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PROJECT Shoreline Management Plans
 for Kent Study Area

TITLE Figure 1



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Legend

-  Medway Estuary and Swale SMP
-  Isle of Grain to South Foreland SMP
-  Flood Risk Area

Date: 1st August 2008
Our ref: Medway Swale SMP AA
Your ref: IMSO000703/NE/001



Mark Smith
Project Manager
Guildhouse House,
Chatsworth Rd, Worthing
West Sussex
BN11 1LD

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London Square
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COPY

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F

Dear Mark

**MEDWAY ESTUARY AND SWALE SHORELINE MANAGEMENT PLAN
HABITATS REGULATIONS ASSESSMENT: DETERMINATION OF LATEST
DAMAGING ALTERNATIVE**

**Medway Estuary and Marshes Special Protection Area (SPA) and
Ramsar site
The Swale Estuary and Marshes Special Protection Area (SPA) and
Ramsar site**

In response to your request for our formal advice on the least damaging alternative for this Shoreline Management Plan (SMP), we advise the following:

- 1) We have previously agreed that the SMP constitutes an Adverse Effect on the integrity of the sites listed above as we cannot guarantee the 'Indicative Extents' of Managed Realignment policies will not damage grazing marsh and standing water features.
- 2) We agree with your identification of less damaging alternatives.
- 3) Based on the best available information as recently produced by the Greater Thames Coastal Habitat Management Plan (CHaMP), Hold the Line is now considered a damaging policy within all epochs due to the plan's predicted loss of intertidal habitat through coastal squeeze. We do not consider Hold the Line to be the least damaging alternative for any epoch of the plan based on this information.
- 4) Having reviewed the SMP Policies within and outside the designated areas plus their respective timing, we confirm that the least damaging alternative policy is Managed Realignment with a Controlled Extent (to minimise ecological impact) for all Managed Realignment policies affecting the designated sites.

- 5) The Greater Thames CHaMP predicts a greater loss of intertidal habitat through coastal squeeze in the first epoch than can be managed by realignments outside the designated areas. We consider it necessary to retain Managed Realignment policies affecting the designated sites within the first and later epochs to manage this habitat loss. In the best interests of managing these estuaries in line with the Habitats Regulations and other SMP drivers, we do not consider it necessary or beneficial to alter the epochs to which the SMP policies are currently assigned.

Based on this advice and, assuming the SMP passes the tests of Imperative Reasons of Overriding Public Interest, we recommend that we work together at the earliest opportunity to determine and secure appropriate compensation measures.

Yours sincerely



Alan Law
Director SE

Andy Tully
European Wildlife Division
Defra
Temple Quay House
2, The Square
Temple Quay
Bristol
BS1 6EB

Our ref: FRM/K/MES/99/

Your ref:

Date: 11 August 2008

Dear Mr Tully

Medway estuary and Swale Shoreline Management Plan (SMP) – notification of Environment Agency intention to authorise the plan

We have led the production of the Medway estuary and Swale Shoreline Management Plan (SMP), on behalf of the South East Coastal Group. The conservation objectives for the Natura 2000 sites in the plan area have been a key factor in the development of the SMP policies.

The SMP has been assessed under Regulations 48 and 49 of the Habitats Regulations. The conclusion of the appropriate assessment is that at this strategic plan level, it is not possible to determine that there will not be an adverse effect on the integrity of the Natura 2000 sites.

Therefore, please find attached an Appendix 20 containing information to the Secretary of State according to Regulations 49(5) and 51(2) of the Habitats Regulations. Please provide direction as to whether we can authorise this SMP within 21 days from the date of this letter.

We have undertaken the Habitats Regulations assessment work in partnership with Natural England, who are also a member of the South East Coastal Group. If you have any questions about this assessment, please contact me on the details listed below, or Dr Chris McMullon from Natural England on 07968 843514 or chris.mcmullon@naturalengland.org.uk

Yours sincerely

Philippa Harrison
Project Executive

Environment Agency, Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD
Telephone: 01903 832217
Email: philippa.harrison@environment-agency.gov.uk

Habitats Directive – Appendix 20

Information to the Secretary of State/National Assembly for Wales according to Regulations 49(5) and 51(2) of the Habitats Regulations

A: Administration details

Date: August 2008

Plan/Project Reference: IMSO 000703

Contact person: Philippa Harrison
(Project Executive)

Address: Environment Agency
Guildbourne House
Chatsworth Road
Worthing
West Sussex
BN11 1LD

Tel: 01903 832217

Fax: 01903 214950

E-mail: philippa.harrison@environment-agency.gov.uk

B: Site details

Name of European sites adversely affected:

- Medway estuary and marshes. This site is a classified Special Protection Area (SPA) and a Ramsar hosting a priority habitat/ species
- The Swale. This site is a classified Special Protection Area (SPA) and a Ramsar hosting a priority habitat/ species

C: Summary of the plan or project having an effect on the sites

This is a Shoreline Management Plan (SMP) for the Medway estuary and Swale in North Kent.

