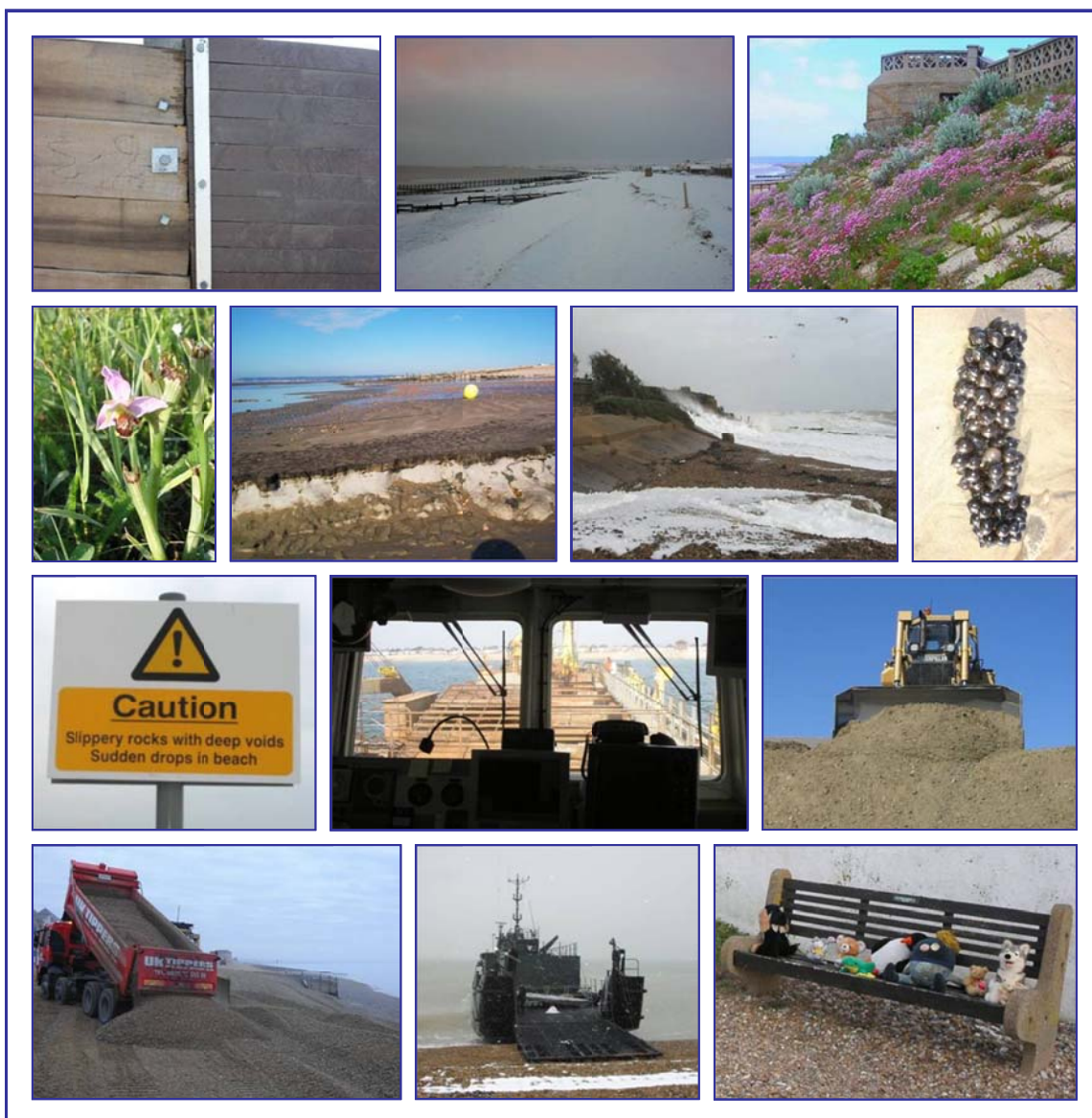


PEVENSEY COASTAL DEFENCE LIMITED



PEVENSEY BAY SEA DEFENCES PPP

MONTHLY REPORT: December 2010





1. Weather

1.1 General Synopsis – Southern England

An exceptionally cold month, with almost everywhere seeing snow at times. Mean temperatures were over 5 °C below the 1971-2000 average in most areas, and it was the coldest December for over 100 years. It was also one of the coldest calendar months in the 100-year series and the coldest since February 1986. There were some severe frosts and the number of days with air frost was the highest in December for over 50 years. Much of the precipitation fell as snow, especially in the first and third weeks. It was drier than normal across almost all areas, provisionally equal fifth-driest December in the 100-year series. Sunshine hours were about 50% of those normally expected in the south-east. In more detail the Met Office recorded October as follows;

Detail

Winds

1st to 8th It was a very cold start with frequent snow showers in many eastern areas during 1st and 2nd, giving significant accumulations in places, including up to 25 cm in parts of Surrey and Sussex. Daytime temperatures widely remained below freezing and overnight temperatures fell below -10 °C in many northern and western areas. A fragmented band of rain, sleet and snow moved eastwards during 3rd, leaving the rest of the first week mainly dry and often sunny, though some places saw further snow showers on 7th and 8th. It continued very cold with widespread frost, and freezing fog slow to clear. Daytime maxima were also very low.

Mainly NE
 Moderate to Strong including SW
 Gale to **Severe Gale 9**

9th to 15th Brisk north-westerly winds developed, bringing increasingly cloudy, but less cold, conditions. Rain showers from Cheshire into the Midlands fell onto frozen surfaces on the morning of 9th, causing widespread ice. Outbreaks of rain and drizzle spread south-eastwards on 10th and 11th with a good deal of cloud and hill fog generally. The 12th to 15th was a relatively quiet period with high pressure. Many places were somewhat less cold than previously, though generally still well below average with overnight frosts. There was plenty of sunshine on 12th but then it became generally dull and cloudy, with locally persistent fog. Light rain affected eastern areas on most days and spread further west at times.

