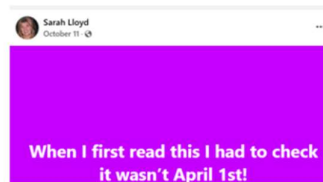
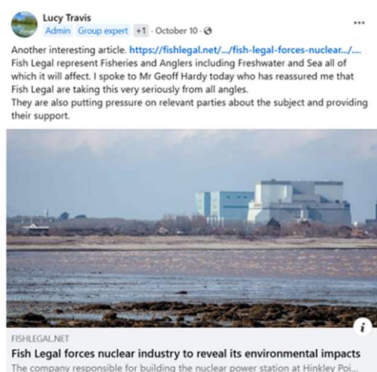




# A report into why EDF's salt marsh proposals makes no sense in Kingston Seymour & why alternative environmental solutions to allow EDF Hinkley Point C Nuclear Power Station to operate must be sought



## Executive Summary

This report is intended for EDF, statutory consultees and relevant people in local and national government to inform decision making regarding EDF's proposal to create saltmarsh at Kingston Seymour.

EDF have applied for a material change to their Development Consent Order, which would allow them to avoid installing an Acoustic Fish Deterrent (AFD) at Hinkley Point C (HPC). Whilst EDF have many options for this mitigation, they have stated that their current preferred strategy is saltmarsh with Kingston Seymour, one of four preferred locations.

### Why EDF's proposals should be abandoned.

- 1. Saltmarsh plans at Kingston Seymour were proposed by the Environment Agency (EA) in 2011. They were abandoned as unworkable in 2012. The coastal geomorphology is fundamentally unsuitable** – This is due to high tides and turbidity, sediment movement and simultaneous siltation and erosion in the estuary. Attempts to create saltmarsh at Kingston Seymour will instead create sterile mudflats. The EA were presented with scientific evidence of this in 2012. **Due to the scientific evidence, flood risk concerns from statutory consultees and local community opposition, the EA abandoned their plans and instead invested in improving the existing sea defences.**
- 2. EDF's saltmarsh proposal would increase flood risk to communities (42,000 homes) and important infrastructure assets including the M5, railway and a water treatment plant** - The area would quickly silt up (increasing ground levels), impacting the existing (gravity fed) drainage system and would also bring flood defences much closer to Kingston Seymour and Clevedon reducing the distance (buffer) and land area which can be used as flood water storage in the event of a storm surge. **There are significant reasons to believe that EDF's statement that saltmarsh will help regulate water levels and reduce flood risk is mistaken.**
- 3. There is no biodiversity net gain of EDF's saltmarsh proposal** - Significant wildlife and biodiversity (including Great Crested Newts, Lesser and Greater Horseshoe Bats, rare and endangered birds, SPA/Ramsar birds and flora and fauna) would be destroyed. **This destruction of habitat would itself require mitigation on a mitigation. Historic ancient hedgerows would also be destroyed by saltwater incursion.**
- 4. Managed realignment to create saltmarsh is not supported by the community, landowners, and representative bodies** - Implementation would require the use of forced compulsory purchase powers, which goes against EA guidance on this matter. A petition against the proposals has gained 4230 signatures and the opposition Facebook group is highly active with over 2150 members. **The local members of parliament, North Somerset council and the parish council have all expressed strong opposition.**

5. **The proposal will destroy local businesses and livelihoods** - This includes multi-generational farms, fisheries, commercial and diversified farm businesses which includes dog training, tourism, caravanning and camping, holiday lets, business premises and cafes. One young farmer will lose an entire property, livelihood and future. The loss of eight hundred hectares of productive farmland threatens our food supply and food security. It is also having negative impacts (blight) on property values and users of the 3-mile pier to pier cycle way and the coastal footpath who are all concerned about impacts from construction traffic on narrow lanes. **The scale of the impacts proposed is not proportionate to the assumed gains outlined by EDF.**
6. **Artificially created salt marsh has low ecological value compared to natural salt marsh.** To the extent that salt marsh (instead of sterile mud-flat) is created, it will be of low ecological value. Agricultural land reclaimed for an artificial salt marsh is unsuitable for saltmarsh plants which fail to thrive in waterlogged low-level land or in hard crusts of soil in high level areas. As a result, a few (non-saltmarsh) plants dominate over typical salt marsh plants. Artificial salt marsh has reduced biodiversity and lower usage by fish due to its uniformity. Invertebrates are also slow to develop in created salt marshes, particularly in high tidal areas. **EDF's proposal will not provide any of the benefits outlined to offset the level of damage associated with removal of the Acoustic Fish Deterrent.**
7. **EDF's salt marsh proposal will cause damage to cultural, historical and archaeological assets** - Kingston Seymour has a unique, ancient and well-preserved landscape of great archaeological and historical importance. **This historic reclaimed wetland dates to Roman times, holds explored and unexplored roman remains, and is mentioned in the Domesday book 1086 AD.**

## Calls to action

### EDF

**EDF is free to choose its strategy for delivering on its environmental responsibilities.** It has many options which will be more acceptable to affected communities and stakeholders. **We urge EDF to explore these alternatives and find a better way.**

### *Stakeholders and statutory consultees*

This report and its supporting appendices contain a wealth of evidence that should enable affected persons and bodies to hold EDF fully to account and subject the proposals to the full scrutiny they deserve. We urge you to consider all the evidence in preparing responses to EDF and **hold EDF to the highest standard of proof, should the Nationally Significant Infrastructure Project (NSIP) approval process be engaged.**

