

## Shoeburyness Coastal Management Scheme – Analysis Report

A twelve week consultation/ campaign was launched on the 3<sup>rd</sup> December 2018 until 18<sup>th</sup> February 2019, which included information promoted online and at public drop-in sessions.

Three sessions were held at the Thorpe Bay Yacht Club throughout the consultation and at different times

- Wednesday 12<sup>th</sup> December 2018
- Thursday 10<sup>th</sup> January 2019
- Tuesday 5<sup>th</sup> February 2019

At these sessions Officers met with those visiting and answered any questions and take any comments forward as part of the consultation.

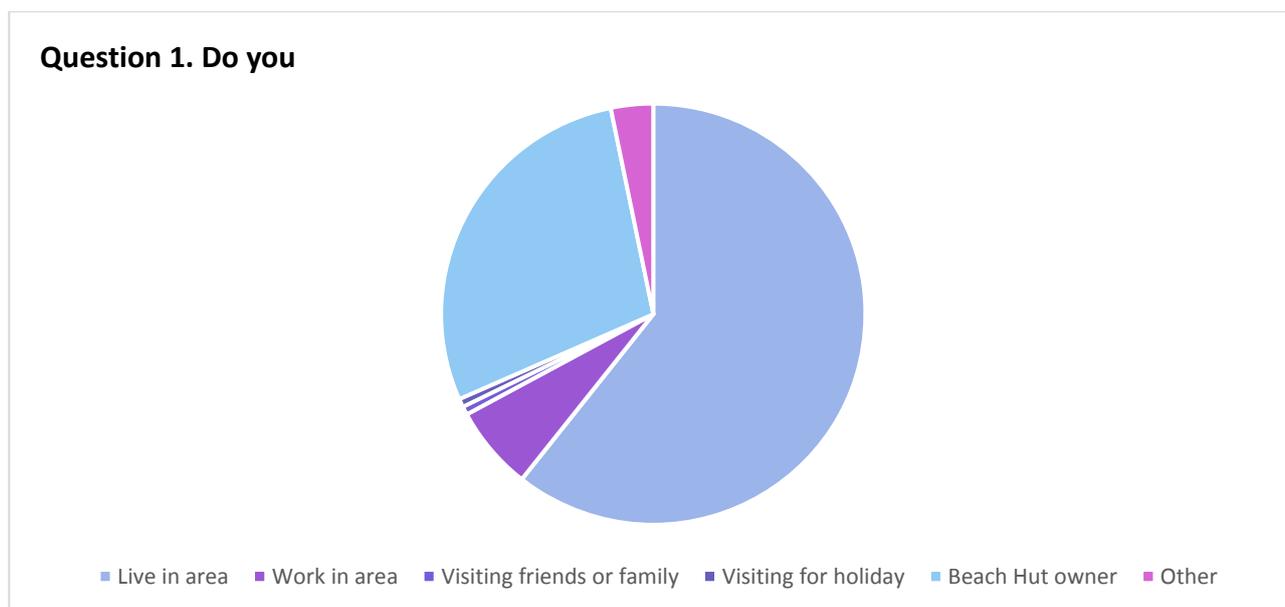
The campaign could also be accessed in many ways

- directly online on the Councils 'Consultation Portal'
- an interactive questionnaire that could be returned via email or,
- Opportunity to either download a hardcopy version from the website or a paper copy send out by us so it could be completed by hand and sent in by post.
- There was also a meeting with some residents who had concerns and wished to discuss them outside of the drop-in events

### The results

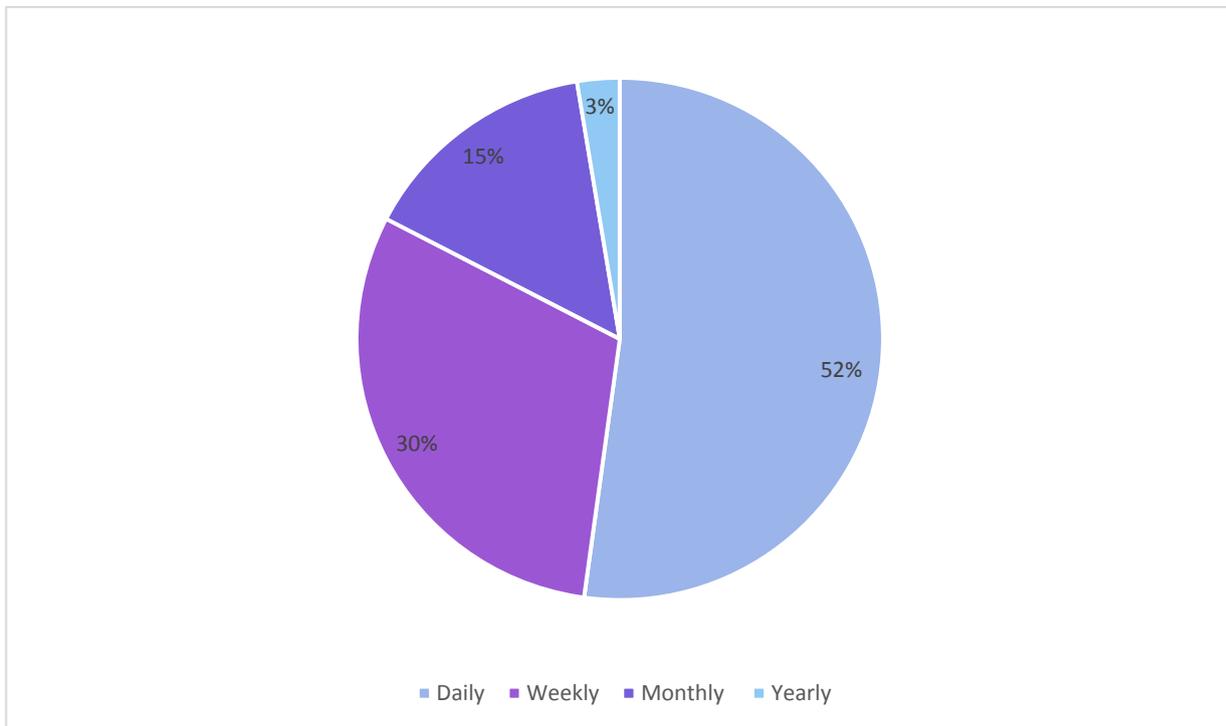
A total of 122 people accessed and responded to the consultation using either the paper questionnaire or online, responding to the questions set and using the free text part to raise any other issues in relation to this consultation. Over 190 people attended 'drop-in' sessions over the course of the three events (some visited more than once). A meeting was also requested by a group of residents wishing to meet with the Project Team this took place on 29<sup>th</sup> January 2019 at the Civic Centre.

*Please note: not all questions were completed by all participants.*



Of those responding to this question 61% live in the area and 28% identified that they owned Beach huts

**Question 2. How often do you visit the coast and adjacent areas along Shoebury Common Road and the Garrison??**



52% of those responding visit the area daily for various reasons, the most popular being walking along the beach closely followed by visiting their beach hut.

