

Standing Environment Environment Group for the Greater Thames Estuary

Arrangements for the provision of environmental advice in pollution incidents affecting sea and estuarial water and shoreline between and including Lowestoft to Ramsgate.

Part One - General Overview

PENULTIMATE DRAFT

**8 September, 2011
M.C. King**

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1 DISTRIBUTION LIST:

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	Dartford Borough Council	Kent
	DEFRA Fisheries Office (Lowestoft)	Suffolk
	DEFRA Fisheries Office (Hastings)	East Sussex
	Eastern Sea Fisheries Joint Committee	Norfolk
	English Nature	Essex
	English Nature	Kent
	English Nature	Suffolk
	English Nature	Peterborough
	Environment Agency	Suffolk
	Environment Agency	Peterborough
	Environment Agency (Thames Region)	
	Essex County Council	Essex
	Essex Strategic Health Authority	Essex
	Felixstowe Dock & Light Railway Company	Suffolk
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	Harwich International Port	Essex
	Havering (London Borough)	London
	Kent County Council	Kent
	Kent & Essex Sea Fisheries Committee	Kent
	Kent Port Health	Kent
	Kent Strategic Health Authority	Kent
	Maldon District Council	Essex
	Maritime & Coastguard Agency	Southampton
	Medway Council	Kent
	Medway Port	Kent
	Norfolk, Suffolk & Cambridgeshire Strategic Health Authority	Cambridgeshire
	Port of London Authority	Kent
	Rochford District Council	Essex
	Southend on Sea Borough Council	Southend
	Suffolk County Council	Suffolk

3 PREFACE

The concept of an Environment Group providing public health and environmental advice to all response units with a role in responding to a significant maritime pollution incident was recommended by Lord Donaldson in his "Review of Salvage and Intervention and their Command and Control". This recommendation was accepted by Government and incorporated in the National Contingency Plan for Marine Pollution from Shipping and Offshore Installations (NCP) January 2000 (Section 9 and Appendix L). **[reference Maritime and Coastguard STOp Notice 1/2001]**

This document has been prepared by the Standing Environment Group for the Greater Thames Estuary in accordance with the NCP and the supplementary guidance provided in STOp Notice 1/2001. In its final form it will be in two parts "Part One – General Overview" and "Part Two – Site Specific". It will provide for a ***Standing Environment Group** response to medium-large spills of oil or chemicals from merchant and other shipping and from on-shore facilities.

The area of coastline addressed by this document is that between and including **Lowestoft (Kessingland South of Lowestoft) to Ramsgate**. To assist in the analysis of environmental risk and hazard, the stretch coastline indicated above, has been divided into ten zones.

Part One – Overview, is structured to facilitate technical, environmental and public health considerations in the first stages of an oil/chemical incident along the area of coastline referred to above.

Phase Two – Site Specific (which will be developed commencing June 2004) addresses in more detail specific/localised risks and sensitivities within each of the ten zones.

***NB During an incident, The Standing Environment Group becomes the "Environment Group" within the Shoreline Response Centre.**

4 INTRODUCTION

The Environment Group (EG) has a vital role in the response to any maritime incident, particularly where there might be a threat of sea or air pollution involving oil and/or hazardous substances.

The EG, operating from an “advisory cell” within the incident control centre, helps to steer the overall environmental incident response to minimise environmental harm and to ensure that response units consider all appropriate measures for environmental evaluation and act upon them. For these purposes the “Environment” includes human health interests, water quality, ecology and wildlife.

The Standing Environment Group (SEG) is established to plan, prepare and develop appropriate information, understanding and actions to facilitate and expedite the work of the EG during an incident.

Interests represented by the **Greater Thames Estuary Standing Environment Group** are those of:-

Suffolk County Council; Essex County Council; Kent County Council; Medway Council; The Environment Agency; Department of Food and Rural Affairs (DEFRA), Maritime and Coastguard Agency; the Strategic Health Authorities for Suffolk, Essex and Kent and English Nature.

The purpose of this document is to assist officers from the above organisations in responding to incidents involving oil/chemical spills along the length of coastline Lowestoft to Ramsgate and to:

- Understand the actions required of staff should an incident occur
- To provide and maintain a catalogue of the resources available within these organisations and from outside sources e.g. RSPCA; RSPB; Suffolk, Essex and Kent Wildlife Trusts.
- To provide information allowing any response to be made swiftly, accurately and proportionately.

5 SCOPE OF THIS DOCUMENT

This document details the Greater Thames Estuary Standing Environment Group arrangements for responding to actual or threatened oil pollution incidents within the area Lowestoft – Ramsgate. It seeks to address all incidents in or likely to affect the areas from Lowestoft – Ramsgate including the tidal boundaries upstream, as far as the QE II Bridge.

This document should be regarded as complementary to all Maritime Local Authority Oil Spill Response Plans written in accordance with the NCP and other plans written under the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations SI 1056 1998.

6 THE STANDING ENVIRONMENT GROUP FOR THE GREATER THAMES ESTUARY

6.1 Terms of Reference.

The terms of reference below are derived from the terms of reference detailed in the NCP Section 9 (Appendix L):

- To provide those undertaking operational incident management with timely and authoritative information, advice and tactics as to the environmental and health and safety considerations in all aspects of an oil or chemical marine pollution incident in the sector of coast between Lowestoft and Ramsgate.
- To form a Core Group to devise and maintain (on behalf of an in consultation with the Standing Group) a Plan of arrangements for response to all oil/chemical incidents.
- To identify organisations and individuals to provide information and special roles and to undertake liaison, technical and administrative support for the preparation, maintenance and implementation of the Plan including training and exercising.
- To provide public health, safety and environmental impact advice and guidance to all agencies involved in response to an oil and or chemical marine pollution incident and on any options or specific operational proposals or strategies proposed or undertaken.
- To advise response units so as to minimise the impact of the incident on the environment in the widest sense taking account of the risks to public health, the natural environment and potential impacts arising from any response operation whether salvage or clean up operations at sea and/or on the shoreline and disposal operations.
- To monitor, assess and document the public health, environmental (including wildlife) impact of a maritime pollution incident with respect to oil and/or chemicals and the impact of all measures implemented in response to the incident.
- To facilitate welfare, rehabilitation or humane disposal of wildlife casualties by recognised animal welfare organisations.

6.2 Scope of Group Functions

The functions of the Standing Environment Group for the Greater Thames Estuary will be proportional to the scale and nature of the incident, its geographical location, extent, severity of pollution involved and potential hazard to human health and environmental sensitivities. The scale of the incident and response is likely to evolve over time therefore, the functions of the Group will be graduated to meet changing requirements.

The definition of the “marine and coastal environment” in the context of the Group includes public health, the natural environment, water quality, wildlife including fish and marine crustaceans, cultural aspects, landscape, habitats and socio-economic factors linked to human health.

The scope of the Group functions include:

- provision of public health and environmental advice to the Secretary of State’s Representative (SOSREP), the Salvage Control Unit (SCU), the Marine Response Centre (MRTC), the Shoreline Response Centre (SRC) and the Command and Control Centre for incident response in ports and harbours.
- liaison as necessary with all response units established to deal with the pollution
- proactive management of information on all health and environmental issues between the units
- seeking to minimise the impact of an oil and or chemical pollution incident on human health
- seeking to minimise the impact of an oil and or chemical pollution incident on the environment by determining optimal environmental end points beyond which the response will not provide environmental benefit .
- planning implementation and management of data gathering to enable an impact assessment to be made across the widest appropriate range of issues.
- ensuring that proper consideration is given to all the health and safety requirements for personnel working for The Thames Estuary Standing Environment Group.

6.3 Area of operation

Lowestoft (Kessingland South of Lowestoft) to Ramsgate (tidal boundaries upstream to the QE2 Bridge).

6.4 Thames Estuary Standing Environment Group Core Members

- Department for Environment, Food and Rural Affairs (DEFRA)
- Environment Agency (EA)
- English Nature (EN)
- Maritime and Coastguard Agency (MCA)
- Health Protection Agency
- Essex County Council Community Safety & Emergency Plans (also representing Suffolk and Kent County Councils and Medway Council Emergency Planning Units)

NB For planning purposes and during an incident, the Group may call on members of other bodies as appropriate e.g. Sea Fisheries Committees, RSPCA, RSPB, Wildlife Trusts

6.5 Key Tasks

In liaison with the appropriate relevant agencies the GTE-SEG tasks and priorities listed below will be incident specific:

Provision of health advice

- Provide advice on potential and real impact on public health with respect to oil and chemicals
- Advise on requirements for the monitoring of threat to public health

Provision of operational advice

- Assess environmental priorities at risk from pollutant and from clean-up activity
- Establish SEG priorities for resource protection and pollution clean-up
- Prepare an SEG incident specific procedure for at sea and on shore dispersant and chemical treatment product use
- Provide advice and guidance on health and environmental sensitivities and risks, preferred options and health and environmental implications of proposed salvage and clean up response strategies with respect to achieving a net environmental benefit
- Ensure that the above advice is timely and accurately reflects the dynamics of health and environmental resources at risk
- Ensure thorough and timely documentation of all advice provided to the response units. Where a response unit does not follow such advice the reasons for not doing so should be recorded. Copies of all records of advice provided and feedback from response units should be circulated within the SEG.
- Facilitate effective communication on health and environmental matters between the response units and the Environment Group appointed Environmental Liaison Officers.
- Ensure that appropriate co-ordinated and timely arrangements for incident specific assessment of the effects on public health and environment are initiated and subsequently managed.
- Monitor and keep under review public health and environmental implications of ongoing salvage and at sea clean up operations.

Contribution to the SRC

- Ensure representation on the Shoreline Response Centre (SRC) Management Team via the appointed Environmental Liaison Officer
- Monitor on shore clean up operations, particularly in sensitive areas to ensure that clean up operations match the strategy agreed in the SRC

- Advise contribute to and provide members for the SRC controlled multi disciplinary Shoreline Clean Up Assessment Teams (SCAT) as required.

Health and Safety

- Ensure the full implementation of health and safety measures for personnel working in the field on behalf of the Environmental Group (for example through risk assessments, COSHH, Personal Protective Equipment and health tracking).

7 Organisational Responsibilities

7.1 DEFRA responsibilities

DEFRA is responsible for Government policy on Environmental Protection issues. DEFRA plays a major role in protecting the marine environment and fisheries interests when responding to marine pollution incidents in England and Wales.

DEFRA regulates the use and approval of oil dispersants for treating oil at sea.

The **Marine Environment Branch 2** (MEB) co-ordinates DEFRA's response to oil and chemical spills at sea in tidal waters. It has a specific role to approve oil dispersant use. It examines oil spill contingency plans produced by ports, harbours and the offshore oil/gas industry to ensure they are satisfactory in this regard.

The decision to approve the use of oil dispersants at sea in waters less than 20 metres deep, or within one mile of such depths, rests with DEFRA. Proposals to use dispersants will be discussed urgently with English Nature, or, if offshore, with JNCC. The aim is to ensure that approval to use dispersants, where this is appropriate, is granted within one hour of such a request being received. This is to ensure that the oil has minimal opportunity to weather before dispersants are applied, whilst still ensuring that dispersants are not used where the dispersing oil into the water column will result in greater environmental damage than leaving it on the surface.

A list of DEFRA approved oil dispersant products is available at <http://www.DEFRA.gov.uk/environment/marine/oilspill/default.htm>.

Sea Fisheries Inspectorate (SFI) has 25 Fisheries Offices around coast of England and Wales. These are managed locally by 7 Coastal District Inspectors of Fisheries and their deputies and Fishery Officers (grade 1). SFI operates an out of hours Duty Officer system and thus provides 24 hours a day cover in the event of an oil spill incident.

SFI District Inspectors and Fishery Officers (grade 1) have knowledge of local fisheries, often backed up by some sea-going experience. They have received basic oil spill response training from MCA and it has been agreed that they will act as DEFRA's representatives on Environment Groups.

The **Centre for Environment, Fisheries and Aquaculture Science** (CEFAS) is a DEFRA Agency internationally recognised as a centre of fisheries expertise. Their Burnham on Crouch laboratory operates an emergency response team to offer scientific advice on oil and chemical spills relating to fisheries and protection of the marine environment, including advice on whether or not dispersant use is appropriate. CEFAS conduct toxicity tests on oil dispersants and they may carry out work for the Food Standards Agency such as analysis of shellfish for contaminants and advice on the extent and duration of fishing prohibitions, introduced to protect consumers/human health.

The **Food Standards Agency** (FSA) is independent and reports to the Department of Health. The Agency works closely with Local Authorities, Environmental Health Officers and Port Health Inspectors. They are responsible for providing advice to the Government on whether or not to make Orders under the Food and Environment Protection Act (FEPA) to prohibit the taking of fish, shellfish and plants from an oil spill affected area and to prohibit wholesalers and retailers from marketing such products. SFI and CEFAS may carry out work for FSA along with local EHO's and Port Health Inspectors.

7.2 On Call Public Health Doctors Responsibilities

In the event of a marine pollution incident (including oil spills) on call Public Health Doctors will be required to attend a Standing Environment Group (if one is established) at a location chosen by the Standing Environment Group Chair.

7.3 English Nature Responsibilities

English Nature is the statutory body that champions the conservation and enhancement of the wildlife and geological features of England. They work for wildlife in partnership with others, by:

- **advising** - Government, other agencies, local authorities, interest groups, businesses, communities and individuals on nature conservation in England
- **regulating** - activities affecting the special nature conservation sites in England
- **enabling** - others to manage land for nature conservation, through grants, projects and information
- **enthusing** - and advocating nature conservation for all and biodiversity as a key test of sustainable development.

