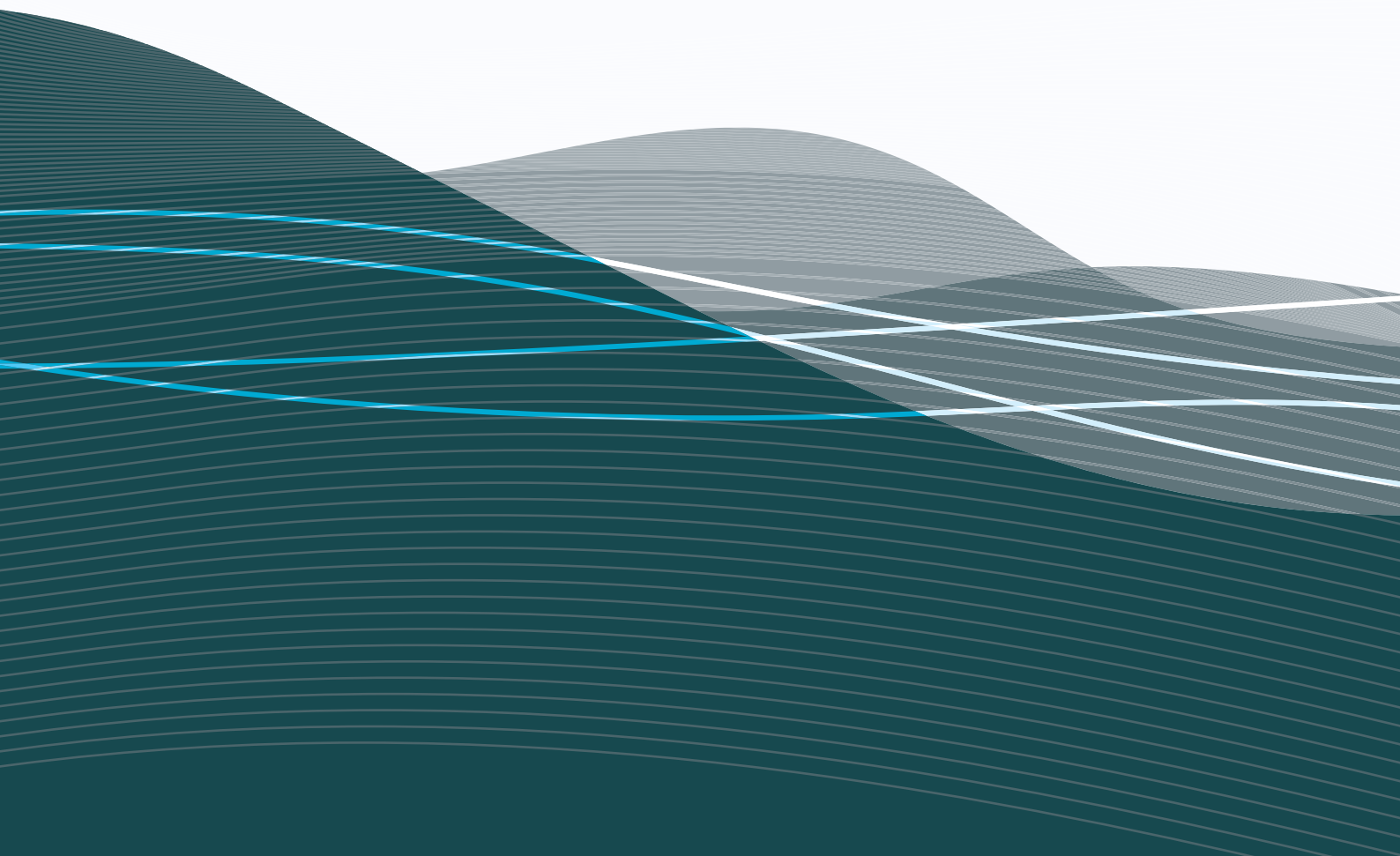
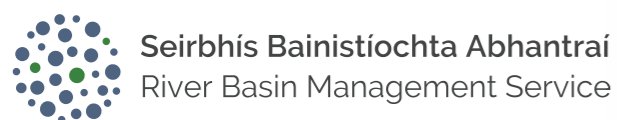


# **National Protocol for Coordinating the Response to Significant Fish Mortality Events in Freshwater**





**Iascach Intíre Éireann**  
**Inland Fisheries Ireland**



## Contents

1.	PURPOSE .....	4
2.	SCOPE AND OBJECTIVES .....	5
3.	POLICY AND LEGISLATION .....	6
4.	OVERVIEW OF AGENCY ROLES .....	7
5.	STAGES IN THE RESPONSE TO A SIGNIFICANT FISH MORTALITY EVENT .....	8
6.	GENERAL RESPONSE TIME .....	8
7.	INCIDENT RESPONSE .....	9
8.	SIGNIFICANT INCIDENT INVESTIGATION GROUP .....	10
9.	LEAD AGENCY ROLE .....	10
10.	INTER AGENCY COMMUNICATIONS .....	11
11.	INFORMATION, DATA SHARING & RECORDS MANAGEMENT .....	11
12.	INVESTIGATION AND SAMPLING PROCEDURE .....	11
13.	LICENCED DISCHARGE INVESTIGATION .....	13
14.	POLLUTION CONFIRMED .....	13
15.	SHORT-TERM MITIGATION MEASURES .....	13
16.	DISPOSAL OF FISH MORTALITIES .....	13
17.	EXTERNAL COMMUNICATIONS .....	14
18.	INVESTIGATION STAND DOWN .....	14
19.	DEBRIEF .....	15
20.	REPORT .....	15
21.	PROSECUTION PROCEDURE .....	15
22.	FREEDOM OF INFORMATION & ACCESS TO INFORMATION ON THE ENVIRONMENT FOI & AIE) .....	15
23.	REFERENCES .....	15
24.	APPENDICES .....	16