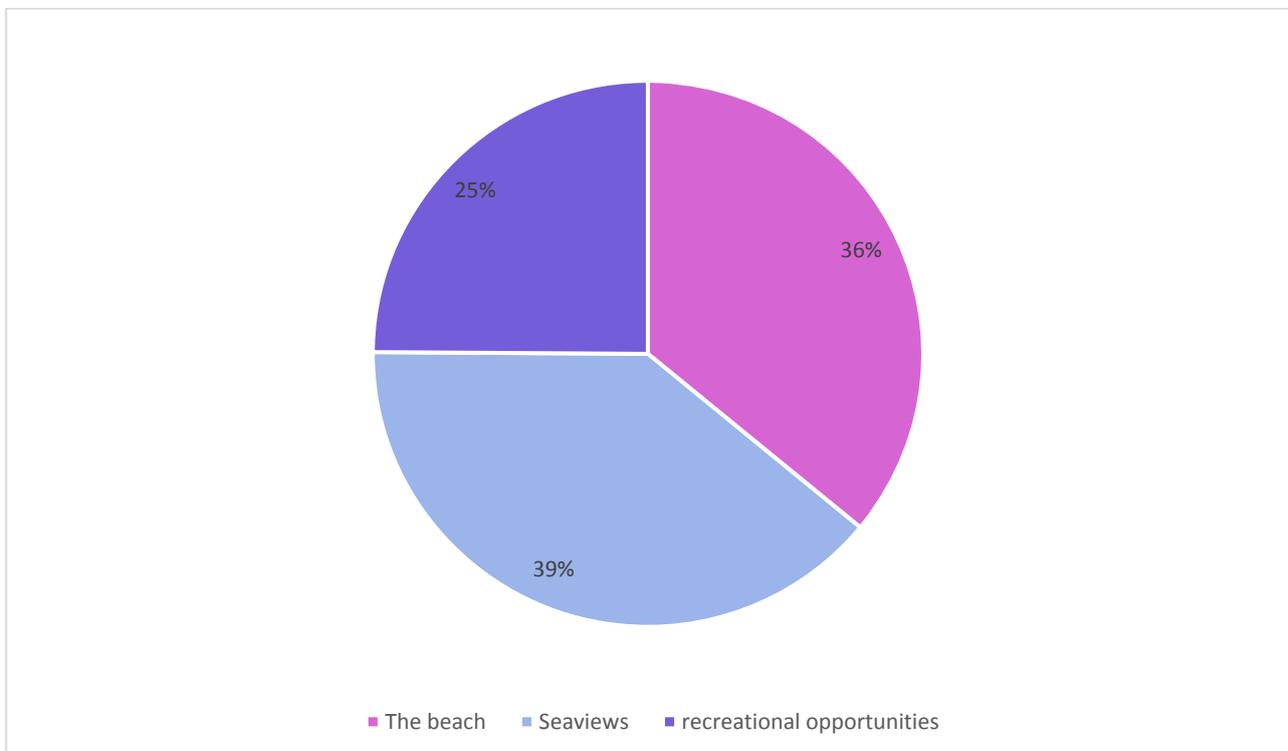
**Question 3. Why do you visit areas along Shoebury Common Road and Garrison?**

This was a free text response question and a total of 29 individual comments received on this question, most people use the area for walking.

Comments	
01	Recreational walks as a daily routine
02	To take grandchildren to beach, to walk the dog and to get fresh air and exercise. I also like to watch the sailing.
03	1. Beach walks, 2. Occasional sailing from TBYC slipway, 3. TBYC visits – food and drinks, 4. Views over the estuary
04	Beach Hut owner/ Member of Beach Hut Society to use beach facilities
05	Beach Hut owner/ Member of Beach Hut Society – frequent user of beach
06	Leisure
07	Local resident and beach hut owner.
08	Walking / Visiting Gunners Park
09	To use my beach hut and enjoy the cycle rides and to use the green area behind my hut to play with my grandchildren also to swim in the sea.
10	Natural Environment
11	Walking, swimming
12	To enjoy the beach hut during the summer months when the sun is out.

13	Pleasure, exercise and public toilets
14	Seafront resident
15	This is where I live and enjoy the local surroundings and foreshore
16	To walk along the coastal path
17	Road/car/bus access to Southend and beyond.
18	Walking my dog
19	Walking – Thorpe Bay to Garrison
20	Health mind and body. Enjoyment of the flora and fauna, wildlife.
21	Exercise and leisure purposes
22	Recreational Enjoyment
23	I enjoy walking the seafront with my dogs enjoying the exercise and the sea view also the wildlife that live on our shores especially the different birds.
24	Walking my dog and cycling for exercise and pleasure
25	To celebrate family birthdays. Stay in Premier Inn in Thorpe Bay and spend days at Beach Hut to go crabbing along the groyne. Our hut is on the promenade close to Uncle Toms Cabin , excellent toilet facilities and the lovely view across the Thames , the proximity of access to the beach amongst other things make Shoebury a must visit location.
26	Enjoy walking along the beach and seafront and own a beach hut between Yacht Club and Garrison on the beach
27	Walking to keep fit and healthy – watching the wildlife
28	Enjoy walking along the promenade and garrison taking my daughter in laws dog for walks. In the summer enjoy swimming in the sea.