N to NW
 Moderate to Strong

16th to 26th The 16th saw a change to much colder conditions as a band of rain, sleet and snow moved southwards, followed by strong northerly winds and snow showers in Norfolk. On 17th, snow showers fell in the south-west and parts of the Midlands, then an area of prolonged snow moved across southern counties on 18th, causing significant disruption to transport networks. A bitterly cold night followed. Snow showers continued in the north-east and the far south on 19th, otherwise it was mainly dry and bright. Early on 20th, the south-west saw heavy snow, with 10 to 15 cm accumulating, later spreading eastwards to other parts of southern England. Snow continued in the Midlands at times through 21st and 22nd, the night 21st/22nd being very cold, with temperatures below -12 °C across the north-east. The 23rd was cloudy and very cold with light snow. Christmas was dry and cold with some sunshine, although snow showers continued in the north and east and freezing fog affecting some areas

Primarily N
 Light to Moderate, occasionally Strong including NE
 Gale to **Severe Gale 9**

27th to 31st The last few days were less cold, with temperatures returning to near normal across many parts and a thaw of lying snow. Rain affected western areas on 27th, spreading north-eastwards on 28th and turning to snow in the north. Otherwise, 27th to 31st was generally dry but dull, with widespread fog and low cloud persisting throughout the day across many areas.

S to E
 Light to Moderate



1.2 Gales

December 2010 proved to be one of the least windy of the contract to date, with the majority of those winds experienced coming from the north and east. Indeed over 80% of all winds had either an easterly or northerly component. The net result was an average wave height well below the seasonal norm, and comfortably the lowest for the eleven December's to date.

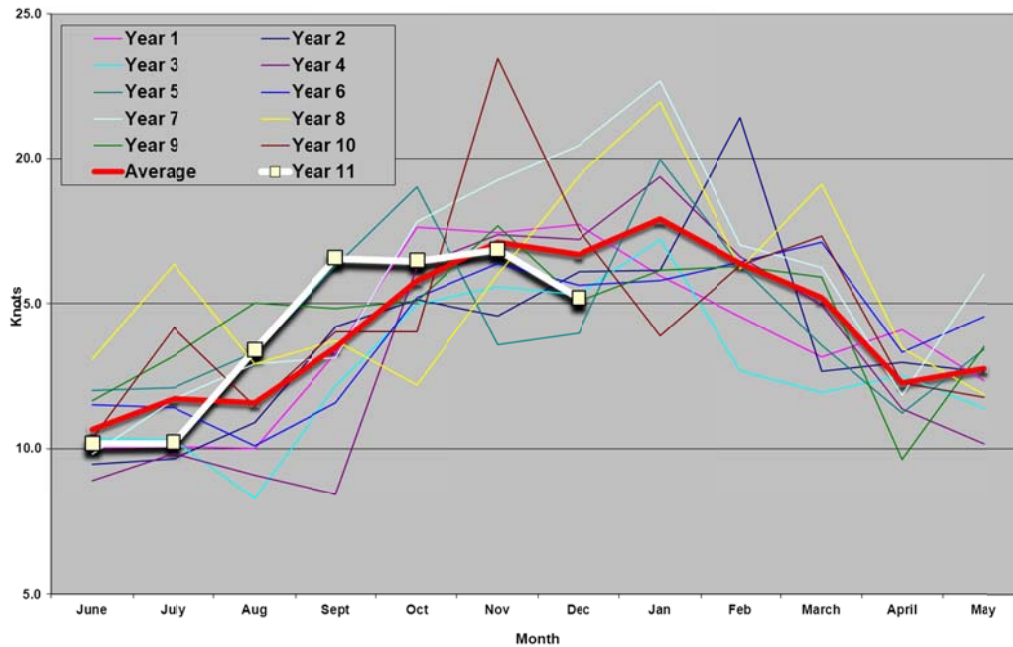


Figure 1: Monthly Average Wind Speeds (from Met Office model)

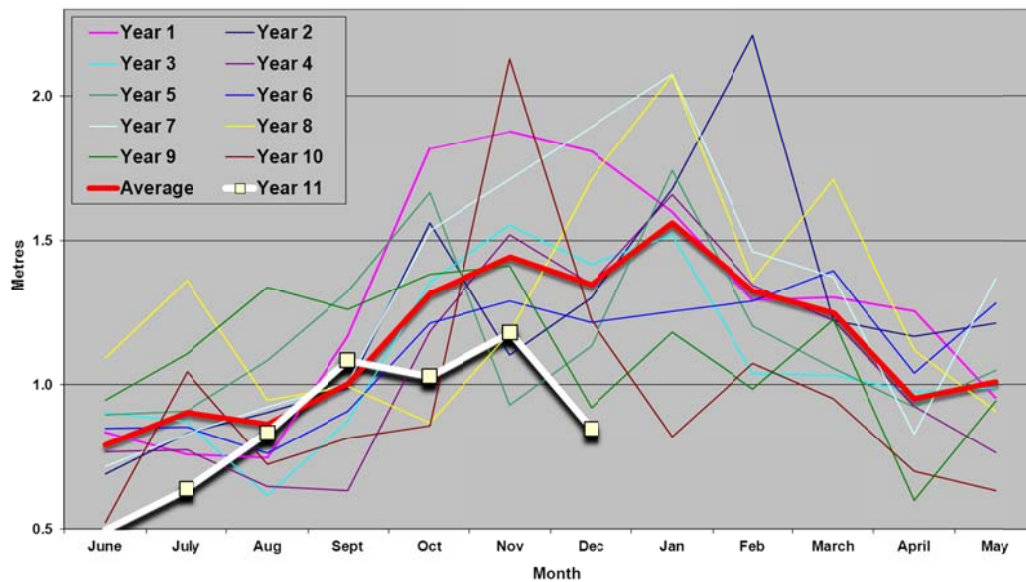


Figure 2: Monthly Average Wave Heights (from Met Office model)