A SMP is a non-statutory, policy document for coastal flood and erosion risk management planning. The main objective of a SMP is to identify sustainable long-term management policies for the coast. The plan enables social, environmental and economic assets effected by coastal flood and erosion to be managed in the best way over the long term.

The SMP has been produced by the South East Coastal Group, according to latest government guidance (Defra, 2006). The shoreline management policies considered are those defined in this guidance: Hold the [defence] Line, Advance the line, Managed Realignment and No Active Intervention.

SMPs are high level, strategic plans. The policies they set are further developed and appraised prior to implementation of any new flood defence and coastal erosion works – this can be through undertaking flood and coastal erosion risk management strategies, informed by technical and environmental studies.

A map of the area that this SMP covers is Annex 1 to this proforma.

Based on the precautionary principle of the Habitats Regulations, we have concluded that this SMP alone and in combination **will have an adverse effect** on the site integrity of the European sites listed in Box B. The conditions attached to this approval to ensure that the least damaging plan is implemented are set out in Box F.

This SMP will be approved by the Environment Agency in September 2008.

D: Summary of the assessment of the negative effects on the sites

This SMP recommends a suite of Managed Realignment policies that have a likely significant effect on the Medway Estuary & Marshes SPA, the Medway Estuary & Marshes Ramsar Site, the Swale SPA, and the Swale Ramsar Site.

At this strategic level of study, we cannot guarantee that these Managed Realignment policies will not have an adverse effect on grazing marsh and standing water habitats within these sites. Based on the precautionary principle of the Habitats Regulations, we have therefore concluded that this SMP alone and in combination **will have an adverse effect** on the site integrity of these sites.

We have determined that displacement of other freshwater features is acceptable modification to the sites or can be mitigated through application of conditions.

Further detail on the appropriate assessment of this SMP is provided as Annex 2 to this document.

E: Modifications or restrictions considered

Possible modifications or restrictions were assessed to mitigate the potential adverse effects of this SMP on the site integrity of the designated sites. The objective of these was to determine the acceptable extent of managed realignment to manage the local and wider Natura 2000 in the most sustainable way into the future. This would be delivered through the application of the following conditions:

1. investigations (ecological survey) to increase understanding of the site conditions necessary to maintain site integrity;
2. informed mitigation and;
3. modification of the realignment extent to cause no adverse effect.

However, we cannot at this stage (without information from steps 1 and 2 above) guarantee that this process will ensure no adverse effect on the grazing marsh and standing water habitats of the designated sites. Therefore, following the precautionary principle, the effects of this SMP cannot be controlled by modifications or restrictions.

F: Alternative Solutions considered

We have identified the following potentially less damaging alternatives:

- a) Hold the Line policies, or
- b) Managed Realignment with a Controlled Extent (to minimise ecological impact)

We have consulted the 'Appropriate Nature Conservation Body' (Natural England) to advise on which of these alternatives is the least damaging. Natural England have advised that alternative b), Managed Realignment with a Controlled Extent (to minimise ecological impact), is the least damaging alternative.

The letter we have received from Natural England is Annex 3 to this document.

In partnership with Natural England, we have identified the following conditions to be applied to ensure that the least damaging alternative is determined:

1. investigations (ecological survey) to increase understanding of the site conditions necessary to maintain site integrity;
2. informed mitigation and;
3. modification of the realignment extent to best manage site integrity and cause minimum adverse effect.

Option b) is the the option that this SMP adopts (see also Box C). The conditions listed above are part of the SMP (they are included within the Action Plan which sets out how the SMP policies will be implemented)

G: Imperative reasons of Overriding Public Interest

Coastal flooding and erosion in this SMP area poses risks to approximately 2000 residential and commercial properties, two major ports, two major power stations, key infrastructure such as roads and railway lines and agricultural land. With sea level rise and increased coastal storminess, we forecast increased risks of flooding and erosion resulting in increased risk to life and properties. We also forecast loss of intertidal habitat due to sea level rise effects.

This SMP coordinates the management of these risks to ensure that the social, environmental and economic impacts of coastal flooding and erosion are managed in the best way over the long term. Without the plan, coastal engineering in the area may be uncoordinated, ineffective and miss opportunities to manage the coastal environment in the most balanced and positive way.

In partnership with Natural England, we have identified the least damaging alternative to manage this coastline and its designated habitats over the next 100 years.

Therefore, the reasons to carry out this SMP notwithstanding the assessment of adverse effect on site integrity are:

- A need to address a serious risk to human health and public safety (uncontrolled flood and erosion risks to large residential populations);
- Where failure to proceed would have unacceptable social and/or economic consequences (loss of economic infrastructure, commercial property and community areas) through coastal flood and erosion damage;
- Whilst this is a damaging plan, it is the least damaging option for the designated sites (see Box F) and will be helping them to adjust to the impacts of sea level rise. This SMP therefore has beneficial consequences of primary importance for the environment.