**Question 3. What do you value most about the areas along Shoebury Common Road and the Garrison?**



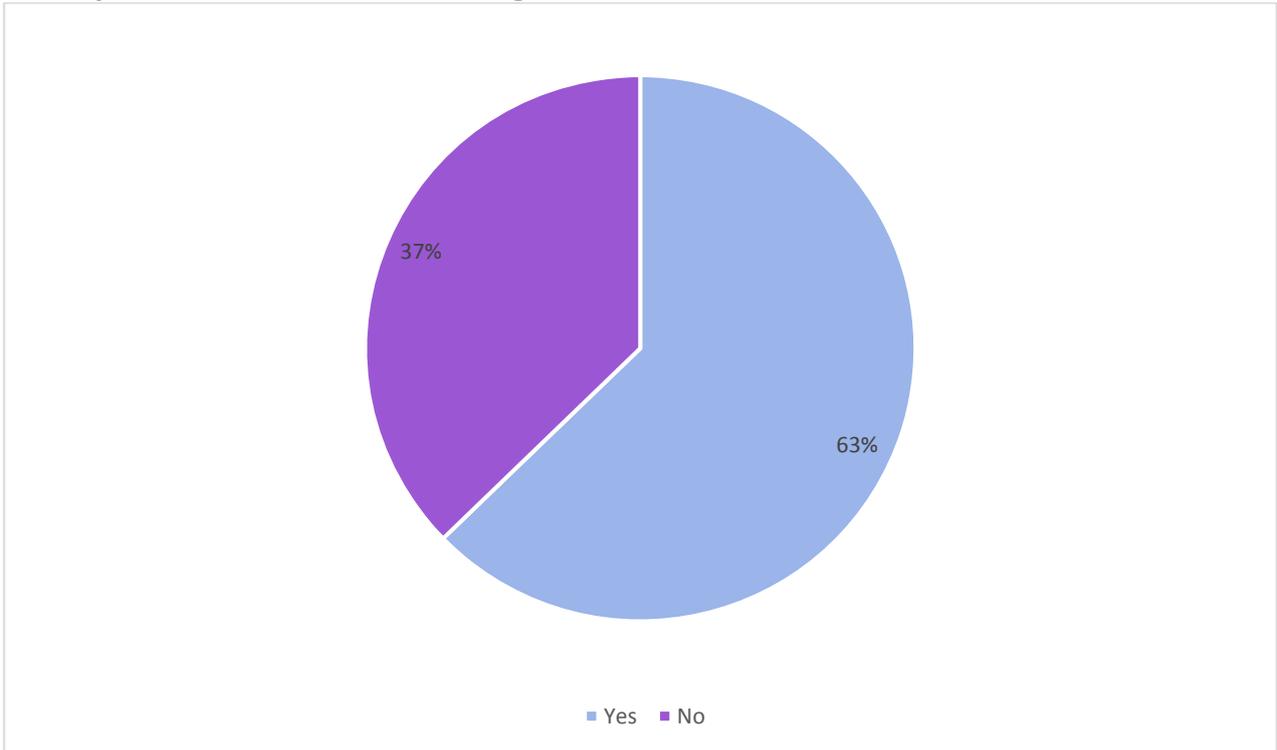
Seaviews was the most valued at 39% closely followed by the beach area.

**Question 4(a). What do you value most about the areas along Shoebury Common Road and the Garrison?**

This was a free text response question and 17 individual comments were received on this question.

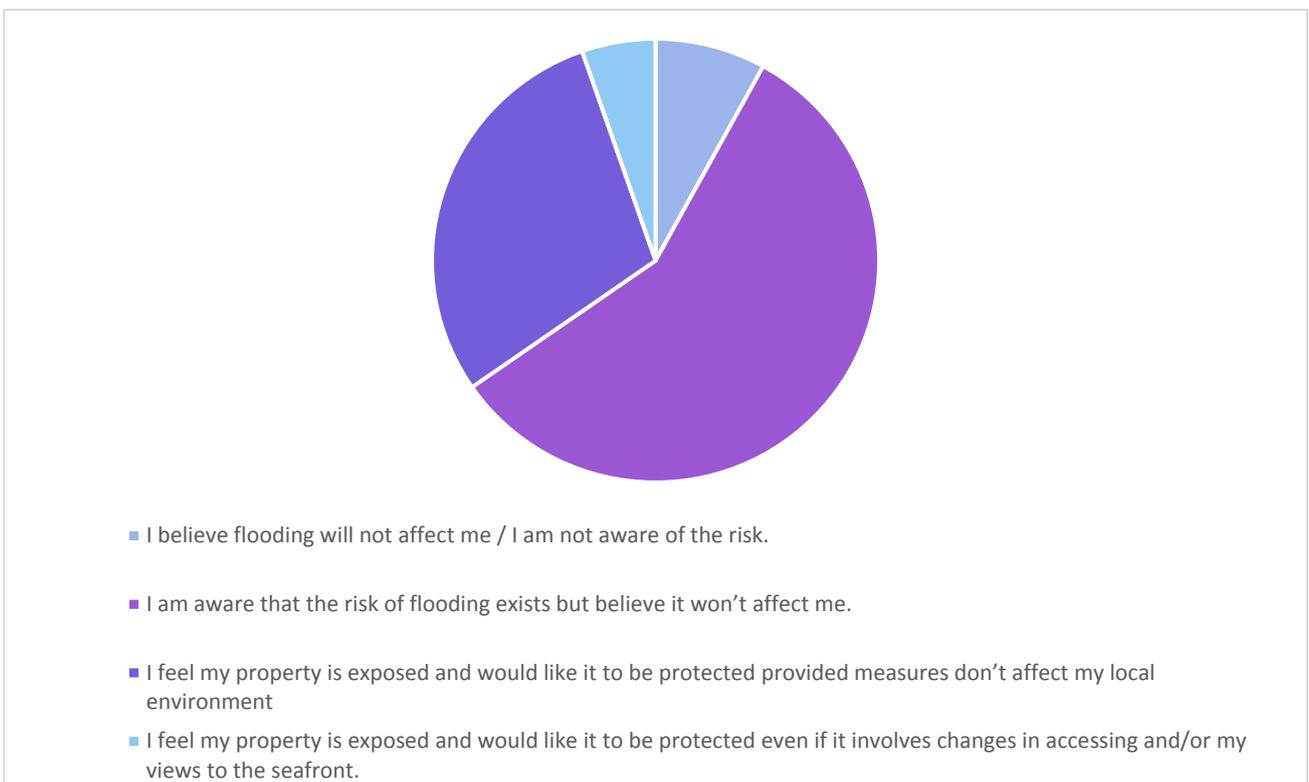
Comments	
01	Safe secure walks without dangerous tree roots impeding steps and no danger of trips and falls. Relatively free of dog fouling etc. Interesting sea traffic /activity as an interest.
02	Family social occasions with children and grandchildren. Car park facility, water tap facility and public toilets.
03	Family facilities, café, toilet facilities, water tap
04	Heritage
05	Opportunity to walk along the seafront and the Garrison Wall
06	What else
07	Love to swim uninterrupted from Maplin Way to Uncle Toms
08	When the café is open
09	Living on the seafront gives a quality of life with space/fresh air and well-being.
10	The green space I probably walk the beaches more in the winter than the summer months
11	Seeing tide movement changing from Leigh to low tide enjoying our beach hut and friendships of neighbours of other huts. Walking the Prom sunsets you can often see the sun and moon together as the vista is so wide.
12	As well as above, it is a place for people to meet in pleasant surroundings. It benefits physical and emotional well-being.
13	wildlife
14	The unspoilt view of the foreshore and sea, enjoying the history of the Garrison also Gunners Park.
15	The open space of the area to come and go
16	As said in question 3, the beach is a real gem – blue flag awarded beach, safe bathing. Stunning sunrises and sunsets which I regularly photo. The walk along the Garrison sea wall and surrounding paths and cycle tracks is enjoyed by many many people
17	Mt family own a beach hut and as we are retired we spend as much time as possible taking in the views and fresh air.

**Question 5. Looking at Figure 2 in the Non-Technical summary, would you consider yourself or assets you own to be at risk of flooding?**



As you can see from the chart above 63% of those responding believe they could be at risk of flooding.

**Question 6. How much does flooding affect you?**



Although in the previous question 63% of those who responded believe they could be at risk of flooding. Only 5% feel their property is exposed and would like it to be protected even if it involves changes in access or views to the seafront, with 29% feeling their property is exposed and would like protection but using measures that don't effect the environment and 58% were aware of the risks but believe it won't affect them

**Question 7 Have you had any issues that have affected you or your assets related to beach erosion or flooding?**

This was a free text question which 13 people responded, overall the perception is beach erosion is causing the flooding that has occurred in the past.