They have statutory responsibilities for nationally and internationally important nature conservation sites: Sites of Special Scientific Interest, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). They also own and manage land directly in the form of National Nature Reserves (NNRs).

The vast majority of the open and estuarial coast in the Greater Thames SEG area is subject to one or more of these designations and English Nature has significant NNR land holdings throughout this area. Indeed, the entire coastal zone supports a range of habitats and species of conservation interest.

The principal role of the English Nature representative on the Environment Group is to ensure that the risk to important nature conservation areas in a pollution incident is properly evaluated (in the context of the statutory provisions relating to such sites) and given due weight in the decision-making process.

7.4 Environment Agency Responsibilities

The Environment Agency is charged with protection of the environment, water, air and land in England and Wales.

It **regulates** major industrial and agricultural activities;

controls effluent discharges into controlled waters and to land and emissions to air;

licences water abstraction and waste management and disposal;

promotes sustainable development, waste minimisation and resource conservation through research, advice, guidance, information and partnerships;

monitors environmental water chemistry, microbiology, fisheries, ecology, precipitation, flows and levels and **conserves and enhances** stocks and quality of fisheries, recreation facilities and archaeological or historical sites, structures and items; and

manages flood risk, prevention and response for fluvial and marine situations; EA **responds** to emergency incidents at all times to determine and minimise effects, identify cause and restore environmental damage; where practicable and appropriate it will prosecute offenders and recover costs and damages.

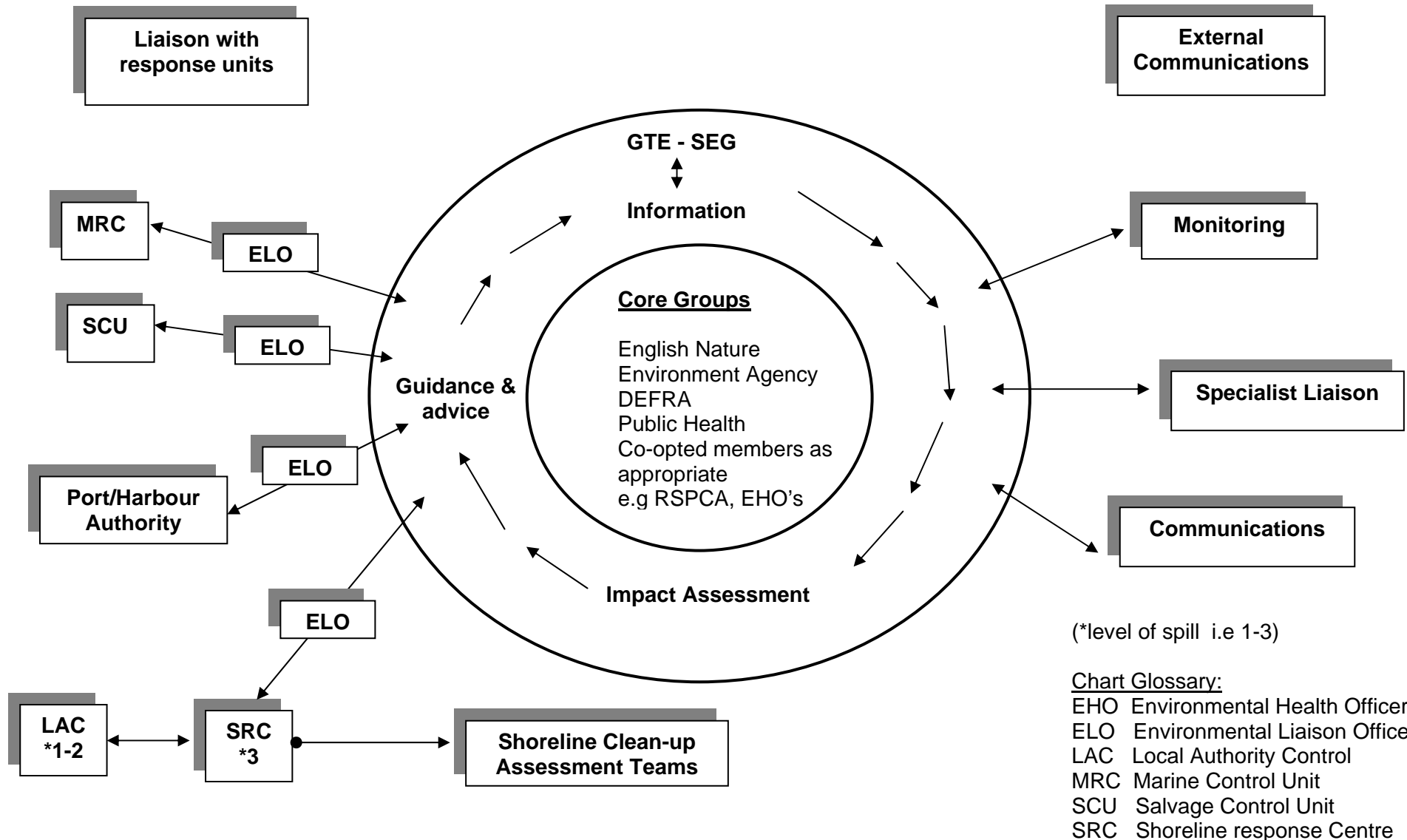
It has **developed incident procedures** for National, Regional and Area response and integrated action;

The Agency endeavours to work through partnerships with stakeholders, customers and communities to educate, understand and support in the development of sensitive and beneficial solutions to social, economic and environmental issues and challenges.

In the context of marine pollution control the Agency:

- has programmes for booming plans to protect certain areas of estuaries and creeks and stocks of equipment and trained personnel for deployment to support operational cleanup and disposal operations;
- will regulate and provide assistance and guidance in the control and transfer of waste arising from incidents and in treatment and disposal strategies;
- will monitor by sampling and inspection to determine the nature, extent and impact;
- in land-based source incidents, for which the Agency is the lead organisation, it will be responsible for legal enforcement action including collecting evidence for case preparation and prosecution as appropriate.

8 Operational Structure of the Greater Thames Estuary Standing Environment Group (GTE-SEG)



9 Core Member Responsibilities and Competencies

9.1 Chair of the Greater Thames Estuary Environment Group

Responsibilities

- Undertake management of the Greater Thames Estuary Environment Group
- Ensure that strategic objectives are met
- Co-ordinate all group functions and activities
- Ensure development and maintenance of the most appropriate structure
- Appoint an Environment Liaison Officer (ELO) for each of the response units established to deal with the incident
- Direct the monitoring of the environment and wildlife and providing advice and guidance to minimise the impact of the incident and clean up response, informed by local knowledge and specific information collected
- Use all relevant environmental information and local knowledge available
- Assess the environmental and wildlife impact of the incident and clean up response in both the short and long terms
- Facilitate the welfare, rehabilitation or humane disposal of wildlife casualties by the RSPCA, RSPB or other agreed recognised animal welfare organisations
- In the simplest incidents act as a conduit of advice (usually by telephone) to the SOSREP, MCA or any response unit or local authority response co-ordination centre .

Training and Experience

- Oil pollution training
- Understanding of the legal and procedural requirements of pollution incident control and management and where to obtain advice and aid as appropriate

9.2 Deputy Chair of The Thames Estuary Environment Group

Responsibilities

- To deputise for the Chair of the Thames Standing Environment Group (for roles and responsibilities see 8.1 above)
- Undertake management of the Thames Estuary Environment Group
- Ensure that strategic objectives are met
- Co-ordinate all group functions and activities
- Ensure development and maintenance of the most appropriate structure
- Appoint an Environment Liaison Officer (ELO) for each of the response units established to deal with the incident
- Direct the monitoring of the environment and wildlife and providing advice and guidance to minimise the impact of the incident and clean up response, informed by local knowledge and specific information collected
- Use all relevant environmental information and local knowledge available
- Assess the environmental and wildlife impact of the incident and clean up response in both the short and long terms
- Facilitate the welfare, rehabilitation or humane disposal of wildlife casualties by the RSPCA, RSPB or other agreed recognised animal welfare organisations
- In the simplest incidents act as a conduit of advice (usually by telephone) to the SOSREP, MCA or any response unit or local authority response co-ordination centre .

Training and Experience

- Oil pollution training
- Understanding of the legal and procedural requirements of pollution incident control and management and where to obtain advice and aid as appropriate

8.3**English Nature Competent Officer****Responsibilities**

- Providing specialist advice to the Environment Group, and (through it) to the response unit(s), about: the nature conservation resource in the area affected by the incident; the implications of any pollution and associated management proposals for that area and its wildlife; and the most effective longer-term clean up and remediation measures.
- Monitoring the environmental effectiveness of clean-up and remediation strategies.
- Providing appropriate nature conservation advice in the context of the Environment Group to external parties including DEFRA, Environment Agency, local authorities and the media.
- Coordinating an appropriate input by conservation partner organisations to the incident response.
- Gathering and collating information about impacts on the wildlife resource during the course of an incident (including the location and number of oiled birds, other wildlife and affected habitats)
- Contributing, with other parties, administrative and other specialist support to the Environment Group as required.
- Obtaining technical advice from English Nature's national specialists.
- Ensuring the continuity of representation on the Group by suitable individuals throughout the course of the incident.
- Provide nature conservation advice and information to the Greater Thames Estuary Environment Group and all other appropriate agencies
- Co-ordinate the response of non-governmental organisations.

Training and Experience

- Competent in Health and Safety Risk Assessment in oil pollution incidents.
- Specialist knowledge of all relevant environmental regulatory regimes in particular Habitats Regulations and Part 1 and 2 of the Wildlife and Countryside Act (as amended) and national policy frameworks.
- Broad familiarity with ecologically sensitive locations across the GTE-SEG Area.
- Awareness of the relative vulnerability of different ecological features to pollution incidents from oil and other hazardous substances and from associated clean up activities.

8.4 Environment Agency Competent Officer

Responsibilities

- Maintain a stock of suitable booms to provide a first line or immediate response to oil spills in order to protect wherever feasible sensitive estuaries and areas of coastline.
- Provide aerial surveillance (to be integrated with MCA but under a separate protocol);
- Deploy small boats and sea going survey vessels (if operated by EA in relevant area).
- Provide advice to the MCA of the risk to controlled waters, ensuring that environmental considerations are given appropriate and timely consideration in any decision making;
- Regulate discharges to controlled waters including the management, monitoring and control of water quality within such waters.
- Provide and audit inspection, surveying and monitoring arrangements of shoreline contamination and environmental impact of pollution by appropriate means including inspection, photography, sampling and measurement for operational management guidance and records and evidential purposes.
- Facilitate ecological and biological assessment of the impact of pollution, cleanup and disposal operations.
- Undertake assessment and provide guidance on the duty of care and control of incident operation including where appropriate the emergency waste regulatory requirements

Training and Experience

- Oil pollution training
- Understanding of the legal and procedural requirements of pollution incident control and management and where to obtain advice and aid as appropriate.

8.5	DEFRA Competent Officer
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Roles and Responsibilities

Where appropriate to:

- Attend marine oil and chemical pollution incidents as DEFRA'S representative to the SEG;
- Act as first point of contact for the SEG with DEFRA'S Marine Environment Branch, The Centre for Environment, Fisheries and Aquaculture Science (CEFAS) and the Food Standards Agency;
- Liaise with officials in DEFRA who are responsible for approving or advising on the use of dispersants by the Maritime and Coastguard Agency or Harbour Masters responding to an oil spill;
- Provide advice on sea fisheries, commercial and recreational sea fishing activities and marine ecosystem issues;
- Act as first point of contact for the SEG with representatives of the local Sea Fisheries Committees, fishing industry and other related bodies.

Training and Experience

- Oil pollution training
- Understanding of the legal and procedural requirements of pollution incident control and management and where to obtain advice and aid as appropriate.

8.6

Public Health Doctor

Roles and Responsibilities

Where appropriate to:

- Attend the SEG
- Act as the point of contact for the Environment Group with NHS organisations
- Liaise with NHS organisations on behalf of the SEG
- Give advice on the likely health effects of agent(s)
- Give advice on the clinical management of persons exposed to the agent(s)

NB These responsibilities will be undertaken with support from the Health Protection Agency Chemical Hazards and Poisons Division

Training and Experience

- Basic training in the management of chemical incidents
- Access to the Chemical Hazards and Poisons Division (formerly Chemical Incident Response Service) in and out of hours

8.7	Environmental Liaison Officer (ELO)
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Roles and Responsibilities

Where appropriate to:-

- Understand information needs of operational response centres and GTE-SEG.
- On behalf of GTE-SEG provide timely, public health and environmental advice to response centres
- Provide an efficient and effective two way communication link, with respect to environmental issues between response centres and GTE-SEG
- Ensure feedback to the GTE-SEG, of all information from response centres that is relevant to GTE-SEG on the progress of the incident
- Maintain links with other ELOs
- Keep careful records of interactions with GTE-SEG and response centres
- Keep careful records of handover responsibilities

Training and Experience

- Oil spill response training
- Understanding of the information needs of response centres and GTE-SEG
- Understanding of the procedural requirements of pollution incident control and management

10 REPORTING POLLUTION: FORMAT OF CG77 POLREP

Information regarding an incident will come through in the following format of a POLREP (Pollution Report) as formal notification of the incident. The initial report will be a POLREP (CG77) followed by small POLREPs identified as SITREPS. The initial POLREP is presumed to be SITREP 1 the following reports are numbered sequentially after this.

