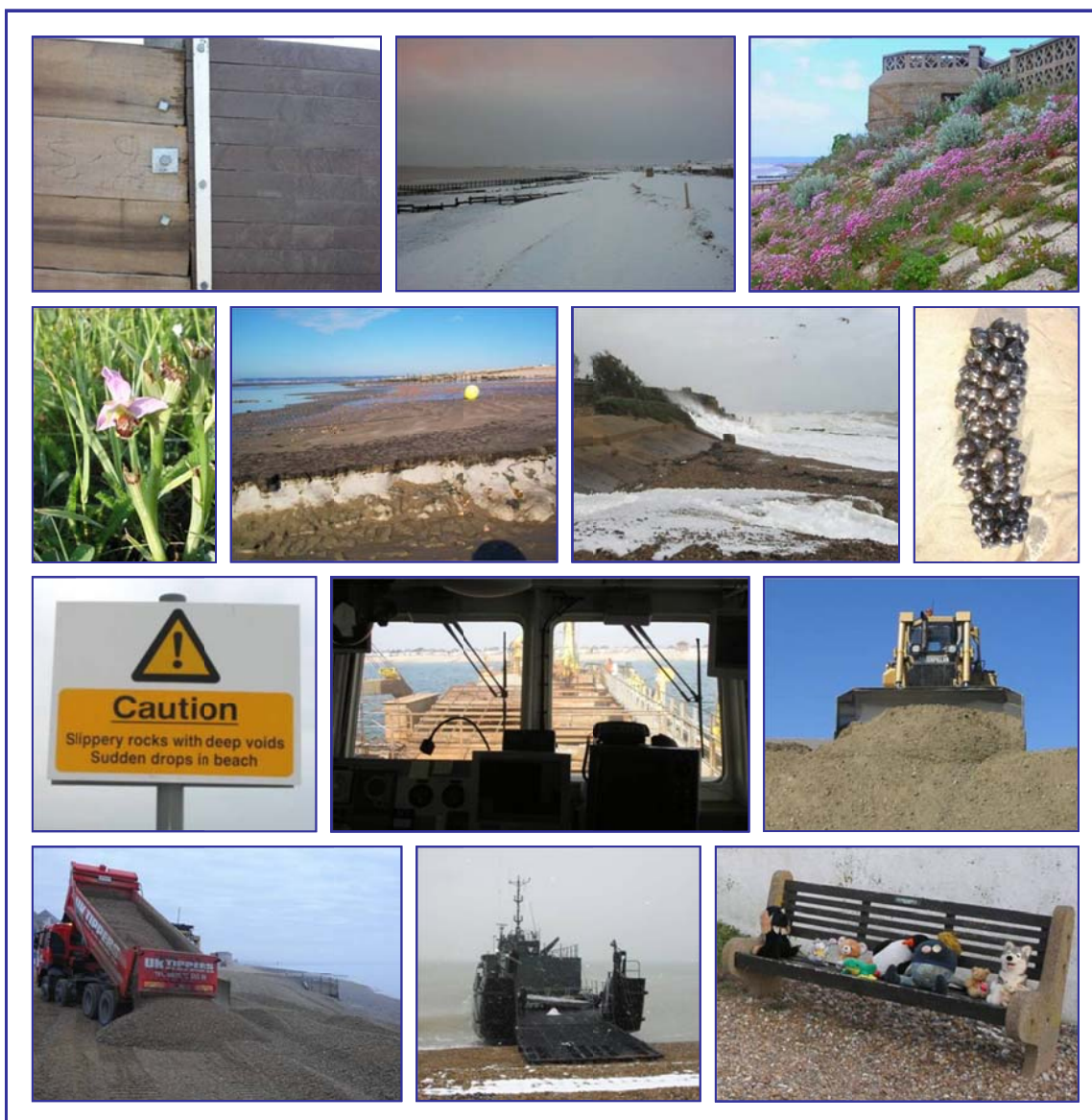


PEVENSEY COASTAL DEFENCE LIMITED



PEVENSEY BAY SEA DEFENCES PPP

MONTHLY REPORT: May 2011





1. Weather

1.1 General Synopsis – Southern England

After a fine, warm start, it was a generally changeable month with westerly airstreams bringing plenty of cloud. Any showers or periods of rain mainly affected areas towards the north and west, whereas the south–east stayed largely dry. The mean temperature for the month was 1.3 °C above the 1971–2000 average. It was a wet month over Cumbria, with over 150% of normal rainfall, but much drier than normal in eastern and southern counties. It was particularly dry over much of East Anglia and south–east England, with less than a third of the normal amount; Essex and Kent had one of the driest Mays on record. Sunshine amounts were close to normal towards the west coast, but it was sunnier than normal over East Anglia. In more detail the Met Office recorded the May as follows;

Detail

Winds

1st to 4th An easterly then south–easterly air flow gave a generally fine and settled start to the month. In the west, occasional showers gave around 10 mm in parts of Cornwall on 1st, and the south–west caught the majority of the showers through to 4th. It was windy at times, especially on 1st and 2nd. Early on 4th, temperatures fell close to or below freezing, especially in sheltered inland areas with values as low as -3.0 °C in places.

