

**Shotley Parish Council**  
**Management Plan for 50 Acres of intertidal mudflats on the River Stour at Shotley Gate,**  
**Suffolk.**  
**Final Version updated 22 April 2014**

**Background**

Shotley Parish Council has applied for a Marine Management Licence (application MLA/2013/00050) to carry out additional erosion protection on the banks of the River Stour at Shotley Gate.

As a result of the consultation process, Natural England has determined that the 'application as submitted is likely to damage the interest features for which the Stour Estuary SSSI has been notified'.

Natural England has requested that a detailed Management Plan be submitted for the area of the mudflat acquired by the applicant in order to assess whether this can help offset the long term impact of the loss of mudflat habitat designated under the SSSI.

**Area affected**

The total area of foreshore acquired by Shotley Parish Council (SPC) is 50 acres (20 Ha). The area to be affected by proposed construction of erosion protection is approximately 714 square metres. This is a 2 metre strip stretching a length of 357 metres. This strip of foreshore is on the northern shoreline of the tidal estuary, immediately adjacent to the existing crumbling concrete and rusting sheet piles installed in 1953. The foreshore composition of the 2 metre strip is predominantly shingle and hard 'septaria', which many residents and bird watchers have observed over many years, provides negligible 'mud feeding ground' for estuary birdlife.

Photographs of the composition of the 2 metre wide strip has already been provided to Natural England in a previous document titled 'Mitigation of the impact of loss of foreshore'.

The 714 square metres of foreshore permanently impacted by the construction amounts to 0.07 Ha, i.e. 0.35% of the total area of foreshore acquired by SPC.

**Impact of doing nothing**

The existing sheet pile erosion protection was installed by the Royal Navy in 1954, the year after substantial coastal damage was done along the North Sea Coast due to a combination of high tides and severe storms. This would now be regarded as the '1 in a 100 year' storm surge event that causes serious damage to coastal communities. The Navy presence at Shotley Gate was due to the existence of the 'Royal Naval Training Establishment (RNTE) HMS Ganges' at Shotley Gate, established in 1906.

The sheet piles were installed adjacent to Shotley Cliff, because parts of the cliff were washed away by the storms. At the top of the cliff was the Gunnery School and Annex Building, an important of HMS Ganges, and one that the Navy could not risk losing if the cliff was to further collapse.

During the 1950's and 1960's, the Royal Navy also built houses at the top of Shotley Cliff to provide accommodation for HMS Ganges staff.

The RNTE HMS Ganges was closed in 1976, and the Royal Navy vacated Shotley Gate.

Since the closure of HMS Ganges, Ministry of Defence land at Shotley Gate has been sold off for housing development, along with all of the former staff accommodation.

Shotley Gate is currently a thriving coastal community of approximately 1200 houses and 2000

people.

In the severe storms in 2008, sections of the concrete and sheet piling collapsed onto the foreshore. The public footpath immediately behind the piles also spilled out onto the foreshore. Due to the severity of the damage, the danger to the public of trying to continue to use the public footpath, and the likely further damage that would result if nothing was done, the Parish Council organised emergency repairs, supported by funding from Babergh District Council and Suffolk County Council.

These repairs were carried out in 2009 (photograph of repair work provided in additional information document 'Mitigation of impact of loss of foreshore').

It was as a result of this damage and subsequent emergency repair work that the community became aware of the overall fragility of Shotley Cliff, and its crumbling existing erosion protection. SPC organised a Community led Working Group to look at the short / medium / long term protection of Shotley Cliff (i.e. Shotley Gate) against tidal erosion.

Shotley Parish Council, supported by the appropriate Statutory Bodies, successfully obtained a Marine Management Licence in 2010 to carry out 265 metres of erosion protection to a part of Shotley Cliff that did not have the protection of any sheet piles. This work was completed in 2011. and the permanent construction occupies 530 square metres of foreshore immediately adjacent to an existing RSPB reserve. A 2 metres wide strip of foreshore 265 metres long.

During the consultation process carried out by the Marine Management Organisation in 2010, Natural England commented as follows:

'Natural England is of the opinion that the proposed activity does not represent a significant effect on the Stour and Orwell Estuary SPA and Stour and Orwell Estuaries Ramsar Site. This is because the timing, methods and scale of works, as described in the application, are not likely to lead to any impacts on the designated features of the SPA. Also the design of the works are such that access to the SPA is likely to be decreased.