Part 1: Information that should be provided in an Initial pollution report

- A Classification**
- B Date and Time**
- C Position and Extent of Pollution**
- D Tide and Wind**
- E Weather**
- F Characteristics of pollution**
- G Source and Cause of Pollution**
- H Details of Vessels in the Area**
- I (Not Used)**
- J Whether photographs have been taken, and / or samples for analysis.**
- K Remedial action**
- L Forecast**
- M Names**
- N Any other relevant information**

11 Initial Notification and Call Out Procedures

ALERT:

Pollution Reports (POLREPS) are sent by HM Coastguard to all agencies responding to oil and chemical pollution incidents.

Upon receipt of a POLREP the constituent core organisations of the GTE-SEG will alert their own organisations using their own organisational cascade arrangements.

In addition to the POLREP, for spills which the MCA consider the GTE-SEG is appropriate, MCA will notify the national contact points for organisations forming the core group. These organisations in turn will inform their representatives on the core group. Time permitting MCA will also contact the group chair or deputy to confirm GTE-SEG initiation.

NOTIFICATION:

Using the GTE-SEG 24 hr contact list the GTE-SEG Chairman or Deputy will confirm receipt of the POLREP with GTE-SEG members.

GTE-SEG Chairman or Deputy in liaison with GTE-SEG members will decide initial operational deployment.

Smaller spills will be attended by GTE-SEG at the discretion of Group Members and in agreement with the Chairman or Deputy. In these instances, and where possible, the GTE-SEG may operate remotely by telephone and e:mail facilities if the situation does not warrant the setting up of the GTE-SEG at a location.

DEPLOYMENT:

Deployment of Group Members will be determined in accordance with the pollutant, the estimated level of pollution and the sensitivity of the location.

COMMUNICATIONS:

The GTE-SEG Chairman or Deputy will establish initial communication routes between GTE-SEG Members.

OPERATIONAL BASE:

The operational base may be at the SRC and/or a local control centre dependent upon the size of the spill, the scale of potential pollution and the MCA declaring a national emergency.

OPERATIONAL LOGISTICS

If deployment to an SRC is appropriate facilities should be made available to the GTE-SEG either in or near to the SRC. Facilities that have not been pre-determined should be made available in liaison with the SRC Management Team.

A pre-sorted grab pack with operational equipment, data and documentation required should be taken to the operational base.

Smaller spills should be attended at the selected Maritime Authority's local control rooms or facilities nearby.

Information on **initial facilities** available for the GTE-SEG should be available from the Essex County Council Duty Officer using the 24 hr duty officer number.

NB It may be necessary for the GTE-SEG to re-locate after the initial deployment of members and in the light of developments

STANDING DOWN GTE-SEG

The role of GTE-SEG will evolve over the period of any incident. Provision of operational advice to the Shoreline Response Centre (SRC) is likely to extend far beyond the provision of advice on acute health issues, salvage or at sea response. Operational advice may continue to be required by a local authority shore clean-up control centre after an SRC stands down and impact assessment is likely to be a protracted task.

The decision to stand down will be taken by the GTE-SEG chair and that decision will be conveyed to the SRC, MRC, SCU. After the initial event, and with prolonged incidents that have been reduced to a lower status, GTE-SEG may still have a role in providing occasional advice remotely (e.g. by telephone) to key stakeholders such as local authorities or ports.

[See also section 12 for GTE-SEG initiation]

12 Greater Thames Estuary Environment Group Initiation

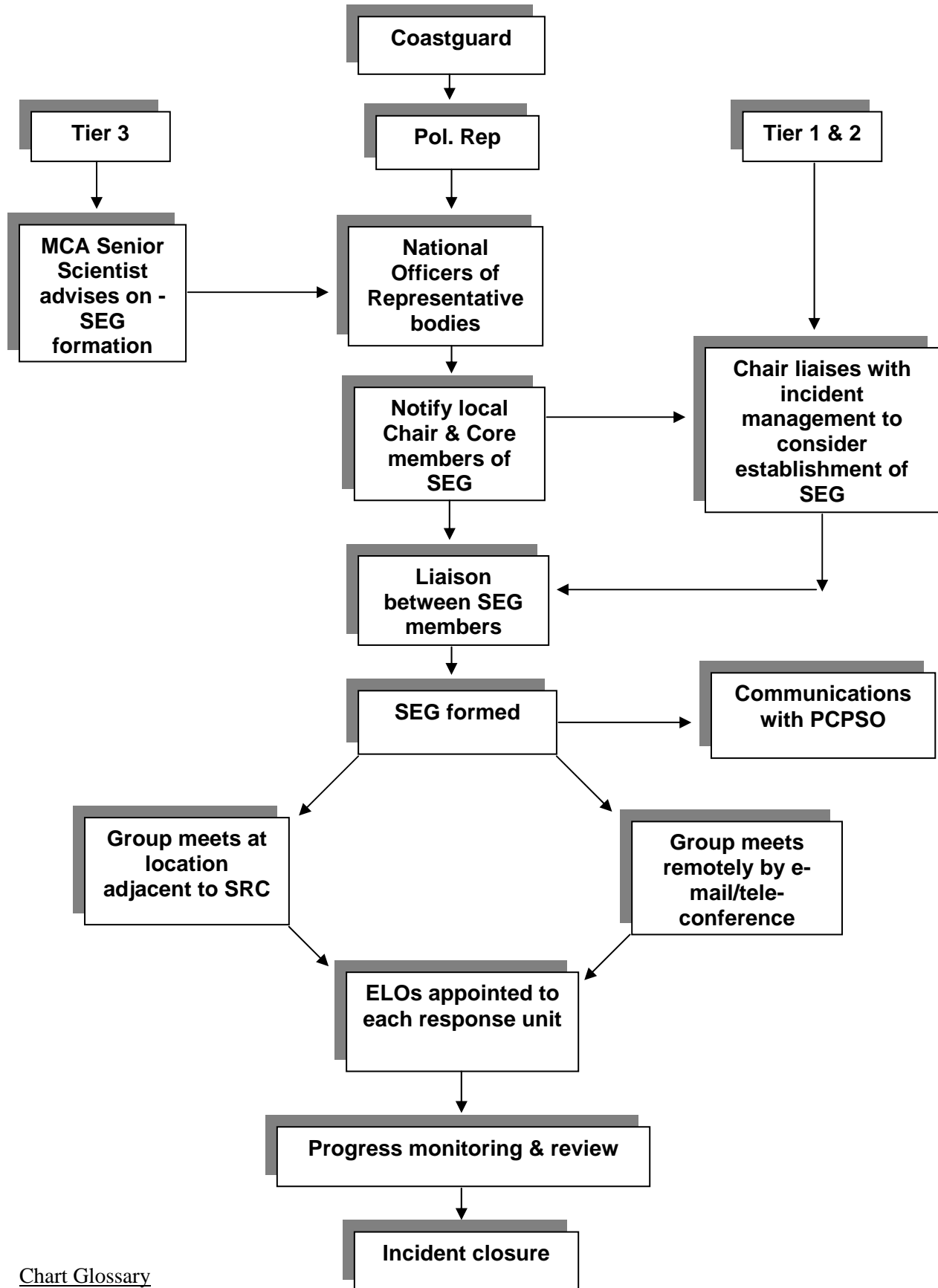


Chart Glossary

ELO (Environmental liaison officer)

PCPSO (Principal Counter Pollution and Salvage Officer)

POL(Pollution Report)

SEG (Standing Environment Group)

13 Initial Response Checklists.

13.1 TE-SEG Chairman's Checklist

- POL REP – What? Where? When? MCA prediction?
- What is the hazard?
- What is at risk in short, medium and long term?
- Weather and tidal state and forecast.
- Duration and scale prediction.
- Establish incident status, operational management and deployment proposals or arrangements.

Group availability contact and deployment.

- Contact Core Group reps: EN, DEFRA, HPA, ECC, EA, MCA and relevant Harbour or Port Authorities.
- Decide on remote operation or convening of Environment Group (EG).
- Confirm communication and/or accommodation in liaison with incident operational control and local authorities.
- Establish incident operational responsibility and deployment situation.
- Decide, in liaison with MCA Chief Scientist, on Chairman, deputy and rotation for EG manning.
- Nominate Environment Liaison Officer(s) to any Response Units established.
- Delegate initial EG action roles and review hourly.

Operational action within first few hours.

- Contact MCA/ MRS/SRC/SOSREP and establish communications arrangements: phone numbers, named EG liaison officers, meetings schedule and attendance or delegation appropriate.
- Arrange administration for logging of reports, requests, distribution etc.
- Establish arrangements for producing, distributing and recording decisions, advice and guidance.
- Review the hazard: determine nature, amount, toxicity/ impact and persistence.
- Consider the resource, who and what is at risk? how sensitive and significant?
- Prioritise and review risks in terms of immediate damage and short, medium and long term threat.
- Identify clear environmental objectives for salvage and response..
- Consider whether spraying at sea with dispersal chemicals is advisable or not.

/ Chairman's checklist cont'd

- Identify options for storage, transportation, treatment, reuse, recycling and disposal of oil recovered.
- Issue initial guidance and advice to Response Units.
- Organise visual situation displays: SITREPs, Info' Board, Arrival/Deployment Board, Contact Directory, maps/charts.
- Find out what monitoring/observation is being undertaken and obtain information gathered.
- Decide what EG monitoring/sampling required/necessary/practicable by Core Group Rep or local team arrangements.
- Check essential legal evidence to be gathered and ensure it is in-hand or delegate EG rep to arrange.
- Consider legal responsibilities and liability of the Environment Group and Response Teams and remind each of them.
- Consider draft media statement and necessary urgent warnings directly and via radio, TV and press.
- Arrange for Group feeding, accommodation, support staff, manning rotas etc.
- Take stock and review situation and process

Expansion of operations.

- Wide Group involvement for back-up and specialist activity; e.g. wild life rescue/cleansing/shelter,
- Local knowledge, specialist advice, resources, etc.
- Communications with parent organisations to provide information and obtain intelligence and support.
- Long-term monitoring requirements

13.2 Nature Conservation Checklist

The Incident

- When did it happen?
- Where?
- What immediate measures have been deployed?

The Material

- What is it? And what are its key characteristics?
- How much is there?
- Where is it? Location? Extent?

The Weather

- Wind speed and direction? Precipitation? Visibility?
- Forecast?
- State of tides (springs to neaps or neaps to springs?)
- Time of high/low water?

The Location

- Designations?
- Features?
- Particular sensitivities/priorities?
- Substrate character?
- What impacts reported (e.g oiled wildlife)?

The People

- Who is leading the response process?
- Which colleagues are immediately available? Need a short term rota
- Ensure national specialists notified (including press office)
- Admin support required?
- Local contacts on the ground?
- Landowners?
- Time recording?
- H&S guidance?

The Environment Group

- Has one been called?
- Where?
- Who chairing?
- Who as Environment Liaison Officer?

13.3 Public Health Checklist

Completed by:

Date and time of arrival:/...../..... Time : _____(24 hr)

EVENT DETAILS

Date of event:/...../..... Time of the event: _____(24hr)

Event location:

Area(s) affected:

POPULATION PROFILE (i.e. predominately elderly):

LAND USE:

Rural/agricultural

Residential

Industrial

Recreational

Other

Unknown

Please specify:

WHAT WERE THE GENERAL WEATHER CONDITIONS AT THE TIME THE
EVENT STARTED? (TIME ZERO)

1 = clear skies

2 = rain

3 = snow, ice, sleet

4 = fog

5 = high winds

6 = weather disasters flood/hurricane

7 = other

DID THE WEATHER CONDITIONS CHANGE DURING THE EVENT?

Specify:

Time: _____ (24 hr)

Condition: _____

Time: _____ (24 hr)

Condition: _____

Time: _____ (24 hr)

Condition: _____

WHAT KIND OF EVENT WAS THIS?