NE
 Strong to
Gale force 8

5th to 10th A slow–moving area of low pressure lay over the near–Atlantic, bringing unsettled conditions into western areas in particular, with generally south–westerly winds. Pulses of rain affected western England at times on 5th, with heavy and thundery showers moving northwards on 6th and 7th. Temperatures climbed, particularly in the east, where 25.3 °C was recorded at St James’s Park (London) on 6th and 25.4 °C at Weybourne (Norfolk) on 7th. Over these two days, 20 to 30 mm of rain were recorded across a broad swathe of central England, but amounts were much lower further east. Sunshine and showers was then the theme for the remainder of the period, with the showers generally spreading from eastwards.

NE to SE
 Light to
 Moderate

11th to 20th High pressure over the mid–Atlantic brought a generally westerly flow, with the northwest seeing the most unsettled conditions and the south and east staying largely dry. Maximum temperatures were close to or somewhat above normal, reaching 20 °C in the southeast on 18th and 19th.

SW
 Moderate
 occasionally
 Strong

21st to 27th A series of deep low pressure systems passed north–eastwards over the UK, bringing unseasonably strong winds for a time. These were separated by quieter, drier interludes. On 22nd, persistent rain gave more than 20 mm in parts of Cumbria, whereas most of the southeast saw very little rain. The 22nd and 23rd saw strong winds across much of England, particularly over the Pennines, with 55 m.p.h. gusts here. Winds then eased, with mainly dry weather and some chilly nights. By 26th, showery conditions gave heavy rain in places, including the southeast. Both 26th and 27th were a little cooler, with daytime maxima around 17 °C.

SW
 Moderate,
 with
**Gales to
 Severe 9**

28th to 31st The southern half of England was cloudy with a little light rain and drizzle at times, a front moving southeastwards on 30th. This was followed by high pressure building from the southwest on 31st, giving a chilly night across the south under clear skies and a local ground frost.

SW then NW
 Moderate



1.2 Gales

After the calm of April, May saw a marked increase in wind speeds, with five separate periods of gale. The most notable of these occurred on 26th May when severe gale 9 conditions were forecast for sea area Dover. Winds once more reverted to dominant northerly and easterly airflows, with almost 80% coming from these directions.

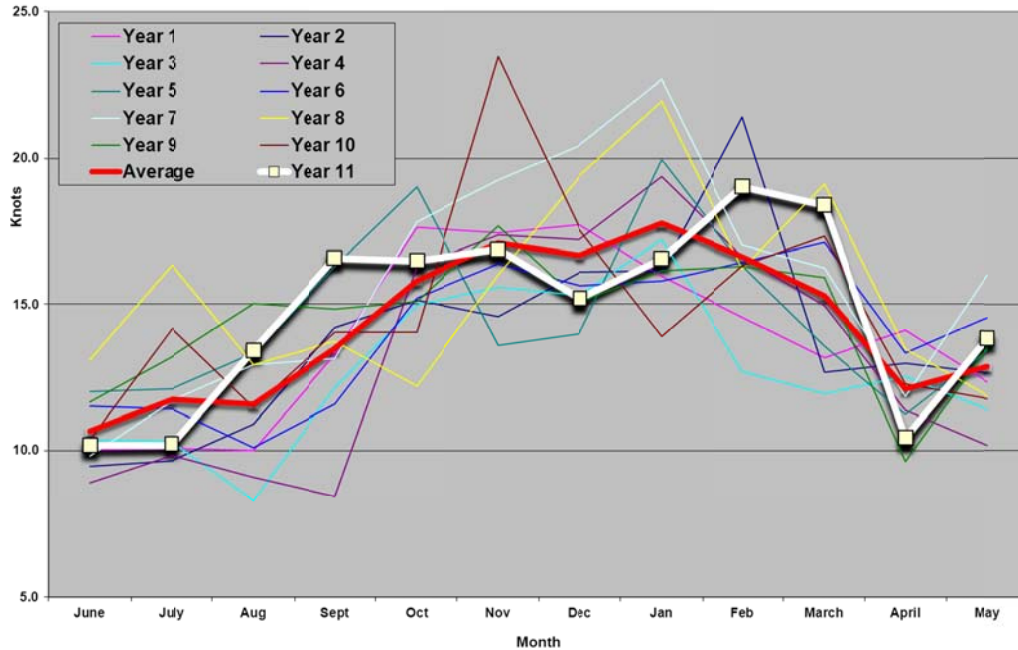


Figure 1: Monthly Average Wind Speeds (from Met Office model)

