# Folkestone and Hythe District Council

## Strategic Flood Risk Assessment (SFRA) update. September 2020

### **1.0 Introduction**

1.1. The national Planning Practice Guidance (PPG) describes Strategic Flood Risk Assessments as:

‘…*a study carried out by one or more local planning authorities to assess the risk to an area from flooding from all sources, now and in the future, taking account of the impacts of climate change, and to assess the impact that land use changes and development in the area will have on flood risk’*.

1.2. Folkestone & Hythe District Council (F&HDC) published the current Strategic Flood Risk Assessment (SFRA) in July 2015. This informed the Places and Policies Local Plan (PPLP), adopted September 2020, and the Core Strategy Review (CSR), currently at Examination in Public (public hearings to resume in June 2021). The SFRA has also been used for the sequential testing of new development proposals that have fallen within the Environment Agency’s flood zone mapping.

1.3. Government guidance indicates that local authorities should update the SFRA early in the plan making process to inform policies and decisions, or if there have been other changes relating to the other matters, such as the predicted impacts on climate change, major flood events or changes to the development plan.

1.4. As the PPLP is now adopted and the CSR is in the final stages of the plan making process, it is now an appropriate time to renew the SFRA as the council starts preparations for reviewing these plans. The Government also published the White Paper, ‘Planning for the Future’[[1]](#footnote-1), which sets out major reforms to the planning system. An up-to-date SFRA will help to ensure that the council can respond to these reforms when they are brought into force.

1.5. The SFRA is also over six years old and there have been changes to the assumptions and information previously used. For example, the Government’s predicted impacts of climate change have been refined and the final part of the Folkestone to Cliff End Strategy for sea defences, approved by Defra in 2010, has now been completed at the Hythe Ranges.

1.5. The following sections of this brief set out the:

* District Context;
* Development Plan;
* Objectives of this piece of work;
* Methodology and outputs required;
* Data sources;
* Submission;
* Timescales;
* Budget; and
* Contact Details

### **2.0 District Context**

2.1 Folkestone and Hythe District is situated on the East Kent Coast, 120 km from London and covering an area of 357 sq. km. The district shares land-borders with Dover District Council to the east, Canterbury City Council and Ashford Borough Council to the north, and Rother District Council to west.

2.2. The district’s population is predominantly located in the three main urban areas of Folkestone, Hythe and New Romney, with the remainder being spread across a number of rural villages and small towns. The district’s natural landscape ranges from the Kent Downs AONB in the north, to the flat marshes of the Romney Marsh in the southern and coastal areas. It has a coastline of around 41km, stretching from Folkestone in the east to Lydd in the west.

2.3. A large proportion of the district is low-lying, with tidal inundation presenting the source of the most significant flood risk. Approximately 55% of the district’s total area lies within Flood Zone 3a, an area considered to be at high risk from flooding. However, most areas within the district are generally well protected from flooding by tidal defences. These are either formal hard engineered structures or are formed by natural shingle barrier beaches that are actively managed to reduce the risk of breaching. It should be noted that only some of the natural shingle barrier beaches are actively managed.

2.4. The EA has also undertaken improvements to the more vulnerable parts of the coast as part of the Folkestone to Cliff End Strategy. This Strategy was approved by Defra in 2010 and set out the plans to manage flood and erosion risks along the coastline over the next 100 years, taking the predicted impacts of climate change into account. The improvements that were made to the defences as part of that strategy in this district include the Lydd Ranges, Romney Sands and Hythe Ranges. The improvements to the Hythe Ranges were the last to be completed in early 2021.

2.5. The South Foreland to Beachy Head Shoreline Management Plan (SMP) covers the coast of the district and is a high-level document, providing a large-scale assessment of the risks associated with coastal evolution. It presents a policy framework to address risks to people, developed and the historic and natural environment in a sustainable manner. This was adopted in 2006 by the district council. Policy changes to this plan since its adoption include the Hythe Ranges (now ‘hold the line’ for all epochs) and Lydd Ranges (which has been split three ways with two areas now ‘hold the line’ and the remaining section continuing as ‘managed realignment’). The SMP is now under review.

2.6. There are a number of watercourses within the district which have been categorised as ‘main rivers’, many of which have caused fluvial flooding problems in the past. The most significant of these rivers are:

* Mill Leese Stream (Saltwood)
* Seabrook Stream (Horn Street)
* Pent Streams (Folkestone)
* Brockhill Stream (Hythe)
* East Stour (Postling, towards Ashford)
* The Nailbourne (Lyminge towards Bridge and the Little Stour, Canterbury)
* Royal Military Canal

### **3. Development Plan**

3.1. The Development Plan for the district currently consists of:

* Core Strategy Local Plan 2013;
* Places and Policies Local Plan 2020;
* St Mary in the Marsh Neighbourhood Development Plan 2019; and
* Kent Minerals and Waste Local Plan 2016.