Comments	
01	Possible ill-considered flood risk schemes affecting the amenity and value of the beach hut.
02	Beach Hut has excellent views so this/ views needs to be maintained
03	No
04	We were flooded twice in 2016 but I am unclear whichever or not - this was due to beach erosion
05	I would hope whichever option is decided upon to reduce the flood risk it imparts as little as possible upon the height of the sea wall and views from the promenade.
06	Yes beach erosion has reduced the height of the beach
07	Sand/ shingle always moving and reach top of groynes to the east of St Augustine's Ave
08	Have lived on Shoeburyness seafront for 13 years during which time there has been no flooding from the sea overtopping the current sea defences. However, there has been flooding in Section 3 from the 'Shoe' after heavy rainfall.
09	Not to date
10	I live in Thorpe Hall Avenue, I understand that there is an issue with Anglian Water Co who instead of replacing the drainage system at the bottom of Thorpe Hall Avenue they chose to do minimum repairs. Hence, when there is a tidal surge the storm drain cannot cope along Thorpe Esplanade. I believe when there is a high tide, it will force the drain water back inland flooding properties
11	Not personally affecting any of my assets but I am still aware of the environmental impact of beach erosion. The area is part of my community and as such as asset to the community. Access to the roads due to the sea coming over the wall impacted us all at some point as we travel the area.
12	Yes, A few years ago, after beach erosion in a storm affecting the huts immediately east of the yacht club, the council stripped ½ to ¾ metre of beach between Marcus Ave steps and the groynes adjoining hut 214. The removed material was put east of the yacht club and within a few tides it had disappeared into the North Sea. Stripping of any beach material should never be allowed. The beach in the affected area has remained at a lower level.
13	Yes the sand falling away to expose the leg foundations of my beach hut

**Question 8. If your answer in Question 7 was yes, what do you think can be done to resolve the cause?**

Free text question which 10 people responded, with the most common solution being to Recharge the beach and install new groynes.

Comments	
01	Continued consultation with local residents and beach hut owners to reach an amicable solution
02	Recharging beach seems the best solution. The beach would be larger therefore adding to tourism opportunities
03	Recharge the beach with extra sand, also install new Groynes to prevent sand being eroded.
04	Leave beach as it is and not like the one in the Roslin Area
05	Monitoring and remedial action to reduce level if needed
06	Regular maintenance of the Shoes ditches, culverts and holding areas.
07	Get Anglian Water Co to install a new drainage system
08	Raising and fortifying the walls by reasonable amount without impacting view and accessibility to the beach has to be worthwhile
09	Repair groynes constantly starting from East to west (not west to east) as it used to be (and still could be) Council Policy. Recharge low areas, but with imported material. Do not remove existing material.
10	Increase beach levels replace sand and extend breakwaters

**Question 9. What do you consider are the main issues relating to the way in which the coastline is managed and which you want to see being dealt with in this project?**

This was also a free text section and the consensus from the 22 people responding was that continuous maintenance and monitoring of existing flood defences needed to be performed, protection of the area was also a main concern.

Comments	
01	Long-shore drift, beach erosion, defective breakwaters. Un-necessarily restricted MOD land access at beach New Ranges. Lack of sea views from footpath between the coastguard and East Beach.
02	Possibly not managed rigorously in recent years. A carefully considered immediate plan and close monitoring in the future to maintain its effectiveness.
03	Needs regular maintenance / monitoring
04	Need to raise seawall defence regardless of people with beach huts complaining
05	To improve existing defences and not to downgrade the existing aesthetics of the area.
06	Beach erosion has been allowed to continue unchecked for years
07	The coast provides a natural flood plains – don't build new homes there simple!
08	Safety has to be a priority but a good visual appearance is also important. Broken steps and groynes also look shabby and present a risk to the general public and users
09	There has been a serious lack of interest and intention to regular maintenance of the seawall repairs and a complete disregard to the importance that the beach groynes have in balancing beach levels. These issues appear to be a low priority due to the expenditure required.
10	I think that its important wherever possible to maintain the access and enjoyment of the beach and foreshore for the benefits and enjoyment of both residents and visitors wherever possible

11	I do not want coastal areas to be used for housing estates when they are natural flood plains i.e. the old Shoebury park / garrison
12	Reduction of flooding in this designated scheme in such a way that it does not cause an impact and potential increase of flooding elsewhere in Shoeburyness – as well as other areas of Southend. End result not allowing construction of more industrial units/ housing in those areas of risk of flooding if no other substantial works are made (Option 1)
13	Making sure local considerations are taken into account the beach etc. is not just for tourists and visitors. Bearing in mind that for a lot of socially isolated older people being able to walk up and down with or without a dog may be their only social interaction. Not over facilitating the area is important. Making sure the litter, particularly the plastics collected regularly.
14	Flood protection although protection of breeding habitat between Southend and the Coastguard is hardly relevant as sea-birds do not nest on this stretch. They feed, but will still feed if beach levels are higher
15	Because our parents hired a beach hut when we were young we have been associated with area 2 for about 60/70 years. We have never been dissatisfied with the way this stretch has been managed.
16	Existing defences must be maintained – additional defences should have minimum impact on the environment. That the areas should remain unspoilt. That the area remains safe and pleasant place for visitors, both young and old to enjoy.
17	You cannot protect the whole coastline. A decision needs to be made as to those areas you wish to protect and those that will be sacrificed to alleviate the risk of flood to other areas. Defences need to be robust and a consistent standard. In some areas groynes need to be replaced or reinstated if not the coastline will drift.
18	Full planned maintenance of groynes and funding provision for same in council budget. Periodic recharge- of beach and regular re banking by bulldozer as seen in other coastal areas (i.e. Hayling Island) to combat the effect of tidal erosion.
19	I'm concerned that parts of East beach cliffs on the beach despite rocks being adored that the wire is not suitable for purpose as after a few years it has rotted and rocks are falling away. More thought needs to be put into if there will be large rocks placed around the foreshore.
20	Replenishment of the beach stop the sand moving behind the yacht club slipway due to tidal movement.
21	Regular maintenance is essential to ensure that sea defences are maintained to a high level yesterday on a walk through the garrison I noticed several cast aluminium supports holding the safety rails are in a shocking condition. Many of the bases fractured and can quite easily be vandalised. If these safety rails do become dislodged there is a sheer drop of about 10f to the beach below – this is to the west of this heavy quick firing battery.
22	The coastline must remain as a haven for people and wildlife. The vista must not change.

**Question 10. Do you have any views on the way in which the existing coastal defences have had an impact on the frontage and its usage?**

18 people responded to this free text question with the overall view being limited access and impaired view.