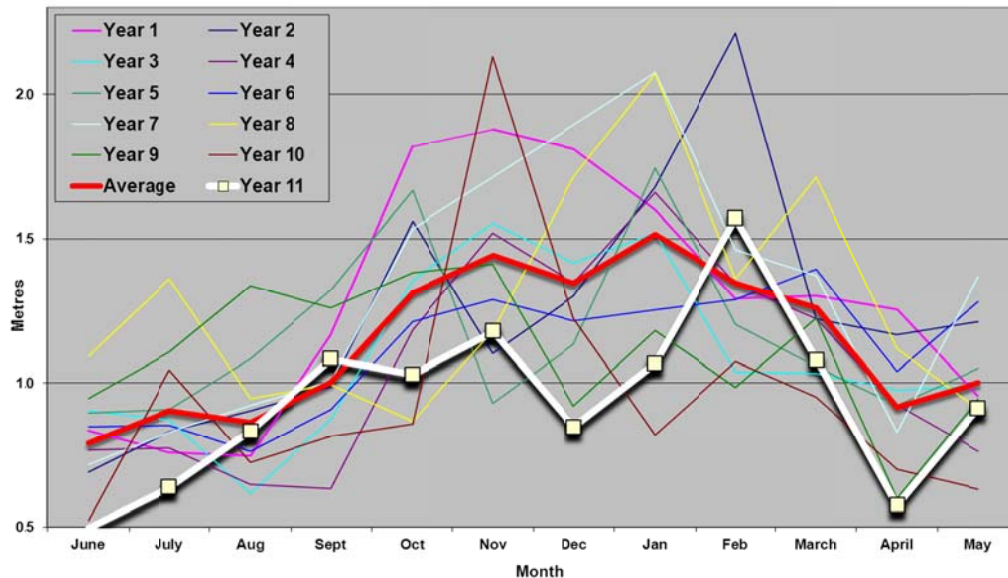


Figure 2: Monthly Average Wave Heights (from Met Office model)

Despite average wind speeds being the third highest for the eleven May months so far, wave heights were below average because of the dominant offshore direction. All pertinent wind and other forecast information for Pevensey and sea area Dover is recorded in Table 1 below;



Type	Day/Date	Times	Wind Force	Wind Direction
Gale Warning	Sunday 1 st	21:35	8	NE expected soon
Daily	Monday 2 nd	20:00 – 22:00	7	NE
Gale Warning		21:47	8	NE continuing
Gale Warning	Tuesday 3 rd	03:24	-	Gale now ceased
Gale Warning	Saturday 21 st	15:34	8	SW expected later
Gale Warning	Sunday 22 nd	15:41	8	SW continuing
Gale Warning		21:31	-	Gale now ceased
Gale Warning	Monday 23 rd	07:28	8	SW expected soon
Gale Warning		21:31	-	Gale now ceased
Gale Warning	Wednesday 25 th	09:39	8	SW expected later
Gale Warning	Thursday 26 th	03:23	Severe 9	SW increasing soon
Daily		10:00 – 19:00	7	SW
Gale Warning		15:35	8	SW decreasing imminent
Gale Warning		21:30	-	Gale now ceased
Gale Warning	Saturday 28 th	03:30	8	SW expected soon
Gale Warning		21:55	-	Gale now ceased

Table 1 – Weather Information Received: May 2011

2. Works Undertaken

2.1 Planned Works – Groyne Maintenance

Continued deterioration of the oldest groynes meant a two week run through of all timber structures commenced on 23rd May. Most items requiring attention were minor generally requiring the removal of loose or broken timbers and metal fittings naturally sharpened by shingle abrasion. Rather than remove groyne sections completely, many were taken down to beach level or to the height of any planks or waling that remained. Works were completed on 3rd June.

3. Health, Safety, the Environment & Sustainability

No Health & Safety incidents were reported during the month.