- | | | | |
|-----------------------|--------------------------|---|--------------------------|
| Explosion | <input type="checkbox"/> | Fire | <input type="checkbox"/> |
| Gas leak/air emission | <input type="checkbox"/> | Container failure/spill | <input type="checkbox"/> |
| Water contamination | <input type="checkbox"/> | Occupation exposure/
industrial accident | <input type="checkbox"/> |

WHAT FACTORS CONTRIBUTED TO THE INCIDENT

- | | | | |
|---------------------|--------------------------|---------------------------|--------------------------|
| Transport accident | <input type="checkbox"/> | Malicious act | <input type="checkbox"/> |
| Industrial accident | <input type="checkbox"/> | Waste disposal | <input type="checkbox"/> |
| Other | <input type="checkbox"/> | Information not available | <input type="checkbox"/> |
- Please specify: _____

DESCRIPTION OF THE SUBSTANCE

- | | | | |
|--|--------------------------|--------------|--------------------------|
| Chemical | <input type="checkbox"/> | Radiological | <input type="checkbox"/> |
| Total number of substances reported
for this event: | _____ | Unknown | <input type="checkbox"/> |

CHEMICAL NAMES Known Unknown
If known, for each, specify: _____

Quantity released: _____ Method of release: _____

Spill	<input type="checkbox"/>	Air emission	<input type="checkbox"/>
Fire	<input type="checkbox"/>	Explosion	<input type="checkbox"/>
Other	<input type="checkbox"/>	Unknown:	<input type="checkbox"/>

Please specify: _____

WAS ENVIRONMENTAL SAMPLING CONDUCTED

Specify sample(s) collected:

a. _____ b. _____ c. _____

From which locations:

a. _____ b. _____ c. _____

Date:/...../..... Results if known _____

Where tested:

MORBIDITY AND MORTALITY

Number of people exposed: _____

Number exposed	Number affected	Number with symptoms	Number attending GPs	Number attending A&E(s)	Number observed in A&E(s)	Number admitted to hospital	Number dead

DECONTAMINATION

Number of employees: _____

Responders: _____

Members of the Public: _____

Decontaminated at the scene: _____

Decontaminated at a medical facility: _____

Decontaminated elsewhere: _____

Number of those affected given antidotes: _____

Please specify:

Number of those treated with pharmaceutical products:

Please specify:

Number of those from whom biological samples were:

a) taken _____ b) processed _____

Results if known:

RESPONSE TO THE INCIDENT

Evacuation considered/carried out
Numbers involved and details:

Sheltering considered/carried out
Numbers involved and details:

ACTION TAKEN

Incident Team set up	YES/NO	Health advice issued to public	YES/NO
GP letters	YES/NO	Food withdrawn	YES/NO
Agricultural restriction	YES/NO	Water restriction	YES/NO
Fishing ban	YES/NO	Allotment restriction	YES/NO
Other land use restriction	YES/NO	Other restriction	YES/NO
Other	YES/NO	Please specify	
Please specify			

HEALTH INVESTIGATION

Epidemiological study	<input type="checkbox"/>	Medical monitoring	<input type="checkbox"/>
Exposure assessment	<input type="checkbox"/>	Counselling	<input type="checkbox"/>

Date Emergency Action terminated:/...../.....

Lessons learned:

Audit:

13.4 OIL SPILL RESPONSE – DEFRA INITIAL CHECKLIST

Nature of incident –

- when did the incident occur
- where did the incident occur
- what was the nature of the incident (eg collision, quayside spillage, etc)
- approximately how much oil has been spilled
- what type of oil (eg diesel, heavy fuel oil, etc)
- what area has been affected so far
- what direction is the oil moving in at present

SEG role -

- is SEG to be established
- where is SEG to be situated
- who is to Chair SEG and who are to be ELOs
- what resources needed, both material and manpower (eg maps, communications, contingency plans, protective clothing, admin. support, etc)
- establish communications with DEFRA HQ and CEFAS
- establish communications with local fishing organisations where appropriate
- maintain record of times and actions

Weather and tidal conditions -

- wind speed and direction
- tidal times of high and low water
- tidal direction and flow speed
- neap tide or spring tide
- sea state (eg calm, moderate, rough)
- current weather conditions (eg precipitation, visibility, temperature)
- forecast weather conditions

Nature of initial response action -

- who is leading/co-ordinating the response
- what initial response action has been taken, if any
- is it intended to seek consent to use dispersant
- what type of dispersant is to be used, if any

Fisheries issues -

- what fisheries and shellfisheries in immediate area of spill
- what fisheries and shellfisheries in path of spill
- any fisheries related impacts reported so far
- consider immediate priority fisheries

13.5 OIL SPILL RESPONSE – ELO Checklist

Incident

- Nature and location of incident
- Combat Agency (e.g. Local Authority, MCA, EA)
- Estimated extent of pollution
- Time into incident
- Time of call out
- Location to attend
- Location of GTE-SEG
- Chair of GTE-SEG
- Telephone number of GTE-SEG Chair
- Communication links to GTE-SEG
- Location of SRC
- Communication links to SRC
- Location of other response centres
- Communication links to other response centres
- Other ELO's
- Location of other ELO's
- Communication links to other ELO's
- Documentation required

Shift change

- Name of ELO handing over to
- Time of handover
- Documentation to hand over

14 Zone Maps and Outline Description of Zonal Sensitivities

14.1 Introduction

This section provides an general overview of the coastline between and including Lowestoft (Kessingland South of Lowestoft) to Ramsgate. Each of the ten zones dividing this area of coastline has been analysed for overall risk and has been allocated a sensitivity score within a scale of 1-5 (1 low – 5 high). The sensitivity score provides an indication of the impact of chemical or oil pollution within each of the zones and hopefully should assist in prioritising activities.

Sensitivity:

- Fish, mammals birds and their feeding, breeding and habitat.
- People living, working and recreating
- Navigation – local sailing, ports and harbours etc.
- Physical and geographical circumstances and particular factors
- Specific industrial factors and protection matters.

Hazard:

- The traffic and local operations involving oil and chemicals

Likelihood:

The likelihood in each zone of an environmentally significant pollution incident is the multiple of “Sensitivity” and “Hazard”. This can be taken to represent the relative rank order of the zones.

More detailed analysis providing a local perspective on each zone will follow in Part Two. The GTE-SEG work on Part Two will commence June 2004.

Zones:

Zone A	Kessingland to Aldeburgh
Zone B	Aldeburgh to Landguard Point
Zone C	Landguard Point to the Naze
Zone D	The Naze to Colne Point
Zone E	Colne Point to Foulness Point
Zone F	Foulness Point to Gravesend to Grain Spit
Zone G	Gravesend to the QE II Bridge
Zone H	Grain Spit to Whitstable
Zone I	Whitstable to Ramsgate
Zone J	Offshore – Outer Thames and Approaches (beyond approximately 20 M depth main contour)

**Maps of each zone are provided behind the text for each zone (not for Zone J)
Please note that the areas on the maps shaded in red indicate human population approximately 3.5 kilometres in from the coastline**

14.2 Zone Sensitivity and Risk Assessment .

REF	ZONE	SENSITIVITY S	LIKELIHOOD L	RISK LEVEL	RANK ORDER
A	Kessingland to Aldeburgh	3	3	9	7
B	Aldeburgh to Landguard Point.	4	3	12	6
C	Landguard Point to The Naze.	5	5	25	1
D	The Naze to Colne Point.	2	2	4	10
E	Colne Point to Foulness Point.	5	3	15	5
F	Foulness Point to Gravesend to Grain Spit.	5	5	25	1
G	Gravesend to the QE2 Bridge	4	4	16	8
H	Grain Point to Whitstable	5	5	25	1
I	Whitstable to Ramsgate	4	4	16	4
J	Offshore – Outer Thames and Approaches	2	4	8	8

14.3 NORTH SUFFOLK (ZONE A) KESSINGLAND TO ALDEBURGH

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: These are very busy coastal waters. The main hazards are bulk oil and chemical tankers and container vessels to the Thames and Medway terminals, refineries and storage, together with those at Felixstowe and Harwich. There are many other coastal vessels and inshore fishing boats and major deepwater routes and junctions about 35 km off the Suffolk shore (but only 12 Km from Ramsgate) for shipping to and from the English Channel, Europort, the Baltic, Scandinavian, Russian and northern Britain ports. Ferries and vessels entering and leaving the east coast and Thames ports cross these major routes. A lot of the local traffic operates much closer to the shore than the designated Deep Water Routes.

The inshore sand banks north of Lowestoft and those off the Essex and Kent coasts pose the greatest navigation hazard; the Suffolk sectors are at less risk than those north and south.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Approximately 90 inshore fishing vessels are based at ports or beach locations in or near this area. The main concentration of fishing vessels is just to the north in Lowestoft. There are also vessels based in the river at Southwold. Small beach launched vessels operate along this stretch of coast at places like Kessingland, Dunwich, Aldeburgh and Sizewell.

'Summer' (Apr - Oct) fisheries for sole, shrimp, rays, dogfish and bass. There is also some limited potting for lobster and crab as a bycatch.

'Winter' fisheries for cod, rays, dogfish, herring and sprats. Also some limited shrimp trawling.

Fisheries for herring, sprat, shrimp and sole can be very close inshore.

Commercial bivalve shellfisheries in the river Blyth for Pacific oysters.

Wide variety of fishing methods depending on season and target species – long-lining, netting, trawling, shrimp beam trawling, potting, drift netting, mid-water trawling.

OUTLINE DESCRIPTION OF WILDLIFE AND HABITATS

(NB this list is not intended to be exhaustive)

Character/Substrate

Sandy beaches and relict dune systems; shingle beaches, spits and ridges; exposed and eroding low cliff shoreline; muddy estuaries at Blyth and Alde-Ore; extensive freshwater and transitional habitats (reed beds, lagoons, broads, grazing marsh etc) and heathland immediately abutting the coast.

Designations

Benacre to Easton Bavents SPA/SSSI
Benacre to Easton Bavents Lagoons cSAC
Benacre NNR
Minsmere-Walberswick Heaths and Marshes SSSI/cSAC
Minsmere-Walberswick SPA
Suffolk Coast NNR
Leiston-Aldeburgh SSSI

Key Sensitivities

The entire coastline (with the exception of sections of developed coast at Southwold, Dunwich, Sizewell and Thorpeness) enjoys European wildlife designations for habitats and birds.

Wintering wildfowl; breeding waders and other wildfowl; breeding tern colonies; gulleries; vegetated shingle habitats; saltmarsh; mudflat; locally eelgrass beds in estuaries; rare plants;

Extensive nature reserves and land in the tenure of conservation bodies throughout the zone.

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

Small coastal town of Southwold. Heritage Coast tourism & coastal path. Shoreline and boat angling extensive. Yacht and boat harbour in mouth of Blythe estuary at Southwold and beach launching at Southwold, Dunwich, Sizewell, and Thorpeness. Long, narrow estuarine creeks with some broad lagoon reaches behind coastal gravel banks. Exposed and eroding low cliff shore-line, some sandy (reducing southward) and very extensive shingle beaches. Road accessibility variable. Sizewell nuclear power station cooling water intake. EA booming plan tested in narrow harbour entrance to Blythe estuary.



14.4 SOUTH SUFFOLK (ZONE B) ALDEBURGH TO LANDGUARD POINT

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: The hazards are similar to Zone A.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Approximately 20 inshore fishing vessels are based at ports or beach locations in this area. The main concentration of fishing vessels is in the river Deben at Felixstowe Ferry. A small number of vessels is also based in the Alde/Ore at Orford.

‘Summer’ (Apr - Oct) fisheries for sole, rays, dogfish and bass. There is also some limited potting for lobster and crab as a bycatch. This includes lobster fishing in the Alde/Ore.

‘Winter’ fisheries for cod, rays, dogfish, herring and sprats.

Fisheries for herring, sprat and sole can be very close inshore.

Commercial bivalve shellfisheries in the Alde/Ore estuaries for Pacific oysters and mussels. Naturally occurring non-commercial oyster populations also exist in the river Deben.

Wide variety of fishing methods depending on season and target species – long-lining, netting, trawling, potting, drift netting, mid-water trawling.

OUTLINE DESCRIPTION OF **WILDLIFE AND HABITATS**

(NB this list is not intended to be exhaustive)

Character/Substrate

Sand and shingle beaches, spits and ridges; exposed and eroding cliff shoreline; muddy estuary of the Deben and lower reaches of the Alde-Ore;

Designations

Alde-Ore Estuary SSSI/SPA
Orfordness-Shingle Street cSAC
Orfordness-Havergate NNR
Bawdsey Cliff SSSI
Deben Estuary SSSI/SPA
Ramsholt Cliff SSSI
Ferry Cliff, Sutton SSSI
Landguard Common SSSI

Key Sensitivities

The complex of shingle structures at Shingle Street is cSAC and SPA for habitats and birds and the Deben Estuary is SPA for its wintering birds.

Wintering wildfowl: brent geese, ducks and waders; saltmarsh and mudflat in the estuary; breeding waders and other wildfowl; vegetated shingle habitats with rare plants.

Nature reserves in the Alde-Ore and at Landguard Point.

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

Principal towns are Aldeburgh at the mouth of the Alde, Woodbridge at head of Deben estuary and Felixstowe at mouth of the Orwell. Sail-cruising from Ore and Deben berths, moorings, quays and slipways. Beach angling considerable from Shingle Street south. Good access to sand and shingle beaches at Felixstowe for bathing plus boat trips and amusements at the pier. The Felixstowe beach is a Designated Bathing Water. Heritage Coast status and Suffolk Coastal and Heath Path public access attract visitors.

14.5 STOUR/ORWELL ESTUARY (ZONE C) LANDGUARD POINT TO THE NAZE

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: Felixstowe, Harwich International Port and Navyard Wharf are major container, cargo and ferry terminals for international trade and Ipswich and Mistley Quay also handle some commercial vessels including bulk chemicals. Exchem at Great Oakley Dock has occasional shipping of chemicals and the Carless Refinery at Parkeston has a terminal for a substantial amount of liquid gas and petroleum and a range of industrial solvent products.

There are mixed industrial areas draining to the estuaries at Brantham, Manningtree, Harwich, Ipswich and Felixstowe that handle significant amounts of oil and other polluting substances. The local industrial and shipping activity poses a significantly increased risk of incidents in or offshore of this zone. The main harbour authorities therefore have individual emergency plans and are jointly committed with the Tendring District C., Essex and Suffolk CC's and the EA in the Haven Oil Plan that organises designated responsibility, training and exercises to ensure a co-ordinated, effective response. This includes onsite booms, deployment boats, oil removal and storage equipment, together with an oil recovery vessel and small dispersant spray capability. These provide for any oil spillage incident in the harbours or anything short of a category 3 entering the waters. Each marina has a booming plan and the EA has a deployment plan for a boom to protect Walton Channel.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Approximately 30 inshore fishing vessels are based at ports in this area. The main concentration of fishing vessels is at Harwich on the Stour/Orwell. A small number of vessels is also based at Ipswich. This is a sensitive high risk area owing to the presence of the large ports and vessels operating to and from Felixstowe, Harwich, Harwich Port International and Ipswich.