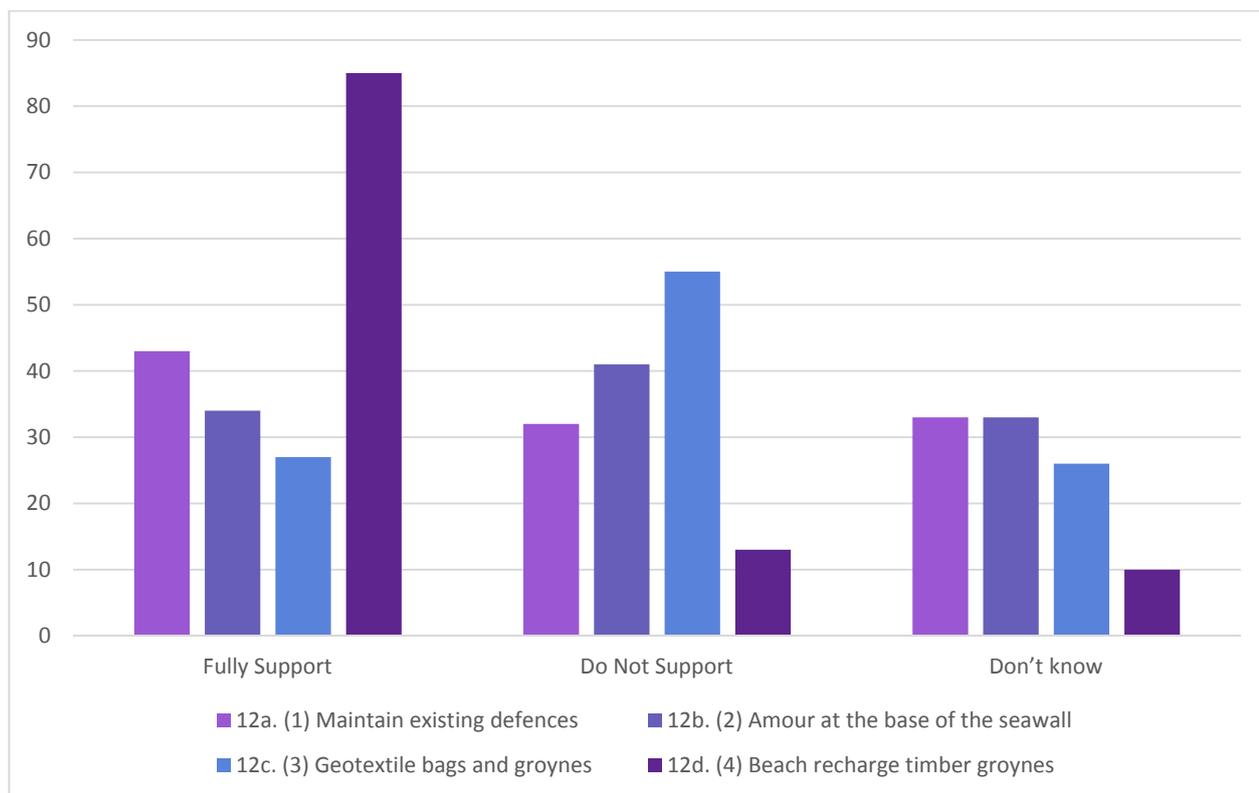
Comments	
01	Existing coastal defences do not appear to impact negatively on the frontage or its usage.
02	Existing Section 2 wall seems sufficiently high. The beach has been increasingly eroded in recent years, beach needs a re-charge
03	In Section 2 – the existing wall would be sufficient if beach recharged. Therefore not necessary to raise wall.
04	No view
05	The new beach (recharged with dirty muck and stones) is awful and is not used much and is not cleaned by the tide.
06	Limits access to the beach, impairs view along section 3
07	Existing coastal defences do nothing to make the beach/access points ‘user friendly’ People with mobility problems, on enabling repair work to be carried out on beach huts
08	I think that the last improvement building up the beach to break waves and reduce deterioration of the existing sea defences was a great success in retaining access to the beach and foreshore whilst improving sea defences
09	The last coastal defences were built in the 1960s I believe with climate change I feel we must adapt and work with nature and not against it. The reason we have coastal erosion is this area was due to the gully dredged to take bigger ships further up the Thames thus losing the majority of the mud which has naturally moved out to fill the ravine. There is now green algae covering the area near the sand of which has been swept out to sea. Maybe more groynes might help with this erosion.
10	The fact that the present timber groynes appear to be not fit for purpose – more of an eyesore
11	As well as a 30yr plan there needs to be a 100yr plan with London and areas upstream also increasing flood defences. This combined with awareness of plans further up the North Sea Coast, otherwise Shoeburyness becomes an increasing bottleneck for the next north sea surge with high tides.
12	The low sea wall near the beach huts has made for a great shelf to leave used nappies on it in the last two years.
13	Over the years we have seen quite a lot of sand and gravel taken away from Shoebury beach to be used elsewhere.
14	They have little impact
15	Lack of maintenance has put some areas at additional risk of flooding.
16	Little or no perceived impact at present, however, it is difficult to walk the beach without having to climb over a groyne some of which have no steps.
17	Not really they seem to work as they are.
18	The existing coastal defences have served very well. To my knowledge this area has never been flooded due solely to sea rising levels. The danger arises from over development and building on flood plains that create flooding for example in Somerset.

**Question 11. Do you have any views on changes that should be made to the existing coastal defences? What effect do you think this would have?**

A free text question with 18 people responding with recharging of the beach and maintaining and adding new groynes being a popular choice.

Comments	
01	Without the necessary technical 'know how' I must rely on expert advice in respect of these issues.
02	Breakwaters in poor condition – need replacement. Beach needs re-charging.
03	Section 2 Re-charge beach, this would be more of an attraction to tourists – the beach would be larger and far more pleasing to the eye.
04	Re-charging beach would make area more attractive. Therefore more visitors and tourism would be brought to area.
05	Accept that walls etc. need to be raised. But no good doing this if similar protection is not put in place along the New Ranges area and Great Wakering. The flood water would come in from the north-east and be trapped behind any new defences along the Thames.
06	More sand on section2 will bring benefits to the area (i.e. more visitors)
07	Beach recharge and groynes will do the job of protecting the coast.
08	Hard to say, but need to take into account with any changes Costs, short and long term effects, Minimum disruption, improving access, an acceptable timescale.
09	Building a wall which is one to two feet higher than the existing one will be fruitless as it would be no more than wave height.
10	I don't think anyone would object to reinforcements and raising seawalls a reasonable amount as proposed. It was the 'metres' high wall all the way round which raised concerns
11	A higher beach is the natural protection and groynes assist the beach build up. It is stated that material is restricted from entering Section 1 by an old cart tracks at TBYC. I think restriction is a concrete groyne built around an old pipe outlet about 20m west of TBYC slipway. The concreted groyne is so effective then surely a similar one or two large groynes in Section 2 and 3 would assist/retention and build-up of the beach.
12	There would be no point coming to Shoebury if the seawall was raised in front of the beach huts in area 2. If you could no longer see across the Thames keep an eye on the children on the beach, watch the ships travelling to and from the sea, study the birds and much else.
13	1 Maintain the sea valve in the groyne west of the coastguard station. At high tides the seawater can flood Shoebury Common Rd, coming through the storm drains. 2 Any tide overtopping existing defences would only last a short time when the tide is high. Such water would collect in the wide flood plain that is Shoebury Common north and south. A pumping station could be installed to pump flood water back to sea as soon as the tide goes out.
14	Additional groynes and gabions
15	In the long term the existing seawalls should be raised rather than continual cost cutting exercise.
16	Maintaining groynes and also replacing some that are damaged – also regular maintenance on them repairing wire around the stones and rocks.
17	No breakwaters should be erected along the stretch of beach along the area in front of section where the beach huts are on the footpath leave it open but build the bottom of the wall up or out.
18	Any changes should be minimal and in line with the exist defences. I have lived here for 6 years and the sea levels have never anywhere near the height of the wall. The danger of erecting a hideous height defence are detrimental of people and wildlife.