In addition, with respect to the Stour Estuary Site of Special Scientific Interest (SSSI), it is our view that the proposed scheme will not cause any damage to the interest features of the SSSI'.

It is noted that the opinion expressed in 2010 by Natural England is very different to the opinion expressed for the application MLA/2013/00050 submitted in 2013, though the foreshores affected are essentially the same.

Also, since the original scheme in 2010, SPC have taken ownership of a significant area of foreshore and have already taken steps to ensure that further disturbance is kept to a minimum. These actions are described in the document already provided titled 'Mitigation of the impact of loss of foreshore'.

In 2012, the Environment Agency produced the final 'Essex and South Suffolk Shoreline Management Plan', approved by DEFRA, which acknowledges the erosion problem at Shotley Gate and designates the status of Shotley Cliff as a 'special project area with allowed managed intervention'.

**Based on experience of the emergency repairs in 2009, a number of long term issues will exist if nothing is done in the future:**

1. The existing steel and concrete sheet piles are badly corroded and holes have appeared in

places. Sections are beginning to 'bow out' as the steel weakens. Photographs of this deterioration have been provided in the document titled 'Mitigation of impact of loss of foreshore'. Evidence shows that the piles will eventually reach a 'breaking point' where they can no longer hold back the force of the cliff material. The piles will then distort and twist, collapsing onto the foreshore in a very haphazard manner. This will be visually unacceptable and far from the definition of an 'Area of Outstanding Natural Beauty';

2. The collapsed piles will at the least occupy a two metre wide strip of foreshore and present a physical danger to wildlife and humans. The sheet piles will be a combination of rust and sharp edge hazards, and the concrete piles have an inner core of steel reinforcement. The concrete may split and crack though won't part company with the steel reinforcement for many years to come;
3. Deterioration and Collapse will be gradual over many years. The footpath that runs behind and at the top of the sheet piles will be impassible in places. This will cause walkers to venture out onto the foreshore at low tide to walk along the bottom of Shotley Cliff. Dog walkers in particular will be forced to use this route. Evidence (both anecdotal and from the bird disturbance surveys carried out during 2012) since the renovation of the footpath behind the previous erosion protection - completed in 2011- shows that far more people with or without dogs, on or off leads, prefer to use a footpath rather than the relatively muddy foreshore;
4. The collapsed and rusting steel piles, with more of their surface area in the water for longer periods, will be polluting the river with rust for many more years to come;
5. Once the concrete and steel sheet piles have collapsed, the contents of the public footpath will spill onto the foreshore and into the river. Since the practise of using bitumen based road planings was commonplace within the County Council Rights of Way maintenance teams, there is potentially a release of pollutants far in excess of 'natural seepage'. A foreshore strewn with waste material and bituminous road planings is far from it's natural composition;
6. In addition to the loss of footpath construction material, further cliff material will be lost including shrubs and trees. Again, the losses will be haphazard and inelegant. Before the installation of erosion protection to Shotley Cliff in 2010 and 2011, a similar loss of trees and shrubs occurred, often with large trees floating downriver into the busy shipping lanes of Harwich and Felixstowe docks, and presenting a serious hazard to recreation boating. Harwich Haven Authority have had to remove floating tree stumps from the river for many years;
7. Evidence exists that shows that before houses were built on the top of Shotley Cliff, RNTE HMS Ganges and the old school at Shotley Gate (now private residential accommodation) used part of Shotley Cliff as a 'rubbish tip'. This material, whatever it is, is currently contained behind the sheet piles. If the sheet piles were allowed to collapse then the contents of the cliff would also likely be washed into the river over a period of time. Thankfully current legislation prevents such waste deposition. However we are left with legacy situations that need to be properly managed;
8. Aside from the environmental impacts of the collapse of the sheet piles, the existing community of Shotley Gate will be significantly affected by slippage of the cliff due to further erosion. Impacts initially to service providers such as Anglian Water, whose sewage water pipes run parallel to the cliff at the top would be costly, as would the polluting impacts

of potentially raw sewage running down the cliff into the river, should such pipe fractures occur. Other services of Highways, Electricity supply and Telephone services would be affected by land slippage, all before the residents houses begin to subside;