## Action group intent

The local community is well organised, motivated and determined. We have a broad base of support and are preparing our strategy and fundraising with a view to full participation at all relevant stages of any related NSIP approval process. Should the action group identify any procedural failings by EDF, **the action group may seek a judicial review of any NSIP decision.**

## Contents

|                                                                                              |           |
|----------------------------------------------------------------------------------------------|-----------|
| <b>Executive Summary.....</b>                                                                | <b>2</b>  |
| <b>Purpose of the North Somerset Levels Action Group.....</b>                                | <b>5</b>  |
| <b>Purpose of this Report .....</b>                                                          | <b>6</b>  |
| Audience.....                                                                                | 6         |
| Aims .....                                                                                   | 6         |
| <b>Context .....</b>                                                                         | <b>7</b>  |
| <b>Why EDF's proposals should be abandoned.....</b>                                          | <b>8</b>  |
| Saltmarsh plans were abandoned as unworkable in 2012. The fundamentals have not changed..... | 8         |
| Attempts to create saltmarsh at Kingston Seymour will instead create sterile mudflats. ....  | 8         |
| Low ecological value of artificial salt marsh.....                                           | 10        |
| Flood risk to 42,000 homes and important infrastructure assets. ....                         | 11        |
| Ecological damage requiring mitigation on mitigation. ....                                   | 13        |
| Local community & business impacts .....                                                     | 15        |
| Strong political opposition to the proposals.....                                            | 16        |
| Damage to cultural, historical and archaeological assets .....                               | 17        |
| <b>Better alternatives .....</b>                                                             | <b>18</b> |
| Alternative solutions.....                                                                   | 18        |
| Alternative locations.....                                                                   | 18        |
| <b>Calls for action. ....</b>                                                                | <b>19</b> |
| Call to EDF.....                                                                             | 19        |
| Call to the Environment Agency .....                                                         | 19        |
| <b>Intent of the action group should EDF plans proceed. ....</b>                             | <b>20</b> |

## Purpose of the North Somerset Levels Action Group

The North Somerset Levels Action Group comprises community representatives (residents, landowners and business owners) who have a range of experience (ranging from legal, environmental, planning, policy historic, farming, surveying, engineering / internal drainage etc).

The purpose of the Action Group is to represent the views of the community and work alongside Parish/County Councils and other representatives (such as MPs) and organisations (such as Country Landowners Association (CLA), National Farmers Union (NFU) and Federation of Small Business (FSB) in making representations against EDF's salt marsh proposals in Kingston Seymour and Lower Strode Road, Clevedon.

**The Action Group does not support EDF's proposals for salt marsh and this paper seeks to provide overwhelming evidence (reasons why not) why EDF should not progress with their saltmarsh proposal.**

## Purpose of this Report

### Audience

This document is intended for.

| Body                                                                                                                                                                                                                                                                                                        | Relevance                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EDF</b>                                                                                                                                                                                                                                                                                                  | Inform and influence EDF's decision on whether to continue the saltmarsh proposal in Kingston Seymour and Lower Strode Road, Clevedon                                                                                                                        |
| <b>Environment Agency</b>                                                                                                                                                                                                                                                                                   | Provide an update for EA on community views on saltmarsh / realignment of sea defences.<br><br>Enable the EA to share its existing knowledge from previous saltmarsh evaluations with EDF, and to take action to reassure the community for the longer term. |
| <b>EDF's statutory consultees (which include (but are not limited to): Environment Agency (EA), Natural England (NE), Natural Resources for Wales</b>                                                                                                                                                       | Enable coordination of actions and messages in opposition to EDF's salt marsh proposals                                                                                                                                                                      |
| <b>Relevant representatives and interest groups: MP Tessa Munt, MP Sadik Al-Hassan, NSC Councillors (including Wendy Griggs and Steve Bridger), NFU, CLA, FSB, IDB, representatives and Parish/County Councils and representatives from other EDF salt marsh sites at Arlingham, Rodley, and Littleton.</b> | Enable coordination of actions and messages in opposition to EDF's salt marsh proposals as much of this evidence to applicable to sites at Arlingham, Rodley and Littleton.                                                                                  |
| <b>Affected communities: Kingston Seymour, Lower Strode Road &amp; Clevedon, wider area including Yatton, Kenn, Nailsea</b>                                                                                                                                                                                 | Build mutual understanding of the issues and options for resolution.                                                                                                                                                                                         |

### Aims

- Provide evidence of the relevant facts, perceived risks / impacts and community sentiment
- Ensure that the relevant facts and opinions of affected communities are fully taken into consideration by decision makers
- Propose actions for EDF and the EA which would enable better alternatives to be found and reassure the local community for the long term.

## Context

Hinkley Point C (HPC) is being constructed by EDF energy. The relevant Development Consent Order (SI 2013/648) came into force on 9 April 2013.

The fish protection measures in the 2013 DCO were:

- a low velocity intake design,
- an acoustic fish deterrent (AFD), and
- a fish recovery and return system (FRR)

The purpose of the AFD, together with other measures, is to reduce the number of fish which could be drawn into the cooling water system and killed.

