

Kempsey Shire Council

Red Weed Stranding & Sea Hare Beaching

Contingency Action Plan

2007



Authorisation

The Kempsey Shire Council Red Weed and Sea Hare Beaching Contingency Action Plan 2007 is authorized under the provisions of

Kempsey Shire Council
General Manager

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The Kempsey Shire Council Red Weed and Sea Hare Beaching Contingency Action Plan 2007 is authorized under the provisions of

DPI Fisheries

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The Kempsey Shire Council Red Weed and Sea Hare Beaching Contingency Action Plan 2007 is authorized under the provisions of

DECC

The Kempsey Shire Council Red Weed and Sea Hare Beaching Contingency Action Plan 2007 is authorized under the provisions of

Department of Lands

The Kempsey Shire Council Red Weed and Sea Hare Beaching Contingency Action Plan 2007 is authorized under the provisions of

Introduction

Purpose

This Plan describes the arrangements to provide an effective response to implement management strategies in the event of Red Weed strandings and/or Sea Hare beaching within the Kempsey Shire Councils Local Government Area.

Scope

This plan covers all recognised public bathing locations in coastal estuarine and beach environments within the Kempsey Shire Council LGA.

Objective

To clearly set out procedures that;

1. Identify the species of aquatic flora and/or fauna involved in the beaching events
2. Provide clear directional processes to notify all relevant bodies, including any public awareness strategies
3. Identify appropriate response criteria and actions
4. Clarify event reporting requirements

Key Agencies.

Agency	Contact Person	Phone	Fax	email
Kempsey Shire Council	Mr David Martin	(02) 6566 3200		
Kempsey Shire Council	Mr Tom Vermeulen	(02) 6566 3200		
DPI Fisheries	Mr Marcus Riches	(02) 6626 1370	(02) 6626 1377	marcus.riches@dpi.nsw.gov.au
DECC	Mr John Schmidt			John.Schmidt@dnr.nsw.gov.au
Kempsey Shire Council	Mr. Ron Kemsley	(02) 6566 3200	(02) 6566 3245	ron.kemsley@kempsey.nsw.gov.au

PART 1 -RED WEED STRANDING

1a) Background

Red weed stranding is a natural event that can occur along any coastal environment depending on prevailing climatic conditions. Red weed collected from the stranding on beaches within the KSC LGA in December 2006 was identified by a Queensland based marine-algal expert as a non-toxic species of red macro algae **Polysiphonia**.

Unlike the surface floating plant red-tide or Noctiluca, **Polysiphonia** does not spend its entire life cycle on the ocean surface. Polysiphonia is found attached to a firm substrate beneath the ocean surface in various sub-zones lying between high and low tide water levels. Polysiphonia develop bloom-forming drifts late in their life cycle and frequently strand onshore during windy weather.

1b) Event & Action Process

Identification

There are between 30 to 40 species of Polysiphonia found in Australian waters. *Polysiphonia gracilis*, *Polysiphonia infestans* and *Polysiphonia subillissima* are assumed to be the species that was ashore in the December 2006 event however, only plants with intact basal system can be positively identified down to the species level and as a result of wind and wave action positive identification can be very difficult.

In general red weed stranding can be confirmed by the presence of mats of red colored aquatic vegetation deposited within the inter-tidal zones.

Health & Ecological Issues

Polysiphonia is a non-toxic species and generally not harmful to humans. There are however, some issues associated with the visual presence on the beaches particularly in bathing areas and the odour generated when **Polysiphonia** commences to decompose. There can also be issues associated with deoxygenating events in water bodies if the blooms are unable to wash away.

Notification Strategy

Generally there are no legislative requirements for Council to officially inform any state or federal agency of any red weed event.

However, in the interest of reporting and recording, all significant red weed blooms and/or stranding should be reported to DPI Fisheries and DECC

Obtaining relevant consent

Removing and/or handling marine organisms that are involved in stranding events can sometimes require consent from relevant state and/or federal agencies.

There are no legislative requirements **that can be confirmed** for Council to officially gain consent from any state or federal agency to remove or cover the stranded red weed blooms on public bathing beaches.

Response or Management Strategy

In the event that a red weed bloom and/or stranding is observed and reported to Council, a Council Officer should attend a site inspection of the reported event and, based on the Officers observations, put in place measures to implement the following;

- 1) Physical Management
 - a) Inform relevant agencies – detailing location, bloom and/or stranding dimensions and other information the agencies may require.
 - b) Advise Councils Shire Services machinery may be required to physically remove and/or cover the stranded red weed.
- 2) Public Awareness
 - a) Arrange for the Red weed information flyer produced for the December 2006 event to be placed on Councils web page.
- 3) Media Management
 - a) Marine strandings can generate significant media interest. Prior to any response to the media, a common view should be established between DECC, DPI, Council Officers and other relevant parties. At that time an agreed co-coordinator for media contact will be established.

