



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.dpi.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 Department of Environment and Climate Change (DECC) office and vice versa. Local offices of Department of Planning, Catchment Management Authority and council should also be notified.

Fax the completed Part A forms to the relevant Regional Offices of DPI and DECC 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 DECC 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 DECC 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 DECC 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, DECC 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 DECC or DPI investigate a fish kill, the investigating officer should discuss the fish kill with DPI Manager, Aquatic Biosecurity and Risk Management and DPI Conservation Managers at the earliest opportunity.

Completed Part B forms should be faxed to both the relevant DPI and DECC offices.

Collection and analysis of samples

On-site water quality measurements may help elucidate the cause of the kill. If available, please forward water quality data with fish samples to the laboratory. Sampling of fish should be discussed with DPI Pathologists or DPI Veterinary Officer, Aquatic Animal Health if a disease event is suspected or DECC laboratory staff if a toxicity event is suspected.

GENERAL GUIDELINES FOR SUBMISSION OF FISH SAMPLES FOR DISEASE INVESTIGATION BY DPI LABORATORIES: approximately six, freshly dead, individuals of each species affected should be placed in separate plastic bags on ice, NOT FROZEN. Please contact the relevant laboratory for further guidance.

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 DECC and DPI officers and other relevant parties. The Manager Aquatic Biosecurity & Risk Management is the NSW DPI co-ordinator for media contact.

Database

All completed **Notification and Investigation Report** forms and results of analyses are to be forwarded to DPI Veterinary Officer, Aquatic Animal Health for inclusion on the statewide 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, 100s, 1000s, 10,000s, 100,000s, 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	DEPARTMENT	LOCATION	COMMENTS

REPORTED TO : POSITION: LOCATION.....

ORGANISATION : DATE: PHONE.....

REMINDER. Send copies of Parts A and B to DPI, Veterinary Officer, Aquatic Animal Health, Private Mail Bag 8, Camden NSW 2570 (fax (02) 4640 6300).

FISH KILL Notification & Investigation Report

Part B - Investigation

TIME/DATE KILL INVESTIGATED:

HABITAT DESCRIPTION: (circle as appropriate):

(A) Freshwater, estuarine, marine

(B) stream, river, anabranh, 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

OTHER COMMENTS: (eg behaviour/appearance of fish)

AFFECTED FISH SPECIES (Full name)	LENGTH RANGE (cm)	NUMBERS	SAMPLES COLLECTED
			Yes / No
			Yes / No
			Yes / No
			Yes / No

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, Veterinary Officer, Aquatic Animal Health, Private Mail Bag 8, Camden NSW 2570 (fax (02) 4640 6300).

Contacts

NSW Dept of Primary Industries

24 hour service 1800 043 536

District Offices

Albury	02 6042 4228
Ballina	02 6686 2018
Batemans Bay	02 4472 4032
Bathurst	02 6331 1428
Coff's Harbour	02 6652 3977
Deniliquin	03 5881 9930
Eden	02 6496 1377
Huskisson (Shoalhaven)	02 4428 3400
Illawarra	02 4295 1809
Inverell	02 6722 1129
Jindabyne	02 6451 3400
Macleay	02 6645 0504
Narooma	02 4476 2072
Narrandera	02 6959 9021
Nelson Bay (Port Stephens)	02 4982 1232
Port Macquarie	02 5524 0600
Swansea	02 4971 1201
Sydney Metropolitan (Wollstonecraft)	02 8437 4905
Sydney South (Sans Souci)	02 9529 6021
Tamworth	02 6763 1132
Narara	02 4328 8618
Tumut	02 6497 9028
Tuncurry	02 6591 6300
Tweed Heads	07 5523 1822
Wellington	02 6881 1208
Dareton (Lower Murray)	03 5019 8408

Conservation Regional Offices

Wollongbar	02 6626 1200
Dubbo	02 6881 1270
Tamworth	02 6763 1100
Port Stephens	02 4928 1232
Huskisson	02 4428 3400
Batemans Bay	02 4472 4032
Cronulla	02 9527 8411
Tumut	02 6947 4188

Dept of Environment and Climate Change

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	02 9795 5331
Laboratories	02 9995 5033

Advice on pathology testing, disease and sampling procedures:

NSW Dept Primary Industries 02 4640 6327

Advice on chemical residue testing:

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