3.2. The Core Strategy was adopted on the 18 September 2013 and sets out the vision, broad principles and spatial approach for development across the district to 2031. This Strategy identifies three broad areas within the District, the Urban Area, the North Downs and Romney Marsh. It sets out a settlement hierarchy and the broad locations for strategic development sites in Sellindge, New Romney and Folkestone. Development has now started at these sites.

3.3. This plan also sets out policies for the consideration of water issues and new developments in Policies SS3, ‘Place Shaping and Sustainable Settlements Strategy’ and Policy CSD5, ‘Water and Coastal Environmental Management’.

3.4. The Core Strategy Review is currently at Examination in Public and this, when adopted, will supersede the 2013 plan. This plan includes the new homes requirement set out by Government, which equates to 13,285 new homes over the plan period to 2037, and a new Garden Settlement (5,600 new homes) to help meet this increased requirement. It also proposes to carry over updated versions of Policies SS3 and CSD5.

3.5. The Places and Policies Local Plan identifies and allocates small and medium sized sites for development across the district to meet the targets in the adopted Core Strategy. The allocations are grouped in the three character areas identified in the Core Strategy. The plan also sets out detailed development management policies to assess planning applications. This plan includes Policies CC3 ‘Sustainable Drainage Systems’, NE8 ‘Integrated Coastal Zone Management’, NE9 ‘Development around the Coast’ and CC2 ‘Sustainable Design and Construction’.

3.6. The [St. Mary in the Marsh Neighbourhood Plan](https://www.folkestone-hythe.gov.uk/media/237/St-Mary-in-the-Marsh-Neighbourhood-Plan-September-2018/pdf/St_Mary_in_the_Marsh_Neighbourhood_Plan_Final_September_2018.pdf?m=637000922187470000) was brought into force in 2019 with general policies that will also need to be considered within the designated Neighbourhood Area. There are no allocations or specific water related policies identified in this plan.

3.7. The [Kent Waste and Minerals Local Plan](https://www.kent.gov.uk/__data/assets/pdf_file/0004/112585/Kent-Minerals-and-Waste-Local-Plan-2013-2030.pdf) (2016) sets out the vision and strategy for waste management and mineral provision up until the year 2030. This has been produced by Kent County Council. This plan identifies Sand and Gravel pits in the Romney Marsh area.

### **4.0 Objectives**

4.1. The overall objective of the SFRA is to provide the council with a robust evidence base to inform the application of the Sequential and, if necessary, Exception Tests to inform the future development strategy for the district. Opportunities for future development are constrained by the AONB in the north of the district and the flood risk in the Marsh area. The SFRA will need to identify if there are any further development opportunities around towns and villages identified in the settlement hierarchy, particular around those in the Romney Marsh area, which currently fall within Flood Zone 3a.

4.2. The SFRA will also be used by others, such as other council departments, the Environment Agency, developers and other flood risk consultants, so the assessment will need to be clear and accessible for others to use. The SFRA will be published on the Council’s website and will, therefore, need to meet the Government’s accessibility standards so consideration should be given to this when producing the final version of the SFRA.

4.3. The SFRA will include an assessment of both current and future flood risk (accounting for climate change) to people and property from all sources (such as coastal, fluvial and surface water). Climate change allowances should account for 100 years from today (year 2121) for ‘more vulnerable’ development, such as residential, and 60 years from today for commercial or ‘less vulnerable’ development.

4.4 The SFRA should also include, as advised by the PPG, the identification of opportunities to reduce the causes and impacts of flooding to existing communities and developments, the cumulative impact of development over time, land usage for flood risk management and recommendations on how to address flood risk on development.

4.5. It is anticipated that the SFRA will be used to:

* Inform the preparation of planning policy documents in terms of the use of land;
* Inform the preparation of flood risk policy and guidance;
* Identify the requirements for site-specific Flood Risk Assessments;
* Assess the cumulative impact that development or changing land use would have on the risk of flooding;
* Identify opportunities to reduce the causes and impacts of flooding to existing communities and developments;
* Identify any land likely to be needed for flood risk management features and structures; and
* Determine the acceptability of flood risk in relation to emergency planning capability.