9. If nothing is done at all to protect the existing sheet piles from further deterioration and collapse, it is likely that remedial work would continue to be carried out on an emergency ad-hoc basis. This would be very costly when compared with an organised and managed project as submitted in MLA/2013/00050. Such ad-hoc emergency repairs would mean that foreshore access to carry out repairs would be a frequent event, therefore causing regular disturbance of the foreshore over many years to come. Evidence of the construction in 2010 / 2011 shows that the foreshore impacts of using track vehicles are 'repaired' by natural processes within 2 years. This view is supported by Natural England in their initial consultation response to MLA/2013/00050. Photographs have been provided in the document 'Methodology' that show how the foreshore has returned to its natural state within two years of completion of the work.

**In view of these very real issues, a prime factor in preserving the status of the SSSI, AONB and SPA is to install further protection to the existing deteriorating concrete and sheet piles as a whole. It is on this basis that this scheme has been designed and submitted, bearing in mind the acceptability of materials choice and overall cost effectiveness.**

**The application MLA/2013/00050 to install gabions is a measure that will ultimately preserve the interest features for which this part of the Stour Estuary SSSI has been notified.**

## **Mudflat Management Plan**

The picturesque combination of woodland and estuary provides a unique experience to visitors where woodland tumbles into the sea. In the Stour Estuary at Shotley Gate, this is coupled with spectacular numbers of waterbirds during autumn and winter months. In an area largely given over to high-grade agricultural land the area offers visitors one of the few 'natural' looking areas in the district.

The established Stour Estuary Erwarton Bay RSPB Reserve is a relatively large and complex site in that it combines three habitats (estuarine, woodland and open, scrubby areas). The visitor routes around the reserve and neighbouring fields give the opportunity to vary the length of each visit. In spring and early summer, the woodland areas are most attractive to visitors with a mass of vernal flowers, singing birds and many insects. Thus, this reserve has much to offer visitors and the local community all year round, the reserve team make the most of the recruitment opportunity at peak visitor times.

The Estuarine habitats are, in parts, prone to disturbance by visitors (particularly dog walkers and those walking onto the foreshore). In some areas of the RSPB reserve 'no dogs are allowed' is in place, to minimise disturbance. Reserve patrol volunteers help reduce disturbance, and will help identify birds for visitors.

The Woodland and Scrubby/open areas are very robust, but can be prone to localised disturbance. Most of the visitors pass through these habitats if they want to reach the estuary. It is intended that these trails remain open to visitors. Chicanes to reduce the attractiveness of the site to cyclists have been installed over the last 5 years.

Shotley Parish Council recognises the value and importance of preserving the long term integrity of

the foreshore and mudflats that it owns at Shotley Gate. Before SPC took ownership of the 50 acres of foreshore a number of initiatives have already been put in place in conjunction with Suffolk Coast and Heaths AONB team, and the RSPB.

An overriding objective of the Parish Council is:

**'To manage the 20Ha of Stour Estuary SSSI estuarine habitat and the adjacent 7Ha of non-SSSI woodland to ensure favourable condition status for the SSSI and SPA features is maintained. This notably includes ensuring suitable habitat is available for the internationally and nationally important populations of wintering and passage waterbirds'**

This Management plan sets out the activities that are being done to achieve this objective.

### **Long term vision**

The Stour Estuary SPA, despite various threats, remains one of the UK's top 25 estuaries, in terms of sheer numbers of wintering birds. We will ensure that the reserve continues to function as a protected roost and feeding area for wintering birds, and is capable of supporting large numbers of wintering birds. Coastal Access will be embraced, ensuring that the integrity and security of the reserve is not compromised. In keeping with the tradition at Stour Estuary reserve we will work hard to engage with people at a range of locations on the reserve, or around the estuary, recruiting increasing numbers of supporters and those involved with the reserve and adjacent RSPB reserve.

### **Visitor Management**

From visitor surveys and feedback the most valued aspect of visitor experience to the RSPB Stour Estuary reserves are referenced as: 'Peace and quiet in woodland', 'spring flora', 'estuarine birds and views', 'muddy trails' and the least valued aspect as 'aggressive dogs', 'muddy/slippery trails', 'bikes'.

