

WATERWAY INCIDENT (FISH DEATH) RESPONSE GUIDELINE

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1. INTRODUCTION

This Waterway Incident (Fish Death) Response Guideline applies to government agencies and authorities with responsibilities under a range of legislation for management of the environment, waterways, fisheries and health. These agencies and authorities include:

- Department of Sustainability and Environment (DSE)
- Department of Primary Industries (DPI)
- Parks Victoria (PV)
- Department of Human Services (DHS)
- Environment Protection Authority (EPA)
- catchment management authorities (CMAs)
- Melbourne Water
- regional water authorities
- urban water authorities
- regional local government.

This Guideline describes expected organisational roles and responsibilities and enables a framework to establish regional response plans that describe incident management arrangements, regional contacts, communication processes and review processes. It is intended that the regional

arrangements will be included in regional and municipal emergency plans.

The Guideline aims to clarify and allow an agreed, coordinated and effective response capability, which enables the participating agencies to minimise the impact of incidents. A robust response capability will increase safety to employees and public health, protect the waterway environment, and maintain public confidence in agencies.

These arrangements are designed for use by all participants, from all agencies, at all levels. They are consistent with the State Emergency Response Plan arrangements, the Emergency Management Manual Victoria (EMMV) and the *Victorian Emergency Management Act 1986*. Although in some cases fish death may not be considered 'emergencies', this Guideline will still apply.

2. OBJECTIVE

To describe the expected roles and responsibilities for parties to cooperatively and effectively manage waterway incidents defined under this Guideline, to achieve:

- minimal impact of a waterway incident on waterways, public health and safety and local amenity

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- coordinated response to defined waterway incidents
- linkage to other waterway incident management procedures such as the state emergency management framework
- effective and timely communication with water/waterway users of potential risk
- effective investigation and information sharing as to the likely cause and actions that could be taken to prevent future occurrences
- effective communication with the broader community
- application of the ‘polluter pays’ principle and equitable allocation of agency responsibilities.

3. WATERWAY INCIDENTS COVERED UNDER THIS GUIDELINE

This Guideline applies to waterway incidents involving fish death. Such waterway incidents are generally ‘one-off’ events impacting or potentially impacting on water quality or waterway amenity and will require co-ordinated management by a number of agencies.

The management of waterway incidents other than fish deaths, which are not covered by this Guideline, are managed in accordance with other established frameworks such as the Emergency Management Manual Victoria (EMMV). Examples are described in Table 1.

Table 1: Waterway incident response framework for incidents not covered by this Guideline

| Waterway incident type | Example of incident | Agreed response framework | Control agency |
|------------------------------------|---|--|----------------------------|
| Emergency pollution of waterway | Fuel spill from a boat | Emergency Management Manual Victoria | EPA |
| Emergency pollution into waterways | Chemical spill from a roadway into a waterway | Emergency Management Manual Victoria | CFA |
| Blue-green algae (BGA) Incidents | BGA bloom | BGA Response Management Framework | Regional water authorities |
| Non-emergency pollution incidents | Oil sheen on waterway | EPA Pollution Report & Investigation Process | EPA |

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4. ROLES AND RESPONSIBILITIES UNDER THIS GUIDELINE

The roles and responsibilities described in this guideline will support the management of incidents in accordance with the provisions of the EMMV.

Pursuant to the *Emergency Management Act 1986*, roles and responsibilities for agencies are divided into three key areas:

- Prevention and preparedness
- Response
- Recovery.

4.1 Prevention and preparedness

4.1.1 Prevention

All agencies have a role in the prevention of waterway incidents. The precise nature of these preventative activities will vary depending on the legislative responsibility of the agencies, however broadly all parties are responsible for:

- implementation of legislation, policy and strategies to reduce the likelihood of waterway incidents by management of:
 - waterways
 - releases and discharges into waterways
 - flows along waterways
 - waterway frontages
- development and implementation of priorities for reducing threatening land and water management processes and activities.

4.1.2 Preparedness

Each agency must allocate adequate resources and training to satisfy its responsibilities for responding to waterway incidents as set out in this Guideline.