'Summer' (Apr - Oct) fisheries for sole, rays, dogfish, mullet, bass and eels. There is also some extensive potting for lobsters outside the entrance to the Stour/Orwell at Roughs Tower and West Rocks.

'Winter' fisheries for cod, rays, dogfish, herring and sprats.

Fisheries for herring, sprat, lobster and sole can be very close inshore. Bass, mullet, eel and sole fisheries occur in the Stour/Orwell rivers.

Commercial bivalve shellfisheries for Native and Pacific oysters are found in the Naze Backwaters. Naturally occurring non-commercial Native oyster and cockle populations also exist in the Stour and Orwell rivers.

Wide variety of fishing methods depending on season and target species – long-lining, netting, trawling, drift netting, mid-water trawling.

OUTLINE DESCRIPTION OF WILDLIFE AND HABITATS

(NB this list is not intended to be exhaustive)

Character/Substrate

Extensive muddy estuaries; complex inter tidal creek systems; improved and unimproved grasslands behind seawalls; shingle spits and sand dunes; sandy beaches; eroding cliffs;

Designations

Landguard Common SSSI
Orwell Estuary SSSI
Stour Estuary SSSI
Stour and Orwell Estuaries SPA
Harwich Foreshore SSSI
Hamford Water SSSI/SPA
The Naze SSSI

Key Sensitivities

The Stour, Orwell and Hamford Water estuaries are SPA for wintering birds and their supporting habitats.

Wintering wildfowl (including brent geese, ducks and waders) which make use of the open water, saltmarsh and mudflat, islands, and grasslands behind the seawall; breeding waders and other wildfowl; sparsely vegetated shingle habitats; eelgrass beds; gulleries; breeding terns; rare plants; seals and otters;

Several nature reserves for example at Landguard, Copperas Bay, Trimley and in the Walton Backwaters.

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

There are four marinas in the Orwell and one in Walton Creek and many moorings and sailing facilities in Felixstowe, Ipswich, Mistley, Holbrook and Harwich and other minor locations. Sailing, cruising and angling are of importance and water and jet skiing and power boats are also active in some areas. There are designated bathing waters at Dovercourt and Harwich and other swimming beaches at Wrabness, Manningtree, Holbrook and Shotley.



14.6 TENDRING COAST (ZONE D) THE NAZE TO COLNE POINT

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: The main hazard is the risk of collision or sinking of vessels in the inshore and off shore channels and movements across these by local traffic to the north and south.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Approximately 10 inshore fishing vessels are based in this area, principally operating from Walton-on-the-Naze and around Clacton.

'Summer' (Apr to Oct) fisheries for sole, rays, dogfish and bass. There is also some potting for lobsters around the West Rocks and for whelks.

'Winter' fisheries for cod, rays, herring and sprats.

Fisheries for herring, sprat, whelk, lobster and sole can be close inshore.

No bivalve shellfisheries in immediate vicinity but large concentrations to the north and south.

Principal fishing methods – netting, trawling, potting, drift netting.

OUTLINE DESCRIPTION OF **WILDLIFE AND HABITATS**

(NB this list is not intended to be exhaustive)

Character/Substrate

Exposed and eroding cliffs; sandy beaches; defended cliffs; sediment accreting defensive structures (groynes and concrete/stone barriers); seawalls; shingle/shell ridge to south.

Designations

The Naze SSSI
Clacton Cliffs and Foreshore SSSI
Holland on Sea Cliff SSSI
Holland Haven Marshes SSSI
Colne Estuary SSSI/SPA/NNR
Essex Estuaries cSAC

Key Sensitivities

The Colne Point area forms the most northerly extent of the Essex Estuaries cSAC.

Geologically important cliff exposures; important brackish and transitional wetlands and associated grassland behind the sea wall at Holland Gap; also used by wintering wildfowl; smaller numbers of less common waders on the beaches; sparsely vegetated sand dune and shingle at Colne Point; breeding terns.

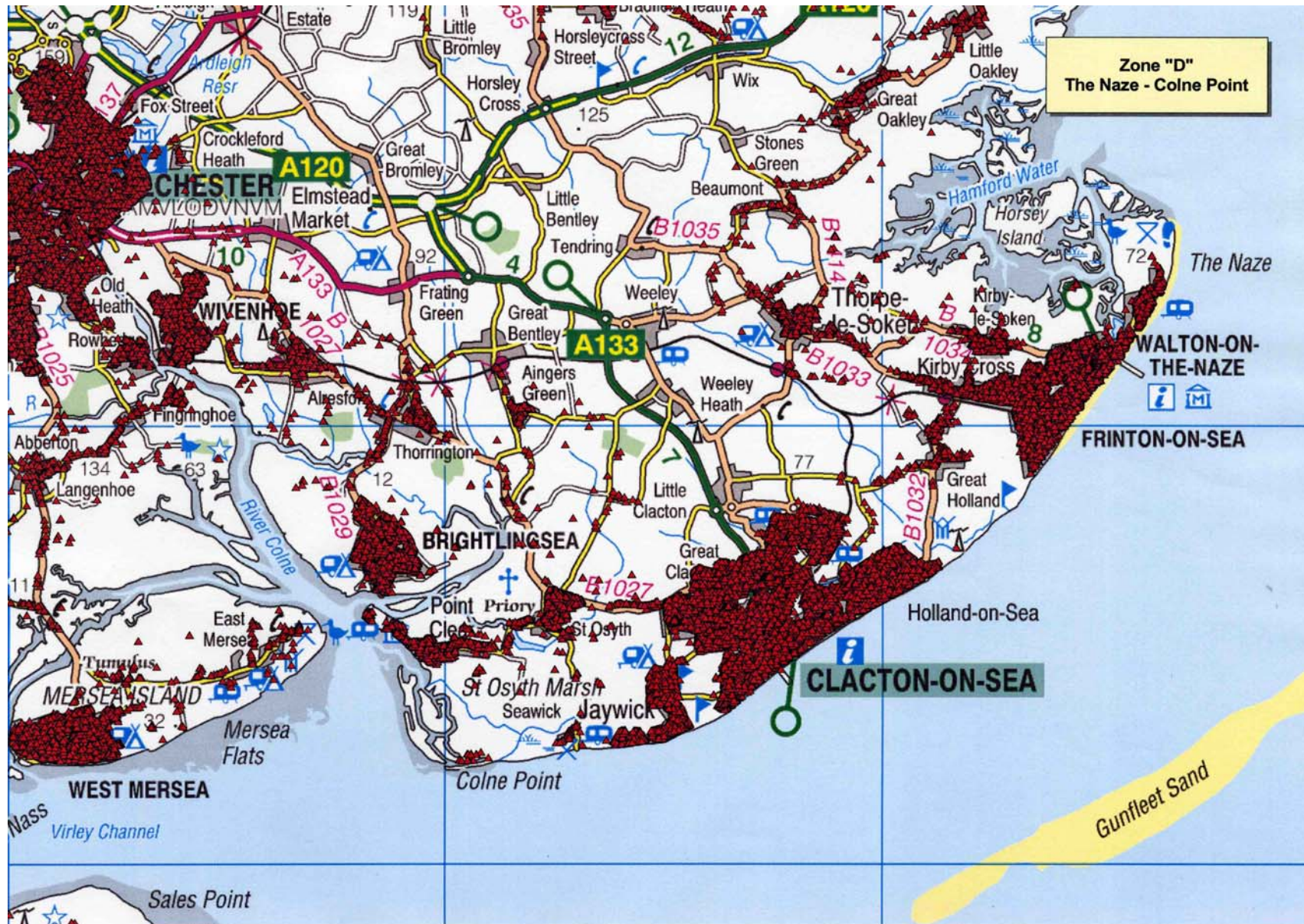
Nature reserve at Colne Point.

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

The principal resorts of Walton, Frinton, Holland, Clacton and Jaywick have designated Bathing Waters in the safe, shallow sea meeting high water quality standards as a result of substantial sewerage and sewage treatment investment. Holiday recreation and retirement are the main planks of the local economy reliant on the quality of the beaches. Skiing, jet-skiing, power boating and sailing together with some angling from boats, shore and piers are also significant. There is a substantial population resident in these resorts close to the seafront, many of whom are elderly.

There is good access to most beaches and the District Council Emergency Plans incorporate arrangements for oil removal and initial marshalling, storage and removal.



14.7 ESSEX ESTUARIES (ZONE E) COLNE POINT TO FOULNESS POINT

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: Bulk cargo handling for import and export occur at Fingringhoe, Brightlingsea and Wallasea Island quays by means of small, often elderly, vessels. Some fuel and chemicals in solid and liquid state and waste materials are involved as well as innocuous timber, rock and aggregates. Mixed light industrial development exists in the towns and surface water run-off drains from these to the estuaries directly and via tributary streams. These present a moderate to low local pollution hazard. Coastal shipping in and out of the Thames, Channel and continental ports poses the most serious hazard which is nevertheless of infrequent occurrence.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Approximately 50 inshore fishing vessels are based at ports in this area. The main concentration of fishing vessels is at West Mersea. Fishing vessels also operate from moorings and the quayside in the various estuaries at Wivenhoe, Brightlingsea, Bradwell, Maldon, Burnham-on-Crouch, Rochford, Gt. Wakering and Barling. This is a sensitive fisheries area but at less high risk than the Stour/Orwell area.

'Summer' (Apr - Oct) fisheries for sole, cockles, rays, dogfish, bass, mullet and eels.

'Winter' fisheries for cockles, cod, rays, herring and sprats. This includes the noteworthy Thames herring drift net fishery which has Marine Stewardship Council accreditation and which includes the sensitive spawning area at the Eagle Bank.

Fisheries for herring, sprat, and sole can be very close inshore. Bass, mullet, eel and sole fisheries occur in the rivers.

There are significant commercial bivalve shellfisheries in this area, which considerably raises the sensitivity of the area. These include the extensive Thames Estuary commercial cockle beds (eg Maplin and Buxey Sands). There are concentrations of Native and Pacific Oysters, mussels and cockles in the Blackwater area, at Tollesbury and West Mersea and in the rivers Colne, Crouch and Roach.

Wide variety of fishing methods depending on season and target species – trawling, netting, beam trawling, drift netting, mid-water trawling, cockle suction dredging.

OUTLINE DESCRIPTION OF WILDLIFE AND HABITATS

(NB this list is not intended to be exhaustive)

Character/Substrate

Extensive muddy estuaries and open coast; complex intertidal creek systems with islands; sandier features at the mouths; improved and unimproved grasslands behind seawalls; sandy beaches locally; eroding soft cliffs;

Designations

Colne Estuary SSS/SPA/NNR
Blackwater Estuary SSSI/SPA/NNR
Upper Colne Marshes SSSI
Roman River SSSI
Dengie SSSI/NNR
Crouch and Roach Estuaries SSSI/SPA
The Cliff, Burnham-on-Crouch SSSI
Essex Estuaries cSAC

Key Sensitivities

The entire zone is cSAC for its estuarine habitats and features and SPA for its wintering birds. Wintering wildfowl (including brent geese, ducks and waders) which make use of the extensive open water, mudflat, saltmarsh, islands, and grasslands behind the seawall; over-wintering birds of prey; breeding waders and other wildfowl; eelgrass beds; sabellaria reefs; breeding terns; rare plants; rare invertebrates; otters; Several nature reserves across the zone on inter-tidal mud, saltmarsh, islands and grazing marshes behind seawalls.