**Question 12. Which one is your preferred approach for Shoeburyness Coastal Management Scheme?**



This was a multiple choice response, and of those responding beach recharge timber groynes was identified as the preferred option closely followed by maintaining existing defences. Finally the least preferred option was the Geotextile bags as there was a fear that these could break down overtime and cause the filling to spill out into the sea and onto the beach.

**Question 13. Would you provide with your thoughts for the reasons behind your answer(s) in Question 12?**

26 people provided comments for this free text question which indicated why beach recharging was the preferred option. Other comments identified the need to maintain the defences already there.

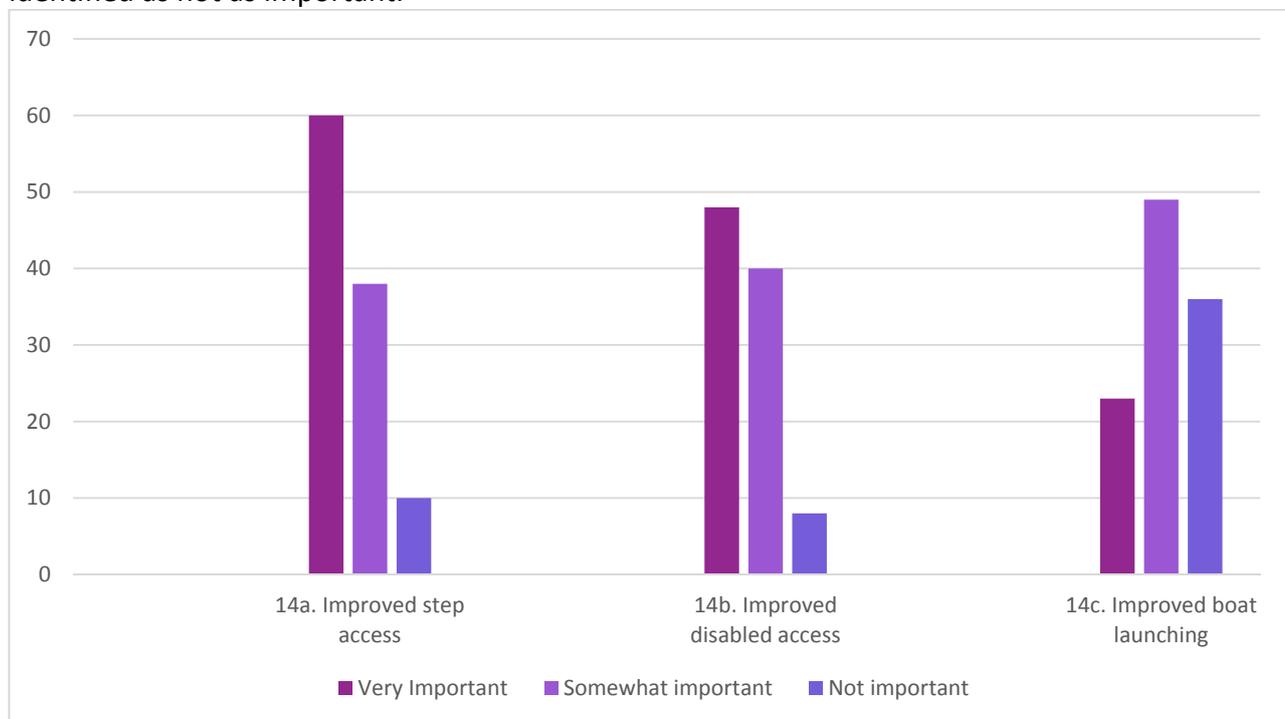
Comments	
01	This seems the best option for the long term protection with minimum impact on local amenities and enjoyment of the beach and seafront area.
02	If work is to be undertaken then it is logical that the scheme chosen should improve protection against coastal flooding rather than just maintain the status quo in this respect.
03	1. Vast improvement to beach to benefit leisure and tourism, 2. Economically viable option.
04	Beach re-charge would provide the flood protection required. It would enhance the look of the area. Geo-textile bags, if exposed would look ugly and would be expensive to replace.
05	Opt 4 Fully Support – More attractive if re-charged it means a bigger beach and better for all who use the area. Other options are either not suitable plus rocks/armour attract rubbish rubbish/vermin and are very dangerous for children.
06	The need to improve dense against flooding is real. Cannot just rely on existing measures
07	Cost efficient, better for area (i.e. upgrade to a sandy beach) and less impact to area

08	Provides the protection needed but has little impact visually and is friendly to the environment.
09	Maintain the beach, seawall and leave it alone we will have no beach at all.
10	Less intrusive and safer. Also it could identify more easily where the tides move the shingle.
11	Recommended by the Beach Hut Association
12	Any maintenance is better than that of the past
13	I do not want vast amounts of money spent on holding back the tide if it is an impossible task. By maintaining the existing defences and constructing more timber groynes will be the most sensible way. The geotextile bags are a waste of money and in time will tear and rupture causing more eco damage. This assignment is going to be a huge endeavour. I would be interested to know who the 'partnership' funding is who are paying for this.
14	Further investigation required as to geotextile suitability or suitable other product balanced against cost and cost effectiveness/ stability (long term) of a beach recharge therefore undecided between options 3+4 without further information.
15	Listening at the event didn't make the wall raising sound as large as proposed in the technical document so I've gone from fully support options 3 &4 to not sure. The picture of the wall raising looks hideous adding 11 inches to the existing wall didn't sound so bad.
16	Prevention of beach loss is paramount so new efficient groynes must be the answer. However, as material moves west to east, there shall also be beach recharge further west, perhaps to the Roslin Hotel or beyond
17	12d seems to be the least disruptive and the most effective
18	<p>(a) Existing defences must be maintained but may not provide protection in years to come.</p> <p>(b) Rock Armour is unsightly and presents a health and safety risk. This has been demonstrated at the lagoon, west of Southend Pier both children and adults have injured themselves here some needing to be rescued by emergency services</p> <p>(c) Geotextile Bags are not a natural feature, if exposed or even split they would be ugly, spoil the beach and have the potential to turn into a muddy riverbank</p> <p>(d) Beach recharge and groynes seems to be the most effective and least intrusive. It will never the less be a shame to cover the shells and sea glass the children love to examine but see my thoughts on material that could be used to recharge the beach in final question.</p>
19	Defence design and structure needs to be sympathetic to the locality. I do not wish to live behind a concrete wall with no views of the estuary.
20	I would not like to see the coastal wall made higher that would take away the lovely view after all Shoebury and Southend are seaside towns and we need to encourage visitors rather than deter them.
21	The beach would appear as it does today just higher
22	Something needs to be done and simply maintaining what we have (which is not being done at present) is not the answer. The most ideal long term solution is to raise the wall which I doubt would secure funding for. Beach recharge and groynes would work but only if this council actively maintains the recharge and groynes each year rather than on a reactive basis.
23	Repair existing groynes /breakwaters address the erosion caused by the Yacht club slipway, look at the water pumping out the sand by the storm water outlet. Recharge the beach with some decent sand and if you are going to pump it ashore put some around the beach huts
24	I believe that the beach recharge is the only sensible long term way to protect the existing sea wall. Shoebury Common is extremely popular and this can only encourage more people