1c) Intervention Criteria

After notifying all relevant agencies and clarifying any consent requirements for physical intervention management and/or suggested intervention procedures to address Red Weed strandings, Council's Officer must determine if intervention and physical management is required.

The following criteria must be satisfied before any Red Weed stranding intervention management is implemented;

- b) The Red Weed stranding event occurs on a recognized public bathing area
- c) The Red Weed stranding event is deemed by an authorized authority as a 'public health hazard'.
- d) The Red Weed stranding event has resulted in more than 30% of the inter-tidal zone within the bathing area being covered by decomposing Red Weed
- e) The Red Weed stranding event results in a level of odour that renders the bathing area unusable by swimmers and/or bathers

1d) Reporting

Generally there are no formal legislative requirements for Council to report on red weed bloom and/or stranding events. However, Council should maintain records of all events. In addition Councils Coast & Estuary Management Committee will be notified of any recorded events.

PART 2 -SEA HARE BEACHING

2a) Background

Sea Hare beaching is a natural event that can occur along any coastal environment depending on prevailing climatic and/or environmental conditions. Sea Hares are named from their supposed similarity in shape to the European Hare. The Australian Museum maintains an informative online Sea Slug Forum.

Sea Hares collected on beaches within the KSC LGA in December 2006 were identified as *Aplysia extraordinaria*. *Aplysia* is not a fish; it is classified as a specialised Gastropod snail.

As well as having the ability to crawl over surfaces, *Aplysia* are also active swimmers that can produce clouds of reddish-purple ink when disturbed. Despite being strong swimmers it is quite common at times in some of the large bays and inlets along the New South Wales coast, large numbers washing up on the shore.

2b) Event & Action Process

Identification

Aplysia are herbivores that primarily eat red, brown or green algae. Their colour is diet derived from the algae they eat and they can measure 12cm up to 40cm in length.

Health & Ecological Issues

Aplysia is a non-toxic species and generally not harmful to humans. There are however, some issues associated with the visual presence on the beaches particularly in bathing areas and the odour generated when large numbers of the Sea Hares commence to decompose.

Notification Strategy

Most large scale Sea Hare strandings are related directly to natural events and normal environmental cycles, however, as Sea Hares are a marine animal all mass strandings are required to be reported to DPI Fisheries under the Fisheries Act 1994. (See Append 1)

Obtaining relevant consent

As Sea Hares are classified as a fish under the Fisheries Act 1994 Section 5 (Definition of Fish – a fish means any marine estuarine or fresh water fish or other aquatic animal life at any stage of their life history (whether alive or dead), consent to remove or handle the dead Sea Hares requires consent from DPI Fisheries.

Response or Management Strategy

In the event that a Sea Hare stranding is observed and reported to Council, a Council Officer should attend a site inspection of the reported event and based on the Officers observations put in place measures to implement the following;

- 1) Physical Management
 - a) Inform relevant agencies – detailing location of stranding, dimensions and other information the agencies may require.
 - b) Assess the described intervention triggers or criteria (See Intervention Criteria)
 - c) Advise Council’s Shire Services what machinery may be required to physically remove and/or cover the stranded Sea Hares.
- 2) Public Awareness
 - a) Arrange for the Sea Hare information flyer produced for the December 2006 event to be placed on Councils web page.
 - b) Contact the online Sea Slug Forum
- 3) Media Management
 - a) Fish kills can generate significant media interest. Prior to any response to the media, a common view should be established between DECC, DPI, Council Officers and other relevant parties. At that time an agreed co-coordinator for media contact will be established.

2c) Intervention Criteria

After notifying all relevant agencies and clarifying the consent process for physical intervention management and any suggested intervention procedures for the Sea Hare beaching, Council Officer must determine if intervention and physical management is required.

The following criteria must be satisfied before any Sea Hare beaching intervention management is implemented;

- 1) The Sea Hare beaching event occurs on a recognized public bathing area
- 2) The Sea Hare beaching event is deemed by an authorized authority as a ‘public health hazard’.
- 3) The Sea Hare beaching event has resulted in more than 30% of the inter-tidal zone within the bathing area is covered by dead and/or dying Sea Hares
- 4) The Sea Hare beaching event results in a level of odour that renders the bathing area unusable by swimmers and/or bathers

2d) Reporting

There is a legislative requirement for Council to provide a written or verbal report on any Sea Hare stranding event that occurs within Councils LGA. (See Append. 1)
All events are to be presented to Councils Coast & Estuary Management Committee.

Append. 1

FISH KILL Notification & Investigation Report
Part A - Notification

NAME OF WATERBODY:

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

.....

PRECISE LOCATION WITHIN WATERBODY:

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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:

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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)

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

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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 :

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OTHER FORMS OF WILDLIFE AFFECTED ? (specify):

.....

WHAT IS THE SUSPECTED CAUSE?

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OTHER INDIVIDUALS & AUTHORITIES NOTIFIED :

INDIVIDUAL DEPARTMENT

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LOCATION COMMENTS

REPORTED TO :POSITION:

.....LOCATION.....

Updated March 2005

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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).

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