With reasons for visiting as: Peace, quiet and tranquillity of the extensive woodland areas. A safe place to walk with the family. Excellent views over the Stour Estuary, the Suffolk Shore is an AONB. During the autumn and winter months the reserve provides superb views of large numbers of waterbirds. Dog walking accounts for a major proportion of our visitor numbers.

In addition to visitors who are not resident in the area, the community of Shotley and Shotley Gate is the largest population on the Shotley Peninsula. For many years they have enjoyed the amenities of Shotley Cliff, the Woodland (now known as 'Shotley Heritage Park'), Ganges Wood (a Woodland Trust managed area) and the Coastal Footpath that runs from Bristol Hill westerly adjacent to the river Stour. With the proposed improvements for the protection of Shotley Cliff against further erosion, and the improved management of the woodland, it is important to strike the right balance between more people using the area and retaining the very aspects of the visitor experience as described above.

A key factor in 'striking the right balance' is to manage and maintain walk routes and public areas, and to have information available about the value and sensitivities of the area. We are mindful that not all people are specifically interested in nature as the focus of their visit – e.g. dog walking, cycling, jogging – and we strive to provide an amenity where both can exist in harmony.

**SPC will continue to ensure that the existing footpaths and public rights of way are properly maintained and appropriate direction signs are installed. This will help to keep people on walk routes that are preferred, and discourage them from walking along the foreshore where there is potential to disturb birdlife.**

Current Practice:

- Since the installation of erosion protection in 2010/11, the coastal footpath at the foot of the cliff has been reinstated. The immediate impact of this is that the vast majority of visitors are choosing to walk on the designated footpath, and not on the foreshore at low tide.
- An 'Shotley Explorer leaflet' was produced in 2013 by Suffolk Coast and Heaths AONB team, funded by SPC, the local Suffolk County Councillor and SC&H's AONB team. This leaflet, available in hard copy and on-line describes several walks in and around Shotley. The leaflet includes walks along the coastal path, with new sign posts erected clearly marking the designated walk routes at Shotley Gate. An alternative footpath has been created through the 'Upper Shotley Cliff' woodland (now owned by SPC and known as 'Shotley Heritage Park'). This is featured in the Explorer Leaflet, and a new signposts erected to guide visitors through the upper woodland. The effect of this is that some visitors prefer to walk through the woodland, rather than along the coastal path.
- The existing picnic area adjacent to the foreshore at the bottom of Bristol Hill was renovated in 2011. New picnic furniture has been installed, along with several matching benches that have been purchased and gifted to the Parish Council by local residents. The picnic surface has been relaid by Suffolk County Council's Right of Way team and is now suitable for wheelchair users. The picnic area is very well used particularly during the school holidays during summertime. An information board produced by Suffolk Coast and Heath's AONB unit will be installed at the picnic site during 2013. This information board is part of the 'Balance' coastal project organised by the SC&H AONB team, and will inform the public about the extent and value of the AONB along the Shotley Peninsula.

The picnic area will continue to be used as a focal point for community events such as the 'Discovery Day' held on 21 August 2013, which was an event jointly organised with Suffolk Wildlife Trust. The event was aimed at informing youngsters aged up to eleven years old about the local wildlife in the area, and several 'nature activities' were held in and around the woodland and cliff.

**SPC will continue to work with Suffolk Coast and Heaths AONB team through the Estuaries Officer to ensure that the Volunteer Code of Practise for Bait Diggers is effectively managed. This will include information on the code of practise published in the 'Shotley Noticeboard', a local newsletter distributed every two months to every household in Shotley and Shotley Gate. The bait digging code of practise and map will also be displayed on the two community noticeboards located opposite the local shops.**

**The work being done to inform dog owners of their responsibilities to keep proper control of their charge will continue.**

Current Practice:

- Since work began on the erosion protection project in 2009, a detailed progress report has been written by the 'Shotley Stour Footpath Renovation Group' (a formal Working Group set up by the Parish Council) and included in every Shotley Noticeboard Newsletter. This is a total of 24 publications so far. Included in the reports are references to the importance of the mudflats as a feeding ground for overwintering birds, and a plea to dog owners to ask them to refrain from letting their dogs loose on the foreshore. The reports have recently included information about the progress of the Phase three erosion protection project.
- Four new 'Welcome to Shotley Heritage Park' signs have been installed at the entrance

footpaths into the woodlands. These signs also ask dog owners to 'please keep their dogs on a lead'. Some dog owners have taken issue with SPC about this request, and the opportunity has been taken to discuss the reasoning behind this. This communication will continue.