## 1. PURPOSE

1. The **Strategic Emergency Management National Structures and Framework** sets out the national arrangements for the delivery of effective emergency management. Some emergencies may be beyond the normal response capabilities of the local emergency response services .
2. The **National Contingency Plan in case of massive pollution events** describes the command and control to be implemented where there is a threat or actual pollution at sea or shoreline.<sup>2</sup>
3. Local Authorities maintain specific **Major Emergency Plans** which detail their response to major emergencies, including environmental pollution.
4. A fish mortality event occurs when conditions within a waterbody change due to either natural or human-induced (anthropogenic) causes resulting in the death of multiple fish of a single or multiple species. It may occur suddenly or following a period of time during which fish morbidity was observed in a fish population.
5. A 'significant' fish mortality event is one that may affect single or multiple species, has the potential to result in significant aquatic habitat damage, impact on spawning and/or jeopardise the short-term survival of a fish population and may require the response of more than one agency.
6. The Inland Fisheries Environmental Officer on scene shall determine whether a fish mortality event is significant based on their experience and knowledge of the affected waterbody/catchment and shall liaise with IFI Management regarding initiating this Protocol accordingly.
7. This document sets out the protocol for coordinating the response to significant fish mortality events in freshwater by relevant agencies and supports the **National Emergency Framework**.
8. This document establishes a clear framework for coordinating and communicating the timely response, thorough investigation, and accurate documentation of significant fish mortality events, ensuring a consistent and effective approach.
9. This protocol follows the precautionary principle, assuming a worst-case scenario when a fish mortality event occurs and is refined as evidence emerges during the investigation process.
10. This policy has been informed by the Australian National investigation and reporting protocol for fish mortality events (Commonwealth of Australia, 2007), the report of the European Commission's Joint Research Centre following the 2025 significant fish kill on the Munster Blackwater (Free, 2026) and the recommendations of the Joint Committee on Climate, Environment and Energy regarding the Fish Kill on the River Blackwater 2025.

<sup>1</sup> Strategic Emergency Management: National Structures and Framework, Department of Defence 2017.

<sup>2</sup> National Contingency Plan in case of massive pollution events, Department of Transport 2019.

## 2. SCOPE AND OBJECTIVES

11. A wide range of organisations have a full or partial remit in the management of the aquatic resource in Ireland.
12. The Agencies with immediate investigative responsibilities in respect of a significant fish mortality event in freshwater in the State are:
  - **Inland Fisheries Ireland (IFI):** the state agency responsible for the protection, management, and conservation of Ireland's inland fisheries and sea angling resources.
  - **The Environmental Protection Agency (EPA):** the independent statutory body with a wide range of responsibilities including licencing of large industrial and waste sites and wastewater discharges, enforcing the conditions of those licences and enforcing Regulations applicable to certain sectors e.g., drinking water quality.
  - **Local Authorities:** responsible for delivering a number of inspection programmes in the area of water quality protection, and licencing and regulation of trade effluent discharges under Section 4 of the Local Government (Water Pollution) Acts 1977 to 2007, which are not Scheduled Activities under the 1992 EPA Act.
  - **The Marine Institute (MI):** the agency responsible for marine research, technology development and innovation in Ireland. The Fish Health Unit of the Marine Institute is the Competent Authority for aquatic animal health under Regulation (EU) 2016/429 and associated national implementing regulations and is also the National Reference Laboratory for aquatic animal diseases.
  - **The National Parks and Wildlife Service (NPWS):** the state agency responsible for the protection and conservation of Ireland's natural heritage and biodiversity at national government level.
13. Depending on the location of the fish mortality event the following agencies have responsibilities:
  - **Waterways Ireland (WI):** responsible for the management, maintenance, development and restoration of waterways, including the network of canals and navigable channels throughout Ireland.
  - **The Loughs Agency:** the cross-border agency that conserves, manages and protects the Foyle and Carlingford loughs.
14. The supporting agencies with key expertise essential to the success of a significant fish mortality event investigation are:
  - **River Basin Management Service:** A national local authority shared service which works on behalf of Ireland's 31 local authorities to protect and restore good water quality in Ireland's rivers, lakes, estuaries, ground and coastal water through catchment science and local community engagement.
  - **Uisce Éireann:** Ireland's National Water Utility responsible for the providing secure, safe and sustainable water and wastewater services to domestic and commercial customers connected to the public water system. It is also responsible for delivering and maintaining public water and waste water infrastructure.
  - **The Health Service Executive (HSE):** Responsible for protecting public health in instances where there is a known risk to public health. As a consultee, must be consulted by the appropriate supervisory authority in incidences where there is a breach of Drinking Water Regulations or Bathing Water Quality Regulations which poses a risk to public health

- **The Department of Agriculture, Food and the Marine (DAFM):** Regulates animal health & welfare, and the authorisation and use of plant protection products and biocides through legislation and inspections.
- **An Garda Síochána (AGS):** Ireland's national police and security service. AGS investigate criminal offences, protect State security and community safety.