Each agency has a responsibility to participate in planning and preparedness activities to facilitate effective response. On an annual basis, the effectiveness of the arrangements in place should be reviewed, drawing upon debriefs of incidents. This annual review will be led by EPA.

Each agency has a responsibility to ensure adequate training is provided to its personnel who may be required to respond to a fish death. Training should cover the responsibilities described in this Guideline.

Regional Response Plan

Local resources, logistics and waterway responsibilities need to be clearly defined as part of planning and preparedness for any waterway incidents. These are best addressed by preparing a Regional Response Plan. A Regional Response Plan will provide a greater level of detail on how a local response may occur for fish deaths, and list local contacts.

The roles and responsibilities for agencies in a Regional Response Plans should reflect those described in Table 2. Response Plans may include other agencies beyond those that are called up in this Guideline.

The preparation and review of the Regional Response Plans will be led by EPA. Regional Response Plans will cover an appropriate geographical area (for example, CMA or rural water authority region).

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Initially, each Regional Response Plan needs to be developed by 20 December 2006. Following this, the Plans must be reviewed and updated by September 2007, and reviewed annually thereafter.

The roles and responsibilities of parties in a Regional Response Plan must be consistent with this *Waterway Incident (Fish Deaths) Response Guideline* and endorsed by CEOs and Regional Managers of agencies.

The Regional Response Plan will describe the overall response procedure for a region. As a minimum, each Regional Response Plan should cover the following.

Preparedness procedures including:

- Control agency responsibilities.
- Support agency responsibilities.
- Allocation of support agency responsibilities across key waterways.
- Training and OHS.

Response procedures including

- Notification.
- Activation.
- Site response.
- Stand-down procedures.
- Escalation procedures.
- Investigation procedures.
- Allocation of support agencies across key waterways.
- Agency communication framework.
- Stakeholder and community communication framework.

- Agencies' 24-hour contact list.
- Agency reporting and debrief procedures.

Administrative procedures including:

- Management procedures.
- Review and renewal of Regional Response Plan.
- Internal procedures.

Response procedures

Agencies will have the responsibility to prepare internal procedures to ensure effective and safe delivery of the Regional Response Plan. It is recommended that any relevant agency internal procedures be shared amongst the other agencies party to the Regional Response Plan.

4.2 Incident response

4.2.1 Control Agency

For the purposes of incidents of fish deaths as covered by this Guideline, EPA is the control agency. Where an incident involves contaminated foodstuffs, drinking water, human illnesses, radiological substances and intentional biological releases, DHS will become the control agency as set out in EMMV.

As Control Agency, EPA will have responsibility for the following:

- Incident management (may be delegated by agreement).
- Notification.
- Attendance at incident as required.
- Media liaison (may be delegated by agreement).
- Coordinating clean-up activities where required.

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- Management of a database for fish deaths.
- Briefing Minister for Environment.
- Investigation of cause of incident (may be in partnership with other agencies/authorities).
- Specifying actions to be taken to manage any condition of pollution as a result of a waterway incident.

Incidents shall be controlled by EPA in accordance with *EPA Fish Death Response Procedure*.

4.2.2 Support Agency

A Support Agency provides essential services, personnel or material to support or assist a Control Agency. The geographic responsibility for a Support Agency will vary depending upon the agency's responsibility.

4.2.2.1 Support Agency Geographic Responsibility

The following principles and decision hierarchy should be used to allocate Support Agency roles. Where appropriate, a number of Support Agencies may be identified.

1. Response activity responsibility resides with government agencies where private polluter cannot be identified and incidents occur on public waterways.
2. The hierarchy of allocation of Support Agency response activities for agencies other than DPI, DHS and EPA is:
 - (a) A waterway is within an area managed by Parks Victoria – Support Agency is Parks Victoria.
 - (b) *If not a.* A waterway managed or within an area of land managed by local government

either directly or through a Committee of Management – Support Agency is Local Government.