Final internal comments on PCDL's Sustainability Action Plan were collated ready for approval by the PCDL Board at their meeting in early June, whilst the CDM Coordinator will visit site along with Mackley's site agent, to undertake the annual review of the Health & Safety file.



4. Monitoring

4.1 KPF Surveys – GPS Quad Bike Survey

No survey was undertaken in May.

5. Stakeholder & Landowner Liaison

5.1 Wealden District Council (WDC)

With two separate 5 year consents issued to date, WDC Planning department excelled themselves this year and granted a license through to the conclusion of the contract in May 2025. A copy was provided to the Agency's facilities team for their records.

5.2 Residents

Potential resident, Mrs Bateman, called at the suggestion of her estate agent to determine the flood risk of properties on the Beachlands estate. As this is behind rather than on the defences, her query was passed to the Agency.

2nd year Physical Geography student at the University of Worcester, and Stone Cross resident, Martin Barker emailed regarding potential work experience;

In the next academic year I am looking to take a work placement module to get some hands on experience with different aspects of Geography in practice in the real world. One of my main areas of interest is coastal erosion and this is what I am focussing my dissertation on. I am hoping that there would be an opportunity to spend a week or two working with the PCDL team sometime in the next Academic year before Easter time

As site work is intermittent and rarely falls into programmed timescales it was suggested that the Pevensey scheme may not be an ideal placement location, although regular visits during the forthcoming year could provide useful background knowledge.

Continuing dry weather saw more residents on the lookout for old groyne timber for use as garden ornamentation. Nigel Crocket, Geoff Pycroft Jan Guest and Vanessa Smith all took small quantities of wood from East Stream depot, whilst landscape gardener Andrew Norwood made a return visit. Local fisherman, Carl Waters, claimed some old planking to help make a maintenance turntable for double-hulled vessel he is constructing.

On 20th May the owner of 404 Coast Road telephoned having heard a rumour that a bulldozer was still working on site. He was enquiring whether a ridge that had built up at the toe of the main embankment could be smoothed out to boat launching and recovery. This was not possible since the bulldozer had left a month earlier.



6. Meetings & Other Liaison

6.1 Environment Agency

6.1.1 Environment Agency – Project Managers

PCDL and Agency project managers met on several occasions during the month to view and discuss on-going matters of interest. A record of issues discussed has been included as Appendix B of this report.

6.1.2 Environment Agency – Regional Flood Forecasting (FCRM)

Nigel Sell, from the SSD Area Incident Management team visited PCDL on 4th to introduce himself and to find out more about how PCDL would interact with the Agency in the event of a coastal incident, and to discuss provision of information that would help PCDL's flood defence functions.

Andy Gilham has arranged for his team to meet at Pevensey on 22nd September, which will include a briefing on the Pevensey scheme, how it functions and partnering arrangements needed to provide a full range of flood defence services.

6.1.3 Environment Agency – Environmental Management

Environment officers Shane Harper and Bunmi Aboaba visited PCDL to discuss updates necessary to ensure the Site Waste Management Plan (SWMP) is up to date. The existing exemption for handling and storing old timber could be renewed on line via the Agency's website, whilst website www.smartwaste.co.uk/swmp provides a free tool for constructing an acceptable SWMP.

6.1.4 Environment Agency – Development & Flood Risk (D&FR)

Kim Smith and Wesley Jones, SSD Area D&FR Team Leader and Technical Specialist respectively, visited PCDL on 26th May. This was a good opportunity to let them know how well D&FR staff has worked with PCDL over the last decade or so, but also to highlight the need to consider all proposed development in or on the defences. It is only a minority of residents and planners who are fully aware of the constraints placed on development by the Sea Defence Byelaws. It is thus important that the Agency considers the implications of any proposed works within the area that defines each sea defence, regardless of how small it is.

7. Media Contact

7.1 University of the Third Age (U3A)

PCDL made a PowerPoint presentation to U3A on 4th May in Eastbourne. The main subject of the talk related to how coastal processes have evolved since the last Ice Age, and how works undertaken during the Pevensey contract have evolved to take advantage of natural processes as much as possible.



7.2 Sussex Express



Published on **Thursday 26 May 2011 16:27**

A LIFEBOAT was launched into the sea near Pevensey Bay in response to fears that a dog owner was trying to rescue his pet. Eastbourne inshore lifeboat (ILB) roared into action after the call was made on Wednesday afternoon, May 25.

Dover Coastguard was concerned about a dog owner who was worried his elderly pet was struggling to swim in the bay. Coastguard experts thought that the man would try and swim after his dog – and get into trouble himself. A spokesman for the Eastbourne crew said: “Following a rapid assembly and launch by the volunteer crew the ILB was stood down just minutes into the service when the dog, as is not unusual in these cases, found its own way ashore.”

