



NSW DEPARTMENT OF
PRIMARY INDUSTRIES

PROTOCOL FOR INVESTIGATING AND REPORTING FISH KILLS

All fish kills are potentially significant and should be investigated thoroughly and as soon as possible

Information on fish kills is available at www.fisheries.nsw.gov.au

Notification

When a report of a fish kill is received all information is to be recorded on the ***Fish Kill Notification & Investigation Report [Part A]***. Officers of DPI who receive this information are to notify the nearest DEC office and vice versa. Local offices of DIPNR, Catchment Management Authority and council should also be notified. Fax the completed Part A forms to the relevant Regional Offices of DPI and DEC for information. Each agency is responsible for information exchange within their respective departments.

Initial assessment

The officer receiving notification of the fish kill will decide whether a field investigation is warranted. This decision will be made following discussions with other staff (e.g. DPI or DEC biologists, Regional Director) on the basis of: size of kill, sensitivity of waterway, potential cause, species affected, potential public interest, etc. If a field investigation is warranted, and DPI or DEC 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 department, whichever is most appropriate.

Field investigation

Generally, DPI officers will investigate fish kills in non-metropolitan areas while DEC officers will investigate fish kills in Sydney, Newcastle and Wollongong metropolitan areas. In many cases a joint inspection will be appropriate. Regardless of the location, DEC Officers will be responsible for detailed investigation of 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 the ***Notification & Investigation Report [Part B]***. If officers of a Council or a department other than DEC or DPI investigate a fish kill, the investigating officer should discuss the fish kill with DPI Conservation Managers at the earliest opportunity. Completed ***Part B*** forms should be faxed to **both** the relevant DPI and DEC offices.

Collection and analysis of samples

On-site water quality measurements may help elucidate the cause of the kill. However, detailed laboratory testing will be required to detect most contaminants and diseases, and this will require sampling of water and/or fish. Sampling of water is to be carried out according to DEC guidelines (see ***Water Sampling Protocols - A Training Manual for NSW Fisheries in the Collection of Water Samples for Fish Kill Investigations*** prepared by Science Management and Support Branch). Sampling of fish should be discussed with DPI Pathologist or Conservation Managers or DEC laboratory staff. Without such guidance, and as an interim measure, eight, freshly dead, individuals of each species affected should be placed in separate plastic bags on ice. In general, subsequent preservation in formalin (for disease testing) or freezing (for contaminant testing) will be required until analysis can be undertaken.

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 all organisations previously involved with the fish kill.

Media contact

Fish kills can generate significant media interest. Prior to any response to the media, a common view should be established between DEC and DPI officers and other relevant parties. At that time an agreed co-ordinator for media contact will be established.

Database

All completed ***Notification and Investigation Report*** forms and results of analyses are to be forwarded to DPI Shoalhaven/Huskisson office for inclusion on the state-wide fish kill database. Information from the database is available on request.

FISH KILL Notification & Investigation Report

Part A - Notification

NAME OF WATERBODY:

CATCHMENT (e.g. Murray River, Sydney Harbour, Tuggerah Lakes):

PRECISE LOCATION WITHIN WATERBODY:

HABITAT DESCRIPTION: (circle as appropriate): (A) Freshwater, estuarine, marine (B) stream, river, anabranch, lake, billabong, swamp, drain, channel, impoundment, bay, lagoon, farm dam, beach, open ocean, other:

REPORTED BY (Name, address, phone):

TIME/DATE REPORTED..... TIME/DATE KILL FIRST OBSERVED.....

WEATHER CONDITIONS PRIOR TO OBSERVATION OF KILL:

.....

TIDAL STATE/WATER LEVEL AT TIME OF KILL (if applicable):

NUMBERS OF FISH AFFECTED (circle): less than 10, 10 to 100, 100's, 1000's, 10,000's, 100,000's, millions

CONDITION OF FISH (circle): dying, freshly dead, few hours old, few days old, decomposed

SIZE OF FISH (circle): all similar size, wide range of size classes (specify size/size range in cm)

SPECIES OF FISH AFFECTED (circle): one species only, few species, many different species, (please list if known):

.....

LOCATION OF FISH (circle): floating in water, on bottom, along waters edge, onshore

EXTENT OF KILL (area (ha) or length (m) of habitat affected):

GENERAL OBSERVATIONS OF REPORTING PERSON :

.....

.....

OTHER FORMS OF WILDLIFE AFFECTED ? (specify):

WHAT IS THE SUSPECTED CAUSE?

OTHER INDIVIDUALS & AUTHORITIES NOTIFIED :

INDIVIDUAL	DEPARTMEN T	LOCATION	COMMENTS

REPORTED TO :POSITION:LOCATION.....

ORGANISATION :DATE:PHONE.....