Despite an overwhelming majority of north and east winds, there was still sufficient atmospheric activity to record two days of gale on the beach. December 3rd wind speeds were recorded at or above gale force between 01:00 and 04:00, peaking at 37.1 knots, whilst the southerly gale on 18th December was even more remarkable. Southerly winds gradually increased during the morning to reach 34.8 and 41.4 knots at 11:15 and 11:30 respectively. As the front passed, speeds dropped dramatically such that 11:45 logged 11.5 knots from 250° and noon saw 2.9 knots from 300°. 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	Wednesday 1 st	09:38	8	NE continuing
Gale Warning		15:31	-	Gale now ceased
Gale Warning	Friday 3 rd	15:24	8	SW expected soon
Daily	Saturday 4 th	02:00 – 13:00	7	S to SW
Gale Warning		03:31	Severe 9	SW increasing imminent
Gale Warning		15:31	8	SW now decreased
Daily		18:00 – 19:00	7	SW
Daily		21:00 – 22:00	7	SW
Gale Warning		03:25	-	Gale now ceased
Gale Warning	Wednesday 8 th	03:26	8	NE expected soon
Gale Warning		15:38	-	Gale now ceased
Gale Warning	Thursday 16 th	09:49	8	N expected soon
Gale Warning		23:07	-	Gale now ceased
Gale Warning	Saturday 18 th	11:43	8	S imminent
Daily		14:00 – 15:00	7	S
Gale Warning		16:21	-	Gale now ceased
Gale Warning	Sunday 19 th	13:39	8	NE imminent
Gale Warning		21:48	-	Gale now ceased
Gale Warning	Wednesday 22 nd	09:37	8	NE expected later
Gale Warning	Thursday 23 rd	09:48	Severe 9	NE increasing imminent
Daily		12:00 – 24:00	7	NE
Daily		00:00 – 05:00	7	NE
Gale Warning	Friday 24 th	03:34	8	NE decreasing soon
Gale Warning		15:31	-	Gale now ceased

Table 1 – Weather Information Received: December 2010

2. Works Undertaken

2.1 Planned Works – Reprofiling

After the rapid response recycling resulting from the 8th November storm, December was altogether more sedate. A second bulldozer remained during the first week of the month, but it was off-hired on Friday 3rd December. Thereafter a single bulldozer was used, mainly at Sovereign Harbour and 'White Horses', where the defences were maintained partly by reprofiling and by occasional use of the box.

3. Health, Safety & Environment

No Health & Safety incidents were reported during the month.



4. Monitoring

4.1 KPF Surveys – GPS Quad Bike Survey

A monthly quad bike survey for December was always going to be difficult, since the main spring tide period coincided with the Christmas Day/Boxing Day Bank Holiday period. Whilst the earlier set of tides could have been used, they coincided with the heaviest snow fall and coldest weather of the month. This meant that most of the upper beach remained buried under snow masking any obstacles that could have proved hazardous to the quad bike and its rider. Similarly any areas clear of snow were frozen solid, resulting in dramatically reduced traction for the quad bike's wheels particularly on inclines. It was thus decided to miss this month's survey.

5. Stakeholder & Landowner Liaison

No significant liaison between PCDL and stakeholders or residents occurred during the month as most were pre-occupied with having to deal with snow and ice rather than sea defence related issues.

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)

Following the November 8th storm, and specifically the underestimation of wave heights predicted for the event, an email was sent to Richard O'Callaghan, Regional Flood Forecasting Team Leader. This recorded PCDL's views on why the actual event was significantly different from that forecast and asked for hindcast data to see if varied from forecast information. It also suggested that the Met Office should be asked for their view of the event and that wave direction should play a bigger part in determining whether Flood Alerts should be issued.

In response, Richard recorded that;

- queries to the Met Office require a formal feedback process where the FCRM team would submit a feedback form to the Flood Forecasting Centre where the Meteorologist who provides the tidal/wind/wave forecasts can then comment on it. A form would be filled in for this event.
- It would be useful to see some of the evidence collated so please do send through the relevant sections.
- It seems the Flood Alert thresholds relating to wind and waves need some tweaking so will pass this on to the local Flood Incident Management team who set these.

Once the November report was complete, sections relating to the storm, its effect and a review of recorded data were sent to FCRM



6.1.3 Environment Agency – NCPMS

Following the PCDL/Agency presentation to ICE South Branch Maritime Group on 9th December, Allister Humby (Dean & Dyball) contacted PCDL to report that he and Will Shields (WDCo) represent a Westminster D&D JV as contractor for NCPMS on their “Strategic Coastal Programme Initiative”. The initiative is looking at efficiencies that could result from linking coastal cells across political boundaries, much as has been achieved by connecting Pevensey with Bulverhythe and Seaford. Whereas PCDL and the Agency locally have been concentrating on promoting a unified approach for the Sussex coast, this initiative is being targeted at a more national level. For a forthcoming presentation to the project steering group, Allister was given copies of slides describing the linking of Pevensey, Bulverhythe and Seaford but where more could be done by including Eastbourne. He sees this as a positive example, in comparison to the Selsey area, where there are four unlinked adjoining schemes, with different delivery authorities and procurement routes.

6.2 Islington Council

In July 2009 Hastings & Bexhill Wood Recycling Project supplied Islington Council with old groyne timber for use in a street landscaping project. A copy of the designer’s outline and a picture of how the space used to look was included in that month’s report. During summer 2010 the Council’s Community Landscape Team used the materials provided to regenerate an area of land on Wheelwright Street that belongs to – and adjoins – Pentonville prison. Their website subsequently published the information shown right about their work.

Wheelwright Street-On-Sea

The Community Landscape Team bring a coastal feel to the borough.

We have taken a challenging site in Wheelwright Street and transformed it into a slice of the seaside.

The Wheelwright Street site runs along the side of Pentonville prison and is a long, narrow site. It's in full sun for most of the day and is a testing environment for all but the toughest of plants. The whole site was reminiscent of a cliff and beach, so that's exactly what we built.