### **5.0 Methodology and Outputs Required**

5.1. The successful consultant will be expected to have due regard to the most up to date national policy and guidance together with best practice from elsewhere in completing the project. Specifically, the SFRA needs to be completed in line with the PPG including the guidance from DEFRA and the Environment Agency titled ‘How to prepare a strategic flood risk assessment’[[2]](#footnote-2), which, at the time of writing this brief, was last updated on 10th September 2020.

5.2. The successful consultant will be expected to work with the Environment Agency and Kent County Council as the Lead Flood Authority in line with the advice set out in the guidance. They will also need to consult:

* Internal Drainage Boards;
* Emergency planners;
* emergency services;
* water and sewerage companies;
* highways authorities;
* neighbouring district councils; and
* regional flood and coastal committees.

5.3. A Level 1 SFRA will need to be undertaken, and if necessary a Level 2 SFRA. The assessment should collect and present the information outlined below.

#### Level 1 SFRA

5.4. As set out in the guidance, the Level 1 SFRA should include maps, a supporting report setting out the methodology and results and user guidance, which show *all* sources of flood risk (current (2021) and future (2081 & 2121)) affecting the Folkestone & Hythe district and shall detail:

* The sources of flood risk including from rivers, sea, estuaries, surface water, groundwater, coastal erosion, areas with a critical drainage problem and areas where sewer capacity may be causing drainage issues and contributing to local flood risk;
* In respect of surface water flooding, in line with the PPG, areas at risk from surface water flooding and drainage issues shall be identified, taking account of the surface water flood risk map published by the Environment Agency and any other available evidence, such as local flood risk management strategies. It should also identify the types of measure which may be appropriate to manage them, taking account of location, site opportunities, constraints and geology;
* Areas of flood zone 1 where the sequential test and flood risk assessments will be required;
* Flood management and defences;
* Land that is likely to be needed for flood risk management features and structures;
* Reservoir risk;
* The cumulative impact of development and land-use change, including strategically planned development, windfall development, permitted development and significant changes in land use, where relevant;
* Expected effects of climate change;
* A detailed explanation of the approach to defining and mapping functional floodplain and an assessment of the potential impacts of climate change on the future extent of the floodplain;
* Opportunities to reduce the causes and impacts of flooding;
* Recommendations on how to address flood risk in development; and
* A narrative/discussion relating to whether a level 2 SFRA will be required.

5.5. The maps produced should indicate the following information:

* All main rivers, ordinary watercourses and drainage channels managed by another organisation (such as Romney Marshes Area Internal Drainage Board);
* The administrative areas of the lead local flood authority (Kent County Council), water and sewerage companies and internal drainage boards;
* Historic instances of flooding and their sources;
* Show how district residents and visitors can receive flood warnings;
* Flood risk management features and structures, with information on these provided within the supporting report;
* For key flood risk management features and structures the current type of protection, the standard of protection, whether it is in public or private ownership and the condition it’s in should be described or shown;
* Identify and label any land and access to land that may be needed for flood schemes in the future;
* Identify and label buffer areas, which may be needed for access, maintenance or future flood risk management to make sure development in these areas doesn’t increase flood risk;
* Identify and label areas benefitting from existing flood risk management features and structures;
* Show land that would flood with an annual probability of 1 in 20 (5%) or greater in any year, with flood risk management features and structures operating effectively Show land that would normally form the river channel;
* Identify areas on maps where climate change is expected to increase flood risk; and
* Identify on maps where the effects of climate change will make existing development unsustainable.

5.6. All mapping should meet the EA guidance in relation to GIS format, detail, resolution, clarity and referencing expected for a Level 1 SFRA. The District Council would preferably see fewer maps combining several sources of information to make the SFRA easier to use.

5.7. A user guidance section will need to be included detailing how the Level 1 SFRA should be used.

#### Level 2 SFRA

5.8. If the Level 1 SFRA indicates that land outside flood risk areas cannot appropriately accommodate all the required development, it will be necessary to increase the scope of the assessment to include a Level 2 assessment to provide the information needed for the application of the Exception Test where appropriate. A Level 2 SFRA will need to consider the detailed nature of the flood characteristics within a flood zone including:

* Flood probability;
* Flood depth;
* Flood velocity;
* The hazard;
* Rate of onset of flooding;
* Sources;
* Duration of flood; and
* Mechanism, for example breach or overtopping.

5.9. The Level 2 SFRA will also need to include a different, more detailed, set of maps, a supporting report for the maps and a user guide. The information provided will need to:

* Be detailed enough to enable the development allocation sites with least risk of flooding to be identified;
* Contain the information needed to apply the exception test, if relevant, and show how development could reduce flood risk overall where possible and provide wider sustainability benefits to the community that outweigh flood risk.
* Assess whether development can be made safe from flooding for its lifetime without increasing flood risk elsewhere.