Since 2018 EDF/NNB have sought permissions to remove the requirement for the AFD from the EA who issue the Water Discharge Activity Permit. Initially this was refused after a PINS appeal in 2020. In 2022 a second application (EPR/HP3228XT/V005) was made to the EA to remove the AFD, this was based on updated estimates of total impinged biomass in the zone of interest. This triggered a second Habitats Regulations Assessment, which was published in 2023 and concluded that there would be no adverse effects of removing the AFD on designated European sites and SSSIs. On this basis the EA decision was to agree to the variation.

As part of this variation, a package of compensatory measures was agreed to offset the impact of the AFD removal. This included creating eight hundred acres of saltmarsh.

EDF are currently preparing an application for a material change to the DCO which is expected to be submitted to the SoS for Energy Security and Net Zero in 2025. As part of this they are looking for potential sites to for saltmarsh.

The Environment Agency have requested EDF look at a range of compensation measures including weir and easement removals, saltmarsh, sea grass, kelp forests and oyster beds.

EDF have chosen to preference saltmarsh at Kingston Seymour (and three other sites), despite having alternatives available.

## Why EDF's proposals should be abandoned.

**Saltmarsh plans were abandoned as unworkable in 2012. The fundamentals have not changed.**

### Unsuitable coastal geomorphology

As described in the next section, the nature of the coastline, the second highest tide in the world, sediment movements and simultaneous siltation and erosion is such that any attempt to create saltmarsh will fail and instead create sterile mud flats.

The Environment Agency was presented with a report on this in March 2012 and accepted the evidence. They subsequently invested in strengthening the existing defences as the best flood defence strategy for the area, and noted a strong economic case for continued investment - **see appendix A.**

### Concerns raised by statutory consultees.

#### *Internal Drainage boards (IDB)*

The IDBs consulted in 2011/12 and identified significant concerns with the feasibility and desirability of saltmarsh creation at Kingston Seymour. Particularly regarding:

1. The loss of the buffer currently provided by the agricultural land, insulating housing stock and key infrastructure from flooding
2. The critical nature of the existing gravity outfalls for the drainage – not just in Kingston Seymour but in populated upstream areas and around critical infrastructure. The IDBs noted that the effect of alterations to the gravity outfalls is difficult to predict and flood risk may be created unintentionally.

*Details are in Appendix B1 & B2.*

**Attempts to create saltmarsh at Kingston Seymour will instead create sterile mudflats.**

### Key Facts

1. In 2011 the Environment Agency proposed creation of saltmarsh at Kingston Seymour through allowing the natural degradation of the existing sea defences.
2. This proposal was shown to be unworkable by the eminent coastal geomorphologist, Dr Rob Kirby.
3. Dr Kirby is the world's leading authority on the geomorphology of the Severn Estuary, which has been the focus of his research for over 40 years.
4. Dr Kirby presented his findings to representatives of the Environment Agency on 28<sup>th</sup> March 2012
5. The Environment Agency agreed that the saltmarsh proposals were unworkable and undertook to update the Severn Estuary Flood Risk Management Strategy (SEFRMS), changing the strategy for the relevant section of coastline.
6. This was reflected in the draft of the SEFRMS appraisal report (IMSW001215, pp32) issued in 2014.

## Kirby report summary

Dr Kirby's report outlines the coastal geomorphological factors affecting the **feasibility** of creating a sustained salt marsh habitat at Kingston Seymour. It is important to note that this is a different perspective from marine biologists who have advised on the **desirability** of such habitat.

Whilst increasing salt-marsh habitat on the UK coastline may be desirable, if the forces of nature mean that it is unfeasible in a given location, any attempts to create it will be a waste of resources.

*'Separately, it is conclusively shown that creation of small enclosures, for example an intertidal pond or bare tidal flat, within the setback area can never be a sustainable option. The lifespan of all such schemes is inevitably limited. Attempts at such provision would be doomed to failure.'* (Dr Kirby)

Dr Kirby's research showed that any attempt to create saltmarsh at Kingston Seymour would be futile. Within a short period (circa 3-5 years) any salt-marsh basin would be transformed into sterile mudflats with poor wildlife, no gains to fish stocks, and the potential for invasive plant species (*Spartina anglica*) and decaying algae producing poisonous gas; namely, hydrogen sulphide (*Enteromorpha*).



This is due to:

1. The high concentration of fine cohesive sediment (mud) in the estuary – up to thirty million tonnes is circulating on any day.
2. The low “travel” of that mud – only 0.6-0.7 million tonnes moves in/out of the estuary every year – meaning that the mud is circulated rather than dispersing to the sea.
3. The high tidal range – up to fifteen metres – the second highest in the world – which causes the mud to deposit across inter-tidal area and smother the intended marshland, causing rapid siltation and preventing growth of the desired plant life – creating instead a sterile mud-flat.
4. A simultaneous siltation and erosion in the estuary due to strong tidal turbidity, storms and the second highest tide in the world.

The expectation of siltation creating sterile mud-flat is borne out by the experience of human-caused structures in the surrounding area, including:

**1. Harbours**

- a. Avonmouth and Portbury docks each have a dredging need of 1.5 to 2 million tonnes per year.
- b. Watchet marina has a siltation rate of 40-60 tonnes per day.

**2. Pools**

- a. Seawater recreational pools constructed at Weston-Super-Mare, Burnham, Clevedon and Portishead all suffered from high siltation.
- b. The cooling water pool at Oldbury power station has never operated at above 10% planned capacity due to the high siltation rate not taken into account during design.