Sea defences, recycled from Pevensey Bay in East Sussex, were set out just as they would be at the seaside. Sand, shingle, crushed cockle shells, giant boulders and specially made gabions all add to the coastal feel.

The land belongs to the prison and is not accessible to the public, which means we've been able to use materials that would usually not be suitable for a public open space. The chunky sea defences are completely authentic, with bolts sticking out and mussel shells still attached. The cockle shells actually smell of the sea.

The design allowed us to improve biodiversity, even in the hard landscaping. The sea defences act as huge loggeries and the gabions and aggregates create plenty of places for invertebrates to nest undisturbed.

The planting scheme is native and coastal, including grasses and wild flowers such as thrift and the stately *Crambe maritima*. Most of the plants are nectar giving and have attractive seed heads. And of course, they are all drought tolerant. As the site becomes established it should involve no maintenance other than the odd litter pick.

The public response to the new site has been really positive:

'It makes my day every time I drive past'

'I feel like I've been transported to the seaside'

Go and check it out if you need a seaside fix!

For more information about the Wheelwright Street project, please contact: Colette Blanchard
E colette.blanchard@islington.gov.uk T 020 7527 7520

6.3 Chichester District Council

Ben Cooper, a Trust Development Officer with Chichester District Council’s Coastal Change Team telephoned PCDL to learn how the Pevensey project is managed. He intends to visit site during January to learn more and look at the way works are carried out on the beach, and to see how they might be replicated by their own project in Selsey.

6.4 Considerate Constructor’s Scheme

Following scheme monitor John Ogle Scan’s second site visit in November, his report was submitted in early December;

Monitor's Site Report

July 2010

www.ccscheme.org.uk



ID:	41524	Visit no. for this registration	3
Project name	Pevensey Bay Sea Defences PPP		
Contractor	Pevensey Coastal Defence Ltd (PCDL)		On site contact name
			Ian Thomas
Site description and location	This is the 11 th year of a 25-year 'Pathfinder' PPP sea defence project for the EA to improve and maintain 9km of shingle bank between Eastbourne and Bexhill. The bank protects an ecologically sensitive area of 50sq.km and some 10,000 properties. Principally now a mix of planned and reactive maintenance, the work is both seasonal and tidal and in response to weather events and natural erosion. PCDL is a consortium of four companies each working as sub-contractors to PCDL. The project is managed from a small office within the local EA depot. During this visit I witnessed 'shingle by-passing'-the movement of shingle by excavator and road transport, from one side of Sovereign Harbour to the other for beach reprofiling and restocking.		
Observations	Score	Comments	
1. Considerate	4.5	Ian maintains an excellent communications network for residents, agencies and organisations providing advice on proposed works in addition to a mine of information on the contract and its environmental foundations. Most recently details of timing and location of proposed 'recycling works' were e-mailed to some 150 recipients (including Residents' Associations and this monitor!); further information was sent following the later gales which prompted extensive remedial work to the beaches and the current 'by-passing'. This information is disseminated to many thousands of other people by newsletters and the like. Locally, there appeared to be no affect on roads or access to beaches, beach plant is controlled by banksmen and lorries have to follow agreed routes, and speed limits, set out in the operation-specific TMPlan and Method Statements to reduce local impact. For this operation beach-access is gained via a restricted access gate and a lockable/gated road designated solely for this project. There are some 20 other, mainly public, beach-access points. Specific warning signage is displayed near all beach-access points. Access to the off-site project office is suitable for all. Ian, having developed his communication strategy over a long period, would be able to accurately to determine how effective PCDL's performance is relative to the project's stakeholders and the public without the need for questionnaires.	
2. Environment	4.5	PCDL's Envir Policy and Env Management Plan are in place and currently being audited and updated. Project-specific issues are well documented and included in inductions; operation-specific copies are maintained in separate information files on site. Ian maintains contact with the local EHO. The files include specific procedures for hazardous spillage with spill kits required to be in place; the rare habitat -'vegetated shingle' is identified for those working on the beach so that these areas can be protected. An SWMPlan is in place with the minimal waste generated including office waste mostly being recycled; groyne timber has been available to local residents and small businesses, and local timber recycling projects are supported. Metals are segregated into EA's skips. Sand and gravel for recharging the beach is also sea-dredged by one of the consortium-see report No 2. All vehicles run on bio fuels stored in bunded tanks on site. Risks of pollution are confined to noise/vibration and dust-all monitored; careful timing reduces the dust nuisance whilst a change to a different type of dozer has reduced the effects of vibration, confirmed successful by at least three residents. The project amply demonstrates how environmental performance can be improved through developing best practice, new methods of moving shingle having reduced plant and transport usage to the ultimate benefit of the local community. A Sustainability Plan is being prepared for approval; this will show how successful the carbon footprint monitoring is.	
3. Cleanliness	4.5	A positive result of the project's public image is that it remains mostly very low profile and when operations are under way has no negative effect on the cleanliness and tidiness of the local area. A full-time road sweeper was in attendance throughout. From earlier discussions with a number of local people, and a particular resident on the day of my visit the project is very well thought of and well presented. The project office, meeting area and its welfare facilities are very well maintained and ideally laid out for local residents to visit.	
4. A Good Neighbour	4.5	Noise and potential inconvenience is carefully monitored although it is doubtful whether any has been experienced from either of the two operations I have witnessed. However reversing beepers have been switched off, as all vehicles are banked on site. Good neighbourliness and community involvement continues to be a major factor in the successful operation of the contract; also a feeling of partnership, a tripartite with the client and the local population. Ian's office is open house to local people providing an exhibition of the works and a meeting point for those new or potential residents to learn about the scheme. The PCDL website and e-mail notifications provide up to date information with extensive web links to relevant organisations; and PCDL runs a 24/7 emergency response facility in association with EA and emergency services as part of the Pevensey Emergency Plan. Neighbours are formally advised of emergency works and changes in planned work. Community involvement extends to include an Annual Public Forum attended by some 150 people last April; recently one of the local MP's visited the project. Close liaison with the local fishing industry avoids sensitive fishing grounds. A 'Key Stakeholder Group' meets regularly. Any complaints would be reported in the monthly Report to EA or would emanate from EA; it is refreshing to report a number of really sincere thank you letters and a number of letters raising concerns regarding potential flooding/property damage, all of which are dealt with sympathetically and professionally by Ian.	
5. Respectful	4.5	The welfare facilities provided in the project offices are adequately sized and equipped, with toilet and shower. Ladies and disabled facilities are available within the EA compound. Within the extensive and remote operational areas local public facilities are identified for personnel use; in this case facilities are available in Sovereign Harbour. Some teams prefer to provide their own mobile units. Operatives' appearance gives a professional impression with company branded PPE. Inductions deal with behaviour towards the public and local residents in particular; radios and the like are not allowed on site. Communications though rely heavily on mobile phones. Working in such an exposed area requires specific advice on skin protection.	
6. Safe	5	There is a detailed CPH&SPlan and Site Safety and Environmental Rules for the current project works implemented by Ian, audited annually, and recently reviewed in association with Mackley who are responsible for the majority of the work now. The Mackley foreman carries out a fortnightly safety inspection. There are very detailed Method Statements for each of the operations. Public safety is paramount with banksmen employed, speed limits enforced, and temporary signage in place. Ian maintains close contact with the local Police traffic unit. All accidents and near misses would be recorded and investigated; there have been no accidents in the last period. Ian has introduced two 'Buddis'- personal GPS tracking devices enabling workers on remote locations to be locatable within metres using a phone or online, 24/7, 365 days a year; they also provide an emergency alert should a worker need assistance; lone working is not allowed on site. Additionally two bagged kits are now provided for shoreline working. Emergency procedures are extensive and well detailed in a separate method statement including both site works and weather event procedures, and emergency contact details - all contained in separate operation folders. Mackley personnel are subject to occupational health surveillance with an OD specialist available for advice including on-site visits.	