Eastbourne has celebrated more than 185 years as a lifeboat station and now operates an all-weather Mersey Class lifeboat ‘The Royal Thames’ and an inshore D-Class lifeboat ‘Joan and Ted Wiseman 50’.

7.3 The Independent



My Life In Travel: Martina Cole, novelist

Part of an interview by Laura Holt
Saturday, 28 May 2011

Favourite place in the British Isles?

I'd probably have to say Eastbourne. I've got a beautiful caravan in Pevensey Bay on the outskirts. I write when I'm down there because I can hear the sea. I've got a boat in the harbour, so we sail to Brighton as well.

8. Short Term Programme

Sospan Dau is still on course for an early season recharge this year, possibly arriving in very late June.



RECORD OF PEOPLE ENTERING SITE

Attachment	No. of visits to site
PCDL Project Manager	20
Agency Project Manager	3
Environment Agency Staff	15
Westminster Dredging	0
Dean & Dyball/Balfour Beatty	1
Mackley Construction	18
Mouchel	1
Sub-contractors	0
Local Residents/Landowners	12
Other Third Parties	4
Universities/Colleges	1
Total visits	74

- ❖ A single site visit includes any work-related visit or meeting attendance at the PCDL site offices or on the beach.
- ❖ A full working day (e.g. by the PCDL Project Manager) equates to one visit to site. No more than one visit per day per person is recorded.
- ❖ Attendance at a ½ hr meeting by 10 people counts as 10 visits to site.



APPENDIX A: SUSTAINABILITY INSPECTION CHECKLIST

DATE: 1st June 2011

CONDUCTED BY: Ian Thomas

PERIOD COVERED: May 2011

Number	Item	Yes/ No	Corrective Action Required?	Comments
1	HEALTH & SAFETY			
1.1	Is there any shingle cliffing making public access to and from the beach dangerous?	No		
1.2	Are there any loose, sharp or protruding parts of groyne that are a potential hazard to the public?	No		
1.3	Have any voids in shingle opened up over the Sovereign Harbour revetment?	No		
1.4	If yes, how were they made safe?			
2	NOISE AND VIBRATION			
2.1	Has pile driving been used on site?	No		
2.2	Are compressors acoustically silenced?	Yes		
2.3	Is equipment powered by mains electricity?	No		
2.4	Is all mobile plant fitted with exhaust silencers?	Yes		
2.5	Are reversing alarms set to the minimum safe level?	Yes		
2.6	Have there been any complaints about noise or vibration?	No		
3	AIR POLLUTION AND DUST			
3.1	Is all plant machinery correctly adjusted and maintained with respect to emissions?	Yes		
3.2	Is there visual evidence of dust on roads around the site?	No		
3.3	Is there visual evidence of wind-blown dust in the vicinity of properties around the site?	No		
3.4	Have there been any complaints about dust?	No		



Number	Item	Yes/ No	Corrective Action Required?	Comments
4	HAZARDOUS MATERIALS			
4.1	Have any known or suspected explosive materials been found on site?	No		
5	WATER POLLUTION AND LIQUID WASTE DISPOSAL			
5.1	Have shingle recharge methods been discussed with the Fisheries Liaison Officer.	Yes		
5.2	Are materials, vehicles or equipment stored within 3m of the beach crest?	No		
5.3	Are all fuel and oil tanks adequately bunded?	Yes		
5.4	Is there any evidence of spills or leaks which have not been reported?	No		
5.5	Has the Contractor prepared and maintained a spill management plan?	Yes		
6	SOLID WASTE DISPOSAL			
6.1	Is there an adequate supply of litter and waste receptacles, are they labelled and are they being emptied sufficiently frequently	N/A		
6.2	Is all waste being treated in accordance to the Duty of Care regulations?	Yes		
7	NATURE CONSERVATION			
7.1	Are areas of vegetated shingle being marked off prior to works and staff briefed?	N/A		
7.2	Are access points clearly marked and respected?	Yes		
7.3	Is there any evidence of damage to established shingle vegetation and the saline lagoons?	No		
8	ARCHAEOLOGY & HISTORIC MONUMENTS			
8.1	Have there been any archaeological finds?	No		
8.2	If there have been any archaeological finds, was the Contractor's Environmental Manager informed, and was work stopped in that area pending investigation?	N/A		