H: Compensatory measures

Our conclusion of adverse effect in this assessment is precautionary. We do not yet know that there will definitely be an effect, nor the scale of any effect. This will be informed by the study required under the condition of implementation stated in Box F.

However, we have secured the following programme of habitat compensation within the Environment Agency Southern Regional Habitat Creation Programme:

Epoch 1 - 0-20 years: 270 -370 Ha Grazing Marsh

Epoch 2 - 20-50 years: 600 Ha Grazing Marsh

Epoch 3 - 50-100 years: 860 Ha Grazing Marsh

Habitat Creation programmes are Government's (defra) recommended vehicle for delivering strategic habitat compensation and are funded in advance of engineering works that cause damage. The Southern RHCP is a dedicated, resourced plan for achieving a constant process of delivering compensatory habitat.

In order to comply with the condition of implementation, damaging activities cannot progress until compensation is provided and in a functional state. The extents required will be fully functioning by the end of the epoch to which they relate.

The study referred to above will inform what function these habitats must perform and the exact extent of habitat compensation required. The estimates here for the first 2 epochs are based on the current best available information regarding the damaging effects of Hold the Line policies in this SMP area (the draft Greater Thames Coastal Habitat Management Plan (CHaMP), 2008). The estimate for the third epoch is based on the SMP information on the most sustainable shape of the estuary. Should a greater extent than this be required in epoch 3, this could be compensated for outside of this SMP area.

In line with condition 1 in Box F, study and monitoring will be undertaken and there will be periodic reviews of this SMP (at 5 – 10 year intervals). This will inform the ongoing process of habitat compensation.

I: Supporting Documentation

List of attached technical supporting documents:

Annex 1 - Map of SMP area

Annex 2 - Medway Estuary and Swale SMP Appendix J – Appropriate Assessment

Annex 3 – Natural England letter containing advice on least damaging alternatives

**Habitats Directive (Supporting document for Appendix 12)
 Proforma for Stage 3: Assessing adverse effect on site integrity –
 New permissions**

FORM HR02: PROFORMA FOR STAGE 3 APPROPRIATE ASSESSMENT

PART A: Technical Consideration

1 Table 1 – Permission, plan or project details

Type of permission, plan or project:	Plan: Shoreline Management Plan
Agency reference no:	SOS001/ IMSO000703
National Grid Reference:	TQ900700 (mid point)
Site references:	Thames Estuary & Marshes Special Protection Area/ Ramsar Site Medway Estuary & Marshes Special Protection Area/ Ramsar Site The Swale Special Protection Area/ Ramsar Site Peter's Pit Special Area of Conservation

2 Table 2 - Site details:

Name, Legal Status, and Priority of the European site:	Thames Estuary & Marshes	SPA	
	Medway Estuary & Marshes	SPA	
	The Swale	SPA	
	Peter's Pit	SAC	

3 Table 3 - Features List:

Table deleted: Refer to Medway Estuary and Swale Shoreline Management Plan Appendix J, Appropriate Assessment Version 9, 3rd August 2008

4 Report Content

Refer to Medway Estuary and Swale Shoreline Management Plan Appendix J, Appropriate Assessment Version: 9, 3rd August 2008

Table 4 Appendix 12: Proforma for Stage 3 (Appropriate Assessment Record)

Summarised Conclusions:

Table deleted, the following conclusions are extracted from Medway Estuary and Swale Shoreline Management Plan Appendix J, Appropriate Assessment Version: 9, 3rd August 2008

Peter's Pit SAC

This site was screened out at Stage 2. **The SMP has no likely significant effect on this site.**

Thames Estuary & Marshes SPA/ Ramsar

The SMP policy for Policy Unit E401 will continue to cause coastal squeeze. This will be countered by the TE2100 and Open Coast SMP policy for Managed Realignment in Policy Unit 4d01. **In Combination the SMP will have No Adverse Effect on this site.**

Medway Estuary & Marshes SPA/ Ramsar and The Swale SPA/ Ramsar

Alone and in combination, the *Indicative Extents* of Managed Realignment within the Medway Estuary & Swale SMP would cause **Adverse Effect** to the Medway Estuary and Marshes and The Swale SPA/Ramsar sites, through displacement of Grazing Marsh and Standing Water Habitat. **This assessment therefore progresses to consideration of Alternatives, Imperative Reasons of Overriding Public Interest and Compensation.** Please refer to Medway Estuary and Swale Shoreline Management Plan Appendix J, Appropriate Assessment Version: 9, 3rd August 2008 and Environment Agency Proforma Appendix 20 for further information

STAGE 3 AGENCY CONCLUSION

CAN IT BE ASCERTAINED THAT THE PLAN OR PROJECT WILL NOT ADVERSELY EFFECT THE INTEGRITY OF THE EUROPEAN SITE(S)? NO, THE PLAN MAY HAVE AN ADVERSE EFFECT

