

**From:** Tony Hills, Deputy Cabinet Member for Environment  
**To:** Kent Flood Risk and Water Management Committee – 16 July 2024  
**Subject:** Water Management Solutions for Romney Marsh Area  
**Classification:** Unrestricted

**Past Pathway of Paper:** N/A

**Future Pathway of Paper :** Southern Regional Flood and Coastal Committee

**Summary:** This report outlines the findings of a Water Management Working Group (see Appendix 1 for membership) looking at current flooding issues and future water management solutions for the Romney Marsh Area.

**Recommendation:** The Committee is asked to comment on the report as the basis for a lobbying document to the Southern Regional Flood and Coastal Committee for investment funding in Romney Marsh.

## 1. Introduction and Executive Summary

- 1.1 There are many water management challenges facing the Romney Marsh Area but there are also potential solutions.

### The Challenges

- 1.2 The Environment Agency has identified Romney Marsh as having long-term risk from rivers, sea, surface and ground water
- 1.3 Much of Romney Marsh area is below the present-day high tide level, and without adequate sea defences, 14,500 homes, 700 businesses and nationally important, critical infrastructure are at risk of flooding<sup>1</sup>.
- 1.4 The area is identified as “one of the largest in Southern England vulnerable to flooding from the sea with some parts having a 1 in 5 chance of flooding in any given year”<sup>2</sup>. The main flood risk areas are shown here:  
[Managing Flood Risk Map.jpg \(950x610\) \(romneymarshhistory.co.uk\)](#)<sup>3</sup>
- 1.5 Climate change is happening at an increasing rate with the consequence of more extreme weather conditions and increased water volumes that need to be moved more quickly and effectively to prevent local surface water flooding is becoming the new normal. This requires new investment and the need to adapt traditional approaches to introduce new sustainable solutions to mitigate and manage climate change effects.

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<sup>1</sup> [Lydd Ranges Sea Defences Scheme - Environment Agency - Citizen Space \(environment-agency.gov.uk\)](#)

<sup>2</sup> [Flood Risk on Romney Marsh - History of Romney Marsh \(romneymarshhistory.co.uk\)](#)

<sup>3</sup> Source Environment Agency

- 1.6 Housing development is putting severe strain on and contributing to overloading of current systems and reduces open land available to deal with surface water drainage. Balancing the need for housing development to ensure that that new developments do not increase flood risk and, where possible, contribute to the reduction of flood risk to protect the safety and sustainability of communities is a key challenge.

### **The Potential solutions**

- 1.7 All private and public sector agencies will need to work collaboratively to develop a comprehensive approach to water management systems supported by investment in new infrastructure to improve their effectiveness and efficiency. This would include:

- **Infrastructure investment** to strengthen and maintain existing assets and a robust replacement programme at end of life with new technologies.
- **Dynamic control of catchments** to prepare for storms as warnings improve. By moving water across the Marsh and pumped to sea (relies on accurate data adjusting for consecutive storm events).
- **Continuous Improvement of catchment knowledge** and on-going investment in identification of ownership and responsibilities of assets such as culverts and investigate whether these assets are being adequately maintained by the owners.
- Need for **comprehensive shared data sets** to ensure evidence-based joined-up decision-making.
- **Legislative changes** to require developers to include flood mitigations such as SUDs from new housing developments and stronger responses from the Environment Agency to housing developments.

## **2. Key Objectives of the Report**

- 2.1 The key objectives for the Working Group were:
- To understand the particular water management issues within the Romney Marsh area and to review and consider water management solutions
  - To prepare a report outlining the current situation regarding surface water issues and potential solutions to present to the Southern Regional Flood and Coastal Committee to raise awareness to the challenge, also act as a bid for funding for future mitigations and interventions.

## **3. Current Water Management Systems and Challenges**

- 3.1 Flood Defences are in place to protect against sea flooding using a combination of shingle beach and rock revetment. This needs to be maintained and updated as sea level rises.
- 3.2 This unique area has a range of nature reserves and biodiversity initiatives that contribute to flood mitigation including the Dungeness National Nature

Reserve, Special Area of Conservation, Romney Marsh and Rye Bay Special Protection Area, Rye Bay and Romney Marsh Ramsar Site and the oldest RSPB reserve in the country.

- 3.3 10% of watercourses in the area are maintained by the Environment Agency, Internal Drainage Board or, in a few urban areas, Folkestone & Hythe District Council, under their permissive powers. The remaining 90% are classified as Ordinary Watercourses and may receive occasional maintenance by their riparian (land) owners.
- 3.4 Traditionally, Catchment Management systems have aimed to sustain irrigation during the summer months while reducing water levels in the winter. However, the advent of rapid climate change and the resulting extreme weather patterns have surpassed the system's capacity to respond.

#### 4. Potential Solutions

- 4.1 The following table outlines a range of potential options that can be further developed into costed solutions.

Table: High-level draft options

Options	Description	Likely cost	Pros	Cons
Do nothing	Continue current regime	Low	Low cost no change	Does not reduce flood risk
Enhanced maintenance	Increased maintenance activities beyond standard level	Low/Medium	Reduced flood risk	Potential impact on wildlife
Increased conventional engineering approaches	More pumping stations	High	Significantly reduced flood risk	Energy/carbon intensive. Ongoing maintenance.
Eco-friendly green engineering solutions	Wind/solar powered pumping / SUDs	High	Significantly reduced flood risk.  Low energy/carbon impact	Relatively untested
Catchment water management	Managing water quantity in a defined area	Medium – high	More sustainable	Potential impact on farming

## 5. Conclusions

- 5.1 With the predicted increase in sea level rise the Romney Marsh coastal defences will need to be maintained and updated.
- 5.2 The forecast increase in the level of rainfall requires more investment to enhance existing maintenance regimes to give more capacity within the historic dyke system.
- 5.3 Upgrading the existing pumping systems to generate more water movement and facilitate the quicker dispersal of excess water will need to be considered.

## 6. Next Steps for Group

- 6.1 The Working Group agreed to continue to meet to foster communication and collaboration, addressing issues, sharing challenges and delivering key messages aligned to winter review planning and a meeting post winter to review lessons learnt.

## 7. Recommendation

- 7.1 The Committee is asked to comment on the report as the basis for a lobbying document to the Southern Regional Flood and Coastal Committee for investment funding in Romney Marsh.

## 8. Contact Details

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