**Regular patrols will continue around the area by many members of SPC and the Shotley Stour Footpath Renovation Group. Interaction with other members of the community will continue, and any threats to the estuary and it's wildlife will be appropriately dealt with.**

Current Practice:

- Shotley Gate is fortunate to have two trained volunteer Estuary Wardens. The estuary wardens regularly patrol the area in and around both the foreshore owned by SPC and the RSPB reserve. The area also includes other land owned by various landowners including Crown Estates. The estuary wardens have reported several 'events' in the last few years, which includes reporting the placing of fishing nets across the Erwarnton Bay reserve (reported to inland fisheries office who visited site the next day), and removing timber stakes that had been driven into the mudflats to support the nets.
- Local residents were involved in cleaning up broken glass, bottles and rubbish left behind on the Erwarnton Bay reserve during August 2013 after an illegal 'rave' was held overnight on the foreshore adjacent to 'Cockle Creek'. Nine bin liners of rubbish was removed. The incident was reported to the Police by several residents who had been disturbed by the noise – a mobile generator, amplifier and speakers were used by the group on the foreshore – unfortunately the Police did not attend that evening.
- Estuary Warden reports will continue to be submitted to SC&H's AONB team as and when necessary.
- SPC and other volunteers will continue to do 'bird disturbance monitoring reports' and submit them to SC&H's AONB team.
- As a condition of the SPC public liability insurance for the erosion protection gabions, an inspection of the gabions and the coastal footpath that runs alongside them is done every three months and a written report submitted to the Parish Council. In addition, an annual detailed technical inspection is done by a Marine Consultant. The carrying out of these inspections by necessity involves inspecting the condition of the foreshore immediately adjacent to the toe of the cliff / gabions, and any adverse impacts noted and dealt with. To date, other than the periodic accretion and decretion of the shingle and sand immediately adjacent to the gabions (due to turbulent wave action) no detrimental impacts are have been noted.

## **Bird Count Surveys and Species and Habitat Management**

**Existing bird counts carried out by RSPB volunteers will continue as at present, and SPC will assist where possible. The counts will record those species as set out in 'Table A' below, which lists those waterfowl species occurring in the Stour Estuary in national & internationally important numbers. Any significant annual variations in numbers will result in investigation to determine if the likely cause is anything to do with the way the mudflats are managed, and action taken as necessary.**

**Appendix A are excerpts from the 'RSPB Stour Estuary Reserve Management Plan' of the RSPB Survey Methodology and Management Prescription for information.**

**Regular patrols of the area will continue, and any illegal or adverse activities that could affect the feeding grounds and roosting sites will be reported to the appropriate authorities.**

**A list of contact details of the various authorities will be held and kept up to date by SPC and Footpath Group members.**

**SPC will work with other local landowners to minimise bird disturbance.**

**SPC will continue to work with the Stour and Orwell Estuaries Forum, and will provide a report annually on the progress of this Management Plan.**

Current Practice:

- RSPB volunteers carry out bird counts within the SPC owned mudflats, and submit the data to the Wetland Birds Survey (WeBs) database. Regular detailed counts are carried out by volunteers on behalf of 'Harwich Haven Authority' as a requirement of their dredging licence.
- Since the erosion protection scheme (phase 1 and 2) was installed in 2010 / 2011, and SPC purchased the mudflats and adjacent cliff and woodland, many members of the local Shotley community have taken up an interest in bird and wildlife. A 'bird watching' event was organised in early spring 2013 by the local RSPB reserve manager at Shotley Gate, and twelve residents spent a couple of hours observing estuary birdlife on the mudflats. This interest continues to grow within the community.
- Funding has been obtained from SC&H's AONB 'Sustainable Development Fund' for a 'bird information board' to be sited at the end of the SPC owned mudflats, adjacent to the start of the Erwarnton Bay reserve. This information board will provide pictures of the various estuary birds and help people appreciate and value the area. It will likely be installed in Spring 2014. There is no information at all in the area at the moment. Along with SC&H's 'Balance Project' information board located at the Picnic Area, visitors will be able to learn about the value and importance of the mudflats and estuary.
- The local farmer who owns land adjacent to the Erwarnton Bay reserve and SPC mudflats and woodland has been cooperative in permitting new footpaths to be cut through his own woodland. These footpaths form a new 'Permissive Path' that links two existing woodland together. It provides an alternative walk route through woodland rather than alongside the mudflats.
- Regular contact is had with the Stour and Orwell Estuaries Group, and with the Stour and Orwell Estuaries Officer (an employee of Suffolk Coast and Heaths AONB team). The current Chairman of Shotley Parish Council is a member of the Stour and Orwell Group Steering Committee.