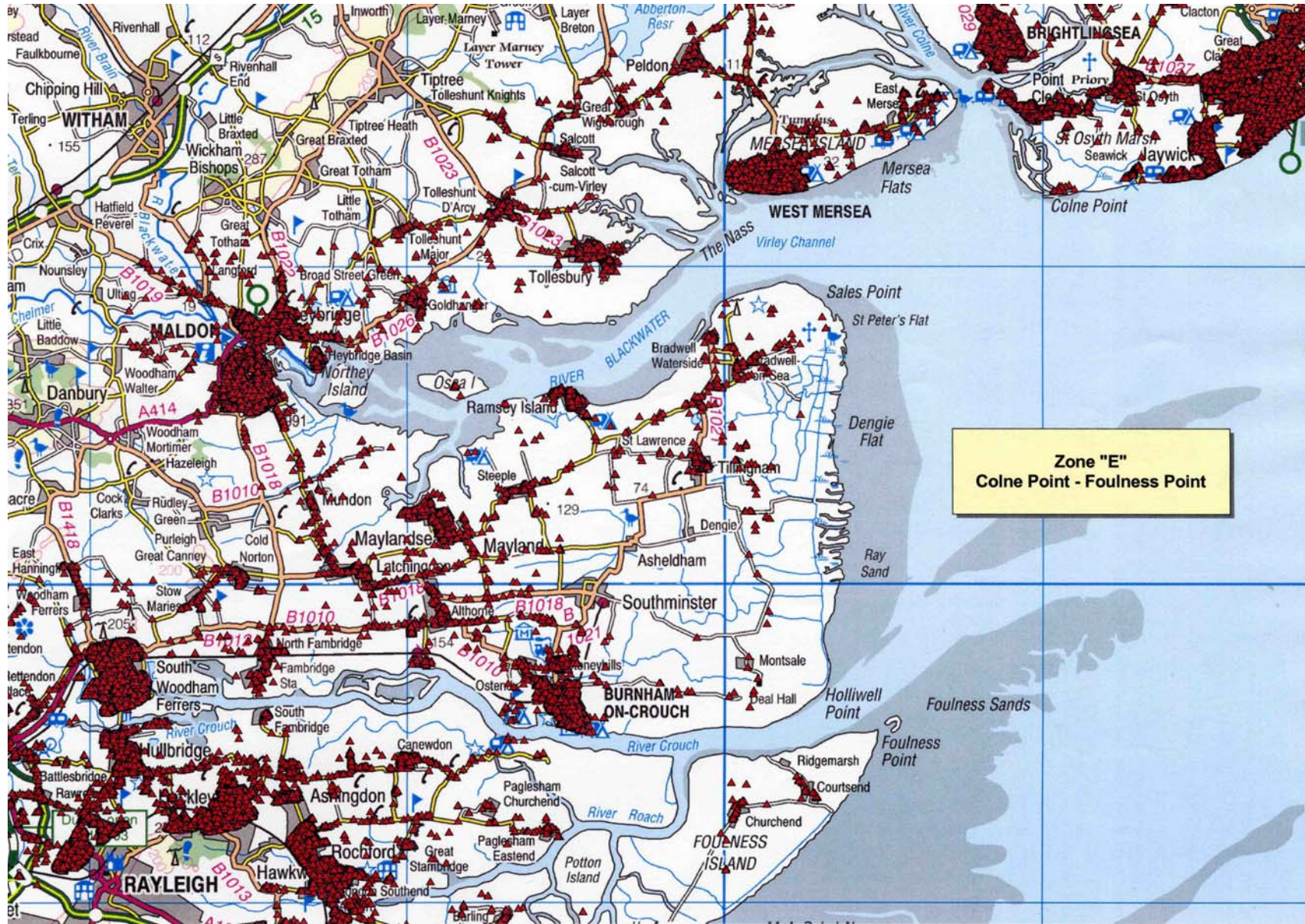
OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

Sailing in most of its forms is widely practised throughout these sheltered waters where there are many clubs, extensive creek and mud-berth moorings, slip-ways and marinas. Boat chartering for angling and cruising is also considerable. There are small areas for water and jet skiing designated off Osea Island and at Brandy Hole. Bathing Waters are designated at Brightlingsea and West Mersea and small scale informal activity occurs quite widely including Point Clear St Osyth, East Mersea, Goldhanger, Millbeach, Maylandsea, Stone, Steeple, Bradwell, Burnham, Hullbridge and South Woodham Ferrers.

The clay embanked and concrete or asphalt revetted sea walls, with broad shallow ditches behind, are a major feature of this area, defending the surrounding low-lying land from tidal flooding. The walls and ditches are themselves significant wildlife habitats. Some defences are gradually being realigned landwards to counteract erosion due the tidal squeeze by rising sea level making existing alignments unsustainable. This enables creeks, mudflats and saltmarsh to be regenerated with ecological benefit.

Human habitation and occupation close to the shoreline occurs on a moderate scale in the towns and villages of Colchester, Wivenhoe, Brightlingsea, West Mersea, Tollesbury, Maldon Maylandsea, Burnham, Hullbridge and Battlesbridge.



14.8 LOWER THAMES (ZONE F) FOULNESS POINT TO GRAVESEND TO GRAIN SPIT

OUTLINE DESCRIPTION OF **HAZARDS FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA**

(NB this list is not intended to be exhaustive)

Hazards: A large volume of shipping plies these waters to jetties on both banks. Proposals to construct a major port for container cargoes on the site of the former Shellhaven site in Thurrock have recently been considered at public enquiry. Should this be built with associated industrial activity it would further increase the shipping and consequent river impacts. BP oil refinery Coryton, adjacent to Shellhaven is a major oil refinery handling oil super tankers. There are numerous terminal operators, berths and jetties in this reach that receive oil in bulk for their operations (as listed in the Port of London Oil Spill Contingency Plan), with many shipping movements.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Approximately 40 inshore fishing vessels are based at ports in this area. The main concentration of fishing vessels is at Leigh-on-Sea, Southend and Canvey Island. These ports are in the major Thames Shipping route and therefore at quite high risk. Leigh-on-Sea is the main centre for the important Thames cockle fishery.

‘Summer’ (Apr - Oct) fisheries for sole, cockles, rays, bass and eels.

‘Winter’ fisheries for cockles, sprats, herring, rays and cod.

Fisheries for sole, sprat, bass, mullet and eels can extend up river to Coalhouse Point and beyond on occasions. There are also limited fisheries in the river for whitebait and smelts.

There are significant commercial bivalve shellfisheries in this area, which considerably raises the sensitivity of the area. These include the extensive Thames Estuary commercial cockle beds extending out into the Inner Thames Estuary and all the way along the coast from Canvey Island to Foulness Point. There are also concentrations of mussels throughout the area and notably off Southend.

Wide variety of fishing methods depending on season and target species – cockle suction dredging, trawling and mid-water trawling being the main methods. There is significant charter angling activity operating from the Thames for species like bass (summer) and cod (winter).

OUTLINE DESCRIPTION OF WILDLIFE AND HABITATS

(NB this list is not intended to be exhaustive)

Character/Substrate

A complex of large flats of mud, sand and shingle; intertidal creek systems with islands; saltmarsh; sand and shingle beaches; much of the intertidal zone is backed by seawalls with improved and unimproved grazing marsh behind; locally modest cliff formations.

Designations

Crouch and Roach Estuaries SSSI/SPA
Essex Estuaries cSAC
Foulness SSSI/SPA
Benfleet and Southend Marshes SSSI/SPA
Holehaven Creek SSSI
Mucking Flats and Marshes SSSI
South Thames Estuary and Marshes SSSI
Thames Estuary and Marshes SPA

Key Sensitivities

Virtually all the intertidal in this zone is SPA for its wintering wildfowl; Maplin Sands north of Shoebury Ness is cSAC for its estuarial features.

Wintering wildfowl (including brent geese, ducks and waders) which make use of the extensive open water, mudflat, saltmarsh, islands, and grasslands behind the seawall; over-wintering birds of prey; breeding waders and other wildfowl; eelgrass beds; breeding terns.

Nature reserves at Leigh and Cliffe.

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

There are a total of seven designated Bathing Waters on sandy beaches between Shoeburyness and Leigh, with Canvey Island soon to be designated.

Shoeburyness and Southend have a total of four designated Bathing Water sandy beaches and there is recreational bathing also between Leigh Beck and Thorney Bay at Canvey Island and at Allhalows. Recreational sailing is a major feature of these resort locations and in the Benfleet and Holehaven creeks. Mud berths and anchorages together with numerous slipway launching points provide access to the estuary. The long pier at Southend is another attraction supporting angling and visitors.

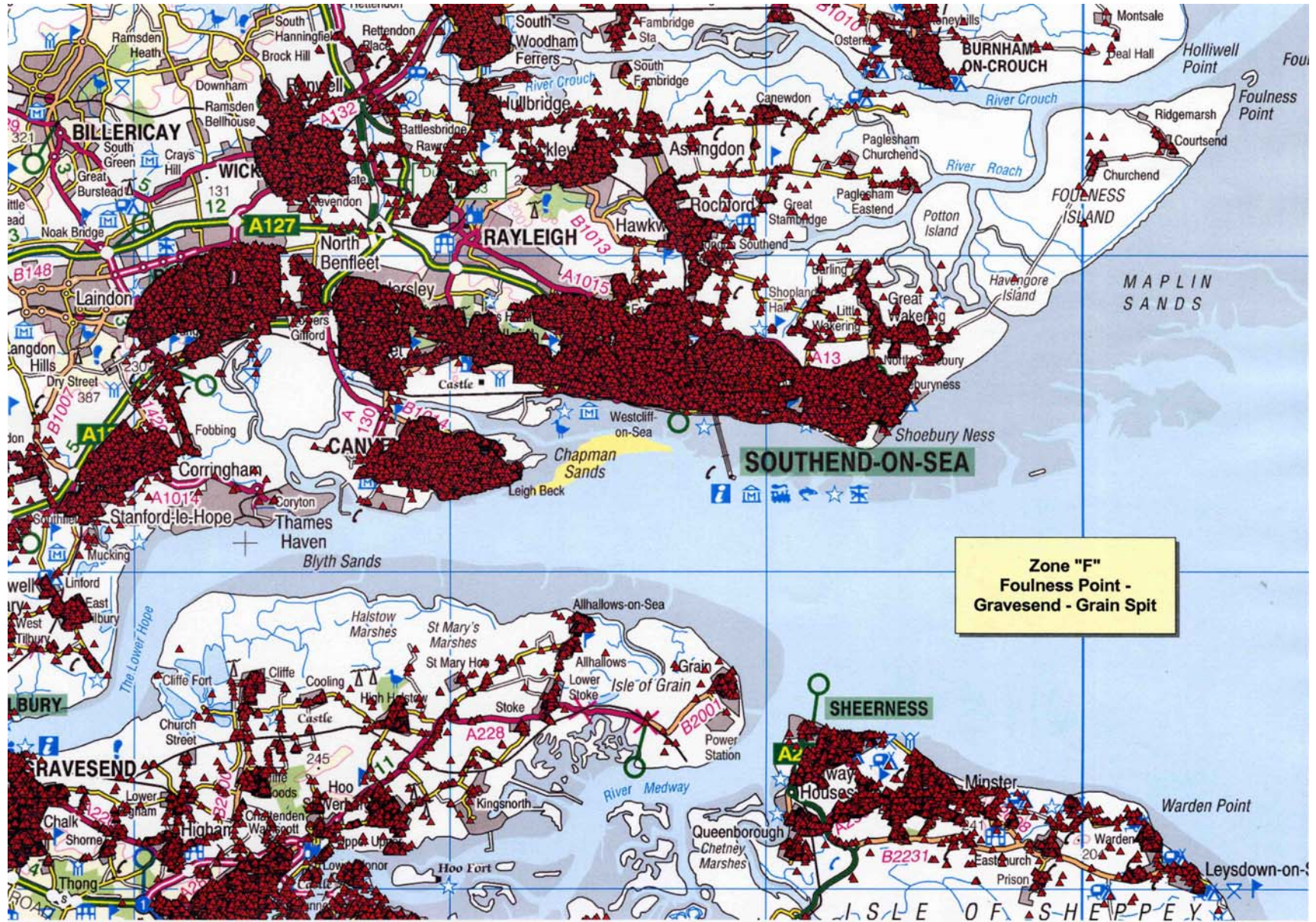
Industrial activity is significant with refineries at Coryton and Isle of Grain where there is also a Power Station, oil and chemical storage on Canvey and at Grain and a coal powered Power Station at West Tilbury just east of the Tilbury Docks which

still handles a large volume of mixed cargo vessels and has a cruise terminal. Military firing ranges still operate at Maplin Yantlet Marshes and restrict shoreline access. Two large waste landfill and raising sites remain in operation, at Pitsea and Mucking; the latter mainly receiving containerised municipal waste via barges from the Wandsworth Transfer Depot.

There are several other stretches of shoreline where land has been raised and now forms the flood defence. The Environment Agency also has barriers or barrages to exclude tidal floodwater from Benfleet, Holehaven and Mucking Creeks and from Tilbury Dock. Mineral winning continues at East Tilbury, Mucking and Cliffe for sand and gravel; with marine transport at the latter.

Southend, South Benfleet, Canvey, Tilbury and Gravesend all have large populations residing close to the estuary shoreline.

There are numerous cooling water intakes along this reach that take water from the river.



14.9 LOWER THAMES (ZONE G) GRAVESEND TO THE QE II BRIDGE

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

Hazards: A large volume of shipping plies these waters to jetties on both banks. Proposals to construct a major port for container cargoes on the site of the former Shellhaven site in Thurrock have recently been considered at public enquiry. Should this be built with associated industrial activity it would further increase the shipping and consequent river impacts. BP oil refinery Coryton, adjacent to Shellhaven is a major oil refinery handling oil super tankers. There are numerous terminal operators, berths and jetties in this reach that receive oil in bulk for their operations (as listed in the Port of London Oil Spill Contingency Plan), with many shipping movements.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES**

(NB this list is not intended to be exhaustive)

Very few commercial inshore vessels operate upriver from Gravesend. The majority of fishing vessel activity is down-river from Coalhouse Point. This area is subject to considerable commercial fishing activity and therefore quite high risk.

The area is an important nursery/spawning ground for a number of commercial fish species including sole.

Fisheries for bass, mullet and eels.

Limited fishing vessel activity but some limited gill and fyke netting. There is a considerable amount of shoreside rod and line fishing.

OUTLINE DESCRIPTION OF **WILDLIFE AND HABITATS**

(NB this list is not intended to be exhaustive)

Character/Substrate

A large tidal river mostly contained within heavily defended flood walls, with extensive industrial, commercial and residential development behind; the channel itself is characterised by marginal exposures of mud and sandy beaches;

Designations

Inner Thames Marshes SSSI
West Thurrock Lagoon and Marshes SSSI

Key Sensitivities

No international designations on intertidal areas in this zone.