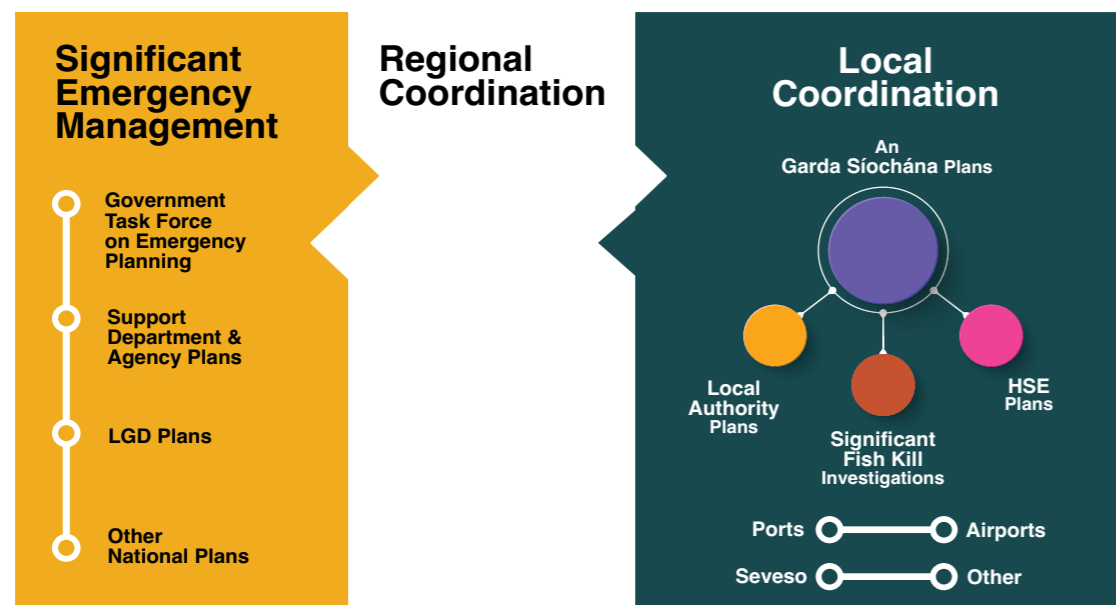
15. Inland Fisheries Ireland, (IFI) as the State agency responsible for the protection and conservation of Ireland's inland fisheries and sea angling resources has developed a detailed protocol in collaboration with the relevant statutory agencies for investigation fish mortality events: **National Protocol for Coordinating the Response to Significant Fish Mortality Events in Freshwater**. This interagency protocol aligns with the procedures set out in the IFI protocol.

### 3. POLICY AND LEGISLATION

16. As the state agency with primary responsibility for the protection and conservation of Ireland's inland fisheries, Inland Fisheries Ireland shall investigate fish mortality incidents within its jurisdiction. If a fish mortality event is found to have resulted from an action or event that constitutes a clear offence under relevant legislation and sufficient evidence is available, legal proceedings will be initiated against the alleged offender.

17. This protocol aims to streamline inter-agency investigations of fish mortality event incidents in freshwater environments in Ireland, and to ensure a consistent approach in response to such incidents across the state in line with the framework for major emergency management .

Table 1: Linking National Plans, MEM Plans and other Plans



18. A nationally consistent approach will improve the management of such incidents, and the sharing of relevant information (such as response or diagnostic techniques) between relevant agencies. The protocol sets out the recommended minimum requirements for each stage of the management of a fish mortality event, including preparedness, investigation and reporting activities.

<sup>3</sup> Strategic Emergency Management: National Structures and Framework Chapter 1: Structures and Arrangements

## 4. OVERVIEW OF AGENCY ROLES

Agency	Key Role in a Significant Fish Mortality Event
Inland Fisheries Ireland	Lead Agency within the jurisdiction; responsible for declaring significant fish kill and co-ordinating Protocol Implementation to investigate cause and source of fish mortalities within its jurisdiction; incident containment; water and fish tissue sample collection for chemical analysis; habitat investigation.
EPA	The EPA will investigate any EPA-Regulated sites in the vicinity of a fish kill, including inspection of sites, examination of records, sampling of discharges and ambient sampling in the immediate vicinity of those discharges.
Local Authority	The relevant Local Authority (or Local Authorities if catchment is cross boundary) will investigate LA regulated sites and activities in the catchment of a fish kill, including site inspection, examination of records, sampling of discharges, and ambient sampling downstream of discharges.  The LA shall follow their own pollution sampling & catchment investigation protocols until a sampling protocol has been agreed with SIIG.
NPWS	NPWS provides on the ground response to incidents through divisional staff, liaising with other key agencies including public engagement and awareness, provision of surveillance and monitoring and technical supports where feasible. This will inform assessing impacts on protected habitats and species (Qualifying Interests) linked to the Site-Specific Conservation Objectives for protected sites. NPWS will also provide ecological assessment and / or technical expertise and scientific advice as appropriate. Consideration can also be given to appropriate enforcement approach.
Marine Institute	As Ireland's Competent Authority for the implementation of Regulation (EU) 2016/429, the Marine Institute is responsible for ensuring preparedness, disease awareness, and control measures for listed aquatic diseases, which includes maintaining and activating contingency arrangements in line with the Animal Health Law's requirements for detection, response, and coordinated disease control actions.
Water Advisory Unit	Consultee
Uisce Éireann (UÉ)	Consultee – must be consulted where the cause of the significant fish kill may impact on the quality of water abstracted for public supply. Will also liaise with the EPA and other investigators in the assessment of discharges from Uisce Éireann assets, where relevant to any response to a significant fish kill event.
HSE	Consultee – Responsible for protecting public health in instances where there is a known risk to public health. As a consultee, must be consulted by Uisce Éireann in incidences where there is a breach of Drinking Water Regulations which poses a risk to public health, or by the Local Authority where there is a breach of Bathing Water Quality Regulations which poses a risk to public health.
River Basin Management Service	Consultee. The Local Authority Waters Programme can provide catchment science support to the local authority sector and Significant Incident Investigation Group as required.
DAFM	DAFM will assist the Marine Institute on request and where available
Waterways Ireland	Will support Agency investigations
Loughs Agency	Lead agency within their jurisdiction. IFI will investigate incidents jointly until source catchment is identified.