(c) *If not a. or b.* A waterway with management responsibility declared under the *Water Act 1989* to a regional water authority, urban water authority, Melbourne Water or CMA and managed directly or by a Committee of Management – Support Agency is the agency with the legislated management responsibility,

(d) *If not a. or b. or c.* A waterway with frontage that is Crown land either managed directly or under a Committee of Management, *or* Waterway is on a regulated system and waterway flow is strongly influenced by the actions of the waterway regulator – Support Agency is the Crown frontage manager or agency with the waterway regulation responsibility or a combination of both.

(e) *If not a. or b. or c. or d.* Waterway frontage is private land – Support Agency is the relevant CMA or Melbourne Water. Where a waterway has been stocked by DPI or supports a commercial fishery, Support Agency role also falls to DPI where stocked fish or the commercial fishery is impacted. The Support Agency role for DPI is described in Table 2. This role is in conjunction with the appropriate waterway management agency identified in point 2 above.

4. DHS has a statewide role with Support Agency roles described in Table 2. Support Agency role will be in conjunction with the appropriate waterway management agency identified in point 2 above.

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5. EPA has a statewide role to act as Control Agency with roles described in 4.2.1. This role may be in conjunction with the appropriate waterway management agency identified in point 2 above.

Regional Response Plans should specifically include the allocation of the geographic responsibility for Support Agencies, based on the above principles.

Where agreement cannot be reached between the agencies, EPA as Control Agency may declare an agency a Support Agency using Protection Agency powers under section 66 of the *Environment Protection Act 1970*. As a Protection Agency, EPA may specify the actions or measures required to be taken for the management and control of an areas or for abating or reducing any condition of pollution as a result of a waterway incident. Costs incurred for any activity undertaken as a Protection Agency will be covered by the delegated Protection Agency. The declaration of Protection Agency will be based around the decision framework described above and the responsibilities outlined in Table 2.

4.2.2.2 Support Agency responsibilities

A summary of the expected responsibilities to be undertaken by a Support Agency is described in Table 2, with the expected activities described in Appendix 1. The geographic extent for Support Agency responsibilities is described in 4.2.2.1 and should be allocated in the Regional Response Plan.

Depending upon the size and type of fish death event, not all fish death events will require all of the responsibilities described in Table 2 to be undertaken. These will be determined on a case-by-case basis through discussion between the Control Agency and Support Agency.

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Table 2: Principal Support Agencies and their responsibilities for waterway incidents.
A description of the expected activities is provided in Appendix 1.

| Support Agency | Support Agency responsibility* |
|----------------------------------|--|
| Regional/urban water authorities | <ul style="list-style-type: none"> ▪ Notification. ▪ Attendance and support at a fish death. ▪ Clean-up where required and where polluter cannot be identified. ▪ Support for investigation (where needed). ▪ Implementation of Risk Management Plans under Safe Drinking Water Act ▪ Communication with water users. |
| CMA | <ul style="list-style-type: none"> ▪ Notification ▪ Attendance and support at a fish death ▪ Clean-up where required and where polluter cannot be identified. ▪ Support for investigation (where needed). ▪ Communication with water users. |
| Melbourne Water | <ul style="list-style-type: none"> ▪ Notification. ▪ Attendance and support at a fish death (as per Regional Response Plan). ▪ Clean-up where required and where polluter cannot be identified. ▪ Support for investigation (where needed). ▪ Communication with water users. |
| Parks Vic | <ul style="list-style-type: none"> ▪ Notification. ▪ Attendance and support at a fish death. ▪ Clean-up where required and where polluter cannot be identified. ▪ Support for investigation (where needed). ▪ Implementation of Risk Management Plans under Safe Drinking Water Act. ▪ Communication with water users. |
| DSE | <ul style="list-style-type: none"> ▪ Notification. ▪ Attendance and support at a fish death. ▪ Clean-up where required and where polluter cannot be identified. ▪ Support for investigation (where needed). ▪ Communication with water users. ▪ Communication with federal stakeholders under Environment Protection and Biodiversity Conservation Act. ▪ Brief Minister for Water. |