REMINDER. Send copies of Parts A and B to DPI, Office of Conservation, PO Box 97 HUSKISSON 2540 (fax (02) 4441 8961).

FISH KILL Notification & Investigation Report

Part B - Investigation

TIME/DATE KILL INVESTIGATED:

HABITAT DESCRIPTION: (circle as appropriate): (A) Freshwater, estuarine, marine (B) stream, river, anabranch, lake, billabong, swamp, drain, channel, impoundment, bay, lagoon, farm dam, beach, open ocean, other.....

ADJACENT LAND USES (specify):
.....

PHYSICAL EVIDENCE OF POLLUTION (OR ALGAL BLOOMS) OBSERVED:

ON-SITE WATER SAMPLING RESULTS WATER SAMPLES COLLECTED: Yes No

Sample no.	1	2	3	4	5	6
Name of sampling site						
pH						
Temp. (°C)						
Dissolved Oxygen						
Others (specify)						

Attach map/diagram showing total area of fish kill and sample sites. Colour photographs would also assist analysis and identification.

CONDITION OF FISH (circle as appropriate): dying, freshly dead, few hours old, few days old, decomposed

FISH AFFECTED			
SPECIES -(Full name)	LENGTH RANGE (cm)	NUMBERS	SAMPLES COLLECTE
			yes/no
			yes/no
			yes/no
			yes/no
			yes/no

OTHER COMMENTS: (eg behaviour/appearance of fish)

SUSPECTED CAUSE OF FISH KILL:

WATER SAMPLES DESPATCHED TO:.....TO BE TESTED FOR:

FISH SAMPLES DESPATCHED TO:.....TO BE TESTED FOR:

INVESTIGATED BY:POSITION:

ORGANISATION:DATE:

RECOMMENDATION(S) FOR FUTURE ACTION:

REMINDER. Send copies of Parts A and B to DPI, Office of Conservation, PO Box 97 HUSKISSON 2540 (fax (02) 4441 8961).

Contacts

NSW Dept of Primary Industries

24 hour service 1800 043
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District Offices

Albury	02 6042 4228
Ballina	02 6686 2018
Batemans Bay	02 4472 4032
Bathurst	02 6331 1428
Broken Hill	08 8087 6483
Brooklyn (Hawkesbury)	02 9985 7256
Buronga	03 5023 5204
Coff's Harbour	02 6652 3977
Cooma	02 6452 3996
Deniliquin	03 5881 6036
Eden	02 6496 1377
Huskisson (Shoalhaven)	02 4441 8969
Illawarra	02 4295
1809	
Inverell	02 6722 1129
Jindabyne	02 6451 3400
Maclean	02 6645 2147
Narooma	02 4476
2072	
Narrandera	02 6959 9021
Nelson Bay (Port Stephens)	02 4982 1232
Newcastle	02 4927 6548
Port Macquarie	02 6581 4084
Swansea	02 4971 1201
Sydney Metropolitan (Wollstonecraft)	02 8437
4905	
Sydney South (Sans Souci)	02 9529 6021
Sydney West (Brooklyn)	02 9985 7256
Tamworth	02 6765 4591
Taree	02 6552 6799
The Entrance	02 4334 8600
Tumut	02 6226 2199
Tuncurry	02 6554 6078
Tweed Heads	07 5523 1822
Wellington	02 6845 4438
Wollongong	02 4295 1809
Yass	02 6226 3867

Office of Conservation Regional Offices

North (Wollongbar)	02 6626 1200
North West (Inverell)	02 6721 3524
Central (Port Stephens)	02 4916 3919
South (Huskisson)	02 4423 2080
South (Batemans Bay)	02 4478 9103

West (Narrandera)	02 6959 9028
South west (Albury)	02 6042 4213
Sydney Area	02 9527 8422

Dept of Environment and Conservation

Pollution Line 24 hr service 13 15 55

Regional Offices

Albury	02 6041 4963
Armidale	02 6773 7000
Bathurst	02 6332 1838
Dubbo	02 6884 9745
Gosford	02 4323 9875
Grafton	02 6640 2500
Griffith	02 6964 1880
Newcastle	02 4926 9986
Queanbeyan	02 6299 3330
Sydney	02 9995 6810
	or 02 9995 6802
Wollongong	02 4226 8424

Specialist Advice

Water Science	02 9995 5539
Ecotoxicology	02 9514 4050
Marine & Estuarine Studies Laboratories	02 9795 5331 02 9995 5033

Advice on pathology testing, disease and sampling procedures:

Matt Landos
NSW Dept Primary Industries 02 6626
1261
02 6626 1264

Advice on chemical residue testing:

Chemical Residue Laboratory
NSW Dept of Primary Industries
Wollongbar 02 6621 2632