**3. History at Kingston Seymour itself**

**Appendix C** shows that prior to construction of the current the flood defences, *Spartina* grass was present, but washed away by the tidal flows. Soon after the construction, the grass flourished, but within a few years the area was transformed again to sterile mud flat.

## Implications

1. EDF's proposed mitigation for its decision not to install the required AFD will not achieve its aims.
2. Instead, the proposal will create significant ecological damage, transforming productive farmland into sterile mud-flat, smothering subtidal habitat and eroding intertidal mudflats.
3. Saltmarsh will create ideal conditions for *Spartina Anglica* which threatens migratory and resident bird conservation efforts by reducing feeding grounds for wildfowl and waders, altering bird roost availability and reducing invertebrate numbers. Intertidal habitat is also destroyed. *Spartina Anglica* dieback encourages *Enteromorpha spp.* Both species make mudflats unsuitable for invertebrates that birds feed on and can lead to bird population collapse, particularly for over-wintering waders and wildfowl. Decomposing *Enteromorpha spp.* macroalgae can produce high levels of hydrogen sulphide which is a noxious gas and has been linked to paralysis, breathing issues, heart arrhythmias and even heart attacks and deaths in humans and animals on saltmarsh.

## Low ecological value of artificial salt marsh

1. Artificial salt marsh is not biologically equivalent to a natural salt marsh (University of East Anglia researchers, 2012 – see Appendix C).
2. Artificially created salt marshes host significantly less plant life than natural salt marshes, are sparsely vegetated and dominated by only a few plant species. Salt marsh plants like sea lavender, thrift, sea arrowgrass and sea plantain are rare or non-existent in artificial salt marsh while shrubs like sea purslane flourish.
3. Agricultural land reclaimed for an artificial salt marsh is unsuitable for salt marsh plants which fail to thrive in waterlogged low-level land or in hard crusts of soil in high level areas. As a result, a few (non-salt marsh) plants dominate over typical salt marsh plants.

4. Artificial salt marsh has reduced biodiversity and lower usage by fish due to its uniformity. Invertebrates are also slow to develop in created salt marshes, particularly in high tidal areas.

*"It's very difficult to go back to a natural state after land has been used for farming," says Professor Alastair Grant of UEA, co-author of the study, which appears in the Journal of Applied Ecology. 'Flooding an agricultural soil does not produce a salt marsh soil, even if the land used to be salt marsh. This is not esoteric stuff that is of interest only to naturalists; many of the species the public values most in salt marshes are almost completely absent in artificial ones. Existing approaches have not succeeded in creating habitats that are biologically equivalent to natural salt marsh.'"*

5. Creating new salt marsh in the UK through coastal realignment will lead to an increase in two nuisance and potential arboviral vector mosquito species, *Aedes detritus* and *Aedes caspius*. These mosquito species present a public health risk, which is well-recognised in Europe (See Appendix C).