Table 1: Key roles per Agency

## 5. STAGES IN THE RESPONSE TO A SIGNIFICANT FISH MORTALITY EVENT

19. The response to a significant fish mortality event shall follow a logical process. *Table 2* below illustrates the three main stages and the typical steps in an investigation. While these stages are described as separate components, they should be viewed as part of a continuous process.
20. The recommended actions for each stage are set out in the protocol. The tasks detailed are advisory in nature and are provided as guiding principles. During any incident, the decision to vary or add tasks will be at the discretion of the lead investigator. Multiple agencies and personnel may be involved in any investigation.

## 6 GENERAL RESPONSE TIME

21. The success of a fish mortality event investigation is usually determined by the speed of the response. Reports of fish mortality events shall be dealt with as a matter of priority and urgency. Resources shall be redeployed as necessary during the initial investigation phase. Significant fish mortality events shall be treated with the highest level of priority by taking a precautionary approach from the outset.

## 7. INCIDENT RESPONSE

22. When a report of a significant or potentially significant fish mortality event is received, the receiving agency shall obtain and verify as much detail of the report as possible with the person reporting the fish mortalities.
23. The agency receiving the initial fish mortality event report will immediately notify **IFI, the EPA, and the relevant Local Authority/Authorities**, by telephone and then confirm details via each agency's designated reporting portal (Appendix 1).
24. Responding Officers will immediately investigate the reported location to confirm the fish mortality event, the extent of the fish mortalities, species impacted (if possible) and any evidence as to the potential or probable cause.
25. Once IFI establishes that a significant fish mortality event has occurred, the immediate inter-agency objective is to locate the source, take measures to prevent further pollution and mortalities and take initial fish and water samples for analysis.
26. An immediate assessment of the scale of the incident will be undertaken on arrival at the scene. Where the incident is declared 'Significant' a Significant Incident Investigation Group will be set up without delay to coordinate response to the incident.