Number	Item	Yes/ No	Corrective Action Required?	Comments
8.3	Has Tower No 55 at NBW sustained any damage?	No		Currently being renovated
9	TRANSPORTATION			
9.1	Is transport of construction materials being carried out in accordance with the Contractor's Method Statement?	Yes		
9.2	Have any complaints been received relating to construction traffic?	No		
10	COMMUNITY LIAISON			
10.1	Have notices been issued to statutory bodies and the public covering the present phase of works?	Yes		
10.2	Is the log book of complaints received and action taken up to date?	Yes		
11	EMERGENCY INCIDENTS			
11.1	Have there been any emergency incidents?	No		
11.2	If there were any emergency incidents, were the correct procedures followed?	N/A		
11.3	Are emergency planning and training procedures in place?	Yes		
12	ADDITIONAL COMMENTS/CONCERNS			



ACTIVITY LOG

DATE: 1st June 2011
 PERIOD COVERED: May 2011

CONDUCTED BY: Ian Thomas

SITE ACTIVITY THIS MONTH		
<i>Operation</i>	<i>Dates</i>	<i>Comments</i>
Groyne Maintenance	From 23-05-11	Removal of loose or damaged groyne elements

STAFF			
<i>Name</i>	<i>Company</i>	<i>Date</i>	<i>Training Material Supplied</i>
Mark Sanderson	Mackley	23-05-11	Site rules, Plant ID sheet, MS02, 03 & 04
Wayne Harley	Mackley	23-05-11	Site rules, Plant ID sheet, MS02, 03 & 04
Darren Jordan	Mackley	23-05-11	Site rules, Plant ID sheet, MS02, 03 & 04


Pevensey Bay Sea Defences
Notes from Monthly Project Manager's Meeting

May 2010

Items	Comment	Action
H&S Moment & Issues	No H&S or environment issues were raised	
Environment & Sustainability	PCDL Sustainability Action Plan awaiting approval by the PCDL Board. Copy to be provided to Agency once finalised	PCDL
Inspection & Current Condition of Defences	A drive-through of the defences was made and no areas of concern were identified.	
Work Done This Month	Groyne maintenance was underway at the end of the month.	
Programme For Next Month	It is possible that the annual recharge could start in late June	
Medium Term Planning	Only the annual recharge expected.	
Enquiries from the Public	No response yet from Martin Davies (Legal) on resident query re cracks to walls at NBE	Agency
Media Contact	No contact this month.	
Contractual Issues	Delivery of ABMS information still outstanding.	Agency
	10 year review of sea level rise by HR Wallingford received. Five year average rise is 2.8mm per annum	
	Nothing further heard regarding Mr. R. Greatrex's claim against the Agency.	PCDL/ Agency
Emergency Response	Tides still falling towards summer solstice. Maintain watching brief.	
Other Related EA Projects	<u>Pevensey Outfalls</u> Delayed	
	<u>L.A. frontages</u> No change	
Any Other Business	No other business was raised	
Next Meeting	Thursday 9 th June	