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| | |
|------------------|---|
| DPI | <ul style="list-style-type: none"> ▪ Notification. ▪ Attendance and support at a fish death. ▪ Communication with water users (impacted recreational and commercial fishers). ▪ Provision of laboratory services for fish disease . ▪ Investigation where fish disease has been shown by the Chief Veterinary Officer as the cause. ▪ Reporting on investigations where fish disease has been shown as the cause. ▪ Reporting of notifiable exotic diseases. ▪ Briefing Minister for Agriculture. |
| DHS | <ul style="list-style-type: none"> ▪ Notification. ▪ Assessment of public health risk. ▪ Advocacy and advice to other agencies to reduce risk to human health from consumption of fish or exposure to hazards in waterway that may be related to the fish kill. |
| Local government | <ul style="list-style-type: none"> ▪ Notification. ▪ Attendance and support at a fish death. ▪ Clean-up where required and where polluter cannot be identified. ▪ Support for investigation (where needed). ▪ Communication with water users. |

* These listed roles and responsibilities would apply to geographic areas or incidents as described in 4.2.2.1. and documented as much as practicable in Regional Response Plans.

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4.3 Recovery

Control Agency

As response Control Agency, EPA will be responsible for:

- running the debrief after a waterway incident
- investigation of cause of incident (may be in partnership with other agencies/authorities)
- enforcement against polluter where polluter can be identified and sufficient evidence is obtained

- reporting on outcomes of investigations to partner agencies
- routine reporting to partner agencies on the number, type and likely causes of fish deaths

All agencies have a responsibility in recovery to participate in any debrief convened by the Control Agency. Specific additional responsibilities are outlined in Table 3 and should apply to the geographic areas allocated using the hierarchy described in 4.2.2.1.

Table 3: Specific agency responsibilities during recovery process

| Agency | Activity |
|--|---|
| Regional/urban water authorities CMAs Parks Vic DHS Local government | Monitoring of water quality and waterway condition in relation to a fish death event. |
| DSE | Development and implementation of recovery programs for species listed under the Flora and Fauna Guarantee Act. |
| DPI | Development and implementation of recovery programs for stocked waterways. |
| DHS | Assessment of social and economic impacts. |

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5 COST SHARING

All agencies are required to meet the costs of implementing their responsibilities as set out within this Guideline. Where other parties incur costs associated with undertaking activities on behalf of the party with the allocated responsibility, costs may be recovered from the party with the allocated responsibility by agreement.

EPA will assist all parties with the recovery of costs associated with activities undertaken in response to a waterway incident where the polluter can be identified and a successful prosecution undertaken. Costs may be submitted to the courts in conjunction with the EPA cost recovery submission, and recovery of the costs would be at the discretion of the courts.

6. ADMINISTRATIVE ARRANGEMENTS

6.1 Management of Guideline

Each party will allocate an officer to oversee the implementation of the Guideline in the authority/agency, and to act as a contact officer for Guideline-related activities between the parties.

Contact officers will act as a steering committee for the Guideline. A meeting of contact officers (or delegates) will be held once per year, in August, to

discuss issues related to the implementation of the Guideline, issues as a result of the previous 12 months, and required actions for the forthcoming 12 months to ensure timely and coordinated response to waterway incidents.

EPA, or another party as agreed, will arrange and chair the annual meeting.

6.2 Communication

EPA as Control Agency will develop communication procedures to support the management of fish death events.

Regional communication procedures will be developed through the Regional Response Planning process.

6.3 Reporting

Each agency will provide a written report on activities associated with the implementation of this Guideline at the annual meeting of contact officers. EPA and DPI will provide a copy of the fish death database to parties.

6.4 Information sharing

All agencies will share information in a timely manner that will support the effective management and investigation of a waterway incident.

Endorsed by Minister for Environment John Thwaites, 24 October 2006.