## **Flood risk to 42,000 homes and important infrastructure assets.**

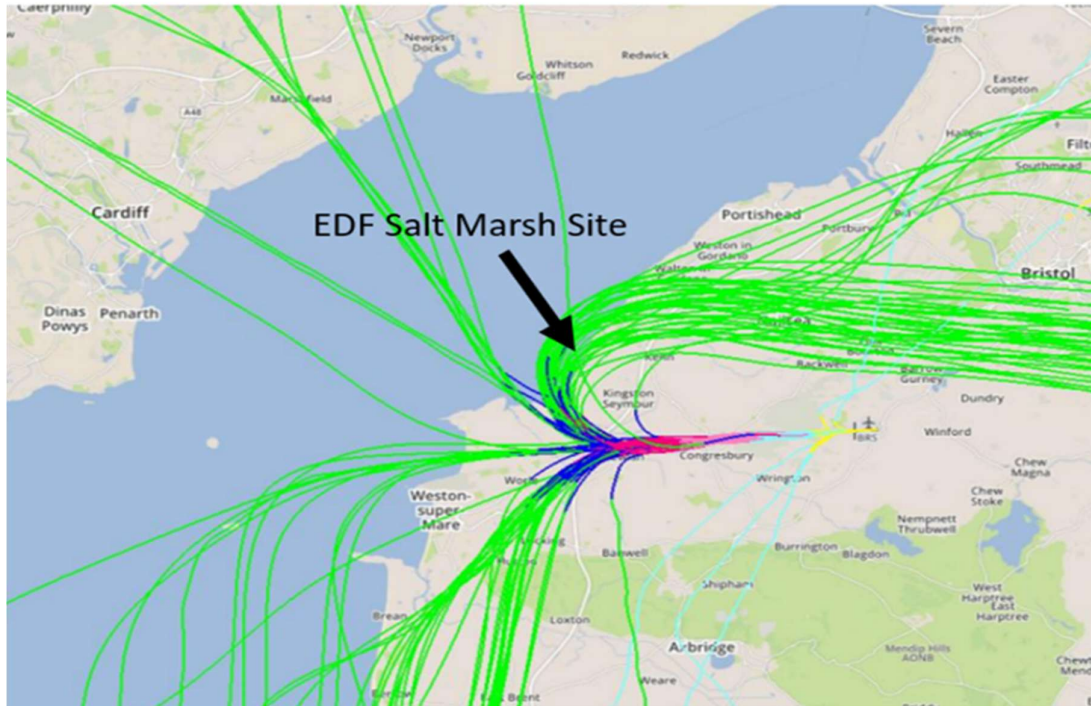
### **Key Facts**

1. The existing sea defences protect c. 42,000 homes.
2. The protected area includes key national infrastructure including:
  - a. The water treatment plant (sewage works) in Kingston Seymour
  - b. The railway and Yatton train station
  - c. The M5 motorway
  - d. The power distribution lines from Hinkley point.
  - e. A solar farm
  - f. Bristol airport key flight paths
3. The ditch and rhyme network in the affected area is managed by the IDB and provides strategic drainage and water buffering critical to the flood-protection of the homes, businesses and farms around Yatton, Congresbury and Kingston Seymour. Under the proposal this buffer would be lost, and the essential drainage system may be impaired.
4. Most of the low-lying coastal area boarding the Severn Estuary is drained via gravity outfalls (managed by the IDBs). This proposal risks low tidal levels becoming elevated due to silt deposits building up over time, and together with other possible alterations to the shape of the tidal curves could have significant implications for the effectiveness of the gravity outfalls. This could ultimately increase flooding.
5. The proposed site lies immediately under Bristol Airport's flight path (Runway 27 Departures). Attraction of high-flying birds such as geese could impair the safety of passengers.
6. No Flood Risk Assessment has been conducted by EDF to consider the impact of moving a long sea wall back and removing field storage (in case of over-tipping) in an Estuary with the second highest tidal range in the world (and where neighbouring residential properties and businesses are below sea-level).

## Implications

1. The site is unsuitable for a salt marsh due to its proximity to key infrastructure e.g. a solar farm, water treatment centre (sewage works for Clevedon), Internal Drainage Board System, the M5 Motorway and Bristol Airport.
2. The scheme will significantly reduce the amount of rainwater storage in the fields, rhynes and ditches, which during high tides will directly increase the flood risk of neighbouring houses.
3. The scheme will advance the seawall much closer to several residential areas including in the Clevedon Yeo ward. Should over-topping occur at high tides, the risk of flooding to these properties will be increased. Currently if sea walls are breached, there is land to 'hold' the water, providing a critical buffer.
4. The proposal will increase flood risk due to ground levels becoming elevated (due to silt deposits building up) impacting gravity outfalls associated with IDB ditches and rhynes.
5. EDF's proposal to breach / realign existing sea defences at Kingston Seymour to allow in sea water will likely create a standing body of water which will likely impact Bristol Airport operations<sup>i</sup>. It will attract birds including high-flying species such as geese, and create significant open water safety concerns directly beneath main flight paths. Glare may also be an issue to aircraft pilots and navigation. It also has the capacity to attract birds and may even amend existing known flight lines.

## Runway 27 Departures



6. Moving the sea wall closer to the village of Kingston Seymour and highly populated areas of Clevedon, Kenn and Yatton (which mostly lie below sea level) will increase flood risk

for 42,000 residents and business owners threatening life and people's homes and businesses. Home insurance premiums will also increase.

## Ecological damage requiring mitigation on mitigation.

### Key Facts

1. Kingston Seymour is part of:
  - a. Severn Estuary Special Area of Conservation (SAC) under the EU Habitats Directive
  - b. A Special Protection Area (SPA)
  - c. A Ramsar site, under the Convention on Wetlands of International Importance.
  - d. Sites of Special Scientific Interest (SSSIs) which are all protected by legislation.
  - e. North Somerset and Mendip Bats Special Area of Conservation (SAC) for the Lesser horseshoe bat *Rhinolophus hipposideros* and the greater horseshoe bat *Rhinolophus ferrumequinum*.
2. Kingston Seymour provides essential habitat for birds and waterbirds during passage or for overwintering including multiple birds which are on the Birds of Conservation Red List and Amber List.
3. Wildlife survey data from Natural England, The Avon Wildlife Trust, YACWG, Chris Sperring MBE and Kingston Seymour residents shows that Kingston Seymour is home to many endangered and rare wildlife:

| Species           | Species Type                                                                                                                                                                                                    | Conservation status                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Amphibians</b> | Great crested newts                                                                                                                                                                                             | Protected in the UK under the Wildlife and Countryside Act, 1981. Priority Species under the UK Post-2010 Biodiversity Framework. Listed as a European Protected Species under Annex IV of the European Habitats Directive. |
|                   | Frogs – several types.                                                                                                                                                                                          | Indicator species of a healthy ecosystem                                                                                                                                                                                    |
| <b>Badgers</b>    |                                                                                                                                                                                                                 | The Protection of Badgers Act 1992                                                                                                                                                                                          |
| <b>Bats</b>       | Lesser horseshoe bat <i>Rhinolophus hipposideros</i> Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> .                                                                                                   | North Somerset and Mendip Bats Special Area of Conservation (SAC)                                                                                                                                                           |
|                   | Common bats                                                                                                                                                                                                     |                                                                                                                                                                                                                             |
| <b>Birds</b>      | Firecrest, Greenfinch, Starling, House Sparrow, Mistle Thrush, Fieldfare, Linnet, Tree Sparrow, Song Thrush, Chiffchaff, Starling, Skylark, Yellow Wagtail, Spotted Flycatcher, Cuckoo, Swift and Herring Gull. | Birds of Conservation Concern 5 Red List                                                                                                                                                                                    |