5.10. The Level 2 SFRA will need to allow for:

* The sequential test to be applied by identifying the severity and variation in risk within medium and high flood risk areas and how this risk will vary over time with the impacts of climate change;
* Establish whether proposed allocations or windfall sites, on which the local plan will rely, are capable of being made safe throughout their lifetime without increasing flood risk elsewhere;
* Application of the exception test, where relevant.

5.11. The map and report will need to include details about the nature of flooding from all sources, taking climate change into account, which considers the risks now and in the future, and will need to specify speed of onset, depth, velocity, hazard, duration, sources and mechanism (for example, breach or overtopping).

5.12. An assessment of what would happen if flood risk management features and structures failed or were breached and consider what would happen if the design standard of flood risk structures or features were exceeded will need to be provided. The maps will need to show clearly whether sites are at risk from:

* Frequent flooding even when flood risk management features and structures are working properly; and
* Residual flooding which would only occur if features and structures fail or design standard is exceeded.

5.13. The maps will need to identify and show any evacuation routes which would stay dry, or experience only non-hazardous flooding.

5.14. A user guidance section will need to be included detailing how the Level 2 SFRA should be used.

#### Exploratory sea level projections for the UK to 2300

5.15. In addition to the Level 1 and 2 reports, the Council is also seeking a short section explaining the relationship of the SFRA and the EA’s ‘Exploratory sea level projections for the UK to 2300’.

#### Identifying the contacts for the resources for the SFRA

5.16. In line with the PPG and guidance, the consultant is expected to obtain and be informed by information from:

* The Environment Agency;
* Kent County Council Lead Local Flood Authority;
* Emergency Planners (County and District);
* Emergency Services;
* Water and sewerage companies;
* Reservoir owners or undertakers, if relevant;
* Internal drainage boards;
* Natural England;
* The British Geological Survey;
* Highway authorities;
* Neighbouring district/borough/city councils;
* Regional flood and coastal committees.

### **6.0 Data Sources**

6.1. The following data and information can be viewed on the council’s web site:

* Shepway SFRA 2015 & Hazard Maps

[*Main Document*](https://www.folkestone-hythe.gov.uk/media/2263/EB-03-80-FHDC-Strategic-Flood-Risk-Assessment-SFRA-2015/pdf/EB_03.80_FHDC_Strategic_Flood_Risk_Assessment_(SFRA)_2015.pdf?m=637206509921630000)

[*Appendix 1 Flood Zone Map*](https://www.folkestone-hythe.gov.uk/media/2264/EB-03-81-SFRA-FHDC-Appendix-1-Flood-Zones-Map/pdf/EB_03.81_SFRA_(FHDC)_Appendix_1_-_Flood_Zones_Map.pdf?m=637206509922730000)

[*Appendix 2a Historic Flood Map*](https://www.folkestone-hythe.gov.uk/media/2265/EB-03-82-SFRA-FHDC-Appendix-2a-Historic-Flood-Map/pdf/EB_03.82_SFRA_(FHDC)_Appendix_2a_-_Historic_Flood_Map.pdf?m=637206509924700000)

[*Appendix 2b Historic Flood Sites*](https://www.folkestone-hythe.gov.uk/media/2266/EB-03-83-SFRA-FHDC-Appendix-2b-Historic-Map-Sites/pdf/EB_03.83_SFRA__(FHDC)_Appendix_2b_-_Historic_Map_Sites.pdf?m=637206509926630000)

[*Appendix 3a Defence Infrastructure*](https://www.folkestone-hythe.gov.uk/media/2267/EB-03-84-SFRA-FHDC-Appendix-3a-Existing-Defence-Infrastructure-Main-Rivers-Map/pdf/EB_03.84_SFRA_(FHDC)_Appendix_3a_Existing_Defence_Infrastructure___Main_Rivers_Map.pdf?m=637206509927670000)

[*Appendix 3b Defence Infrastructure Table*](https://www.folkestone-hythe.gov.uk/media/2268/EB-03-85-SFRA-FHDC-Appendix-3b-Defence-Infrastructure-Table/pdf/EB_03.85_SFRA_(FHDC)__Appendix_3b_-_Defence_Infrastructure_Table.pdf?m=637206509929630000)

[*Appendix 4a Hazard Map 2015*](https://www.folkestone-hythe.gov.uk/media/2269/EB-03-86-SFRA-FHDC-Appendix-4a-Hazard-Map-2015/pdf/EB_03.86_SFRA_(FHDC)_Appendix_4a_-_Hazard_Map_2015.pdf?m=637206509930700000)