Name of EA officer undertaking appropriate assessment:

Signed: Mark Smith

Date: 14th July 2008

Endorsed by (if appropriate) e.g. team leader and date

Signed: Philippa Harrison

Date: 14th July 2008

Natural England COMMENTS ON APPROPRIATE ASSESSMENT:

IS THERE AGREEMENT WITH THE CONCLUSION? YES

Signed:



Dr Chris McMullon (Natural England SE Coastal Senior Specialist)


Date: 14th July 2008

PART B: Final Appropriate Assessment Record

The 'Indicative Extents' of Managed Realignment recommended by the Medway Estuary and Swale Shoreline Management Plan will have an adverse effect through Grazing Marsh and Standing Water Habitat displacement on the Medway Estuary & Marshes and the Swale Natura 2000 sites.

Refer to Medway Estuary and Swale Shoreline Management Plan Appendix J, Appropriate Assessment Version: 9, 3rd August 2008 for full record of assessment.

**THIS DOCUMENT IS BEING SENT: -
FOR CONSULTATION.**

<p>Form HR01: Proforma for new applications within Stage 2 criteria.</p>		 <p>ENVIRONMENT AGENCY</p>
<p>ENVIRONMENT AGENCY RECORD OF ASSESSMENT OF LIKELY SIGNIFICANT EFFECT ON A EUROPEAN SITE (STAGE 2) The new application for a Shoreline Management Plan detailed below is within the Stage 1 criteria of our Habitats Regulations Assessment, and in order to progress the application a Stage 2 assessment, consultation with Natural England is required.</p>		
<p>PART A <i>To be completed by relevant technical/project officer in consultation with Conservation/Ecology section and Natural England/CCW</i></p>		
1. Type of permission/activity:	Shoreline Management Plan	
2. Agency reference no:	IMSO000703	
3. National Grid reference:	TQ870700 (centre +/- 17km Easting, +/-11km Northing)	
4. Site reference:	<i>Medway and Swale Estuaries</i>	
5. Brief description of proposal:	<i>100 year policy plan for managing the coastline of the Medway and Swale Estuaries. Highest Level Coastal Flood And Erosion Risk Management Strategy Plan</i>	
6. European site name(s) and status:	Medway Estuary & Marshes Special Protection Area/ Ramsar Site	
7. List of interest features:	<p><u>Special Protection Area</u></p> <p>The following habitats are required in favourable condition to support the range of bird species for which the SPA is designated (indicative proportion of site %):</p> <ul style="list-style-type: none"> ▪ Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (67%) ▪ Salt marshes. Salt pastures. Salt steppes (15%) ▪ Inland water bodies (standing water, running water) (1%) ▪ Bogs. Marshes. Water fringed vegetation. Fens (1%) ▪ Dry grassland. Steppes (1%) ▪ Humid grassland. Mesophile grassland (15%) <p><u>Ramsar Site</u></p> <p>The following habitats are required in favourable condition to support the range of bird species for which the Ramsar site is designated (indicative proportion of site %):</p> <ul style="list-style-type: none"> ▪ Sand / shingle shores (including dune systems) (0.02%) ▪ Tidal flats (58.3%) ▪ Salt marshes (16.8%) ▪ Coastal brackish / saline lagoons (0.2%) ▪ Rivers / streams / creeks: permanent (1.2%) ▪ Freshwater marshes / pools: permanent (0.4%) ▪ Seasonally flooded agricultural land (13.8%) ▪ Other Other (9.3%) 	

8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?	No	
9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?		
Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
All designated species	Change in Habitat Composition – Smaller proportions of key habitats, reduced mosaic	Recommended changes to land use through coastal management.
intertidal mudflats	Coastal change that results in an unacceptably low proportion of this habitat within the site	Preferred SMP Policy causes coastal squeeze. Advance the line policy encroaching onto habitat
saltmarsh	Coastal change that results in an unacceptably low proportion of this habitat within the site	Preferred SMP Policy causes coastal squeeze. Advance the line policy encroaching onto habitat
grazing marsh	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
saline lagoons	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
flooded chalk pits	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
10. Is the potential scale or magnitude of any effect likely to be significant?		
a) Alone? (explain conclusion, e.g. in relation to de minimis criteria)	Policy units E401-05, E413-19 and E428-30 cover most of the coastline of the SPA and Ramsar site. There are a number of Managed Realignment Policies that could have a significant effect on the terrestrial components of the site whilst benefitting the estuarine components of the site. There is a Do Nothing Policy (with monitoring) for Policy E430 that covers the islands in the Medway that may have an effect. (A.1.3 & A.1.4 beneficial/ B.1.3 adverse)	
b) In combination with other Environment Agency permissions and/or other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).	The Thames Estuary 2100 project is recommending changes to the adjacent coastline.	
c) In combination with permissions and/or plans/projects of other Competent Authorities? (Explain conclusion and which plans/projects have been included. See Appendix 23 for further information). Include list of other Competent Authorities that have been consulted and what their comments were in relation to the decision on likely significant effect.	The Isle of Grain to South Foreland SMP2 is recommending changes to the adjacent coastline. The Thames Gateway project, the South East Plan and the Local Development Framework are recommending increased residential & commercial development in some of the coastal plain protected by the defences. Medway Ports undertake dredging operations to maintain navigable channels.	