	to visit our beach. Not in favour of the rocks as I feel they could be a danger to children and old people. The existing seawall will still be needed to be maintained, as a regular visitor I often look at the repairs and have noted that poor repairs have recently been done. Prime example is the copping stones laid by the steps near beach hut 420, the cross joint is supposed to be filled with mortar not sheared on top.
25	If you look back to the photos in Victorian times (at least 110 years ago) very little has changed. It is very important that the vista remains the same and defences should only be tweaked from time to time and only as a necessity not as a major panic structure
26	Question 12 followed by 4 options is a nonsensical question. The question should assess the following four options by ticking as appropriate. If for example one chose 12c it would be absurd to tick boxes do not support or do not know.

**Question 14. Ranking of access issues to foreshore: Provide a ranking from Not important, somewhat important to very important**

Overall consensus was Improved step access being very important with improved boat launching identified as not as important.



**Question 14(a). Other comments**

This was a free text box with 7 comments

Comments	
01	Would say build in raised viewing points looking over the Thames Estuary?
02	Not related to access but the overall management/ appeal of the seafront. Bigger notices at access steps in particular to say 'No Dogs On the beach... etc.' (pathetic size of the other ones). Remove the dead palm trees, makes the seafront /prom look ill-cared for. No replacement is better than another waste of money
03	Please don't spoil this lovely area. I always regard it as a linear gym there are cyclists along the cycle track, walkers, mobility scooters and runners, children on skates and my favourite is dad on skates pushing a pushchair with Mum on skates and son on a small bike and daughter on a scooter all zooming along the Promenade in the early evening – what fun.

04	Access by steps is equally as important as sloped access for prams and other wheel conveyances. To minimise impact and provide both a scheme such as that at Jubilee Beach could be constructed that is steps adjacent to the wall going left and a slope to the right.
05	Making the foreshore a safe environment for locals, wildlife and visitors
06	The beach huts on the sand provide a lot of revenue to Southend Council lets have something put back to save them.
07	The beach needs to be improved to attract visitors and wildlife with a few more pool areas created to trap the outgoing tide in order for the very young to enjoy and explore the sea at low tide.

**Question 15 – Anything else please provide your thoughts on options, or additional information you want us to consider in selecting a scheme to progress within the Shoeburyness area.**

This was a free text question with 10 people responding with comments

Comments	
01	I would like to see an improvement, widening, separation of the two-way cycling such that there would be minimum chance of head on collisions – especially important for the over 75s.
02	No further comment on these options other than there will be unwelcomed by many but must still go ahead.
03	<p>Consider using beach material that has gathered to the east of Mulberry Harbour. The sandbank here has been increasing in size since Jubilee Beach in Southend was recharged. The sand is of good firm consistency it has obviously been washed there from Southend Beaches, recycle it and bring it to Shoebury Common Beach rather than let it continue to be washed into the shipping lane and been to be dredged out.</p> <p>Before raising the seawall in Section 1 consider recharging the beach here as well as Shoebury Common Beach. Beach Hut owners would welcome added protection to their huts. The new beach material could be pushed under the huts to the wall, a cheaper option and less intrusive.</p> <p>Beach erosion is increased by the Council vehicle that almost daily goes along the beach supposedly cleaning the beach. By the action of the vehicle, the sand and shingle is loosened and more likely to wash out to sea</p> <p>Furthermore, the vehicle is a safety risk. Its caterpillar tracks shatter any glass bottles left on the beach. I have personally had to remove the broken glass shards before a child or an adult with bare feet treads on them and they are not easily visible when the tide comes in and covers them.</p>
04	During our presentation reference was made to using the spoil heap currently held on Gunners Park as part of a sea defence (if material suitable). This material has already been identified to regrade the site of a proposed trade park within Gunners Park.
05	The use of geotextile bags filled with clay has the inherent risk of splitting and contaminating the beach area. Not a good solution why not wire cage gabions filled with rocks and then covered over with sand or shingle. Whatever the solution the Council must have adequate funding provision for ongoing maintenance and not leave it until something needs fixing to find the money.
06	This questionnaire has too many overlapping questions bearing in mind that probably the degrading the existing sea defences is rising sea level, any works selected should take into account the need to minimise the omission of carbon dioxide in there carrying out.

07	During our presentation reference was made to using the spoil heap currently placed on the Gunners Park (if they deemed suitable) would be a part of the defence of the seawall. I attended a meeting where three Councillors said it would be used to flatten out the ground and raise it for a proposed trade park within Gunners Park. Which will it be for?
08	Keeping it an open area for people to enjoy
09	If my preferred option , the beach recharge and timber groynes and the proposed work to be carried out on the Shoebury Common North, this will undoubtedly bring many more visitors to this area which is extremely popular.
10	One of the best beaches runs by the Garrison there is a need to open to the public the small sections of the beach and make them accessible to the public – for example extend the opening of the beach from the jetty at Shoebury Common to the Coastguard building (100 yards) and at East beach make it more accessible

## Statutory Responses

### Environment Agency response

We have no comments to make on the document itself – we have been working with you and your consultants, over a number of years and will continue to support and develop your scheme through this route.

