

DEPARTMENT OF PRIMARY INDUSTRIES – FISHERIES (DPI FISHERIES)

Protocol for Investigating and Reporting Fish Kills

Guidelines for notification, assessment and investigation for fish kills

Notification

- When a report of a fish kill is received, all information is to be recorded on the Fish Kill Notification and Investigation Report – Part A (Appendix 1)
 - DPI Fisheries Officers who receive a report must notify the Environment Protection Authority (EPA) on 131 555 or info@epa.nsw.gov.au The relevant local council should also be notified
 - EPA Officers who receive a report must notify DPI Fisheries via the Fishers Watch Phonenumber 1800 043 536
 - Email the completed Part A form to ahp.central@dpi.nsw.gov.au and info@epa.nsw.gov.au
 - Each agency is responsible for information exchange within their respective departments
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Initial assessment

- The receiving officer of a fish kill report will contact the informant, obtain further information, if required, and decide whether a field investigation is warranted. This decision will be made following discussions with other staff (e.g. DPI and EPA) on the basis of size, scale, sensitivity of the waterway, potential cause (including the likelihood of a disease agent), species affected, and public interest, and needs to be made within 24-48 hours form the notification
 - If a field investigation is warranted, and DPI or EPA officers are not available, the department with primary responsibility for the investigation (see below) will endeavour to arrange an inspection by the local council or another government authority, whichever is the most appropriate
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Investigation responsibility

- Generally, DPI Fisheries officers will investigate fish kills in non-metropolitan areas while EPA officers will investigate fish kills in Sydney, Newcastle and Wollongong metropolitan areas. In many cases a joint inspection will be appropriate
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- Regardless of the location, EPA officers will be responsible for detailed investigation of fish kills which appear to be related to pollution events, hazardous chemical incidents, or discharges from commercial or industrial premises
 - Investigating officers will inspect the site and complete either:
 - The Notification and Investigation Report (Part B) (Appendix 2)
 - The required Part B fields of the Fish Kill record within CM9 for the event (Fisheries staff only)
 - The completed Part B form and other supporting information such as photos or local media articles should be either:
 - emailed to ahp.central@dpi.nsw.gov.au, or
 - saved into the relevant CM9 subfolder for the event (e.g. RVF22/56#39)
 - If officers from a local council or a department other than EPA or DPI Fisheries investigate a fish kill, the investigating officer should discuss the fish kill with the regional DPI Fisheries Manager or Senior Fisheries Officer within 24-48 hours from the notification (see contact list)
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Media contact

- Fish kills can generate significant media interest. All media requests for comment should be directed to the DPI Media Unit via Email - nswdpi.media@dpi.nsw.gov.au or 02 6391 3686
 - PRIOR to any response to the media, agreement on talking points should be established between EPA and DPI officers, where joint investigations have occurred. The respective media units will coordinate this process
 - The Program Leader – Coastal Systems is the DPI co-ordinator for media comment (Ph: 6626 1370) for eastern drainage catchments and the Program Leader – Murray Darling is the DPI co-ordinator for media comment (Ph: 6763 1440) for western drainage catchments (e.g. Murray Darling Basin)
 - Any EPA related investigations and associated media queries should be directed to the relevant EPA regional office (refer contacts list)
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Collection and analysis of samples

Water quality

- On site water quality measurements should be undertaken where possible. Regional DPI Fisheries Managers, EPA officers and local councils may have digital meters available to undertake such assessments (refer contacts list)
 - Water samples should be taken if a pollutant, algae or disease is suspected, particularly during or immediately following an event where fish are still dying or recently dead
 - Specialist advice should be sought regarding relevant water sampling procedures if a disease is suspected, please call Manager, Aquatic Biosecurity (Ph: 4916 3911) or EPA officers for
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pollutants or algae. Water samples will need to be logged with an appropriate National Association of Testing Authorities (NATA) laboratory for testing as soon as possible, and again, advice from the appropriate specialist should be sought

Fish samples for a possible disease

- A disease agent might be suspected when only a single species has been affected or the fish have visible lesions, fungus, and/or sick fish are visible and continue to die over a period, rather than in a sudden incident
- Fish samples should be obtained but only after consultation with the Manager, Aquatic Biosecurity (Ph: 4916 3911)
- All fish samples are to be logged with the DPI Elizabeth Macarthur Agriculture Institute laboratory for analysis, and all appropriate information is to be included including time, date and exact location
- Transport of live fish is ideal, but if not feasible, approximately six (6), dying (not yet dead) individuals of each species affected should be placed in separate plastic bags and placed on ice, **NOT FROZEN**. Dead fish should not be submitted for disease diagnosis as any deterioration in the condition of the fish post death will confound the results
- The final report on the samples will be received and reviewed by Aquatic Biosecurity before being forwarded to the reporting officer to assist with the interpretation of results and advice on appropriate course of action to take if results for disease are positive
- Results will generally be provided within two weeks of submission

Fish samples where another agent, other than disease is possible

- A set of fish samples should also be obtained where poor water quality, pollution, algal bloom or other agent is possible
- Approximately six (6) recently dead or dying individuals of each species affected should be placed in separate plastic bags and placed on ice
- If immediate delivery is not possible, then fish samples should be frozen. Fish samples should only be lodged with an EPA laboratory in consultation with the EPA, DPI Fisheries Program Leaders, regional Fisheries Manager or Senior Fisheries Officer (refer contacts list)

Reporting of laboratory Analysis

- The officer responsible for organising transportation and analysis of water and fish samples will be responsible for reporting results of the analysis to internal staff and relevant organisations involved in the fish kill investigation.