11. Conclusion: Is the proposal likely to have a significant effect 'alone and/or in combination' on a European site?	Yes the proposal is likely to have a significant effect.	
12. Justification for Reduced Consultation review process :	There will be a three month public consultation period on the SMP. This will include consultation on this assessment.	
13. Name of EA Officer:	Mark Smith	Date: 26/2/07
14. <Natural England/CCW comment on assessment: (If the Natural England/CCW officer disagrees with the conclusion of 10c, please include details of the other Competent Authorities which should be consulted)>		
15. <Name of Natural England/CCW Officer:>		Date:
IF THE PROPOSAL IS LIKELY TO HAVE A SIGNIFICANT EFFECT AN APPROPRIATE ASSESSMENT WILL BE REQUIRED (see part B for suggested scope).		

<p>Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMT: (see also and CCW Habitats Regulations Guidance Notes HRGN1 and OH 99/01) (Water Resources, please see note in Appendix 4 of the guidance for assessing new permissions) (add details to following framework)</p> <ul style="list-style-type: none"> • Other competent authorities involved (the scope of the appropriate assessment must be agreed with them). • Characterise the site in relation to the qualifying features and their conservation objectives; <ul style="list-style-type: none"> - Existing information - Additional surveys - Management/ unauthorised impacts • Detailed description of plan/project • Assess each likely impact on the interest features; <ul style="list-style-type: none"> - Compare with historical data - predict impacts - compare with impact from management/unauthorised activities • Determine the extent to which each possible impact can be avoided.


15. Natural England/CCW Comment on scope of appropriate assessment:

Mainly for use when the Appendix 11 is sent to Natural England /CCW **for consultation**. Natural England/CCW may still choose to send comments on the scope of the forthcoming appropriate assessment (if one is required) even if the Appendix 11 was sent for information only. See [Appendix 11 Work Instruction 276_05](#).

16. Name of Natural England/CCW Officer:

Date:

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<p>PART A <i>To be completed by relevant technical/project officer in consultation with Conservation/Ecology section and Natural England/CCW</i></p>		
1. Type of permission/activity:	Shoreline Management Plan	
2. Agency reference no:	IMSO000703	
3. National Grid reference:	TQ870700 (centre +/- 17km Easting, +/-11km Northing)	
4. Site reference:	<i>Medway and Swale Estuaries</i>	
5. Brief description of proposal:	<i>100 year policy plan for managing the coastline of the Medway and Swale Estuaries. Highest Level Coastal Flood And Erosion Risk Management Strategy Plan</i>	
6. European site name(s) and status:	Peter's Pit <i>Special Area of Conservation</i>	
7. List of interest features:	<p>Habitat Types represented (Biodiversity Action Plan categories) Standing open water and canals Broadleaved, mixed and yew woodland Lowland calcareous grassland Inland Rock</p> <p>Individual designated Special Interest Features Great crested newts <i>Triturus cristatus</i> (Annex II & IV of EC Habitats Directive and Appendix II of Bern Convention, Sch.2 of Conservation Regulations and Sch.5 – disturbance 1981 W&C act)</p>	
8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?	No	
<p>9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?</p>		
Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:

All designated species	Negative Change in Habitat Composition	Recommended changes to land use through coastal management.
Standing open water and canals	Erosion/ Tidal Flooding from Managed Realignment	Unmanaged erosion resulting in damage or salt water flooding
Broadleaved, mixed and yew woodland	Erosion/ Tidal Flooding from Managed Realignment	Unmanaged erosion resulting in damage or salt water flooding
Lowland calcareous grassland	Erosion/ Tidal Flooding from Managed Realignment	Unmanaged erosion resulting in damage or salt water flooding
Inland Rock	Erosion/ Tidal Flooding from Managed Realignment	Unmanaged erosion resulting in damage
Great crested newts	Erosion/ Tidal Flooding from Managed Realignment	Unmanaged erosion resulting in damage or salt water flooding