7. Responsible	4.5	Details of the nearest A & E Hospital are provided with maps and directions. Ian is a 1 st -aider and all s/cons provide their own 1 st -aiders. All inductions are operation-specific and medical conditions are recorded; CSCS cards are compulsory. Ian has given several presentations about the project and about sea defence work to local schools, and other organisations both in the UK and abroad. Ian's work within the educational field in providing information for GCSE Geography textbooks is now being reinforced with preparation of an instructional DVD together with time-lapse photography charting all operations involved with the project, for distribution to colleges and schools. Specific information about the project is available online through the extensive PCDL Website – a real mine of useful and interesting information and a good read!
8. Accountable	4.5	Ian continues to demonstrate a very keen interest in the operation of the CCScheme and in meeting its core requirements, especially in neighbour communications. The CCS is extremely well promoted on the PCDL website and in all communications with the public and local people and businesses. The EA is also very supportive of the CCS Code of Practice; the Scheme would welcome their expertise as a Client Partner. A CCS poster is displayed outside the EA compound, and Ian will introduce them on 'A' frames close to public accesses for beach operations.

Total (out of 40):	36.5	Summary and conclusions
---------------------------	------	--------------------------------

With environmental and community considerations so much at the heart of this project it is not surprising that Ian and his team, and the EA, are able to demonstrate so many examples of success in these areas. But it is their personality and keenness to really engage with the local community that stands out.

Any photos taken	Yes	Date of visit	23 November 2010
Monitor's name	John Ogle-Skan ICIOB		SIGNED:

Score per section	Score references	Score per section	Score references
1	Major non-compliance	4	High level beyond compliance
2	Minor non-compliance	5	Exceptional measures taken
3	Compliance		



7. Media Contact

7.1 Eastbourne Herald



Having dealt with body parts washed up during November (believed to have come from Brighton) later the same month the Eastbourne Herald featured two items specifically about Pevensey. The first related to Greg Barker MP's visit on 29th October and was compiled from information provided by Mr Barker's office, although news of its inclusion in the paper and a copy of the article was provided by the Agency project manager.



Ian Thomas and Greg Barker in Pevensey Bay

MP impressed with coastal defence team

PEVENSEY MP Greg Barker has applauded the work of the Pevensey Coastal Defences.

Mr Barker recently visited the world's only sea defence contract which works as a public-private partnership on the beach at Pevensey Bay.

The local MP was welcomed to the site by project manager Ian Thomas and Ian Nunn and Peter Amies from the Environment Agency.

The team explained how a 25-year contract means they can think ahead, cut costs and work effectively with

the community. Celebrating its tenth anniversary this year, the team hopes that the lessons learnt in Pevensey can be used at other sea defences across the country.

Mr Barker said, "Strong sea defences are vital to Pevensey Bay, Normans Bay and the whole local area.

"I like to stay in close touch with the sea defence team, especially at this time of year as the winter approaches, but I was reassured that the beach defences are being maintained in very good order."



The second piece resulted from the 8th November storm and resulted from the initial enquiry made by Juliette Perry two days later, as recorded in section 7.4 of last month's report. What had been published was only found by chance when searching for local news. The accuracy of its content left something to be desired;

Worst storm for a decade batters coastal defences

Published on Wednesday 17th November 2010 10:00 PM

LAST week's high winds battered Pevensey's sea defences in what was the worst storm the shoreline has experienced in 10 years.

Large amounts of shingle, which is piled up on the beach to act as a defence for beachside properties, were lost to the sea through waves action caused by the high winds.

The Pevensey coastline is managed, on behalf of the Environment Agency, by Pevensey Coastal Defence Limited (PCDL), which is the first public private partnership worldwide to manage flood defence. Twice each year, PCDL move or import shingle to replenish and reprofile the beach so the defences are maintained.

A spokesperson from the Environment Agency said, "During the midday high tide on Monday (November 8) the majority of the nine kilometre stretch of the frontage managed by Pevensey Coastal Defence Limited lost significant quantities of shingle due to severe weather conditions.