PEVENSEY COASTAL DEFENCE LIMITED
Monthly Report – May 2011



APPENDIX C

Quad Bike Survey Results
19th & 20th April 2011

Above		Calculations for 5m Crest Recession by Volume														Allowed	Current KPF	Min Vol	
0	Min	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2011	2011	2011	2011	Recession	cu.m	%	Reqd.
ABMS	KPF	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr						
569	10,000	11,236	10,991	10,988	10,872	10,602	22,613	19,945	14,122	14,122	9,630	9,361	9,994	9,931	10,112	-1,305	-11.6		
570		29,392	21,564	21,807	21,738	21,737	21,588	21,617	20,896	20,896	22,297	21,879	22,099	22,032	22,192	-7,360	-25.0	160	
571	34,000	35,373	33,499	33,227	32,855	33,167	32,938	32,982	31,829	31,829	34,395	34,316	34,767	34,521	31,602	-852	-2.4		
572		42,840	41,819	41,635	41,431	42,082	41,955	41,228	41,900	41,900	40,556	41,068	41,809	41,147	39,424	-1,693	-4.0		
573	34,000	36,774	33,001	33,148	32,894	32,928	33,121	32,720	31,865	31,865	30,972	31,733	33,285	32,720	33,271	-4,054	-11.0		
		155,615	140,873	140,805	139,790	140,515	152,215	148,492	140,611	140,611	137,849	138,357	141,953	140,351		-15,263			
574	34,527	36,812	34,694	34,688	34,429	34,365	34,608	34,183	33,753	33,753	32,978	33,320	34,225	34,180	33,958	-2,632	-7.2		
575	43,195	43,719	40,801	40,811	40,504	40,417	40,524	40,067	39,269	39,269	39,335	39,476	40,420	40,495	40,287	-3,224	-7.4		
576	22,990	27,266	27,131	26,266	25,885	26,140	26,510	26,981	27,698	27,698	26,743	26,408	26,338	25,895	24,217	-1,371	-5.0		
577	21,048	21,623	21,032	21,426	21,243	21,410	21,420	20,373	21,057	21,057	21,167	20,583	20,536	20,293	18,887	-1,330	-6.2		
578		37,435	36,040	35,837	35,727	36,010	36,172	35,852	36,354	36,354	35,808	35,634	36,005	35,502	34,516	-1,932	-5.2		
579	25,973	26,928	24,602	24,423	24,175	24,395	24,430	24,542	25,316	25,316	25,103	24,689	24,832	24,421	23,641	-2,507	-9.3		
580	28,238	32,687	32,469	32,536	32,344	32,665	32,249	32,256	32,455	32,455	32,408	31,665	31,772	31,163	29,245	-1,524	-4.7		
581		49,427	48,571	48,536	48,336	48,451	48,546	48,846	49,412	49,412	50,087	49,059	49,278	48,867	45,975	-560	-1.1		
582		38,200	39,119	39,147	39,093	39,138	39,106	38,927	39,164	39,164	38,936	38,221	38,623	38,101	35,129	-99	-0.3		
583		17,145	17,024	16,484	16,271	16,214	16,415	17,169	18,590	18,590	21,049	19,581	19,723	19,306	14,759	2,162	12.6		
584	35,906	41,205	39,334	39,162	39,173	39,412	39,531	39,113	38,905	38,905	38,957	39,920	40,756	40,094	37,106	-1,111	-2.7		
585		27,549	27,961	27,667	27,250	27,439	27,202	27,303	28,394	28,394	27,405	27,264	27,352	26,818	24,070	-731	-2.7		
		399,996	388,777	386,984	384,431	386,057	386,714	385,610	390,368	390,368	389,975	385,819	389,860	385,137					
586	32,375	34,546	37,967	37,944	37,337	37,622	37,459	37,210	38,571	38,571	37,805	37,246	37,667	37,155	30,682	2,609	7.6		
587	45,233	46,771	47,232	47,004	46,515	46,855	46,424	46,136	48,127	48,127	47,871	47,398	48,078	47,600	42,874	829	1.8		
588		64,914	63,054	62,622	62,074	62,149	62,045	62,385	64,178	64,178	63,547	62,688	63,101	62,452	60,781	-2,462	-3.8		
589	40,265	41,495	39,389	39,199	39,056	38,831	38,661	38,333	39,442	39,442	40,505	40,338	40,187	39,833	37,132	-1,652	-4.0		
590		35,402	34,292	34,262	34,203	34,180	34,176	34,111	34,257	34,257	34,593	34,482	34,399	34,222	31,620	-1,181	-3.3		
591	31,043	36,663	39,368	39,404	39,507	39,595	39,989	40,019	41,014	41,014	41,028	40,905	40,832	40,585	32,202	3,922	10.7		
592	25,951	37,101	39,910	39,776	39,787	39,558	39,935	39,942	40,986	40,986	41,962	41,567	41,468	40,895	33,087	3,795	10.2		
593	29,285	42,401	41,872	41,699	41,580	41,647	41,938	42,172	43,076	43,076	43,793	43,549	43,215	42,708	38,360	307	0.7		
594	45,157	48,646	45,751	45,653	45,517	45,656	45,883	46,237	47,253	47,253	47,784	47,874	47,114	46,752	44,680	-1,894	-3.9		