10. Is the potential scale or magnitude of any effect likely to be significant?

<p>a) Alone? (explain conclusion, e.g. in relation to de minimis criteria)</p>	<p>No – Managed Realignment means that any realignment will be controlled where required to protect key features. As site is ~100m from banks of River Medway and erosion rate is at highest 0.5m/yr (50m in life of plan, the site would not be affected even if there was no management of flood and erosion risks in the estuary.</p>
<p>b) In combination with other Environment Agency permissions and/or other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).</p>	<p>No – This rate of erosion change is not influenced by other EA plans or permissions. The site is sufficiently high so as to not be affected by flood risk (higher than 1/1000yr floodplain)</p>
<p>c) In combination with permissions and/or plans/projects of other Competent Authorities? (Explain conclusion and which plans/projects have been included. See Appendix 23 for further information). Include list of other Competent Authorities that have been consulted and what their comments were in relation to the decision on likely significant effect.</p>	<p>Tonbridge & Malling Council – Peters Village Development & Local Development Framework SEERA – South East Plan</p>

11. Conclusion: Is the proposal likely to have a significant effect 'alone and/or in combination' on a European site?	No, the proposal will not have a likely significant negative effect, alone or in combination on Peter's Pit Special Area Of Conservation. The most likely in combination effect around Peter's Pit relates to a residential development including new river crossing recently permitted by Tonbridge & Malling Borough Council. The development site surrounds the designated site. The development has resulted in loss of adjacent non-designated unimproved grassland. The policies within the plan with likely significant effect involve managed realignment. Considering future local development proposals & plans, this policy is likely to limit further residential development between the river and the SAC. Any managed realignment will create greater local resource of mudflat and saltmarsh although any tidal flooding may result in further loss of non-designated unimproved terrestrial grassland in the area.	
12. Justification for Reduced Consultation review process :	There will be a three month public consultation period on the SMP. This will include consultation on this assessment.	
13. Name of EA Officer:	Mark Smith	Date:26/2/07
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Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMT:

(see also and CCW Habitats Regulations Guidance Notes HRGN1 and OH 99/01)
(Water Resources, please see note in Appendix 4 of the guidance for assessing new permissions)
(add details to following framework)

- Other competent authorities involved (the scope of the appropriate assessment must be agreed with them).
- Characterise the site in relation to the qualifying features and their conservation objectives;
 - Existing information
 - Additional surveys
 - Management/ unauthorised impacts
- Detailed description of plan/project
- Assess each likely impact on the interest features;
 - Compare with historical data
 - predict impacts
 - compare with impact from management/unauthorised activities
- Determine the extent to which each possible impact can be avoided.


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4. Site reference:	<i>Medway and Swale Estuaries</i>	
5. Brief description of proposal:	<i>100 year policy plan for managing the coastline of the Medway and Swale Estuaries. Highest Level Coastal Flood And Erosion Risk Management Strategy Plan</i>	
6. European site name(s) and status:	The Swale Special Protection Area/ Ramsar Site	
7. List of interest features:	<p><u>Special Protection Area</u></p> <p>The following habitats are required in favourable condition to support the range of bird species for which the SPA is designated (indicative proportion of site %):</p> <ul style="list-style-type: none"> ▪ Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (39%) ▪ Salt marshes. Salt pastures. Salt steppes (5%) ▪ Inland water bodies (standing water, running water) (2%) ▪ Other arable land (47%) ▪ Other land (including towns, villages, roads, waste places, mines, industrial sites (6%) <p><u>Ramsar Site</u></p> <p>The following habitats are required in favourable condition to support the range of bird species for which the Ramsar site is designated (indicative proportion of site %):</p> <p>Sand / shingle shores (including dune systems) (1%) Tidal flats (38%) Salt marshes (5.8%) Rivers / streams / creeks: seasonal / intermittent (1.8%) Seasonally flooded agricultural land (47.7%) Other (5.7%)</p>	
8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?	No	

9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
All designated species	Change in Habitat Composition – Smaller proportions of key habitats, reduced mosaic	Recommended changes to land use through coastal management.
intertidal mudflats	Coastal change that results in an unacceptably low proportion of this habitat within the site	Preferred SMP Policy causes coastal squeeze. Advance the line policy encroaching onto habitat
saltmarsh	Coastal change that results in an unacceptably low proportion of this habitat within the site	Preferred SMP Policy causes coastal squeeze. Advance the line policy encroaching onto habitat
grazing marsh	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
saline lagoons	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
Inland Water Bodies	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
Other Arable Land	Coastal change that results in an unacceptably low proportion of this habitat within the site	Managed Realignment or No Active Intervention Policy resulting in major reduction in habitat type.