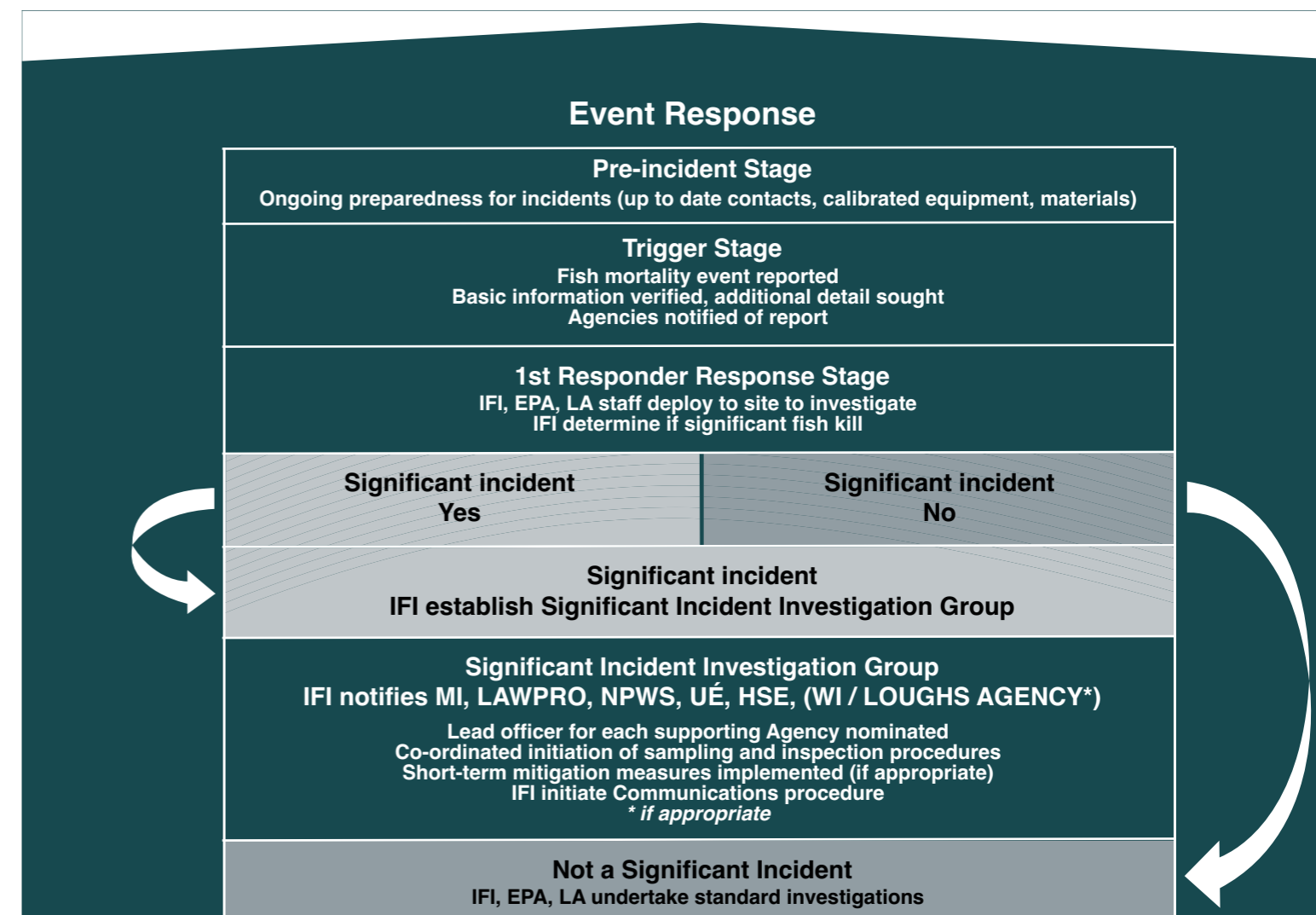


Table 2: Fish mortality event response process

## 8. SIGNIFICANT INCIDENT INVESTIGATION GROUP

27. In the event of a significant fish mortality event, the Significant Incident Investigation Group (SIIG) is formed comprising of representatives of the relevant agencies. Inland Fisheries Ireland (IFI) shall lead the SIIG and an IFI officer will be identified as the SIIG Lead. For incidents within the jurisdiction of the Loughs Agency, IFI shall provide support as necessary.

## 9. LEAD AGENCY ROLE

28. The SIIG Lead shall be responsible for leading the cooperation of the other investigating agencies to ensure all possible avenues are investigated until a cause is determined.

29. The immediate action of the SIIG Lead is to confirm the investigative actions and initial findings of each supporting agency:

- Identify the Lead officer for each supporting Agency
- Identify and agree priority locations for investigation
- Agree deployment of resources to priority locations
- Maintain communications to ensure co-ordinated activities.
- Brief Lead Agency Communications Manager to initiate External Communications Plan.

30. The immediate objectives of the SIIG are:

- Locate the source or identify cause
- Identify any risk to human health
- Identify any risks to animal health
- Prevent further pollution & fish mortalities if possible
- Quantify extent of fish mortality event (length of channel affected, number of mortalities, number of species) and unaffected channels.
- Co-ordinate removal and disposal of fish mortalities.

31. The co-ordinated deployment of agency resources to efficiently investigate possible pollution sources or causes throughout the catchment area is critical. The SIIG Lead shall ensure that the investigation proceeds in a co-ordinated manner.

32. The investigation will consider all relevant possibilities regarding cause of mortality including contamination and potential sources, to achieve a final diagnosis.

33. Determination of causation shall be a matter for the SIIG based on best available information and expert input

## 10. INTER AGENCY COMMUNICATIONS

34. Communication between agencies is a vital element of any emergency response. Timely and clearly articulated communication substantially shapes people's willingness and capacity to help resolve the incident and prevent disruption to the response strategy.

35. An inter-agency Communications Log (Appendix 2) shall be maintained by each investigator throughout the incident.

36. External communications shall be led and co-ordinated by the Lead Agency (Section 17)

## 11. INFORMATION, DATA SHARING & RECORDS MANAGEMENT

37. All Agencies shall share all relevant information with the SIIG Lead in a timely manner to maximise the opportunity for a successful outcome.

38. The SIIG Lead shall:

- Schedule an end-of-day conference call with all participating agencies daily throughout the initial investigation.
- The conference call shall follow a clear agenda and will capture the actions of each agency, leads, routes of investigation and planned actions (Appendix 4).
- Distribute a summary of the conference call to the other agencies without delay.
- Brief the IFI Communications Manager daily.

39. Care shall be taken to avoid the creation of unnecessary or duplicate records.

40. Each Agency shall refer to its Policy and Procedure in relation to evidence and records management.

## 12. INVESTIGATION AND SAMPLING PROCEDURE

41. Where a significant fish mortality event is verified, evidence is immediately gathered by first responders at the location and both upstream and downstream of the mortalities including: on-the-spot instream water chemistry measurements with results recorded and mapped, water and other sample matrices as appropriate for independent laboratory analysis taken following appropriate sampling procedures and respective agency protocols.

42. All sampling methods and sample recording shall meet the required evidential standard where required/practicable.

43. Representative samples of fish species affected (for immediate transfer to laboratory for analysis) shall be removed and the samples and locations documented by photograph. The first Fisheries Officer(s) on scene, shall conduct this immediate sampling.

