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SW NFU Response to the Severn Estuary Flood Risk Management Strategy

The South West NFU welcomes the opportunity to comment on the Severn Estuary Flood Risk Management Strategy (SEFRMS). The South West NFU represents approximately 10,000 Farmers and Growers across the South West region and over 50,000 farmers and growers nationally. Farmers have and wish to continue to be involved in the development of the SEFRMS as this document and the actions that result from it will have a substantial impact on both their livelihoods and the ability of the nation to meet its environmental and food security needs. It is essential that the views of these farmers and landmanagers are built in to the final plan due to the economic, social and environmental importance of the agricultural sector in the area.

The NFU, and its members, recognise the importance of Shoreline Management Planning and Flood Risk Management and that taking a long term view is essential given the timeframes within which coastal processes occur and the potential impact of Climate Change. We also feel that a long-term plan will help to ensure coordination between different strategies, policies and regulations that are impacted by or impact on flooding. However, with regard to the SEFRMS we object to the proposals for the reasons outlined below.

Having reviewed the SEFRMS, it is clear that similar issues affect land-based businesses located all around the geographical area that is within the scope of the SEFRMS. For this reason we feel our input would be of most use if submitted in the form of an overall response for the whole SEFRMS, with occasional comments related to specific locations to emphasis particular points.

The response to the consultation has been laid out in three parts. Firstly, we have noted briefly the key points. Secondly, we have made detailed submissions to the key points and their related issues and opportunities within the SEFRMS. Thirdly, we provide a conclusion and some suggestions for the way ahead. Before starting it is important to note that in light of the size of the document and the short consultation period it has not been possible to address every area of concern within the SEFRMS. Given that the consequences of some of the actions and policies proposed within the document will be

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far reaching and will have serious consequences for farmers and rural communities we would like to register our concerns that the consultation period has been far too short and that some of our members are concerned that the consultation periods have been set to stifle debate on the Environment Agency's (EA) plans. It should also be noted that many landowners who are affected by the implications of the SEFRMS feel aggrieved that they were not contacted individually for their views and that they have not had an opportunity to contribute to the evidence base that has helped shape the SEFRMS. Had this contact been made then it is likely that the SEFRMS would be more robust and more likely to get "buy in" from the communities that are affected by it.

Key Points

1. **Food Security** - The SEFRMS does not consider food security and while it mentions climate change in terms of increased flood risk it does not consider its global effect upon food production. Food production must at least double by 2050 while climate change will curtail production in many parts of the world. The South coast must prepare for increased reliance on locally sourced food and energy.
2. **Concerns around the data and evidence** – the way the data is presented is both inadequate and in places totally erroneous. The key concern is around the use of climate change data and for not using the most up to date figures as shown in the UK Climate Change Projections 2009. These figures do not correspond with the Defra 2006 figures that have been used and therefore create an issue of robustness of data and confusion over what is the correct science. The SEFRMS must be reviewed and the science and data checked for accuracy. We will need a full explanation as to how these figures were derived and how they will be reviewed in light of these comments.
3. **Issues concerning habitat creation and compensatory habitats** – There are concerns from ecologists and landowners that the proposals for habitat creation might be impossible given the nature of the environment and potential management. There needs to be a justification of the potential for creation and some "ground truthing". We have concerns that the levels of compensatory habitat are beyond those required by article 5 of the Habitats Directive and therefore amount to a form of illegal "land banking". We require a full explanation as to the rationale behind the creations and how they meet EU and national law.
4. **Impact on the local economy and farm businesses**– The agricultural sector has a huge multiplier effect on local economies especially in rural areas. This does not seem to have been factored in to the strategy. In addition many farms have diversified and/ or invested huge amounts in to their farming enterprises. Farms are not likely traditional businesses as they are location specific and developed over time. Moving agricultural assets is therefore not as translocation as losing an industrial estate. In addition farms cannot insure against risks such as flooding and this has not been recognised by the strategy.

5. **Cost and transparency**– The strategy is very short on explanation on the costs of various approaches to flood management. These costs not only explain the rationale of the EA but will also enable local landowners and communities to weigh up their options for taking on management. This is critical given the coalitions emphasis on “localism”.
6. **Consultation and compensation** - Landowners that are to be affected by any changes in management or potential loss of land due to policy decisions **MUST** be consulted and listened to. Landowners have an understanding of the recent history of the land and also close links with the community. Therefore they can help to frame solutions for all. Where land is lost then landowners must be compensated adequately.
7. **Planning and nuisance**– we are concerned that some areas of flooding and habitat creation on agricultural land might be such that the use of the land is materially changed and therefore could amount to “development”. This would require planning permission, which has not been noted. Planning regulations are very strong on the need to create our best and most versatile land.
8. **Localism** – Localism represents an important opportunity for residents and businesses to take on the active management of their assets to meet their needs. No provision appears to be made for this and no process by which they can go about taking on management has been made.