[*Appendix 4b Hazard Map 2075*](https://www.folkestone-hythe.gov.uk/media/2270/EB-03-87-SFRA-FHDC-Appendix-4b-Hazard-Map-2075/pdf/EB_03.87_SFRA_(FHDC)__Appendix_4b_-_Hazard_Map_2075.pdf?m=637206509932630000)

[*Appendix 4c Hazard Map 2115*](https://www.folkestone-hythe.gov.uk/media/2271/EB-03-88-SFRA-FHDC-Appendix-4c-Hazard-Map-2115/pdf/EB_03.88_SFRA_(FHDC)_Appendix_4c_-_Hazard_Map_2115.pdf?m=637206509934000000)

* [Shepway Core Strategy 2013](https://www.folkestone-hythe.gov.uk/media/234/Core-Strategy-Local-Plan-2013/pdf/Core_Strategy_Local_Plan_2013_v2.pdf?m=637000911058970000)
* [Core Strategy Review 2020](https://www.folkestone-hythe.gov.uk/media/2234/EB-01-00-Folkestone-Hythe-Core-Strategy-Review-Submission-Draft-2020/pdf/EB_01.00_Folkestone___Hythe_Core_Strategy_Review_Submission_Draft_2020.pdf?m=637206487608870000)
* [Places and Polices Local Plan 2019](https://www.folkestone-hythe.gov.uk/media/2969/Places-and-Policies-Local-Plan-2020/pdf/Places_and_Policies_Local_Plan_2020.pdf?m=637370773065900000)
* [Water Cycle Study](https://www.folkestone-hythe.gov.uk/media/2276/EB-05-20-FHDC-Water-Cycle-Study/pdf/EB_05.20_FHDC_Water_Cycle_Study.pdf?m=637206517576970000) (Core Strategy Review Evidence Base) 2018

6.2. The district council will also provide any necessary base maps to undertake the SFRA.

6.3. The South Foreland to Beachy Head Shoreline Management Plan[[3]](#footnote-3) can be found:

<https://se-coastalgroup.org.uk/shoreline-management-plans/south-foreland-to-beachy-head/>

6.4. If required to view, the neighbouring SFRA documents can found on their websites:

* Ashford Borough Council [SFRA](https://www.ashford.gov.uk/planning-and-development/planning-policy/adopted-development-plan-documents/adopted-local-plan-to-2030/local-plan-2030-evidence-base/local-plan-natural-and-built-environment-background-documents/)
* Dover District Council [SFRA](https://www.dover.gov.uk/Planning/Planning-Policy-and-Regeneration/Evidence-Base/Flooding.aspx)
* Rother District Council [SFRA](https://www.rother.gov.uk/planning-and-building-control/planning-policy/background-evidence/strategic-flood-risk-assessment-sfra/)

Canterbury City Council’s SFRA is not available on line.

6.5. The new Romney Marsh model that is due to update flood maps in August can be made available by the Environment Agency once consultants have been appointed. This does include breach analysis but these have been created for incident response use (using UCKP09) rather than planning so the appropriate allowances for planning would need to be applied. New EA guidance on climate change allowances is to be published on 20th July. The flood zones will be updated with the new Romney Marsh model in August.

6.6. KCC as lead Local Flood Authority should also be contacted for relevant information in relation to surface flooding. KCC is also undertaking a Spatial Risk Assessment for Water, which relates to flood risk changes due to climate change. The data behind this work may also be available for this SFRA.

**Submission**

7.1. The district council wishes to secure a fixed price proposal, inclusive of all expenses and incidental costs, from the consultant in order to give secure financial planning to the council. This will, however, need to reflect the two stages in the SFRA, Level 1 and then, if required, Level 2.

#### Fee payment schedule

7.2 The payment schedule for the required works is suggested as follows:

* 20% of level 1 fee payable from the contract start date
* 40% of level 1 fee payable at midpoint
* 40% of level 1 fee payable on completion of level 1 work
* 50% of level 2 fee payable at midpoint
* 50% of level 2 fee payable on completion of level 2 work

7.3 The Council will make the payment to the consultancy within 30 days of receipt of a correct invoice.

7.4 Payments will be made at dates to be agreed with the successful consultant at the inception meeting.

1. <https://www.gov.uk/government/consultations/planning-for-the-future> [↑](#footnote-ref-1)
2. <https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment#history> [↑](#footnote-ref-2)
3. Please note that a review of the SMP has started. [↑](#footnote-ref-3)