"The tide was one and half metres higher than was forecast and led to the worst storm event the frontage has experienced in ten years.

"Certain tides can damage the frontage depending on the direction the frontage faces. In this case, as the frontage faces south east, it was particularly badly affected. PCDL had recently completed one of their biannual replenishment projects so the defences were in good condition and no homes have been reported as been flooded.

"PCDL immediately deployed heavy plant machinery on Monday afternoon to begin works to replenish the frontage and by Tuesday had brought more machines on to the site."

Pevensey MP Greg Barker recently visited PCDL to hear about its work.

Following last week's severe weather, Mr Barker said, "Although the sea flood defences at Pevensey have had an excellent record over the past ten years, we can't afford to be complacent as these latest storms have shown. That's why I visited Pevensey Coastal Defences Ltd two weeks ago to view the preparations for the winter."

In response to finding this article the following was directed to the press office;

After the storm at Pevensey on 8th November, the two press enquiries I received – in accordance with our contract – were directed to the Agency's press office. Thereafter I heard no more. Last week I found a link to a story on the 8th November storm at:- http://www.eastbourneherald.co.uk/news/local-news/worst_storm_for_a_decade_batters_coastal_defenses_1_1637699

I was somewhat perturbed to discover that factually inaccurate information was described as being supplied by and Agency spokesperson;

- 1. If the tide had been 1.5m higher than forecast there would have been a major catastrophe. Waves were 1.5m higher than predicted, not the tide. The difference between the two is significant.*
- 2. PCDL does not undertake "biannual replenishment projects." We complete an annual replenishment as part of a suite of activities that are necessary to keep the defences up to the required standard. What each activity entails is entirely driven by the weather, so varies month by month and year by year. I also believe it would have been good practice to inform PCDL that a press release had been issued, or that information had been supplied to the Herald for use in a subsequent article.*



A response from the press office is awaited.

7.2 European Commission - Directorate General For Maritime Affairs and Fisheries

In early December an email was received from Diego Paltrinieri, managing director of Arenaria Srl, an Italian contractor, and the first Italian company to have permission to extract submarine deposits from the Adriatic Sea. Arenaria were the main sponsors of the 2009 EMSAGG conference in Rome, at which PCDL gave a presentation on best practice being derived from the Pevensey project. Mr Paltrinieri was introduced to the concept of PPP/PFI for coastal works at the conference. Now, Arenaria is trying to propose a similar PFI approach to the Pevensey model for the Italian Regional Administration.

In order to learn how the Pevensey contract had evolved through to being signed, Mr Paltrinieri invited PCDL to attend another conference that they were part sponsoring, again in Rome, on 16th & 17th December 2010. The conference was entitled "Towards an integrated maritime policy at the level of the Mediterranean coastal regions" and was run under the auspices of the European Commission, Directorate General for Maritime Affairs and Fisheries

Unfortunately, the notice given was too short, particularly for what is often a stormy time of the year, so the invitation had to be declined. PCDL did however express a willingness to meet with Arenaria and extended an invitation for them to visit Pevensey in the New Year instead.

7.3 University of the Third Age

Alan Wenham, chairman of the Eastbourne Central branch of U3A (University of the Third Age) emailed to enquire whether PCDL would be able to make a presentation to his organisation. U3As are self-help, self-managed lifelong learning co-operatives for older people no longer in full time work, providing opportunities for members to share learning experiences in a wide range of interest groups and to pursue learning not for qualifications, but for fun. Eastbourne Central tend to meet in small study groups but come together once a month in a larger meeting of about 50 people for a talk based loosely around science and environment. It was agreed that PCDL would talk to the group for 40 to 50 minutes, followed by questions, on Wednesday 4th May 2011.

7.4 Chesterton Community College, Cambridge

Another example of Pevensey, and the PCDL website, being used as a case study for the teaching of coastal management was found on a Worldlywise Wiki webpage at <http://worldlywise.pbworks.com/w/page/15409213/Unit%201%20Section%20B%20-%20Managing%20coastal%20areas>. It transpired that this Wiki was established primarily for GCSE Geography students at Chesterton Community College, Cambridge to support study of the AQA(B) GCSE course, although Geography teachers and students at other schools are welcome to view the pages. It was noted that data from www.pevensey-bay.co.uk had been inaccurately transcribed and recycling indicated as being west to east rather than the other way round. This error was pointed out to the site moderator, Dr Katharine Hutchinson, Head of Humanities at the College, who amended the erroneous page.



7.5 ICCE 2010

ICCE 2010 was held in Shanghai in early July and was attended by Kaiming She of the University of Brighton. Kaiming had also presented a paper, which he later prepared for publication in the conference proceedings. Nominally co-authored by PCDL, it was finalised for publication just before Christmas. It featured data obtained by PhD student Xiao Wei Yu, particularly sediment sampling data he gathered during his beach monitoring work at Sovereign Harbour. At 19 pages the full paper is too large to include in this report, although a separate pdf version will be available for circulation once published should a copy be required.

7.6 South East Coastal Group (SECG)

SECG exists to encourage an integrated, strategic approach to the management of the entire coastal zone. It provides a forum for coastal practitioners to both discuss problems and develop shoreline management techniques that are both economically efficient and sensitive to environmental considerations. Local authorities and Environment Agency are key members in an area that covers from the Thames Barrier round to Selsey Bill.

Having attended PCDL's 10th anniversary event at SHYC in September, group chairman, Bryan Curtis (Worthing BC), invited PCDL and Ian Nunn to present similar discussion topics as used previously. Lessons learnt with regard to improving 'best practice' and how these could be used to provide more efficient and cost effective management for larger stretches of coast was well received by the group at a presentation on 9th December, again at SHYC.

7.7 ICE South Branch Maritime Group

ICE South Branch Maritime Group arranged a meeting for the evening of 9th December, holding it at the same venue as SECG, enabling PCDL and Agency Coastal Engineer Ian Nunn to make a similar presentation to the one made earlier in the day. Some 37 engineers attended the event and asked some very interesting questions, sparking some lively debate.