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Definitions

| | |
|---|---|
| Agency | Government agency or statutory authority with powers under any Act with respect to water management, waterway management, land management, environment protection, fisheries or human health. |
| Contact Officer | An officer delegated by an agency to represent the agency and champion the implementation of this Guideline within the agency. |
| Control Agency | A Control Agency is defined as the response agency nominated to control the response activities for a fish death event. During the course of an emergency the Control Agency may change according to the needs at the time. |
| Fish | Includes fish, eels, crustaceans etc, but excludes marine mammals. |
| Fish death | Multiple dead or moribund fish occurring in or adjacent to a waterway. |
| Prevention/mitigation/risk reduction | The elimination or reduction of the incidence or severity of emergencies and the mitigation of their effects. |
| Private land | Land held in ownership by legal entities other than the Crown, with the exception of land under lease, licence or other right from the Crown. |
| Protection Agency | Any person or body, whether corporate or unincorporated, having powers or duties under any other Act with respect to the environment or any segment of the environment in any part or parts of Victoria. |
| Response | The combating of emergencies and the provision of rescue and immediate relief services. |
| Recovery | The assisting of people and communities affected by emergencies to achieve a proper and effective level of functioning. |
| Waterway | Includes any reservoir, stream, creek, river, billabong, anabranch, canal, spring, swamp, natural or artificial channel or drain, lake, lagoon, dam, estuary, tidal water or coastal water. |
| Waterway incident | An incident involving the death of multiple fish, including eels and crustaceans (fish death), or dead stock within a waterway (dead stock in waterways). |

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APPENDIX 1 KEY RESPONSE ACTIVITIES

The typical activities required for each of the roles and responsibilities presented in section 6 are described in more detail below.

A1.1 Prevention/mitigation/risk reduction activities

Implementation of legislation, policy and strategies that may result in reduced fish deaths for waterways managed by agencies

- Implementation of required attainment activities and actions under RCS, SEPPs and legislation that may reduce threats to fish health and therefore the risk of fish deaths in waterways under the management of the agency.

Development and implementation of priorities for reducing threatening processes from licensed site discharges including those that may result in fish deaths

- Management of licensed site discharges in a manner that will minimise risk of fish deaths in waterways.

Development and implementation of priorities for reducing threatening processes, including those that may result in fish deaths

- Ensure that general waterway management activities, or land-based activities that may impact on water quality/quantity, are planned and undertaken in a manner that reduces risk of fish deaths.
- Where drought management activities are required that may result in a fish death, plan and manage to minimise fish deaths. Develop and

implement cross-agency plans to minimise impact of a residual fish death.

Participation in waterway response planning activities

- With other parties to the Guideline, participate in planning and preparedness activities to facilitate effective response.

A1.2 Response

Notification

- Where an incident is reported to an agency, notify EPA of incident.

Attendance and support at a fish death

- Where required by the Regional Response Plan, agency staff to attend fish event to provide assessment and reconnaissance
- In the exception, where requested by the Control Agency, agency staff to undertake other activities as considered reasonable and practicable to manage incident.

Clean-up

- Where a clean-up of fish is required, agency to undertake or manage clean-up and disposal. Disposal of fish to be at a location approved by EPA.

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Support for investigation

- If requested and equipment and expertise are available, undertake the direct sampling of fish, waters, sediment etc for analysis by the investigation agency.
- Provide documented and anecdotal information to assist with the investigation of the reasons for the incident.

Implementation of Risk Management Plans

- Implement Risk Management Plans as required under the *Safe Drinking Water Act 2003*.

Communication with water users

- Communicate in a timely manner to relevant stakeholders information to warn waterway users about risks to health, environment or production.

Incident coordinator (may be delegated by agreement)

- Provide high-level coordination of a waterway incident through the development of a response plan (in conjunction with waterway managers and key stakeholders), and ensure that required actions by waterway managers and investigators are being undertaken in a timely manner.

Media liaison

- The agency responsible for incident control will act as the preferred contact for media. Media statements will, where practicable, be vetted by agencies responding to the incident.

Investigation of cause (may be in partnership with other agencies)

- Undertake required investigation to determine the likely cause of the incident.
- Recommend further monitoring for a pre-emptive warning or recovery program.
- Where exotic fish disease is the known cause, DPI will undertake the investigation.