| Species                     | Species Type                                                                                                                                                                                                                                 | Conservation status                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|                             | Shelduck, Kestrel, Song Thrush, Wren, Bullfinch, Sparrowhawk, Rook, Lesser black-backed gull, black headed gull, Moorhen, Redwing, Dunnock and Meadow Pipit, Wood pigeon, Teal, Oystercatcher, Sedge Warbler, Whitethroat, Common Sandpiper. | Birds of Conservation Concern 5 Amber List                                             |
| <b>SPA/RAMSA R birds</b>    | Curlew, Dunlin, Ringed Plover, Skylarks, Lapwing and Whimbrels                                                                                                                                                                               | Birds of Conservation Concern 5 Red List                                               |
|                             | Bar-tailed godwits, Common Sandpipers, Green Sandpipers, Grey Plover, Redshank, Shelduck, Snipe, Turnstone and Wigeon                                                                                                                        | Birds of Conservation Concern 5 Amber List                                             |
| <b>Orchids</b>              | Wasp Orchid and other rare orchids                                                                                                                                                                                                           | Wildlife and Countryside Act 1981                                                      |
| <b>Otters</b>               | River Otters                                                                                                                                                                                                                                 | European protected species                                                             |
| <b>Owls</b>                 | Barn Owl<br>Little Owl<br>Tawny Owl                                                                                                                                                                                                          | Indicator species of a healthy ecosystem<br>Birds of Conservation Concern 5 Amber List |
| <b>Rare flora and fauna</b> | Slender hare's-ear Bupleurum tenuissimum                                                                                                                                                                                                     | Wildlife and Countryside Act 1981                                                      |
| <b>Reptiles</b>             | Slow Worms<br>Grass Snakes                                                                                                                                                                                                                   | Wildlife and Countryside Act 1981                                                      |
| <b>Voles</b>                | Bank Vole<br>Field Vole                                                                                                                                                                                                                      | Fully protected under Section 5 of the Wildlife and Countryside Act 1981               |

4. The above wildlife species have little to no tolerance to salinity.
5. Surveys show that the freshwater rhynes and ditches of Kingston Seymour are rich in biodiversity of invertebrates and plants, and any saltwater incursion would have a highly detrimental effect on their future survival.
6. Many of the concerns raised by Natural England and the Environment Agency when consulted on previous EDF proposals at Pawlett Hams are also relevant to Kingston Seymour – [see appendix B1 for details](#).
7. **Full details of wildlife at risk are in Appendix D.**

## Implications

1. EDF's proposal to convert agricultural and wildlife rich land into salt marsh will have a negative ecological impact on current land and estuary biodiversity including freshwater habitat.
2. Mitigating these impacts will require mitigation of a mitigation.
3. Given the significant environmental value of the existing wildlife and habitats, the environmental and biodiversity net gain from EDF's proposal is highly questionable.

4. Any destruction of or change to habitat including removal of hedgerows or breeding grounds would have a severe detrimental effect on the survival of declining and endangered bird species including ground nesting birds.

## Local community & business impacts

### Key Facts

1. There is overwhelming community, landowner and business owner opposition to the creation of saltmarsh in Kingston Seymour. This is demonstrated by:
  - a. A petition against EDF's salt marsh proposal has gathered over **4350** signatures (as of 17 January 2025)<sup>1</sup>
  - b. A Facebook group set up to oppose the proposals has over 2150 members (December 2024). Refer to [Appendix E](#) for snapshots of community views / sentiment.
2. Considerable media coverage has been received in support of the community and landowners against EDF saltmarsh proposals. Refer to [Appendix F](#)
3. The proposal will have significant detrimental impacts on local businesses and livelihoods. This includes multi-generational farms (such as Tutshill Farm, Swallow Farm, Newhouse Farm, Ham Farm, Treble House Farm and Seawall Farm); fisheries (there are 3 in the village including Plantations Lakes and Bullock Farm); commercial businesses (such as Channel View Farm and Broadstone Farm), and diversified farm businesses (Dowlais Farm and Pool Farm) which includes dog training, tourism, caravanning and camping, holiday lets and cafes (such as the Owl in the Oak at Mendip View Farm). One young farmer will lose an entire property, livelihood and future (Wharf Cottage).
4. Negative impacts (blight) on residential (and other classes of) property values associated with these proposals and uncertainty (which is currently having an impact and will remain relevant for years if EDF's salt marsh proposal proceeds to DCO. This includes higher insurance premiums which residents are reporting is currently effecting renewals.
5. Impact on the 13-mile pier to pier cycle way which had more than 18,000 users in the first month of opening (July 2024). Users are already concerned about impacts from construction traffic on narrow lanes and impact to the rural landscape in flooding agricultural land and wildlife in an attempt to create salt marsh. Refer to [Appendix E](#) for community views which includes users of the cycle way.
6. Reliance by people on the area for mental health – (youth objections, walking, jogging, horse riding popularity of the KS loop)
7. Business support in relation to EDF's salt marsh proposals has been received from Federation of Small Businesses ([Appendix G](#)), along with advice and support from National Farmers Union (NFU) and Country Landowners Association (CLA). EA has also provided advice in relation to concerns raised regarding potential saltwater ingress to freshwater fishing lakes and habitats ([Appendix G](#)).