## **Species and Habitat Monitoring**

**Table A – Overwintering waterfowl species occurring in national & internationally important numbers: Stour Estuary**

Stour Estuary Bird species (common name)	Bird species (scientific name)	Nationally Important Numbers (SSSI Feature)	Internationally Important Numbers (SPA Feature)
Black-tailed godwit	<i>Limosa limosa islandica</i>	*	*
Dark-bellied brent geese	<i>Branta bernicla bernicla</i>	*	*
Cormorant	<i>Phalacrocorax carbo</i>	*	
Curlew	<i>Numenius arquata</i>	*	
Great crested grebe	<i>Podiceps cristatus</i>	*	
Grey plover	<i>Pluvialis squatarola</i>	*	*
Knot	<i>Calidris canutus</i>	*	*
Mute swan	<i>Cygnus olor</i>	*	
Pintail	<i>Anas acuta</i>	*	*
Redshank	<i>Tringa totanus</i>	*	*
Ringed plover	<i>Charadrius hiaticula</i>	*	*
Shelduck	<i>Tadorna tadorna</i>	*	
Pied avocet	<i>Recurvirostra avosetta</i>		*
Dunlin	<i>Calidris alpina alpina</i>	*	*
Waterfowl assemblage			*
Redshank			*

## Monitoring of Plant Species growing 1metre either side of coastal footpath at Shotley Gate, along the length of the SPC owned foreshore

Table B below lists those plant species that are native to Tidal Estuary environments.

A Shotley Gate Resident has already surveyed the Plant species growing one metre either side of the coastal footpath alongside the SPC owned foreshore. This survey was carried out in August 2013, at a designated 'Superior Surveyor Level' (designation as determined by 'Plantlife International'). The information is sent to Plantlife International as part of a National Survey launched in 2013.

This survey will be repeated every year and will build up a database of plants that are thriving and surviving in this harsh environment, particularly those that grow within the aggregate within the gabion erosion protection.

As with the wildfowl monitoring any significant annual variations will result in investigation to determine if the likely cause is anything to do with the way the area is managed, and action taken as necessary.

### Table B – SSSI Listed Vascular plant assemblage

- Marsh-mallow (*Althaea officinalis*)
- Divided sedge (*Carex divisa*)
- Sea barley (*Hordeum marinum*)
- Golden-samphire (*Inula crithmoides*)
- Dittander (*Lepidium latifolium*)
- Lax-flowered sea-lavender (*Limonium humile*)
- Curved hard-grass (*Parapholis incurva*)
- Perennial glasswort (*Sarcocornia perennis*)
- Hoary mullein (*Verbascum pulverulentum*)

- Dwarf eelgrass (*Zostera noltei*)

## **Funding**

The management of the Mudflats and Heritage Park, and work done as a result relies on volunteer labour from the community. The 'Shotley Stour Footpath Renovation Group' is a volunteer community group that works in the Heritage Park on behalf of the Parish Council. A detailed work plan is constantly being revised as work is identified and done, and is the overall responsibility of the Parish Council's 'Open Spaces and Amenities committee'.

Where there are costs associated with any of the work – e.g. new cliff steps (capital), tree lopping (maintenance) then cost estimates are included.

The Parish Council has benefited from funding support from organisations such as Suffolk Coast and Heaths AONB Unit, Babergh District Council, Suffolk Wildlife Trust etc, and will continue to work with these organisations for future support.

Shotley Parish Council also benefits from funding advice from 'Community Action Suffolk' and the 'Suffolk Community Foundation'. Liaison with these organisations will continue and funding streams identified as necessary.

## **Summary**

The 'mudflat management plan' exists to ensure that the 50 acres of Parish Council owned River Stour foreshore, valuable feeding ground for Estuary Birdlife at Shotley Gate, is protected and preserved for future years. The intention is that additional care and attention given to the area will offset any negative impacts caused by the installation of permanent erosion protection on a two metre wide strip of foreshore adjacent to existing concrete and steel sheet piles.

The plan formalises the work that is already being done by Shotley Parish Council and members of the community since the gabion erosion protection project at Shotley Gate began in 2009.

Thanks to the goodwill of the local community the existing RSPB reserve at Erwarton Bay has benefited from regular patrols and work in cleaning up unwanted debris and rubbish from the foreshore.

## Appendix A

### **RSPB Methodology**

**Maintain mean Sept-March Max Counts for all waterbird species, paying particular attention to SSSI and SPA species** (Black-tailed godwit, Dark-bellied Brent geese, Cormorant, Curlew, Dunlin, Great crested grebe, Grey plover, Knot, Mute swan, Pintail, Redshank, Ringed plover, Shelduck, Pied Avocet, Red Knot – see Table A for more information)

- **RA14.01 Wetland Bird Survey counts at high water** - Continue with once monthly (August - April only) WeBS counts, using sections/sub-sections already defined as part of the whole SPA area. Counts to be carried out on dates agreed with national co-ordinating body (BTO). Site Manager to co-ordinate all volunteer counters for the Stour Estuary. Submit records to BTO.
- **RA14.02 Reserve area waterbird counts at high water** - Continue with monthly waterbird counts in addition to WeBS counts. Count to be carried out at neap tide high water, in all months, and employing already established methods and using sections/sub-sections defined for WeBS counts. Submit data to county recorder.
- **RA14.03 Waterbird counts at low water** - Continue with once monthly waterbird counts at low water, November to February only, employing established methods and sections/ sub-sections agreed as part of Wetland Bird Survey Low Counts. Currently these form part of whole SPA counts. Submit data to county recorder.

### **RSPB Management Prescriptions**

**Minimise disturbance from recreational activities through regular patrolling and development of suitable interpretive material and signage.**

- **MP00.01 Patrol roost and mudflat areas. Protect the site by routine patrol** - Routine policing to prevent disturbance to important roosts, especially through illegal wildfowling, unauthorised landing and bait-digging. Patrol during suitable wildfowling periods, peak

recreational periods and other times. Routine patrolling will also seek to reduce vandalism, maintain contact with visitors and maintain a high PR profile at the site, especially where estuary conservation matters are concerned.

- **AS00.01 Protect site by law enforcement** - Report illegal activities to relevant authorities especially: Natural England (damage SPA/SSSI)<sup>1</sup> Environment Agency (pollution)<sup>2</sup>, Police (firearms offences, HHA (infringement of sailing bye-laws)).
- **MI50.01 Minimise bird disturbance on intertidal and saltmarsh habitats through signage** - Provide signage that informs visitors about the importance of wintering bird populations, and seek to minimise disturbance through positively worded requests to keep to the visitor trails and public rights of way. Ensure public rights of way signage is maintained.
- **ML80.02 Attend Stour & Orwell Estuaries Management Group Meetings** - Continue to sit on the S&O Estuaries Management Group, and seek to influence the S&O Estuaries Management Plan through this process, carrying out RSPB responsibilities within the management plan. Attend Regulators meeting, as part of mitigation strategy for Felixstowe capital dredge 1999-2000.
- **RV 10.01 Fixed-point photography** - Continue fixed-point photography, started in 2004, to monitor saltmarsh and intertidal erosion, using digital images. Compare with aerial photograph evidence where available. Use results of this monitoring to inform future reserve management. Expand monitoring area if required.
- **RF04.02 Monitor key saltmarsh plant species** - Carry out botanical survey for NS saltmarsh plants, using appropriate techniques every five years. Submit data to county recorder.
- **RA10.05 Juvenile Brent goose monitoring** - Survey Brent goose flocks throughout the Stour Estuary, to obtain data on their juvenile content, as part of national survey. The counts are to be carried out between October and December. Submit data to WWT.
- **ML40.02 Liaise with Parish Councils** - Maintain regular contact with members of Ramsey, Wrabness, Shotley, Erwarnton and East Bergholt parish councils.