10. Is the potential scale or magnitude of any effect likely to be significant?

<p>a) Alone? (explain conclusion, e.g. in relation to de minimis criteria)</p>	<p>Policy units E421-27 cover most of the coastline of the SPA and Ramsar site. There are a number of Managed Realignment Policies that could have a significant effect on the terrestrial components of the site whilst benefitting the estuarine components of the site. (A.1.3 & A.1.4 beneficial/ B.1.3 adverse)</p>
<p>b) In combination with other Environment Agency permissions and/or other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).</p>	<p>The Swale Water Level Management Plan may be affected.</p>
<p>c) In combination with permissions and/or plans/projects of other Competent Authorities? (Explain conclusion and which plans/projects have been included. See Appendix 23 for further information). Include list of other Competent Authorities that have been consulted and what their comments were in relation to the decision on likely significant effect.</p>	<p>The Isle of Grain to South Foreland SMP2 is recommending changes to the adjacent coastline. The Thames Gateway project, the South East Plan and the Local Development Framework are recommending increased residential and commercial development in some of the coastal plain protected by the defences. Medway Ports undertake dredging operations to maintain navigable channels.</p>

11. Conclusion: Is the proposal likely to have a significant effect 'alone and/or in combination' on a European site?	Yes the proposal is likely to have a significant effect.	
12. Justification for Reduced Consultation review process :	There will be a three month public consultation period on the SMP. This will include consultation on this assessment.	
13. Name of EA Officer:	Mark Smith	Date: 26/2/07
14. <Natural England/CCW comment on assessment: (If the Natural England/CCW officer disagrees with the conclusion of 10c, please include details of the other Competent Authorities which should be consulted)>		
15. <Name of Natural England/CCW Officer:>		Date:
IF THE PROPOSAL IS LIKELY TO HAVE A SIGNIFICANT EFFECT AN APPROPRIATE ASSESSMENT WILL BE REQUIRED (see part B for suggested scope).		

<p>Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMT: (see also and CCW Habitats Regulations Guidance Notes HRGN1 and OH 99/01) (Water Resources, please see note in Appendix 4 of the guidance for assessing new permissions) (add details to following framework)</p> <ul style="list-style-type: none"> • Other competent authorities involved (the scope of the appropriate assessment must be agreed with them). • Characterise the site in relation to the qualifying features and their conservation objectives; <ul style="list-style-type: none"> - Existing information - Additional surveys - Management/ unauthorised impacts • Detailed description of plan/project • Assess each likely impact on the interest features; <ul style="list-style-type: none"> - Compare with historical data - predict impacts - compare with impact from management/unauthorised activities • Determine the extent to which each possible impact can be avoided.


15. Natural England/CCW Comment on scope of appropriate assessment:

Mainly for use when the Appendix 11 is sent to Natural England /CCW **for consultation**. Natural England/CCW may still choose to send comments on the scope of the forthcoming appropriate assessment (if one is required) even if the Appendix 11 was sent for information only. See [Appendix 11 Work Instruction 276_05](#).

16. Name of Natural England/CCW Officer:

Date:

**THIS DOCUMENT IS BEING SENT: -
FOR CONSULTATION.**

Form HR01: Proforma for new applications within Stage 2 criteria.		 ENVIRONMENT AGENCY
ENVIRONMENT AGENCY RECORD OF ASSESSMENT OF LIKELY SIGNIFICANT EFFECT ON A EUROPEAN SITE (STAGE 2) <p>The new application for a <please fill in details> detailed below is within the Stage 1 criteria of <please fill in details>, and in order to progress the application a Stage 2 assessment <and consultation with Natural England/CCW> is required.</p>		
PART A <i>To be completed by relevant technical/project officer in consultation with Conservation/Ecology section and Natural England/CCW</i>		
1. Type of permission/activity:	Shoreline Management Plan	
2. Agency reference no:	IMSO000703	
3. National Grid reference:	TQ870700 (centre +/- 17km Easting, +/-11km Northing)	
4. Site reference:	Medway and Swale Estuaries	
5. Brief description of proposal:	100 year policy plan for managing the coastline of the Medway and Swale Estuaries. Highest Level Coastal Flood And Erosion Risk Management Strategy Plan	
6. European site name(s) and status:	Thames Estuary & Marshes Special Protection Area/ Ramsar Site	

<p>7. List of interest features:</p>	<p><u>Special Protection Area</u></p> <p>Thames Estuary and Marshes contributes to the regularly occurring internationally important wintering populations of the Thames Estuary and Marshes SPA, by supporting the following Annex 1 species;</p> <ul style="list-style-type: none"> • avocet, hen harrier <p>Thames Estuary and Marshes contributes to the regularly occurring internationally important wintering populations of the Thames Estuary and Marshes SPA, by supporting the following migratory species;</p> <ul style="list-style-type: none"> • ringed plover, grey plover, dunlin, knot, black-tailed godwit, redshank <p>Thames Estuary and Marshes contributes to the internationally important waterfowl assemblage of the Thames Estuary and Marshes SPA, by supporting the following species;</p> <p>avocet, ringed plover, grey plover, dunlin, knot, black-tailed godwit, redshank, shelduck, teal, pintail, gadwall, shoveler, tufted duck and pochard</p> <p>To support these species, the habitats required in favourable condition are as follows:</p> <ul style="list-style-type: none"> ▪ intertidal mudflats ▪ saltmarsh ▪ intertidal shingle ▪ grazing marsh ▪ saline lagoons ▪ flooded chalk pits <p><u>Thames Estuary and Marshes Ramsar Site</u></p> <p>The Thames Estuary and Marshes Ramsar site is a mosaic of intertidal habitats, saltmarsh, coastal grazing marshes, saline lagoons and chalk pits. The site provides wintering and breeding habitats for important assemblages of wetland bird species, particularly wildfowl and waders as well as supporting migratory birds on passage. The site also provides suitable conditions for a number of notable plants and invertebrates associated with these wetland habitats.</p>
<p>8. Is the proposal directly connected with or necessary to the management of the site for nature conservation?</p>	<p>No</p>

