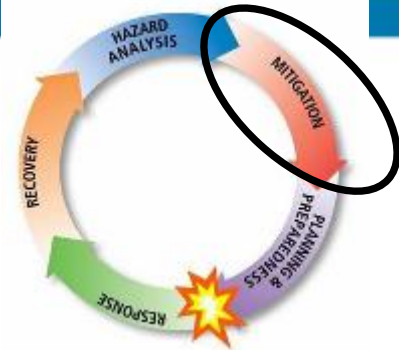
Loss of power  
Access blocked  
Melting snow  
Frozen pipes...



Pumps not working  
Staff shortage  
Chemical supplies  
No lab access  
Flooding  
Contamination  
Burst pipes...

# Mitigation

- Can we prevent/lessen the emergency itself?
- Can we lessen the impact?
- Can we put in place equipment/processes to mitigate the impacts?



- Back-up generator(s)
- Battery packs
- Passive (gravity) systems
- Additional reserve of treated water
- Arrangements for quick repair (on call engineers)
- ...

Robustness

Redundancy

Resilience



# Planning & Preparedness

- What needs to be done?
- Who will do it?
- How will they do it?
- Call out
- Coordination
- Information management
- Communication
- Logistics
- Business Continuity



Plan(ning)



Training



Exercises/  
Drills



Preparedness

# Coordination with Local/National Plans



## A FRAMEWORK FOR MAJOR EMERGENCY MANAGEMENT

A Framework enabling An Garda Síochána, the Health Service Executive and Local Authorities to prepare for and make a co-ordinated response to major emergencies resulting from events such as fires, transport accidents, hazardous substance incidents and severe weather.



## A FRAMEWORK FOR MAJOR EMERGENCY MANAGEMENT

GUIDANCE DOCUMENT 14  
A GUIDE TO SEVERE WEATHER  
EMERGENCIES  
DECEMBER 2010

## Strategic Emergency Management National Structures and Framework



As Roinn Cosanta  
Department of Defence



# Response



Latest News

**#Ophelia**

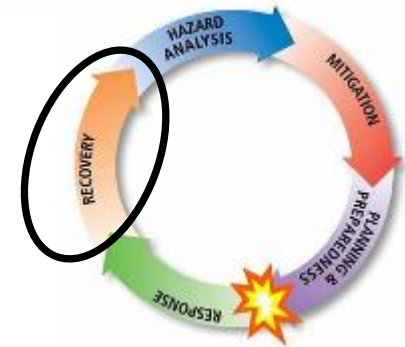
**We are working to restore water supply for customers in the wake of Storm Ophelia**

# Recovery

## Latest News

### Enniscorthy Co. Wexford

A **Boil Water Notice** has been put in place as a precautionary measure as we cannot guarantee water entering the scheme is fully disinfected following Storm Emma



# Contingency Planning

- What could happen?
- What would we need to do keep essential services running?
  - Who
  - What
  - When
  - Where
  - How
- Are our arrangements scale-able?
- Are they robust?
- Do they work?
- How do we know?



Do you want to find out now or during the next emergency?