Detailed comments on the Severn Estuary Flood Risk Management Strategy (SEFRMS)

1. Food security

In line with the overall aim of managing flooding, it is essential that the SEFRMS follows current government policy with regard to food security as laid out in Defra’s “Structural Reform Plan¹” where the three priorities are²:

- 1. Support and develop British farming and encourage sustainable food production.*
- 2. Help to enhance the environment and biodiversity to improve quality of life.*
- 3. Support a strong and sustainable green economy, resilient to climate change.*

Flood defences were, in many places, originally constructed so that farmers could produce more food on the most productive land. They were also constructed (particularly upstream of Gloucester) so that farmland became a more effective flood storage area by taking the peak off the flood, before developed areas became threatened. However, in many areas, new settlements and infrastructure were developed too close to the river channel thus negating any benefits and actually creating a loss of flood flow capacity. This fact seems to have been overlooked along with the guidance provided in the coalition Governments own policies and strategies. The Severn Catchment is a highly productive

¹ Department for Environment, Food and Rural Affairs, Business Plan 2011-2015

² Ibid P. 2

agricultural area, benefiting from high-grade soils, a favourable climate and an established business infrastructure and water supply. These businesses still make a major contribution to the local economy, through direct agricultural production and employment, trade with ancillary businesses and associated benefits for tourism and the wider community. With the growing importance of food security it is essential that farming and growing aspect of land use be considered when developing any plans that will affect future productivity.

The recent 'Foresight report' (The future of food and farming: Challenges and choices for global sustainability) published in January 2010 clearly sets out the global challenges of increasing food production. The report emphasises that more food must be produced sustainably using all existing knowledge, technology and best practice, and by investment in new science and innovation and infrastructure to benefit all producers. The work of the Environment Agency must, in its desire to 'protect people and property', recognise the protection of our 'food productive capacity' as the highest of priorities. At the heart of the report is the need to meet the food security needs of the UK population that is predicted to grow from 62million to 70million by 2030.

In the document entitled "Food 2030", the Government's food strategy, launched in January 2010 sets out the strategic direction for food policy. The statement of intent included "our food security is ensured through strong UK agriculture". We are concerned that this means there is a need for a holistic approach to policy delivery which recognises a significant amount of our nation's carbon and water foot print is currently being externalised through food imports and that this could be made worse if the impact on productive agricultural land from flooding and flood risk management activity is not considered in the overarching strategy and accompanying funding approach.

Given the emphasis placed on having "outcomes" rather than targets surely this strategy should recognise the need for having an outcome measure for productive agricultural land? This would fit in with all current Government high-level policy and strategy, which must be reflected in local plans and strategies unless it is to sit as idle rhetoric.

The predicted implications of the plan do cover agriculture but in a way that seems to make light of the implications. The creation of 6,797ha of wildlife habitat is at the cost of the food that was being produced on that land. Using rough estimates it is possible to extrapolate that one-hectare of land in the UK could feed approximately 4 people (based on FAO 2003 figures³). This would then imply that the

³ The minimum amount of agricultural land necessary for sustainable food security, with a diversified diet similar to those of North America and Western Europe (hence including meat), is 0.5 of a hectare per person. This does not allow for any land degradation such as soil erosion, and it assumes adequate water supplies. Very few populous countries have more than an average of 0.25 of a hectare. It is realistic to suppose that the absolute minimum of arable land to support one person is a mere 0.07 of a hectare—and this assumes a largely vegetarian diet, no land degradation or water shortages, virtually no post-harvest waste, and farmers who know precisely when and how to plant, fertilize, irrigate, etc. [FAO, 1993]"

loss of 6797ha represents the loss of food for 27,068 people or approximately the population of both Clevedon. This is the reality of the choices to be made now for future generations. Loosing land means we will not be able to feed our society.

2. Concerns around the data and evidence

At a number of the meetings we have attended, as part of the consultation on the SEFRMS, farmers, residents and land managers have pointed out inaccuracies in the evidence base as presented in the consultation documents. For example, one of the farmers at the meeting in Agriculture House, Gloucester on the 21st March 2011 pointed out that the text says that for his area of land that flooding was noted as being “frequent” within the SEFRMS. Having farmed that area for generations the farmer could correctly state that this statement was at best misleading. The issue might be to do with semantics or it might be to do with inaccuracy of data. With the former this shows that there needs to be more clarity in the language used and with the latter we would be very concerned that any plans and strategies might rest on a weak and/ or incorrect scientific evidence base. For example, there was also concern that the map of the Gloucester area showed the Hempstead meadows as Zone 3 Flood Plain, while the area is now right out of the flood plain because of the landfill site. This is a critical element of the study area and is not even mentioned.