44. Habitat Inspections shall include biota monitoring.

45. Every investigation has the potential to result in a prosecution and shall be treated as such from the point of initiation. Subsequent decisions to initiate a prosecution will be based on evidence gathered during the investigation. Any enforcement decision will be a matter for the respective agency/authority.
46. The critical sample in terms of deleterious or polluting matter, as defined in the Fisheries and Water Pollution Acts, is typically the polluting discharge and therefore one of the primary aims of the investigation is to find and sample the polluting discharge & effect a discontinuation.
47. Where a discharge is identified, samples of the discharge shall be taken, along with samples taken upstream of the discharge (the control), and downstream of the discharge. A number of samples shall be taken to investigate the source and extent of the fish mortality event throughout the affected channel and to identify unaffected channels
48. In circumstances where samples of discharges are being taken with a view to prosecution, where possible, replicate samples shall be offered to the alleged offender or, in the case of a legal entity, to a representative of same.
49. Where a polluting discharge has not been identified, water samples shall be taken in any areas where fish mortalities are present. Water samples shall also be taken at the nearest upstream location where fish activity is normal as a baseline, and in any adjacent tributaries.
50. Evidential Standard samples shall be conveyed as expeditiously as practicable to an accredited laboratory for analysis, maintaining Chain of Custody.
51. It is important to note that fish mortality events can occur where there is no point or diffuse source of pollution, and that temperature and oxygen saturation levels, along with other environmental variables, can cause or contribute to fish mortality events even where there is no direct pollution source. Such occurrences should be considered by first responders and SIIG where no initial sign of pollution is evident.
52. Based on the initial evidence and information provided by IFI to the Marine Institute Fish Health Unit, the Marine Institute will assess the disease risk and determine whether fish samples are required for disease investigation.
53. If disease is suspected, or if no immediate or obvious cause of mortality can be identified, the Marine Institute Fish Health Unit will arrange for the collection and analysis of fish tissue samples. Samples will be collected and examined either directly by Marine Institute staff. Alternatively, the Marine Institute may coordinate with IFI to deliver live or moribund fish to the Marine Institute for sampling. DAFM will assist the Marine Institute on request and where available

### **13. LICENCED DISCHARGE INVESTIGATION**

54. The relevant Local Authority will investigate LA regulated sites and activities in the catchment of a fish kill, including site inspection, examination of records, sampling of discharges, and ambient sampling upstream and downstream of discharges. Other sites and activities shall be risk assessed as potential sources and investigated accordingly.
55. The EPA will investigate any EPA Regulated sites in the vicinity of a fish kill, including inspection of sites, examination of records, sampling of discharges and ambient sampling upstream and downstream of those discharges.

### **14. POLLUTION CONFIRMED**

56. SIIG continues to be led by IFI.
57. As appropriate, IFI, LA, EPA, or other appropriate authority carry out the investigation on pollution source and assume communications in respect of actions taken.
58. IFI continue communications in relation to overall investigation and fish mortalities.

### **15. SHORT-TERM MITIGATION MEASURES**

59. In some cases, mitigation measures may be possible to reduce the impact of the event. Aeration, fish translocation or use of silt traps / bunds may be feasible and shall be considered by the agencies.

### **16. DISPOSAL OF FISH MORTALITIES**

60. Fish mortalities shall be treated as Category 1 (Cat 1) Animal by-products to ensure biosecurity and environmental protection, particularly where pollution or other hazards cannot be immediately ruled out. Where possible, mortalities may be removed from the water, documented and disposed of in accordance with relevant Regulations .
61. Documenting the locations, numbers and species of mortalities by Inland Fisheries Ireland is critical in order to assess the scale and impact of the event on the waterbody. Photographs shall be taken for subsequent verification.
62. Members of the public and stakeholders shall be advised not to remove fish mortalities but rather to assist investigators by reporting locations of mortalities.

<sup>4</sup> Refer to Appendix 6: Cat 1 Approved Rendering Facilities

## 17. EXTERNAL COMMUNICATIONS

63. Significant fish mortality events will attract the attention of various stakeholders, including angling and environmental stakeholders, the media, political representatives, and the public. These parties have a legitimate interest in the incident, any subsequent investigation, and its outcomes.
64. To prevent the spread of inaccurate information, reduce confusion, and demonstrate effective and professional management of the incident, a clear set of media communication procedures shall be followed. These procedures will ensure the consistency and accuracy of information released and reduce the likelihood of conflicting reports from different organisations.
65. Where a significant fish kill is a result of a Major Emergency (as defined), IFI will support the lead Agency.
66. Only definitive facts shall be reported.
67. No communications shall contain any information that may prejudice a potential legal action.
68. The Inland Fisheries Ireland Communications Manager shall oversee and co-ordinate all external communication output during the investigation phase :
- Handling all media inquiries
  - Issuing all media statements and press releases
  - Coordinating and managing expert interviews with the media
  - Development of key messaging and talking points
69. By centralising media communication and ensuring all involved parties have access to accurate and coordinated information, the SIIG will maintain public trust and effectively manage the public narrative during fish mortality event investigations.

## 18. INVESTIGATION STAND DOWN

70. On completion of the investigation the SIIG Lead shall continue to liaise with the other agencies to co-ordinate:
- Immediate mitigation measures (where appropriate)
  - External communications to inform the public
  - Supporting evidence collection
  - Records centralisation (communications logs etc.).

<sup>5</sup> Other than in event of a Major Emergency

## 19. DEBRIEF

71. Following the conclusion of a significant fish mortality investigation, the participating agencies shall hold a debrief to identify any lessons learned and to facilitate the continuous improvement of investigation procedures. The SIIG Lead shall organise the debrief.