8. Short Term Programme

With the beach currently in good condition, reprofiling will continue as a daily event for the remainder of the winter, with recycling and harbour bypassing implemented as and when weather events demand.

RECORD OF PEOPLE ENTERING SITE

Attachment	No. of visits to site
PCDL Project Manager	21
Agency Project Manager	2
Environment Agency Staff	13
Westminster Dredging	6
Dean & Dyball/Balfour Beatty	2
Mackley Construction	0
Mouchel	2
Sub-contractors	20
Local Residents/Landowners	5
Other Third Parties	57
Universities/Colleges	0
Total visits	128

- ❖ 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: ENVIRONMENTAL INSPECTION CHECKLIST

DATE: 4th January 2011

CONDUCTED BY: Ian Thomas

PERIOD COVERED: December 2010

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 and 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		
8.3	Has Tower No 55 at NBW sustained any damage?	No		Currently being renovated



Number	Item	Yes/ No	Corrective Action Required?	Comments
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			


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

December 2010

Items	Comment	Action
H&S Moment & Issues	No H&S or environment issues were raised	
Environment & Sustainability	PCDL currently working on a Sustainability Action Plan based on Agency goals. Copy to be provided to Agency once finalised	PCDL
Inspection & Current Condition of Defences	No areas of concern were identified. Works repairing storm damage were initiated in a timely manner and in an agreed order.	
Work Done This Month	Reprofiling all month.	
Programme For Next Month	Reprofiling and recycling when necessary in response to any weather events occurring	
Medium Term Planning	Nothing specific planned. Noted that Eastbourne recharge and recycling due to start during January.	
Enquiries from the Public	No response yet from Martin Davies (Legal) on resident query re cracks to walls at NBE	
Media Contact	Presentations were made to both the SE Coastal Group and ICE (South) Maritime Group in partnership with the Agency.	
Contractual Issues	Delivery of ABMS information still outstanding.	Agency
	10 year review of sea level rise by HR Wallingford ordered by Agency	Agency
Emergency Response	High spring tides 21-24 th January. 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 Meetings	Date for January meeting yet to be fixed	