Recording of information and lodging complete forms

- All completed Notification and Investigation Report forms, results of analyses and any other supporting information (e.g. photos, videos, maps) should be forwarded to ahp.central@dpi.nsw.gov.au
- Please make the email subject: FISH KILL [state the location of kill]
- Administration staff monitoring the ahp.central inbox will include the details in the relevant Fish Kill record data base.

Appendix 1 – Fish Kill Form Part A: Notification Report

Location:

Name of Waterbody: Click or tap here to enter text.
 Valley/Catchment: Click or tap here to enter text.
 Local Government Area Click or tap here to enter text.
 Precise location within waterbody Click or tap here to enter text.
(Pin on Google Earth and email with KMZ or KML file attachment)
 Reported by: Click or tap here to enter text.
 Date Reported Click or tap to enter a date.
 Date Fish Kill first observed: Click or tap to enter a date.

Habitat Description:

Type A: Choose an item.
 Type B: Choose an item.
 Weather conditions prior to observation of kill: Click or tap here to enter text.
 Water level: Choose an item.
 Number of Fish affected: Choose an item.
 Conditions of Fish Choose an item.
 Location of Fish Choose an item. Choose an item. Choose an item.
 Reported fish species affected (list if known): Click or tap here to enter text.
 Other forms of wildlife affected (specify): Click or tap here to enter text.
 General observations of reporting person: Click or tap here to enter text.
 Suspected cause category: Choose an item.

Agency Notification:

Reported to Officer: Click or tap here to enter text.
 Position/Agency: Click or tap here to enter text.
 Other Agency Notified: Choose an item. Contact via: Choose an item.
 Ref no (if applicable): Click or tap here to enter text.

Other Agency Notified: Choose an item. Contact via: Choose an item.

Ref no (if applicable): Click or tap here to enter text.

Other notification information: Click or tap here to enter text.

Appendix 2 – Fish Kill Form Part B: Investigation Report

Preliminary information

Site investigation Desktop Assessment only

Date Kill investigated Click or tap to enter a date.

Investigating Officer Click or tap here to enter text.

Adjacent Land uses: Click or tap here to enter text.

Pollution or Algal Blooms observed: Click or tap here to enter text.

On Site Water Sampling Results

Sample no.	Site 1	Site 2	Site 3	Site 4	Site 5
Name of Sampling site:					
Time of analysis					
pH:					
Temp:					
Dissolved Oxygen (ml/L):					
Other (specify):					

Table 1 - On site water sample results

If possible attached map/diagram showing total area of fish kill & sample sites, and any images taken.

Water Samples despatched for further analysis:

Fish Samples

Affected fish species (Full name)	Length/Range (cm)	Numbers	Samples Collected
Choose an item.		Choose an item.	<input type="checkbox"/>
Choose an item.		Choose an item.	<input type="checkbox"/>
Choose an item.		Choose an item.	<input type="checkbox"/>

Affected fish species (Full name)	Length/Range (cm)	Numbers	Samples Collected
Choose an item.		Choose an item.	<input type="checkbox"/>
Click or tap here to enter text.		Choose an item.	<input type="checkbox"/>

Table 2 - Fish Samples

Fish samples despatched for further analysis:

Other comments: (e.g. behaviour/appearance of fish): Click or tap here to enter text.

Suspected cause category following investigation: Choose an item.

Key Contacts

DPI Fisheries	
Fishers Watch Phonenumber (24hr) 1800 043 536	
Media Contact: nswdpi.media@dpi.nsw.gov.au or 02 6391 3686	DPI Aquatic Biosecurity: For advice on pathology testing, disease and sampling (02) 4916 3911
Coastal Systems – Fisheries Managers	Freshwater Environment – Fisheries Managers
North Region: 0447 537 168 Central Region: 0418 925 757 South Region: 0447 644 357	North West: 0429 908 856 South West: 0484 907 343
Fisheries Compliance Regional Offices refer: https://www.dpi.nsw.gov.au/contact-us/contact-a-dpi-fisheries-officer	
Send completed forms and other related information to: ahp.central@dpi.nsw.gov.au	
Environmental Protection Authority Environment Line (24hr): 13 15 55	

DPI Fisheries

Fishers Watch Phonenumber (24hr) 1800 043 536

EPA Regional Offices refer:

<https://www.epa.nsw.gov.au/about-us/contact-us/locations>

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