Allocating clean-up responsibility where required

- Where agreement cannot be reached with a support agency to undertake clean-up activities, EPA will direct the appropriate waterway manager as a Protection Agency under s66 of the *Environment Protection Act 1970* to undertake clean-up. Direction to clean up will be undertaken based on the principles and hierarchy described in 4.2.2.1.

Enforcement against polluter where polluter can be identified,

- Where sufficient evidence is available to identify a legal entity as the polluter that has resulted in a waterway incident, EPA to consider prosecution under the *Environment Protection Act 1970* or *Pollution of Waters by Oil and Noxious Substances Act 1986*.
- Where agencies have incurred costs from actions required to manage a waterway incident as a result of an identified polluter, to submit a summary of the costs to the court for consideration.

Running debrief

- At the completion of a waterway incident, run a debrief with the agencies that participated to

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review and improve the management of response and review outcomes of investigation to date.

Reporting on investigations

- At the completion of an investigation, report back to agencies and public on the findings and recommendations of the investigation.

Management of a database for fish deaths

- Develop and manage a database that provides information on events and findings of investigations.

Briefing Minister

- Where required, brief relevant Minister on the progress of a waterway incident and findings and recommendations of the investigation.

Reporting of notifiable exotic diseases

- Undertake required reporting of notifiable exotic diseases.

A1.3 Recovery

Development and implementation of recovery programmes

- Following a fish death, as required, to develop and implement recovery programs.

Monitoring of water quality and waterway condition in relation to a fish death event

- Where requested, to undertake and manage a monitoring program to support a recovery program (e.g., water quality/flow monitoring and/or fish surveys).

Routine reporting to partner agencies on the number, type, and likely causes of fish deaths

- Provide partner agencies an annual report on the number, type and likely cause of fish deaths reported on a yearly basis.

Development and implementation of recovery programs for stocked waterways

- As required, develop and implement, with appropriate stakeholders, a program to enable recovery of stocked species as appropriate and in accordance with statewide priorities.

Development and implementation of recovery programs for species listed under the Flora and Fauna Guarantee Act

- As required, develop and implement, with appropriate stakeholders, a program to enable recovery of species listed under the Flora and Fauna Guarantee Act.

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APPENDIX 2

Legislative responsibilities

For the purposes of this Guideline, all parties have an involvement in waterway management and/or waterway incident management. The parties have the following legislative responsibilities:

EPA has the responsibility under the *Environment Protection Act 1970* to investigate pollution and other events that have a detrimental impact on the waterway and to direct any necessary management actions to prevent pollution, including clean-up actions.

Catchment management authorities have responsibilities under the *Water Act 1989* for management of designated waterways within Waterway Management Districts, and as caretakers of river health.

Department of Human Services has responsibilities for:

- food contamination under the *Food Act 1984*, *Health Act 1958* and *Health (Infections diseases) Regulations 2001*
- infectious diseases under the *Health Act 1958* and *Health (Infections diseases) Regulations 2001*, *Quarantine Act 1908* (Commonwealth), *Quarantine Regulations 2000* (Commonwealth), *Health Records Act 2001*
- water contamination under the *Health Act 1958*, *Food Act 1984*, *Infectious Diseases Regulations 2001* and *Safe Drinking Water Act 2005*.

Regional water authorities have responsibilities under the *Water Act 1989* for management of designated waterways within Waterway Management Districts.

Urban water authorities have responsibilities under the *Water Act 1989* for management of designated waterways within Waterway Management Districts.

Parks Victoria has responsibilities for the management of Crown land and associated waterways under the *National Parks Act 1975*.

Department of Primary Industries has responsibilities for fisheries as defined in the *Fisheries Act 1995*; this is essentially through the creation of licences to provide for access to fish and the management of fishing activities, and for the management and reporting of fish diseases.

Department of Sustainability and Environment has responsibilities for the management of Crown land and associated waterways under the *Forests Act 1958*, the *Crown Land (Reserves) Act 1978* and the *Water Act 1989* and responsibilities under the *Flora, Fauna and Guarantee Act 1988*.