PEVENSEY COASTAL DEFENCE LIMITED
Monthly Report – December 2010



APPENDIX C

Quad Bike Survey Results
11th – 12th November 2010

Above		Calculations for 5m Crest Recession by Volume														Allowed Recession	Current KPF cu.m	%	Min Vol Reqd.
0	Min KPF	2009 Dec	2010 Jan	2010 Feb	2010 Mar	2010 Apr	2010 May	2010 June	2010 July	2010 August	2010 Sept	2010 Oct	2010 Nov	2010					
569	10,000	11,236	8,556	8,936	8,100	8,310	11,344	10,991	10,988	10,872	10,602	22,613	19,945	14,122	10,112	2,886	25.7		
570		29,392	18,132	19,811	19,059	18,133	21,124	21,564	21,807	21,738	21,737	21,588	21,617	20,896	22,192	-8,496	-28.9	1,296	
571	34,000	35,373	35,625	36,203	35,322	34,661	32,768	33,499	33,227	32,855	33,167	32,938	32,982	31,829	31,602	-3,544	-10.0		
572		42,840	44,716	43,584	42,856	41,762	42,058	41,819	41,635	41,431	42,082	41,955	41,228	41,900	39,424	-940	-2.2		
573	34,000	36,774	31,688	32,001	32,557	32,320	32,715	33,001	33,148	32,894	32,928	33,121	32,720	31,865	33,271	-4,909	-13.4		
		155,615	138,717	140,534	137,894	135,186	140,009	140,873	140,805	139,790	140,515	152,215	148,492	140,611		-15,003			
574	34,527	36,812	32,909	33,281	33,480	33,581	34,437	34,694	34,688	34,429	34,365	34,608	34,183	33,753	33,958	-3,059	-8.3		
575	43,195	43,719	37,763	40,388	40,777	40,257	40,611	40,801	40,811	40,504	40,417	40,524	40,067	39,269	40,287	-4,450	-10.2	535	
576		27,266	28,206	28,396	28,014	28,252	27,111	27,131	26,266	25,885	26,140	26,510	26,981	27,698	24,217	432	1.6		
577	21,048	21,623	20,189	22,115	21,671	21,727	20,657	21,032	21,426	21,243	21,410	21,420	20,373	21,057	18,887	-566	-2.6		
578		37,435	34,178	34,640	35,872	36,242	36,075	36,040	35,837	35,727	36,010	36,172	35,852	36,354	34,516	-1,081	-2.9		
579	25,973	26,928	25,111	25,888	25,566	25,153	24,391	24,602	24,423	24,175	24,395	24,430	24,542	25,316	23,641	-1,612	-6.0		
580	28,238	32,687	31,162	32,279	32,735	32,875	32,542	32,469	32,536	32,344	32,665	32,249	32,256	32,455	29,245	-232	-0.7		
581		49,427	47,287	47,833	48,453	48,567	48,169	48,571	48,536	48,336	48,451	48,546	48,846	49,412	45,975	-15	0.0		
582		38,200	38,209	38,773	38,821	38,938	38,853	39,119	39,147	39,093	39,138	39,106	38,927	39,164	35,129	964	2.5		
583		17,145	17,613	18,213	17,826	17,902	16,741	17,024	16,484	16,271	16,214	16,415	17,169	18,590	14,759	1,445	8.4		
584	35,906	41,205	35,250	36,933	38,649	38,856	38,790	39,334	39,162	39,173	39,412	39,531	39,113	38,905	37,106	-2,300	-5.6		
585		27,549	28,148	28,292	27,643	28,055	27,632	27,961	27,667	27,502	27,439	27,202	27,303	28,394	24,070	846	3.1		
		399,996	376,024	387,032	389,508	390,405	386,008	388,777	386,984	384,431	386,057	386,714	385,610	390,368					
586	32,375	34,546	37,274	38,103	37,624	38,090	37,813	37,967	37,944	37,337	37,622	37,459	37,210	38,571	30,682	4,025	11.7		
587	45,333	46,771	46,662	47,383	47,079	47,577	46,918	47,232	47,004	46,515	46,855	46,424	46,136	48,127	42,874	1,356	2.9		
588		64,914	62,947	63,849	63,118	63,556	62,894	63,054	62,622	62,074	62,149	62,045	62,385	64,178	60,781	-736	-1.1		
589	40,265	41,485	39,352	40,177	40,050	39,626	39,130	39,389	39,199	39,056	38,831	38,661	38,333	39,442	37,132	-2,043	-4.9		
590		35,402	32,528	32,860	33,460	34,049	34,112	34,292	34,262	34,203	34,180	34,176	34,111	34,257	31,620	-1,145	-3.2		
591	31,043	36,663	38,547	39,386	39,255	39,542	39,409	39,368	39,404	39,507	39,595	39,989	40,019	41,014	32,202	4,351	11.9		
592	25,951	37,101	38,687	39,666	39,525	39,975	39,675	39,910	39,776	39,787	39,558	39,935	39,942	40,986	33,087	3,885	10.5		
593	29,285	42,401	41,000	42,044	41,655	41,842	41,752	41,872	41,699	41,580	41,647	41,938	42,172	43,076	38,360	674	1.6		
594	45,157	48,646	45,503	46,447	46,081	46,195	45,607	45,751	45,653	45,517	45,656	45,883	46,237	47,253	44,680	-1,392	-2.9		
595	46,231	46,736	45,428	46,283	45,178	45,358	44,638	44,851	44,608	44,465	44,596	44,311	44,468	45,634	41,973	-1,101	-2.4		
596		38,170	29,866	32,782	32,028	32,788	32,406	34,569	34,051	33,842	33,861	33,104	32,910	32,800	34,073	-5,370	-14.1	1,273	
597		35,810	32,107	32,822	31,876	33,002	32,667	33,902	33,508	33,287	33,723	33,380	33,421	33,812	32,056	-1,998	-5.6		
		508,646	489,902	501,803	496,929	501,599	497,020	502,158	499,730	497,171	498,273	497,304	497,344	509,151					
598	37,978	44,849	50,887	50,790	51,588	50,216	49,902	49,710	49,506	49,793	50,000	50,212	50,633	50,921	40,632	6,071	13.5		
599	63,364	66,985	71,487	70,968	71,275	71,280	70,847	69,287	69,196	69,315	69,756	70,261	70,640	71,630	63,171	4,645	6.9		
600	73,655	76,520	76,076	75,795	75,588	76,008	75,507	74,996	74,942	74,903	75,020	75,699	76,576	73,008	73,008	56	0.1		
601		35,674	38,311	38,135	37,078	37,013	36,395	37,135	36,567	36,538	36,141	35,792	35,948	35,807	32,146	133	0.4		
602		42,491	44,986	44,909	44,334	44,357	44,410	45,009	44,642	44,619	44,595	44,426	44,566	45,028	39,289	2,537	6.0		
603		32,943	32,855	33,416	32,969	33,224	33,226	33,657	33,546	33,561	33,501	33,364	33,720	34,580	29,146	1,637	5.0		
604		41,774	39,022	40,152	39,587	40,715	40,326	40,643	40,349	40,256	40,320	39,884	40,555	40,842	37,949	-932	-2.2		
605		30,794	27,017	28,655	27,657	28,977	29,057	29,314	28,606	28,506	28,959	28,173	28,719	29,029	26,763	-1,765	-5.7		
606		35,158	36,048	37,739	37,460	37,534	37,591	38,729	37,802	37,809	37,747	37,354	38,206	38,056	31,125	2,898	8.2		
607		38,585	43,946	44,036	42,349	41,144	42,171	42,992	42,152	42,274	42,626	42,828	43,670	43,189	35,292	4,604	11.9		
		445,773	460,635	464,594	459,885	460,470	459,432	461,472	457,309	457,646	458,647	457,314	462,356	465,658					
608	37,984	39,897	36,730	38,808	38,703	38,072	36,966	37,096	37,003	36,855	36,815	36,580	36,976	37,513	36,843	-2,384	-6.0		
609		57,229	52,288	54,738	55,612	56,758	56,707	57,055	56,786	56,593	56,684	56,458	56,945	56,756	53,269	-473	-0.8		
610	48,985	53,839	54,636	53,374	53,144	54,095	54,525	55,106	55,053	54,725	54,700	55,168	55,886	56,362	49,227	2,523	4.7		
611		57,442	55,113	54,113	53,228	54,063	54,079	54,170	53,837	53,397	54,334	53,946	54,133	54,558	53,353	-2,883	-5.0		
612		37,765	33,473	34,491	34,198	35,202	33,573	34,228	33,898	33,788	33,638	33,020	32,671	32,702	34,148	-5,064	-13.4	1,446	
613		32,202	33,899	34,107	32,851	33,456	33,446	33,231	32,770	32,907	33,608	33,473	34,020	33,876	29,371	1,674	5.2		
614		50,105	47,750	47,646	47,939	47,850	47,390	46,645	46,225	46,151	46,514	46,424	47,386	49,052	46,648	-1,053	-2.1		
615	46,897	55,547	52,723	52,749	52,236	53,575	52,183	52,592	51,645	51,557	51,986	51,267	51,711	51,894	50,291	-3,653	-6.6		
616		36,118	34,846	35,755	35,458	36,354	35,636	35,931	35,026	34,968	35,556	35,175	36,168	36,531	31,848	413	1.1		
617	29,281	34,489	35,785	36,534	36,704	37,537	36,388	36,831	35,793	35,809	36,138	35,840	36,912	36,703	30,303	2,213	6.4		
618	20,386	20,684	24,698	25,728	25,211	25,435	24,222	24,573	23,582	23,137	23,982	23,675	24,414	25,543	17,188	4,859	23.5		
619	20,758	26,393	31,556	32,180	31,787	31,920	29,433												