Significant numbers of wintering wildfowl use the river and exposed intertidal areas, as well as occasional grassland areas behind the sea wall

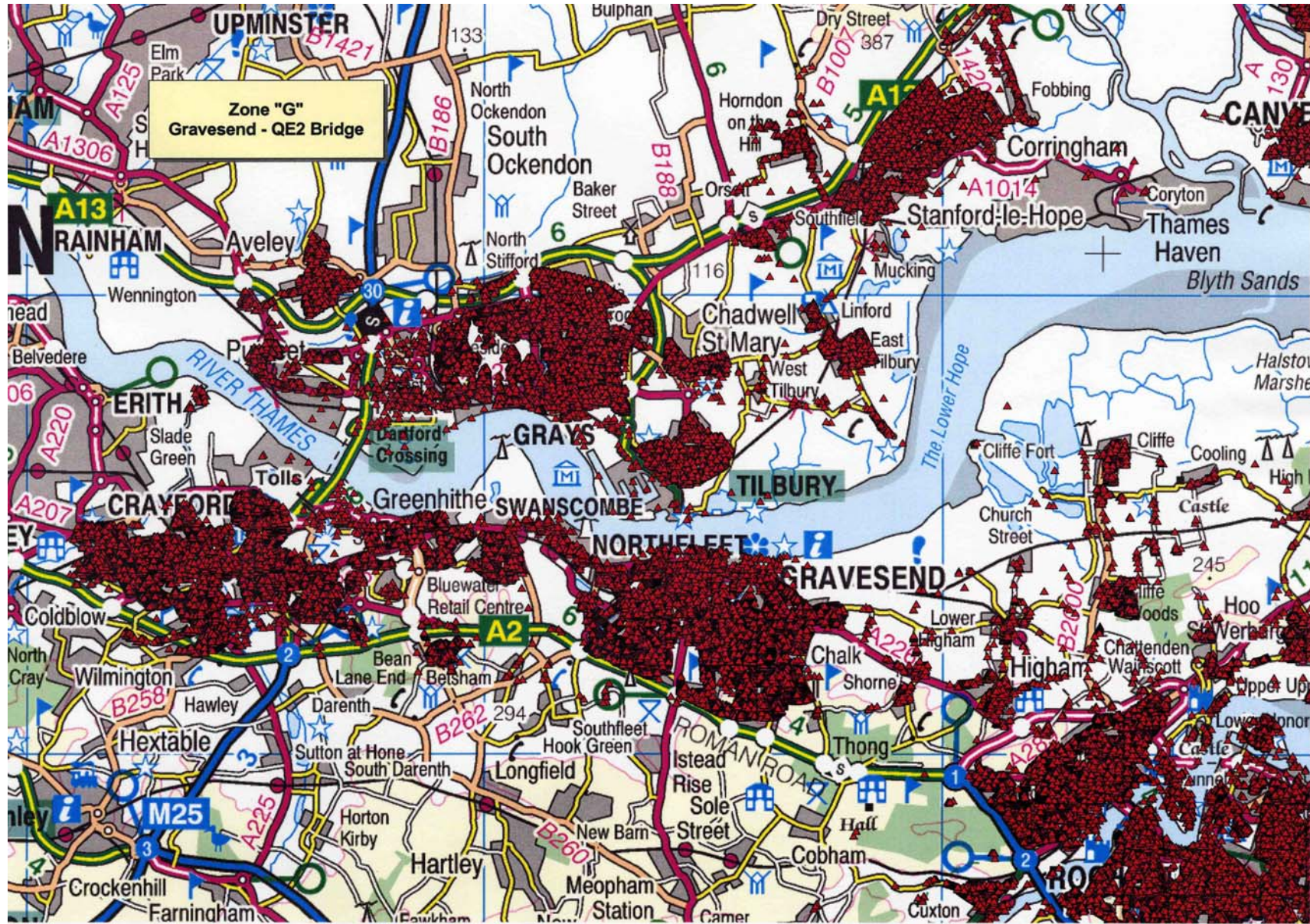
Nature reserve at Rainham Marshes.

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY

(NB this list is not intended to be exhaustive)

There are numerous cooling water intakes along this reach that take water from the river.

(See Zone F)



14.10 MEDWAY COAST (ZONE H) GRAIN SPIT TO WHITSTABLE

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: A large volume of shipping uses the estuarial waters for the area Grain Spit to Whitstable. Two berths operate for the handling of oil and oil products in the Medway Estuary. In addition, is bulk handling for the import and exportations at Thames Port – Isle of Grain, Sheerness Docks – Isle of Sheppey, Ridham Dock – Iwade, Chatham Docks, Rochester, Strood and Whitstable Harbour.

There are concentrations of mixed industry in the area. A large percentage of the UK Paper Industry is located upstream of the Medway Towns and down stream of Sittingbourne. There is considerable risk to the upper reaches of the Medway estuary from land based spills.

The US Montgomery lies on the sea bed 1.5 miles to the north of Sheerness, at the entrance to the Medway Estuary. At low tide the masts are exposed. It is estimated that between 1500 and 3000 tonnes of un-recovered explosives remain in the ship. The Maritime and Coastguard Agency (Receiver of Wreck) is responsible for the wreck. Should it explode it is unknown what effect it would have on the surrounding area.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

Approximately 30 inshore fishing vessels are based at ports in this area. The main concentrations of fishing vessels are at Queenborough and Whitstable. Vessels are also based in the river Medway. The area comprises the Medway and Swale estuaries and the ports at Isle of Grain and Sheerness. This creates a high sensitivity and high risk area.

‘Summer’ (Apr - Oct) fisheries for sole, bass, mullet, cockles, oysters, whelks, crabs, lobsters and eels.

‘Winter’ fisheries for bass, herring, rays, shrimp and oysters.

Fisheries for bass, mullet, oysters and eels in the Medway and Swale.

There are significant commercial bivalve shellfisheries in this area, which considerably raises the sensitivity of the location. These include the extensive Thames Estuary commercial cockle beds extending out into the Inner Thames Estuary. There are also concentrations of mussels, Native and Pacific oysters in the estuaries and at Whitstable.

Wide variety of fishing methods depending on season and target species – trawling, cockle suction dredging, netting and potting.

OUTLINE DESCRIPTION OF WILDLIFE AND HABITATS FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Character/Substrate

Estuarial mudflat and saltmarsh; grazing marsh behind the seawalls; complex tidal creeks with islands and brackish dykes and fleets across grazing marsh areas; shell and shell sand beaches; actively eroding cliffs.

Designations

Medway Estuary and Marshes SSSI/SPA
Sheppey Cliffs and Foreshore SSSI
The Swale SSSI/SPA/NNR
Elmley NNR
South Thames Estuary and Marshes SSSI
Thames Estuary and Marshes SPA

Key Sensitivities

The Swale and Medway estuaries are designated SPAs for wintering wildfowl.

Wintering and passage wildfowl (geese, ducks and waders) on the intertidal habitats and grazing marsh behind the seawalls; invertebrate and scarce plant assemblages; breeding birds including terns; saltmarsh; gulleries;

Nature reserves in the Swale at Elmley and the Isle of Harty

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

At low tide there are large amounts of exposed mudflats and salt marshes in the Medway Estuary and the Swale. There are a number of tidal creeks with islands in the area. The low lying marsh areas that border the Medway and Swale are protected by mud embankments and are designated SSSI's and SPA's.

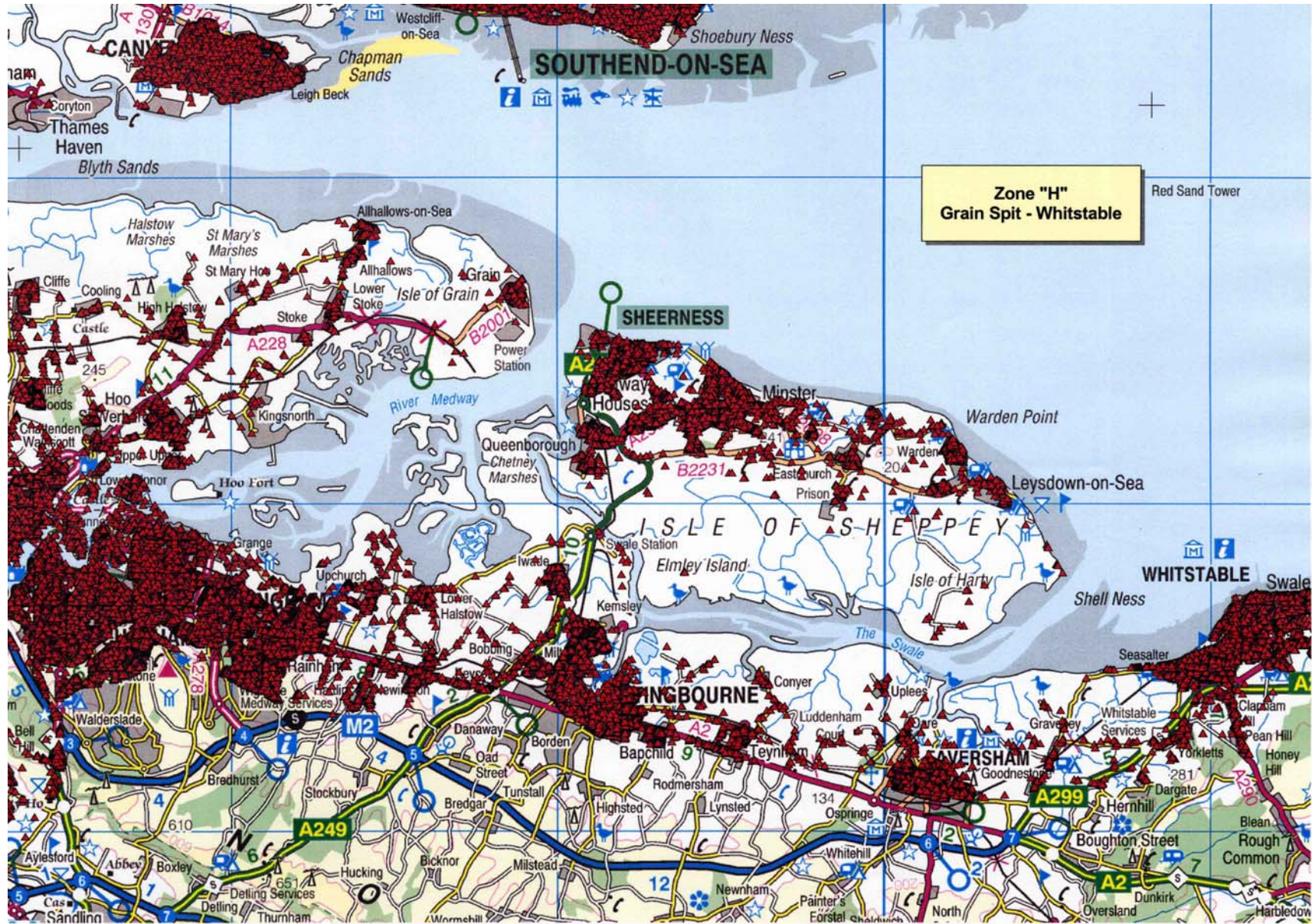
The Isle of Sheppey is bordered by the Swale on the south and the North Sea/Thames Estuary on the northern side. The eastern end of the Swale is a designated shell fish water. There are designated bathing beaches at Sheerness, Leysdown-on-Sea and Whitstable.

The population is mainly concentrated in urban areas – Rochester, Chatham, Gillingham, Sittingbourne, Faversham, Whitstable and on Sheerness on the Isle of Sheppey. During the summer the population on the island rises by several thousand who holiday in the caravan parks.

The Isle of Grain has a power station and an oil refinery on the banks of the estuary. There are ports at Thames Port - Isle of Grain, Sheerness Docks – Isle of Sheppey, Ridham Dock – Iwade, Chatham Docks, Rochester, Strood and Whitstable Harbour.

There are considerable concentrations of mixed industry in the area. A large percentage of the UK paper industry is located upstream of the Medway Towns and Down Stream of Sittingbourne.

Both estuaries are used for sailing and there are a number of marinas and boatyards along the creeks.



14.11 NORTH KENT COAST (ZONE I) WHITSTABLE TO RAMSGATE

OUTLINE DESCRIPTION OF **HAZARDS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

Hazards: Coastal Shipping in and out of the Thames and Channel and continental ports poses the most serious hazard in this area.

Ramsgate harbour runs two commercial ferries. Commercial fishing is run from both Ramsgate and Whitstable.

OUTLINE DESCRIPTION OF THE PRINCIPAL **COMMERCIAL FISHERIES** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

Approximately 35 inshore fishing vessels are based in this area. The main concentrations are at Herne Bay, Margate and Ramsgate.

'Summer' (Apr - Oct) fisheries for sole, rays, bass, mullet, crab and lobster.

'Winter' fisheries for cod, rays, herring, sprat and occasionally mackerel.

There are significant commercial bivalve shellfisheries in this area, which raises the sensitivity of the location. These include the extensive Thames Estuary commercial cockle beds extending along the North Kent coast. In addition, there are widespread concentrations of mussels and also Pacific and Native oysters in areas such as Pollard and Kentish Flats. There are cockle beds in the river Stour (Kent) just to the south of Ramsgate.

Wide variety of fishing methods depending on season and target species – netting, potting and trawling.

OUTLINE DESCRIPTION OF **WILDLIFE AND HABITATS** FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

Character/Substrate

Mud, sand and shingle beaches; rocky foreshore; chalk reefs; coastal lagoons; stabilised clay cliffs; unstable clay and chalk cliffs;

Designations

Tankerton Slopes SSSI
Thanet Coast SSSI/cSAC
Thanet Coast and Sandwich Bay SPA

Key Sensitivities

Most of the coastal strip is SPA for wintering birds, and from Plumpudding Island east is also cSAC for its chalk reefs and caves and their associated marine wildlife.