## 20. REPORT

72. All significant fish mortality event investigations shall conclude with a concise report prepared by IFI and agreed by all agencies involved in the investigation. The report shall:
- Document all suspected causes, investigative steps taken and outcomes.
  - Be published on the Inland Fisheries Ireland website and linked as appropriate.
73. If the investigation results in a likely prosecution, the report shall be limited to information that will not prejudice any prosecution.

## 21. PROSECUTION PROCEDURE

74. Each Agency shall refer to its own Policy and Procedure in relation to prosecutions.

## 22. FREEDOM OF INFORMATION & ACCESS TO INFORMATION ON THE ENVIRONMENT (FOI & AIE)

75. Each Agency shall refer to its own Policy and Procedure in relation to FOI & AIE requests.

## 23. REFERENCES

- Commonwealth of Australia, (2007). *National Investigation and Reporting Protocol for Fish Kills*. Canberra: The Australian Government Department of Agriculture, Fisheries, and Forestry.
- DoD (2017) *Strategic Emergency Management National Structures and Framework*, Department of Defence, 2017.
- DoT (2019) *National Contingency Plan in case of massive pollution events*, Department of Transport 2019
- Free, et al. (2026) *The 2025 Major fish kill on the Munster Blackwater, Ireland. Organisational responses and key recommendations*. Publications Office of the European Union, Luxembourg, 2026.
- IFI (2026) *Inland Fisheries Ireland Policy on Fish Kill Events*.
- JCCEE (2025) *Recommendations regarding the Fish Kill on the River Blackwater*, Joint Committee on Climate, Environment and Energy, November 2025.



**APPENDIX 3: Sample Conference Call Record Template**

**Significant Incident Investigation Group Conference Call Report**

Conference Call No. \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

SIIG LEAD: \_\_\_\_\_

**AGENCIES REPRESENTED**  
Mark Y / N for each Agency; Record initials of each Agency Rep.

IFI	Y / N	EPA	Y / N	Local Authority	Y / N
UE	Y / N	NPWS	Y / N	MI	Y / N
River Basin Management Service	Y / N	HSE	Y / N	DAFM	Y / N
WATERWAYS IRELAND	Y / N	LOUGHS AGENCY	Y / N	WATER ADVISORY UNIT	Y / N
OTHER		OTHER		OTHER	
OTHER		OTHER		OTHER	

**1. REPORT PER AGENCY**

**2. KEY ACTIONS COMPLETED (Action / Agency)**

**3. KEY ACTIONS SCHEDULED (Action / Agency)**

**4. OTHER**

Completed by:

NAME

SIGNED

DATE

**APPENDIX 4: Roles and Responsibilities of First Responders**

Agency	Time	Response	Significant Incident Actions							
			Action 1	Action 2	Action 3	Action	Action	Action		
IFI	Event report received; information verified; additional details obtained; Agencies notified	Deploy staff	Declare Significant Event, Notify ILL, NPWS, River Basin Management Service, DAFM, HSE.	Initiate co-ordinated sampling, inspection and communications procedures	Collect water /fish samples; water chemistry spot analysis at report location	Conduct wider habitat investigations to determine affected channels	Engage with local anglers stakeholders to seek information if necessary	Deliver samples to independent contracted Lab	Co-ordinate end of day conference call; agree next actions	Issue summary of conference call to all; brief comms manager
			Nominate lead officer	Confirm priority regulated sites/ discharges and investigate	Collect water samples / water chemistry spot analysis	Examination of records	Maintain comms with SIIG Lead	Sample analysis	Attend end of day conference call; provide update	
			Nominate lead officer	Confirm priority regulated sites/ discharges and investigate	Collect water samples / water chemistry spot analysis	Examination of records	Maintain comms with SIIG Lead	Sample analysis	Attend end of day conference call; provide update	
MI			Assess and confirm sampling requirement and liaison with DAFM	Co-ordinate sampling	Collect samples	Provide preliminary observations to SIIG Lead				
NPWS			Divisional staff assess appropriate NPWS further response e.g. technical/enforcement staff as appropriate	Assessment and evaluation of impact on protected species and habitats by appropriate staff						
River Basin Management Service			On notice to provide catchment science information & support to LA							
UE			Notified by EPA	Assess risk to public water supplies	Liaise with EPA on investigation of discharges from UE assets					
HSE			On notice							
DAFM			On notice							

**APPENDIX 4: continued**

Significant Incident Actions									
Day 2 onwards									
Action	Action	Action	Action	Action	Action	Action	Action	Action	Action
IFI	Maintain comms with all agencies.	Advise AGS if no source identified	Brief Dept.	Continue habitat inspections	Co-ordinate end of day conference call; agree next actions				Issue summary of conference call to all; brief comms manager
LA	Maintain comms with SIIG Lead	Continue site investigations							
EPA	Maintain comms with SIIG Lead	Continue site investigations							
MI	Maintain comms with SIIG Lead								
NPWS	Maintain comms with SIIG Lead	Continue assessment and evaluation of impact on protected species and habitats by appropriate staff							
REMS	Maintain comms with SIIG Lead								
UE	Maintain comms with SIIG Lead								
HSE	On notice								
DAFM	On notice								