9. What potential hazards are likely to affect the interest features? (Refer to relevant sensitivity matrix and only include those to which the interest features are sensitive). Are the interest features potentially exposed to the hazard?

Sensitive Interest Feature:	Potential hazard:	Potential exposure to hazard and mechanism of effect/impact if known:
All designated species	Negative Change in Habitat Composition (A.3.1, A.3.3 & B.1.3)	Recommended changes to land use through coastal management.
intertidal mudflats	Negative Change in Habitat Composition (A.3.1, A.3.3)	Preferred SMP Policy causes coastal squeeze. Advance the line policy encroaching onto habitat
saltmarsh	Negative Change in Habitat Composition (A.3.1, A.3.3)	Preferred SMP Policy causes coastal squeeze. Advance the line policy encroaching onto habitat
grazing marsh	Negative Change in Habitat Composition (A.3.1, A.3.3)	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
saline lagoons	Negative Change in Habitat Composition (A.3.1, A.3.3)	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.
flooded chalk pits	Negative Change in Habitat Composition (A.3.1, A.3.3)	Managed Realignment or No Active Intervention Policy resulting in negative change in habitat type.

10. Is the potential scale or magnitude of any effect likely to be significant?

<p>a) Alone? (explain conclusion, e.g. in relation to de minimis criteria)</p>	<p>Policy unit E401 covers a 2.5km section of the Thames Estuary & Marshes SPA/ Ramsar site coastline. The Preferred Policy is Hold the Line to protect internationally important industrial infrastructure, regionally important residences and freshwater components of the SPA/ Ramsar site. The SMP has determined that the intertidal habitat along the frontage of this habitat unit is likely to suffer erosion and coastal squeeze which is likely significant effect. [A.3.1 adverse (intertidal), A.3.3 Beneficial (intertidal), B.1.3 Adverse (freshwater)]</p>
<p>b) In combination with other Environment Agency permissions and/or other plans or projects? (Explain conclusion and which plans/projects have been included, including those associated with other functions).</p>	<p>The Thames Estuary 2100 project is recommending changes to the adjacent coastline.</p>
<p>c) In combination with permissions and/or plans/projects of other Competent Authorities? (Explain conclusion and which plans/projects have been included. See Appendix 23 for further information). Include list of other Competent Authorities that have been consulted and what their comments were in relation to the decision on likely significant effect.</p>	<p>The Isle of Grain to South Foreland SMP2 is recommending changes to the adjacent coastline. The Thames Gateway project, the South East Plan and the Local Development Framework are recommending increased commercial development in the coastal plain protected by the defences</p>

11. Conclusion: Is the proposal likely to have a significant effect 'alone and/or in combination' on a European site?	Yes the proposal is likely to have a significant effect.	
12. Justification for Reduced Consultation review process :	There will be a three month public consultation period on the SMP. This will include consultation on this assessment.	
13. Name of EA Officer:	Mark Smith	Date: 26/2/07
14. <Natural England/CCW comment on assessment: (If the Natural England/CCW officer disagrees with the conclusion of 10c, please include details of the other Competent Authorities which should be consulted)>		
15. <Name of Natural England/CCW Officer:>		Date:
IF THE PROPOSAL IS LIKELY TO HAVE A SIGNIFICANT EFFECT AN APPROPRIATE ASSESSMENT WILL BE REQUIRED (see part B for suggested scope).		

<p>Part B - SUGGESTED SCOPE OF THE APPROPRIATE ASSESSMT: (see also and CCW Habitats Regulations Guidance Notes HRGN1 and OH 99/01) (Water Resources, please see note in Appendix 4 of the guidance for assessing new permissions) (add details to following framework)</p> <ul style="list-style-type: none"> • Other competent authorities involved (the scope of the appropriate assessment must be agreed with them). • Characterise the site in relation to the qualifying features and their conservation objectives; <ul style="list-style-type: none"> - Existing information - Additional surveys - Management/ unauthorised impacts • Detailed description of plan/project • Assess each likely impact on the interest features; <ul style="list-style-type: none"> - Compare with historical data - predict impacts - compare with impact from management/unauthorised activities • Determine the extent to which each possible impact can be avoided.

15. Natural England/CCW Comment on scope of appropriate assessment:

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16. Name of Natural England/CCW Officer:

Date: