

6 December 2016		ITEM: 6
Cleaner, Greener and Safer Overview and Scrutiny Committee		
Grays Beach Report		
Wards and communities affected: N/A	Key Decision: N/A	
Report of: Sue Harper, Interim Head of Environment		
Accountable Head of Service: Sue Harper, Interim Head of Environment		
Accountable Director: Steve Cox, Corporate Director of Environment and Place		
This report is Sue Harper, Interim Head of Environment		
Date of notice given of exempt or confidential report: N/A		

Executive Summary

To provide the Overview and Scrutiny committee with an overview of the flooding incident at Grays Beach Riverside Park, during the summer and the work completed to rectify the situation and prevent reoccurring.

1. Recommendation(s)

1.1 That the report be noted.

2. Introduction and Background

2.1 This report has been prepared at the request of the scrutiny committee after the matter was referred to it by Council.

2.2 The report considers the part closure of the sandpit play area at Grays Beach Riverside Park, Thames Road, Grays, due to surface water flooding affecting the site which prevented the use of Grays Beach by residents during late summer and early Autumn.

3. Issues, Options and Analysis of Options

3.1 On 22nd July 2016 the Council became aware of what appeared to be surface water flooding affecting the sandpit play area at Grays Beach Riverside Park. Arrangements were made on that Friday afternoon via the Council's Environment callout team for the flooded area to be fenced off with temporary herras site fencing. It was identified that the flooding was coming into the

sandpit via surface water drains, and subsequently the main local water authorities both Anglian Water & Essex and Suffolk Water, were contacted to investigate. To our knowledge in recent history there had been no previous instances of flooding.

- 3.1.1 On 26th July 2016 Anglian Water confirmed they had had a field technician on site on Saturday 23rd July and tested the flood water for ammonia, which would indicate if sewerage was present, the result of this test was negative. Essex and Suffolk were also on site, they confirmed no issue with fresh water supply. From this point, Essex & Suffolk Water as suppliers of fresh water had no further involvement with the situation.
- 3.2 **Site visit:** Anglian Water's "Collection Manager" attended site on the 27th July to ascertain more about what was confirmed as sea water entering the park through surface water drains that were being flooded by seasonally high tides surcharging the Anglian Water owned culvert (known locally as Drums Culvert) located near Grays Beach Riverside Park, further along Thames Road.
 - 3.2.1 Council Officers emailed and called Anglian Water for updates and further information regarding their works on site. During 29th July Anglian Water's Contractors Public Sewer Services (PSS) were on site along with an Officer from the Council's Environment Department (Luke Love). The Engineer from PSS, informed the officer that Silt removal, jetting, cleaning and maintenance work on the Drums Culvert (Thames Road) had been completed as far as possible for that week, however; he stated that further works were still required on the foreshore side of the culvert, (the seaward side of the sea wall) but that it was very likely to require a Marine Management Organisation (MMO) license, to complete this work on the foreshore. Further details can be found at the attached website: <https://www.gov.uk/guidance/do-i-need-a-marine-licence>
 - 3.2.2 Continuing through to August, Anglian Water continued work in the culvert, investigations by Anglian Water determined that the cause of the flooding was fly tipping and litter in the Thames Road lagoon (Drums Culvert), blocking the inlet to their pumping station. Work was subsequently undertaken by Anglian Water to clear the blockages which provided some short-term relief, however, the flooding subsequently re-occurred on 22nd August and resulted in further flooding in Thames Road, Rippleside Metal Works and again in the play area of Grays Beach Riverside Park.
 - 3.2.3 Further investigations undertaken by Anglian Water to establish the cause of the flooding determined that sea water was entering the drainage system at high tide due to a missing tidal flap at the final outfall to the Thames River, exacerbated by restricted outflows from siltation and a raised sea bed into the river. In addition, it was established that flooding to the Grays Beach Park was being caused by a damaged tidal outfall flap from the park's drainage system that discharges into the Anglian Water culvert facility.

The Council's Environment team acted accordingly with regards to the moving of the temporary herras site fencing on the play area, and upon the worst of the flooding, extended the perimeter of the fence to a larger area of the sandpit in the park.