Wintering birds (waders); cliff top grassland; rare terrestrial plants; rare marine plants and plant assemblages (especially algae and lichens); vegetated cliffs; rare invertebrates;

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

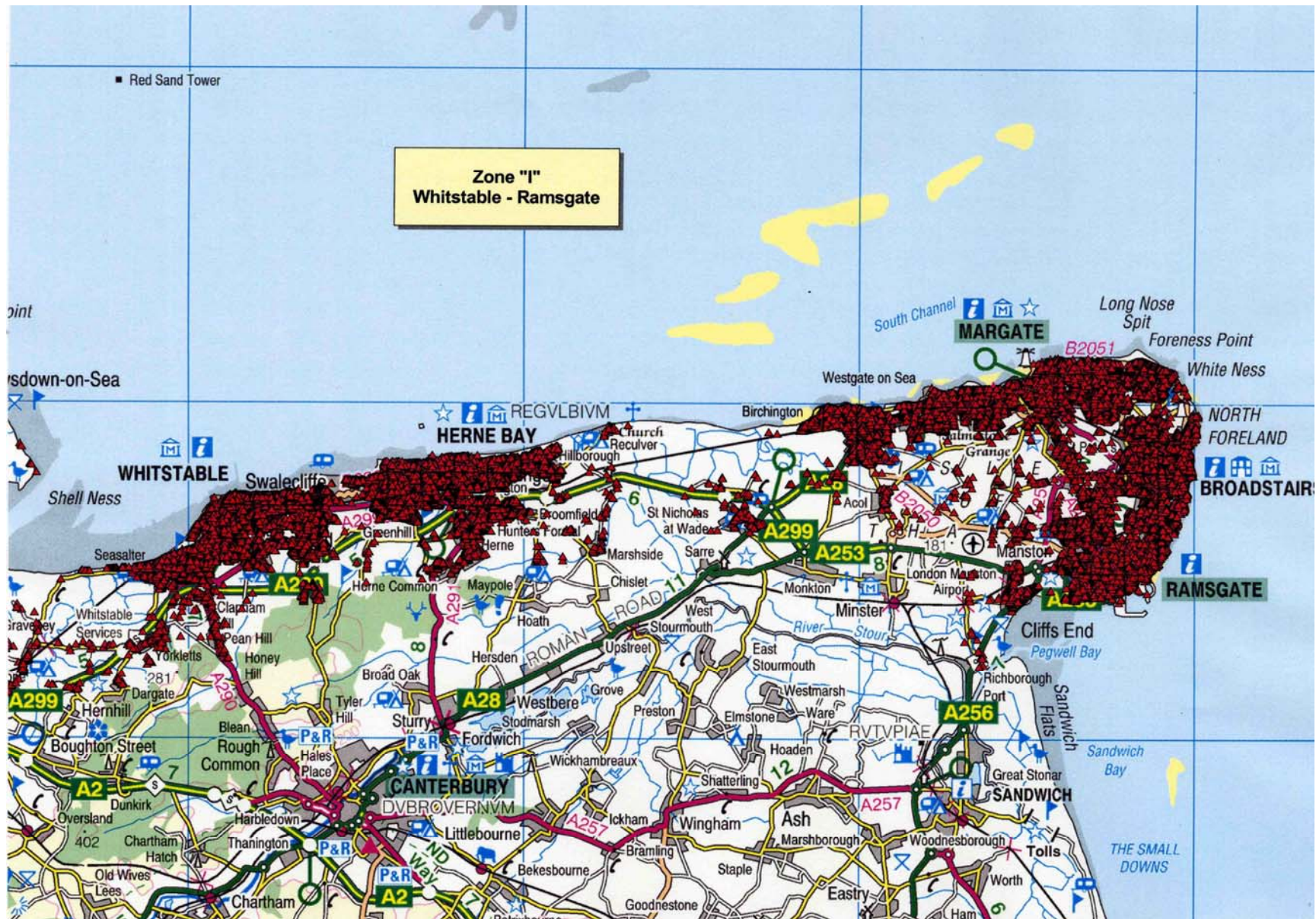
The Coastline is entirely sandy beach or cliff with no river confluence's which would be impacted by a marine oil spill. Whitstable Harbour to Ramsgate Port have a total of 14 designated bathing water sandy beaches.

The population is concentrated along the coastline from Whitstable to Beltinge and Birchington to Ramsgate. Seasonal fluctuations are probably along the coast. Margate beaches are popular in the summer.

Sailing and other water sports are popular from Whitstable to Margate. There are numerous slipway-launching points for Jet Ski's along this coast. Beach angling is practised along the entire stretch of coast.

Whitstable receives and moves bulk aggregate and Ramsgate Harbour run two commercial Ferries. Commercial fishing is run from both harbours.

Manston Airport based near Ramsgate receives mainly worldwide freight traffic and is anticipating expanding in the future. The flight paths can be over Herne Bay and Ramsgate Harbour.



14.12 OFFSHORE (ZONE J) OUTER THAMES AND APPROACHES (Beyond approximate 20M depth main contour)

OUTLINE DESCRIPTION OF HAZARDS FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA

(NB this list is not intended to be exhaustive)

There is a large volume of shipping activity in the Outer Thames and its Approaches. Such shipping includes large container vessels, tankers, passenger ferries and aggregate dredgers, then ranging down to small fishing vessels and leisure craft. Shipping activity becomes concentrated towards the southern part of GTE-SEG's area as vessels enter and leave the Dover Straits traffic separate scheme. Apart from shipping transiting north and south through the area, traffic also crosses the area to enter London, Harwich, Felixstowe and continental ports such as Zeebrugge and Rotterdam. The wider offshore area contains numerous shallow waters and drying sandbanks with navigable channels in between.

OUTLINE DESCRIPTION OF THE PRINCIPAL COMMERCIAL FISHERIES FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

This area is subject to extensive shipping and fishing activity. Trawling activity takes place in the 'deeps' (channels) and along the edge of sand banks (eg Long Sand, Sunk Sand, Kentish Knock, etc). Netting takes place over the sand banks. Vessels operating from Kent and Essex ports work these areas. In addition, outside 6 miles from low water baselines, foreign fishing vessels can also be encountered such as Belgian beam trawlers and French stern trawlers.

'Summer' (April to October) fisheries for sole, rays, plaice, bass, and lobster and a mixed range of demersal species.

'Winter' fisheries for cod, rays, herring, sprat and mixed demersal species.

There are highly significant commercial cockle beds in the Thames.

Wide variety of fishing methods depending on season and target species – beam trawling, trawling, netting, drift netting and mid-water trawling are the main methods.

OUTLINE DESCRIPTION OF WILDLIFE AND HABITATS FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NB this list is not intended to be exhaustive)

Character/Substrate

A complex of sand banks and navigable channels

Designations

Essex Estuaries cSAC

Key Sensitivities

Large numbers of over-wintering sea birds especially divers and ducks; seals;

OUTLINE DESCRIPTION OF PEOPLE, INDUSTRY AND GEOGRAPHY FOR THIS POLLUTION SENSITIVITY AND RISK ASSESSMENT AREA.

(NOT APPLICABLE)



16 Standing Environment Group for the Greater Thames Estuary GTE-SEG) Reporting forms

Form reference	Title	Purpose
Reporting		
GTE 001	Pollution Report (POLREP)	Initial internal advice about the pollution incident to be used by staff receiving initial report about a pollution incident).
GTE 002	Situation Report (SITREP)	Current internal advice and details about the pollution incident.
Communications		
GTE 003	Contact Directory	Contact list for all TE-SEG members involved in the response. Should contain all internal and external contact points (including emergency service numbers as necessary eg ambulance, hospitals etc)
Status		
GTE 004	Incident Running Sheet	Documents all key actions and communications during the incident. To be used by <u>ALL</u> staff deployed in the incident.
GTE 005	Incident Details	Documents the status of the incident. Can be used as an attachment to SITREP's and as a status board within any operations room.
GTE 006	Resource Risk	Documents the resources at risk and their respective priority for clean-up and protection. Can be used as an attachment to SITREP's or as a status board.
GTE 007	Shoreline Status	Documents clean-up activities on key shorelines. Can be used as an attachment to SITREP's and as a status board.

GTE 001	POLLUTION REPORT (POLREP)
----------------	--------------------------------------

Date/Time of Report				Ref. No.	
Date/Time of Incident					
Location of Incident					
	Latitude		Longitude		
Original Report Source	Name				
	Position				
	Contact	Address			
		Telephone			
		Fax			
Mobile					
Nature of the Incident & Spill Source					
Cause of Discharge					
Status of Discharge					
Oil Type or Description					
Identity & Position of Adjacent Vessels (if source unknown)					
Nature & Extent of Pollution					
Rate & Direction of Movement					

CONTINUES ON PAGE 2

POLREP PAGE 2

Weather/ Sea/ Tide Conditions			
Combat Agency			
Initial Response Actions			
Samples Taken? Yes/No			
Images Taken? Yes/No	Photographs: Yes/No	Video: Yes/No	
Additional Information			
POLREP Prepared By	Name		
	Agency		
	Role		
	Contact	Telephone	
		Fax	
		Mobile	
Attachments ?	No of Pages Attached:		

GTE 002	SITUATION REPORT (SITREP)
----------------	----------------------------------

			Ref. No.	
Priority	Urgent <input type="checkbox"/>	Immediate <input type="checkbox"/>	Standard <input type="checkbox"/>	
Final SITREP?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Next SITREP on:	
Date/Time				
POLREP Reference				
Incident	Name			
	Latitude		Longitude	
Brief Description of Incident and Impact				
Overall Weather conditions				
Summary of Response Actions to Date				
Current Strategies				

CONTINUES ON PAGE 2

SITREP PAGE 2

Summary of Resources Available/Deployed			
Expected Developments			
Other information			
SITREP Prepared By	Name		
	Agency		
	Role		
	Contact	Telephone	
		Fax	
		Mobile	
Attachments Yes/No	No of Pages Attached:		

GTE 005**INCIDENT DETAILS**

Incident		Ref. No.	
Date		Time	
Name of Vessel(s)/ Facility			
Location of Vessel/Facility	Latitude		Longitude
	Geographic		
Volume of Oil Spilled	Total		
	Est. Weathering		
	On Shore		
	At Sea		
Volume of Oil Remaining (at risk of being spilled)			
Spill Source Control Status	Controlled <input type="checkbox"/> Continuing <input type="checkbox"/> Other _____		
Shorelines impacted	Location/Beach Name/Sector/Segment	Length Oiled (km)	
Other Details			

GTE 007	RESPONSE AND CLEAN-UP GUIDANCE
----------------	---------------------------------------

To document and advise the relevant response centres on appropriate actions

INCIDENT NAME:			
DATE/TIME ISSUED:			
LOCATION:			
SECTOR ID:		SEGMENT ID:	
GUIDANCE CURRENT FOR:			
PREPARED AND ISSUED BY:		POSITION	

The following guidance is issued by GTE-SEG to minimise the risk to the natural environment from clean-up operations.

The Guidance will be changed as necessary in response to changing conditions and as the oil weathers

GTE 008	SHORELINE STATUS
----------------	-------------------------

This form is used to record the status of shoreline clean-up operations. Should be used as a Status Board.

Spill Incident		Ref. No.	
Division/Sector	Date:	Time	

Location		Assessment		Cleanup	
Sector	Segment	Date of Survey	Current (Last) Oiling Status	Current cleanup Status/ Activities	Date of Last Cleanup

CONTINUED OVERPAGE

CONTINUED

Location		Assessment		Cleanup	
Sector	Segment	Date of Survey	Current (Last) Oiling Status	Current cleanup Status/ Activities	Date of Last Cleanup

18 GLOSSARY

A

A&E Accident and Emergency

B

C

CC's County Council's

CEFAS Centre for Environment, Fisheries and Agriculture
Science

COSHH Control of Substances Hazardous to Health

D

DEFRA Department of Environment Food and Rural Affairs

E

EA Environment Agency

EG Environment Group

EHO Environmental Health Officer

ELO Environmental Liaison Officer

EN English Nature

EPU Emergency Planning Unit

F

FEPA Food and Environmental Protection Act

FSA Food Standards Agency

G

GP General Practitioner

GTE-SEG Greater Thames Estuary Standing Environment Group

H

HPA Health Protection Agency

I

J

JNCC Joint Nature Conservancy Council

K

L

M

MCA	Maritime and Coastguard Agency
MEB	Marine Environment Branch (DEFRA)
MRTC	Marine Response Centre

N

NCP	National Contingency Plan
NHS	National Health Service
NNR	National Nature Reserves

O

OPRC	Oil Pollution Preparedness Response and Co-operation
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P

POLREP	Pollution Report
PPE	Personal Protective Equipment

Q

QE2	Queen Elizabeth II (Bridge)
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R

RSPCA	Royal Society for the Prevention of Cruelty to Animals
RSPB	Royal Society for the Protection of Birds

S

SAC	Special Areas of Conservation
SCAT	Shoreline Cleanup Assessment Team
SCU	Salvage Control Unit
SEG	Standing Environment Group
SEG-GTE	Standing Environment Group – Greater Thames Estuary
SFI	Sea Fisheries Inspectorate
SITREP	Situation Report
SPA	Special Protection Area
SOSREP	Secretary of States' Representative
SSSI	Site of Special Scientific Interest
SRC	Shoreline Response Centre
STOp	MCA Scientific Technical and Operational Note

T

U

V

W

X

Y

Z

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