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<sup>1</sup> [https://www.change.org/p/stop-hinkley-point-c-edf-proposal-to-flood-part-of-kingston-seymour-for-salt-marsh?recruiter=1354603952&recruited\\_by\\_id=f46f6350-86e8-11ef-95da-2521abc82b07&utm\\_source=share\\_petition&utm\\_campaign=share\\_petition&utm\\_term=share\\_petition&utm\\_medium=copylink&utm\\_content=cl\\_sharecopy\\_490243851\\_en-GB%3A9](https://www.change.org/p/stop-hinkley-point-c-edf-proposal-to-flood-part-of-kingston-seymour-for-salt-marsh?recruiter=1354603952&recruited_by_id=f46f6350-86e8-11ef-95da-2521abc82b07&utm_source=share_petition&utm_campaign=share_petition&utm_term=share_petition&utm_medium=copylink&utm_content=cl_sharecopy_490243851_en-GB%3A9)

## Implications

1. EDF's proposal is strongly opposed by local politicians and the local and wider community (this includes residents from Clevedon, Yatton and as far as Bristol).
2. Successful businesses and productive farms will be destroyed by this proposal and jobs will be lost following years of investment and hard work. This level of destruction is not proportionate to the habitat creation proposed.
3. EDF's salt marsh proposal has the potential to detrimentally impact freshwater habitats and fishing lakes as a result of saltwater ingress.
4. The loss of eight hundred hectares of productive farmland threatens our food supply, food security, and the livelihood of intergenerational farmers.
5. The Pier to Pier Way and the proposed Southwest Coastal Path would be negatively impacted by the proposal e.g. flood risk, closure for re-routing, passing through land which is rendered unusable and an unattractive landscape.
6. Vehicular access to Kingston Seymour is less than ideal for such a large project. Construction traffic would need to travel through Clevedon and Yatton (past houses and schools) then onto narrow lanes which are heavily used by farmers, businesses and cyclists on the Pier to Pier.
7. The local area is likely to experience elevated levels of mosquitos because of creating pools of stagnant water.
8. A significant area of our community (and amenity) will be lost to this proposal. This will have a negative impact on the fabric of what makes this community and its people a great place to live.
9. EDF's proposal will take years to approve and then complete. This uncertainty (and disruption) will hang over us impacting our day to day lives and homes for years to come. People will be unable to get on with their lives.

## Strong political opposition to the proposals

All the elected representatives and bodies for areas affected by the proposals, at national and local levels, have expressed strong opposition:

1. Ashley Fox MP & Tessa Munt MP held a Westminster Hall debate on 9 October 2024 ([Appendix H](#))
2. Sadik Al-Hassan MP has written in opposition to the proposals and attended meetings with EDF urging them to alter their plans ([Appendix I](#)) ([Appendix J](#))
3. The Parish Councils affected by EDF's proposals issued a Joint Statement – (22 October 2024) ([Appendix K](#))
4. North Somerset Council Resolution agreed 12 November 2024

"This council notes:

the immense consequences to the residents and wildlife of Kingston Seymour with the EDF's planned saltmarsh creation.

This council requests:

that the Executive writes to the Secretary of State for Local Government and the Secretary of State for Energy to outline North Somerset Council's support for the government to enforce the planning requirement on EDF for the provision of an ADF system, to avoid flooding extensive tracts of land that already provide high wildlife value"

## Damage to cultural, historical and archaeological assets

### Key Facts

1. Kingston Seymour has a unique, ancient and well-preserved landscape of great archaeological and historical importance. This historic reclaimed wetland dates to Roman times and is mentioned in the Domesday book 1086 AD (the following evidence is detailed in [Appendices L&M](#)).
2. Professor Steve Rippon, University of Exeter has researched the area and found it to be a well-preserved example of a traditionally drained and managed reclaimed wetland dating back to late Roman times and the medieval period. He notes *Kingston Seymour's unique Landscape Archaeology and its historic importance* and has written a journal article and book chapters to support this.
3. In 2011, in response to the EA proposals for managed realignment, the Professor stated that *'this will lead to the loss of an extremely well preserved and important landscape that is of great archaeological and historical value'*. He went on to mention the quality of the landscape preservation which is so much better than on other reclaimed wetlands.
4. In 2018, NSC commissioned a Landscape Character Assessment of Kingston Seymour to identify areas for enhancement, restoration and conservation. This highlighted the medieval historical and largely intact landscape of Kingston Seymour and recorded its intention to conserve and restore this important unique and ancient landscape, noting:
  - a. 'The medieval historic landscape is apparent in the form of the organic pattern of enclosure, winding rural roads and tracks alongside sinuous ditches and scattered farmsteads. Together, these features create a remote and ancient character.
  - b. The drainage channels contain a rich diversity of aquatic, emergent and marginal plants including several nationally scarce species. A diverse invertebrate fauna is also present including molluscs, dragonflies and water beetles.'
5. The Report also highlights the archaeological and historical significance of this foreshore area and expresses concerns about conserving as yet unexplored and undiscovered "Archaeological resource vulnerable to damage due to lack of information on nature and location of remains."
6. North Somerset Council have called for its potential and actual archaeological and landscape importance to be conserved and restored for future generations.
7. North Somerset Council has further called for an archaeological field survey into the unexplored and undiscovered archaeological remains in the coastal foreshore.