- 3.3 **Further site visit:** On 19th September the Council's Corporate Director of Environment and Place met with senior colleagues from Anglian Water to determine a further approach to resolving the works in the culvert, and predominantly beyond the seawall where the MMO license was required to complete the most influential part of the required works that prevented sea water access the culvert in the first instance.

Discussions were productive, and provided an opportunity to keep on going communication in place, as well as build a list of relevant contacts between the two organisations. Anglian Water also agreed to provide a clean-up of the sand pit, and arrangements were made to meet with the Environment Portfolio Holder on site to see the extent of works, and cause of the issues.

- 3.3.1 All works that effected the seaward side of the culvert required specific permissions from the MMO and relevant Port Authorities, and whilst Anglian Water made their application, further support as to the urgency of the works was provided to the relevant authorities by the Council – in the form of a letter which was sent to Port of London Authority.

- 3.4 **Clean Up, Rotovating & Sand Top Up:** Anglian Water's contractors completed the rotovating of the sand to break up the salt residue that had formed after the sea water flooding had resided, and added 4t of new sand in the worst affected area of the sand pit. The Council took down the herras site fencing at the beginning of October, and the sand pit was made open to the public. Anglian Water had a full Plan of Works, Method Statements, Risk Assessments and Environmental Impact Assessment in place and waiting to go for as soon as they received permission to work on the foreshore & Thames front from the PLA.

- 3.4.1 After receiving their works licence, Anglian Water and their contractors were on site at the soonest opportunity available to them working around the lowest tide levels every day for nearly a week. Below is the confirmed works that AW's Engineer provided to an Environment Officer at the Council following works being successfully completed on the 21st October:

- The tidal flap on the sea wall (1st line of defence) is back in place fitted with some new heavy duty brackets. The previous brackets had rusted and failed. On leaving site today the sea water was around 1m above the flap and the balancing facility (lagoon) was free from sea water.
- A second flap was found in a chamber between the balancing facility and the outfall previously obscured by the sea water. This was jammed open with a piece of wood. The wood has been removed and the flap now operates normally to provide a 2nd line of defence.

- The new flap within the balancing facility which takes flow from the park remains operational and is clear from debris

3.5 **Minor reoccurrence:** During work on the 21st October, it was reported that a small amount of sea water entered the Grays Beach sand pit, assumed during high tide whilst the flap system AW were working was open or being fitted. This was reported *immediately* to colleagues at Anglian Water, and an officer from the Council's Environment team met Anglian Water Engineers on site. There was no further flooding on completion of the work.

3.6 **Current measures in place:** There were a number of factors which led to the flooding taking place. The following measures have been undertaken by AW these measures along with regular inspections and maintenance if required should help to prevent any flooding from happening again:

- Fly tipping and litter was removed from the Thames Road lagoon (Drums Culvert), which was blocking the inlet to the pumping station.
- The electric pumps were reset in the 'modern' electric pump-house was installed to negate the need for daily maintenance.
- New heavy duty brackets were fitted to the tidal flap on the sea wall
- The second flap found in a chamber was unjammed and now operates correctly.
- The new flap within the balancing facility which takes flow from the park remains operational and is clear from debris.

Anglian Water have also offered to take over the management of the infrastructure under Grays Beach where responsibility was previously unclear.

4. **Reasons for Recommendation**

4.1 The recommendations are to ensure that Cleaner, Greener and Safer Overview and Scrutiny are aware of this incident and the current status.

5. **Consultation (including Overview and Scrutiny, if applicable)**

5.1 N/A

6. **Impact on corporate policies, priorities, performance and community impact**

6.1 N/A

7. Implications

7.1 Financial

Implications verified by: **Laura Last**
Senior Finance Officer – Management
Accounts

The works to rectify the problems at Grays Beach were undertaken by AW at no cost to Thurrock. Anglian Water paid for 4 tonnes of replacement sand for the play area.

7.2 Legal

Implications verified by: **Adam Rulewski**
Barrister – Litigation and Prosecutions

There are no legal implications relating to this update report.

7.3 Diversity and Equality

Implications verified by: **Becky Price**
Community Development Officer

There are no diversity and equality implications relating to this update report.

7.4 Other implications (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder)

N/A

8. Background papers used in preparing the report (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- None

9. Appendices to the report

- None

Report Author:

Sue Harper, Interim Head of Environment