### Port of London Authority response

Thank you for consulting the Port of London Authority (PLA) on the potential recommendations to protect Southend-on-Sea frontage from flood and coastal erosion, for the 2km stretch of coast between Thorpe Bay Yacht Club and the World War II Quick Battery. For information, the PLA is the Statutory Harbour Authority for the Tidal Thames between Teddington and the Thames Estuary. Its statutory functions include responsibility for conservancy, dredging, maintaining the public navigation and controlling vessel movement's. The PLA's functions also include for the promotion of the use of the river as an important strategic transport corridor and recreational asset for the region. To note, the area that is under consideration as part of this consultation lies within the Southend Exempt Area, which means that certain parts of the PLA's statutory powers, notably the licensing of river works, do not apply. For further information please see schedule 8 of the PLA Act: <http://pla.co.uk/Port-of-London-Act-1968>. I have now had the opportunity to review the consultation documents, and whilst at this shortlisting stage there are limited details available to comment on, The PLA has the following general comments to make:

- Firstly the PLA has some concerns with regard to the long-term use of geotextile bags as highlighted on page 12 of the non technical summary, as over time these will degrade and release plastic fibres into the environment. In addition the PLA would encourage the use of natural flood defence measures where appropriate, and also the incorporation of habitat enhancement measures into any new or upgraded hard flood defence (such as wooden fenders or bird roost sites).
- With regard to the beach raising option used in options 3 and 4 it should be noted that the PLA has an MMO maintenance dredging license for navigation channels in the Thames Estuary and the arising's may be of interest to the project as beneficial re-use for loose fill. There may be some challenges with using this source including physical characteristics of the material, waste permitting and economics but this could be an option for further exploration.

### **Historic England response**

We note that you are consulting on four options for the 2km stretch of coast between Thorpe Bay Yacht Club and The World War II Quick Battery. We note that options being considered include the replacement of timber groynes, building up sea defence walls, raising beach levels either by adding material, or by burying geotextile sandbags. Some of this work will involve the excavation of beach material, which has the potential to damage buried archaeology if it is present (either artefacts/remains or deposits of palaeo-environmental interest such as peat).

There is little mention of heritage matters within the report (with the exception being the scheduled monument, the Danish camp although even in this case, there is no discussion of the potential impact that the proposed works may have on the heritage asset). We would recommend that a heritage statement be prepared as part of the consideration of options. This statement should include a discussion of what heritage is there and how the proposed management strategies may impact on both designated and undesignated heritage. We recommend that you consult Essex County Archaeological advisers as well, as they will be able to advise you on the undesignated heritage.

As the shortlist of management options has not been prepared yet, it is not clear if you will need to take into account changes that the works may have to coastal processes. For example, if new groynes are built in an area where previously there weren't any, then the changes that this may have to the coastal processes should be considered as this may result in the increased erosion or accumulation of material along the coast. If this occurs it could have either a positive or negative effect on the historic environment located further round the coast, exposing or burying remains.

In essence, it is important that, as the proposals progress and in determining the most appropriate option, full consideration is given to any potential impact on the historic environment. We hope that the above comments are of assistance. Please let me know if you have any queries. We look forward to further engagement on the Proposals. Finally, we should like to stress that this opinion is based on the information provided by the Council in its consultation. To avoid any doubt, this does not affect our obligation to provide further advice and, potentially, object to specific proposals, which may subsequently arise where we consider that these would have an adverse effect upon the historic environment.

### **Natural England**

Thank you for consulting Natural England on the Shoeburyness Coastal Management Scheme. Apologies for our delay in responding, and thank you for agreeing to include our comments at this late stage. The scheme documents raise issues around the potential for coastal squeeze effects on designated intertidal habitats. There is also the potential for construction disturbance and 'footprint' impacts from the selected options.

All options have the potential to result in a likely significant effect on internationally important sites, and therefore options taken forward should be accompanied by a Habitat Regulations Assessment, including Appropriate Assessment (AA).

The AA should consider the potential to mitigate for any identified coastal squeeze, construction disturbance, construction footprint effects, or smothering effects on intertidal habitats through re-charge, over the life of the scheme.

The potential for impacts on SSSI features should also be considered and addressed in the development of the Environmental Assessment/Report.

Should you wish, we can provide detailed advice on the development of the HRA and other environmental work, through our Discretionary Advice Service.

We also have the following more detailed comments:

This Shoeburyness CMS covers over 2km stretch (see page 5), of which the intertidal habitats and seaward side of flood defence of Sections 1 and 2 are wholly within SSSI unit 13 of Benfleet and Southend Marshes SSSI, SPA and Ramsar site, and Section 3 is partly within the same SSSI unit of this designated site and SSSI unit 2 of Foulness SSSI, SPA and Ramsar site. A boundary Map of these designated sites is attached for your reference.

#### Key Issues for the Frontage

Section 1 – any works raising the height of the existing sea wall are likely to impact on the SSSI, SPA and Ramsar site features and may be regarded as a likely significant effect on the SPA features, either alone or in combination with other plans or projects.

Section 2 – maintenance works to the existing defences are likely to impact on the SSSI, SPA and Ramsar site features and may be regarded as a likely significant effect on the SPA features, either alone or in combination with other plans or projects.

Section 3 – Natural England has not seen any details of proposals to improve the condition of the existing coastal defences, so cannot comment on its appropriateness or compliance with nature conservation legislation. Any development or maintenance are likely to impact on the SSSI, SPA and Ramsar site features and may be regarded as a likely significant effect on the SPA and SAC features, either alone or in combination with other plans or projects.

It should be noted, mitigation measures will need to be considered within an appropriate assessment consistent with the Sweetman 2 ruling.

#### Flood and Erosion Risk

Coastal squeeze – Natural England refers to mudflats and sandflats in Benfleet and Southend Marshes SSSI, SPA, Ramsar site and Foulness SSSI, SPA, Ramsar site recognising these intertidal habitats support slightly different biodiversity and features.

#### Develop Short List of Options

1. Maintaining existing defences – would involve maintenance effects on designated site and LSE, but AA should be able to ensure inclusion of mitigation will avoid AAI. ( on-going squeeze effects?)
2. Armour at base of wall – would involve construction impacts and permanent habitat change in area of placement and therefore LSE, uncertainty whether AA would be able to demonstrate adequate mitigation to avoid AAI
3. Buried geotextile bags, timber groynes (and wall raising) – would involve construction impacts linked to working footprint and permanent habitat change due to burying geotextiles beneath beach and therefore LSE, uncertainty whether AA would be able to demonstrate adequate mitigation to avoid AAI
4. Construct timber groynes, beach recharge (and wall raising) – would involve construction impacts linked to working footprint and permanent habitat change due to recharge and alterations to hydrodynamics and sediment regime and therefore LSE and uncertainty whether AA would be able to demonstrate adequate mitigation to avoid AAI. The maintenance to the existing defences in section 3 would be regarded as LSE on the features of the respective designated sites but AA for this, if viewed in isolation, should be able to ensure inclusion of mitigation will avoid AAI.

## Initial Designs

Rock Toe Armour for Option 2 – see 2 above

Wall raising for section 1 of Options 3 & 4 – see 3 & 4 above: If viewed in isolation the construction impacts would constitute LSE but AA for this item of work may be able to ensure adequate mitigation package to avoid AAI.

Beach raising for Options 3 & 4 – see 3 & 4 above.

## Preferred Option – Next Steps

NE note the process and happy to provide further advice as necessary to ensure a sustainable development solution is achieved at this location, accounting for compliance with statutory nature conservation legislation.