595	46,231	46,736	44,851	44,608	44,465	44,596	44,311	44,468	45,634	45,634	45,955	45,596	45,282	45,242	41,957	-1,494	-3.2		
596		38,170	34,569	34,051	33,842	33,861	33,104	32,910	32,800	32,800	32,127	31,290	32,746	33,446	34,073	-4,723	-12.4	627	
597		35,810	33,902	33,508	33,287	33,723	33,380	33,421	33,812	33,812	32,776	31,695	32,582	32,933	32,056	-2,878	-8.0		
		508,646	502,158	499,730	497,171	498,273	497,304	497,344	509,151	509,151	509,747	504,628	506,672	503,824					
598	37,978	44,849	49,710	49,506	49,793	50,000	50,212	50,633	50,921	50,921	50,810	50,487	50,678	49,839	40,632	4,989	11.1		
599	63,364	66,985	69,287	69,196	69,315	69,756	70,261	70,640	71,630	71,630	71,866	71,119	71,189	70,863	63,171	3,878	5.8		
600	73,655	76,520	74,996	74,942	74,974	74,903	75,020	75,699	76,576	76,576	77,005	76,585	75,579	75,255	73,008	-1,265	-1.7		
601		35,674	37,135	36,567	36,538	36,141	35,792	35,948	35,807	35,807	34,786	34,990	34,573	34,137	32,146	-1,537	-4.3		
602		42,491	45,009	44,642	44,619	44,695	44,426	44,566	45,028	45,028	43,982	43,071	42,681	42,194	39,289	-298	-0.7		
603		32,943	33,657	33,546	33,561	33,501	33,364	33,720	34,580	34,580	34,225	33,650	33,483	32,785	29,146	-158	-0.5		
604		41,774	40,643	40,349	40,256	40,320	39,884	40,555	40,842	40,842	40,615	39,373	39,705	38,543	37,949	-3,231	-7.7		
605		30,794	29,314	28,606	28,506	28,959	28,173	28,719	29,029	29,029	29,199	27,553	28,745	27,854	26,763	-2,941	-9.5		
606		35,158	38,729	37,802	37,809	37,747	37,354	38,206	38,056	38,056	37,263	36,026	36,392	35,691	31,125	533	1.5		
607		38,585	42,992	42,152	42,274	42,626	42,828	43,670	43,189	43,189	43,880	42,625	41,156	40,901	35,292	2,317	6.0		
		445,773	461,472	457,309	457,646	458,647	457,314	462,356	465,658	465,658	463,632	455,479	454,182	448,061					
608	37,284	39,897	37,096	37,003	36,855	36,815	36,580	36,976	37,513	37,513	37,882	37,666	37,115	37,074	36,843	-2,823	-7.1		
609		57,229	57,055	56,786	56,593	56,684	56,458	56,945	56,756	56,756	56,000	55,165	55,423	55,275	53,269	-1,954	-3.4		
610	48,985	53,839	55,106	55,053	54,725	54,700	55,168	55,886	56,362	56,362	58,240	57,010	56,768	56,975	49,227	3,136	5.8		
611		57,442	54,170	53,837	53,397	54,334	53,946	54,133	54,558	54,558	55,146	54,161	54,276	54,446	53,353	-2,996	-5.2		
612		37,765	34,228	33,898	33,788	33,638	33,020	32,671	32,702	32,702	33,027	32,365	34,687	33,798	34,148	-3,967	-10.5	350	
613		32,202	33,231	32,770	32,907	33,608	33,473	34,020	33,876	33,876	33,386	32,633	33,188	33,359	29,371	1,157	3.6		
614		50,105	46,645	46,225	46,151	46,514	46,424	47,386	49,052	49,052	49,097	48,078	47,712	47,887	46,648	-2,218	-4.4		
615	46,897	55,547	52,592	51,645	51,557	51,986	51,267	51,711	51,894	51,894	53,585	51,819	51,325	51,310	50,291	-4,238	-7.6		
616		36,118	35,931	35,026	34,968	35,556	35,175	36,168	36,531	36,531	36,317	35,406	35,426	35,366	31,848	-753	-2.1		
617	29,281	34,489	36,831	35,793	35,809	36,138	35,840	36,912	36,703	36,703	36,406	34,694	34,160	32,954	30,303	-1,535	-4.5		
618	20,388	20,684	24,573	23,582	23,137	23,982	23,675	24,414	25,543	25,543	24,771	23,391	22,443	21,692	17,188	1,008	4.9		
619	20,758	26,393	29,923	28,961	28,440	29,046	28,789	29,659	30,244	30,244	30,377	30,065	29,135	28,352	22,731	1,959	7.4		
620	30,348	32,870	37,933	38,844	35,755	36,488	35,918	37,072	35,072	35,072	35,951	35,816	33,683	33,056	28,618	185	0.6		
621		38,991	44,355	43,356	43,406	43,807	43,832	44,384	43,996	43,996	44,637	44,476	42,579	42,281	35,285	3,290	8.4		
		573,572	579,668	572,779	567,488	573,295	569,566	578,339	580,802	580,802	584,823	572,744	567,919	563,824		-9,748			
		2,083,601	2,072,948	2,057,607	2,046,525	2,056,788	2,063,113	2,072,141	2,086,590	2,086,590	2,086,027	2,057,028	2,060,587	2,041,197		-42,404	-2.0	2,065,595	
									Stockpile Volume	7,565		Total Material available as Sea Defence						2,048,762	