### Implications

1. Archaeological Experts including Landscape Archaeologist Professor Steve Rippon from University of Exeter and North Somerset Council County Archaeologist Vince Russett (retired) strongly oppose the EDF proposal.

## Better alternatives

### Alternative solutions

Salt marsh creation is not the only option available to EDF.

1. Since EDF's decision not to proceed with the AFD, further information on its feasibility has been published. EDF should not proceed with AFD mitigations until this has been formally reviewed<sup>ii</sup>
2. Measures to promote fish passage in rivers such as fish ladders and re-design of dams and weirs may be more effective at improving fish populations and more socially acceptable to local communities.
3. Whilst local projects might be preferred, should there not be sufficient local opportunities to deliver the required mitigation, projects across the UK could be included.
4. Support for wider environmental projects in the Severn Estuary (creating environmental benefits other than increase in fish stocks) could provide mitigation that benefits local communities.

### Alternative locations

EDF is considering four locations for saltmarsh in the Severn Estuary. Should EDF fail to achieve local support in any of these locations (as seems likely) EDF should (after considering alternative solutions) identify locations to reclaim land for saltmarsh that are acceptable to local residents, as has been done for example in the Netherlands<sup>iii</sup> and at Slimbridge.

## **Calls for action.**

In the light of the above evidence, we propose the following actions:

### **Call to EDF**

1. Immediately and irrevocably halt the proposed consultation process for the creation of saltmarsh at Kingston Seymour, and pursue alternative measures to achieve the required environmental standards for HPC
2. Consider alternatives to saltmarsh as an environmental mitigation option.
  - a. Revisit evaluation of the AFD in the light of the report by the AFD delivery group
  - b. Other options as may be identified in consultation with the EA and other stakeholders
3. Should saltmarsh still be preferred after all other alternatives have been fully explored, only consider sites with the support of landowners. However, it is clear that saltmarsh is not supported by the community due to the issues highlighted in this report.

### **Call to the Environment Agency**

1. Formally adopt the findings of the Kirby report shared with the EA by Kingston Seymour parish council in 2012
2. Update shoreline management plan SMP19 to “Hold the line” for section KIN1 as unanimously supported by the community
3. Require all relevant associated and subsidiary plans including (but not limited to) Severn estuary flood risk management plan SMP2 and North Somerset Flood Risk Strategy / action plan to be updated in line with a “hold the line” policy for KIN1
4. Commit to pro-actively informing and consulting with local residents and councils should any future changes to strategy be considered.

## Intent of the action group should EDF plans proceed.

The action group has received legal advice and believes that there are valid legal arguments to challenge EDF's use of a material change order to its Development Consent Order (DCO) in the respect of creating salt marsh at Kingston Seymour.

It is the intent of the action group to challenge the material change order's validity, should EDF make an application.

Further, should the material change order be accepted, the action group will both.

1. Seek representation at all relevant stages of the Nationally Significant Infrastructure Project (NSIP) approval process, to ensure that the Group's concerns are fully heard.
2. Engage with all statutory consultees, communities and media outlets to raise awareness and ensure that all risks inherent in the project are fully identified and mitigated, including but not limited to maximising the scope of the required environmental statement – maximising the burden of proof on EDF.
3. Provide evidence to the Secretary of State as part of the DCO process that saltmarsh cannot be delivered and will fail to provide the level of compensation required to offset the loss associated with removal of the AFD. This poses significant risks to EDF and HPC in demonstrating to the SoS that saltmarsh is suitable and can be delivered.

The action group is already in contact with several statutory consultees including the local councils and drainage board. These organisations have expressed both strong opposition to the project and raised significant questions that EDF must answer.

Furthermore, the action group intends to monitor any application made by EDF under the NSIP process very carefully. Should the action group identify any procedural failings by EDF, the action group may seek a judicial review of the decision, making the case that electricity generation by EDF should not commence until the review is complete.

The action group is organising its resources and fundraising with a potential judicial review in mind and is confident to be able to demand the review if necessary.

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<sup>i</sup> <https://bristolairport-futureplans.co.uk/>

<sup>ii</sup> <https://afddeliverygroup.com/>

<sup>iii</sup> <https://www.sciencedirect.com/science/article/pii/S2772411521000057>

## Appendices

|    |                                                                                                        |
|----|--------------------------------------------------------------------------------------------------------|
| A  | 2011 salt marsh plan abandoned as unfeasible and continued investment in Kingston Seymour sea defences |
| B  | Key stakeholder positions regarding alternative compensation measures                                  |
| C  | Saltmarsh not feasible                                                                                 |
| D  | Ecological impact                                                                                      |
| E  | Community views – social media                                                                         |
| F  | Media coverage                                                                                         |
| G1 | Business support                                                                                       |
| G2 | NFU response to previous consultation                                                                  |
| H  | Parliamentary questions                                                                                |
| I  | Sadik Al-Hassan Letter                                                                                 |
| J  | Sadik Al-Hassan Email                                                                                  |
| K  | Local government statements and resolutions                                                            |
| L  | Cultural impact                                                                                        |
| M  | Historic landscape report                                                                              |
| N  | Responses 2011 consultation                                                                            |
| O  | CLA response SMP 2009                                                                                  |
| P  | Natural England response to HPC DCO material change pre-application consultation Feb 24                |