**APPENDIX 5: Approved Category 1 Rendering Facilities**

Approval/ Registration No.	Name	Town / Region	Category	Address	Telephone No.
R910	Dublin Products	Co. Wicklow	C1	Dunlavin, Co. Wicklow	045 401 381
R911	College Proteins Ltd (open 24 hrs)	Co. Meath	C1	College Rd., College, Nobber, Co. Meath	046 909 6000
BD003	College Biofuels ULC	Co. Meath	C1, C3	College Rd., College, Nobber, Co. Meath	046 909 6000
R919	Waterford Proteins	Co. Waterford	C1	Christendom, Ferrybank, Co. Waterford	051 832 501
BIOD-001	Green Biofuels Ireland	Co. Wexford	C1, C2, C3	Marshmeadows, New Ross, Co. Wexford	051 447 628
BD001	Irish Biofuels Production	Co. Wicklow	C1, C2, C3	Broadlough Business Park, Port Access Rd., Co. Wicklow	0404 32567

### APPENDIX 6: Pollution Investigation Equipment

Item	EN ISO
High Visibility Vest	
Hard Hat	
Zip Lock Freezer Bags	
Cool Box	
Disinfectant Spray Bottle	
Disinfectant	
Protective Gloves	EN374-2
Indelible Markers	
Samples Bottles	
Protective Face Shield	EN166-3
Protective Facemask	FFP 2 / FFP3
Protective Overall	
Personal Flotation Device (PFD)	
DO/Temp/Conductivity Probe (Charged and Calibrated)	

**Note:**

While ordinarily, 2L HDPE plastic containers will suffice for most incidents, it is recommended first responder agencies retain a number of sample kits for potentially significant pollution incidents where the source of pollution (or pollutants) may be unknown, to include a number of 2L amber glass bottles (pesticides and POPs) and a VOC bottles.

### APPENDIX 7: Roles and Responsibilities of Lead and Support Government Departments / Agencies (National Emergency Management Framework)

Emergency / Incident Type	Lead Government Department (LGD)	Principal Support (Bold) & Other Support Roles
<b>Fish Kill</b>	DCEE	<b>Inland Fisheries Ireland (See Remarks)</b> <b>Local Authority (DHLGH)</b> <b>EPA (DCEE)</b>  NPWS (DHLGH) Marine Institute (DAFM) Water Advisory Unit (DHLGH) HSE (DOH) River Basin Management Service (DHLGH) DAFM Waterways Ireland (DHLGH / DI NI) Loughs Agency (DCEE/DAERA)* notice only
<b>Environmental Pollution</b>	DHLGH	<b>Local Authorities</b> <b>EPA (DCEE)</b> <b>DAFM</b> <b>HSE (DOH)</b> <b>OPW (DPENDPDR)</b>  Inland Fisheries Ireland (DCEE) River Basin Management Service (DHLGH)
<b>Water Supply Contamination Impacting on Public Health</b>	DHLGH	<b>Local Authorities</b> <b>Uisce Éireann</b> <b>ESB</b> <b>OPW (DPENDPDR)</b> <b>EPA (DCEE)</b> <b>FSAI (DOH)</b> <b>HSE (DOH)</b> <b>CD (DOD)</b>
<b>Major Impacts on Water Services, Quality, Infrastructure or Supplies</b>	DHLGH	<b>Local Authorities</b> <b>Uisce Éireann</b> <b>HSE (DOH)</b> <b>EPA (DCEE)</b>

## APPENDIX 8: Summary of Key Roles in a Significant Fish Kill Investigation

Lead Government Department (LGD)	Agency	Key Role
DCEE	Inland Fisheries Ireland	Lead Agency; responsible for co-ordinating Protocol Implementation to identify cause and source of fish mortalities; incident containment; water and tissue sample collection for bacterial and chemical analysis; habitat investigation., rescue/mitigation measures if possible/appropriate
DCEE	EPA	Investigating any EPA-Regulated sites in the vicinity of a fish kill, including inspection of sites, examination of records, sampling of discharges and ambient sampling in the immediate vicinity of those discharges.
DHLGH	Local Authority	Investigating any LA-Regulated sites and activities in the vicinity of a fish kill, including inspection of sites, examination of records, sampling of discharges and ambient sampling in the immediate vicinity of those discharges. The LA should also inspect activities on a risk assessment basis having regard to the potential source/agent that may have caused the significant fish kill. The LA shall undertake their own water pollution investigation & water sampling protocols until a sampling protocol has been agreed by Significant Incident Investigation Group.
DHLGH	NPWS	NPWS provides on the ground response to incidents through divisional staff, liaising with other key agencies including public engagement and awareness, provision of surveillance and monitoring and technical supports where feasible. This will inform assessing impacts on protected habitats and species (Qualifying Interests) linked to the Site Specific Conservation Objectives for protected sites. NPWS will also provide ecological assessment and / or technical expertise and scientific advice as appropriate. Consideration can also be given to appropriate enforcement approach.
DAFM	Marine Institute	Undertaking diagnostic investigations during significant fish kill events, including sample collection, laboratory analysis, and determination of any pathogen involvement.
DOH	HSE	Responsible for protecting public health in instances where there is a known risk to public health. As a consultee, must be consulted by the appropriate supervisory authority in incidences where there is a breach of Drinking Water Regulations or Bathing Water Quality Regulations which poses a risk to public health
DHLGH	River Basin Management Service	Provide catchment science support to the local authority sector and SIG as required throughout a significant fishkill incident.
DAFM	DAFM	Provide support, advice and expert opinion where available - in support of MI and SIIG
DHLGH / DI (NI)	Waterways Ireland	Provide support, advice and expert opinion in relation to W.I managed waters
DCEE /DAERA	Loughs Agency	Provide support during investigations in jointly managed catchments.