A great deal of concern was raised around the use of data from Defra 2006 guidance on climate change. Whilst there is a good deal of scientific evidence for climate change, as an organisation the NFU recognises that climate change will have an affect on sea levels and weather patterns, there is such uncertainty with the figures that their use must be done with a huge degree of caution and caveats. The key issue surrounds the use of 100cm as the anticipated level of sea level rise. This figure is based on the Defra 2006 data that has now been superseded by UKCP09. UKCP09 uses a probabilistic approach and is based on three different scenarios. This approach is supposed to be the standard for all calculations on the impact of climate change. Why haven't these been used? Why is the figure of 100cms so far out from the figure used in UKCP09? The highest probable level is of 74cm in Weston Super Mare in UKCP09. Given the huge levels of uncertainty and the probabilistic nature of climate change there must be more caveats in the information. Why hasn't the strategy emphasised the uncertainty and dynamic nature of climate change?

The current assumptions are just that and do not have any certainty, however, their impact is certain and has already been noted and as a result insurance premiums have risen and the value of assets have decreased, all as a result of the use of uncertainties. It should be noted very clearly by policy makers that these policies and strategies might be considered by them to be dynamic and act as a guide for action but on the ground local businesses and residents are affected immediately leading to

loss of livelihood and a reduction in the quality of their lives.

We would suggest that the knowledge of the local landowners and residents is built into the strategy to ensure that the theory fits with what is actually happening on the ground. Time and again farmers are asked for their views at consultation meetings and very rarely do we see these views being used to help shape future strategies and plans. Is it any wonder that the communities that are affected by them do not embrace these strategies?

3. Issues concerning habitat creation and compensatory habitats

Many of the concerns raised by members has been that of the fact that it would appear that the key driver is of habitat creation and land banking compensatory habitat as part of the national requirement for the protection of Natura 2000 sites. There are two key concerns here. Firstly, the legality and robustness for creating compensatory habitat. Secondly, the real potential for creating good quality habitat.

The concern on the legality is as follows. There is likely to be some sea level rise as a result of changes to the climate and this is likely to have an affect on our sea level defences and also some protected habitats. We question the need for the creation of compensatory habitat. Special Areas of Conservation are designated under the Habitats Directives and Special Areas of Protection are designated under the Birds Directive. Article 6 of the Habitats Directive places a duty on member states to take measures to conserve Natura 2000 sites but does not require new habitat to be created to replace that lost due to rising sea levels. We would therefore question some of the plans made in the SEFRMS where it would appear that this line is not being followed.

The second point concerns the real potential for the creation of salt marsh. I am a qualified ecologist and member of the Institute of Ecologists and Environmental Managers. My understanding is that the creation of salt marsh is very difficult and can often result in the creation of brackish water and waste ground rather than good quality habitat. Many of the farmers in the area who are experienced with these kinds of habitats believe the land will end up as rough grass. For example, the Cardiff bay amelioration doesn't seem to have worked and the habitat creation has removed good farmland and failed to create good habitat. It would be very helpful to be given some examples of where similar habitat creation has been done in similar situations. This would create an element of best practice and will also enable discussion on how this can be achieved in the unique environment of the Severn.

We would also question the amount of habitat that has been proposed for creation. The SEA states that a loss of up to 3670ha of intertidal habitat is anticipated. This is then balanced with the potential

creation of up to 6797ha. The Atkins report stated that the situation should be “habitat neutral”. Why then is the figure for habitat creation almost twice that which is to be lost?

A further question related to the habitat creation is that of “at what cost?” The creation of habitat needs to be balanced with the cost of the loss of highly productive farmland and the loss of rural livelihoods and a distinctive way of life. In the Slimbridge area the creation of new mud flats and salt marsh is likely to have an affect on the winter grazing for the White –fronted geese that flock to the area. We are unsure as to how well this is dealt with in the Environmental Impact Assessment. Many existing important habitats and species will be destroyed and we would also be concerned with the legal implications of adversely affecting protected habitats and species. In addition there full account must be taken of any historic monuments and areas of interest from a heritage point of view. There are Roman remains scattered across the strategy area. In the Kingston Seymour area there is some evidence for late Saxon settlements.

Allied to the creation of habitat is the potential risk of displacing populations of badgers infected with bovine TB (bTB). As you will be aware, bTB is a major issue in the area and extreme caution needs to be taken to ensure that flooding of certain areas does not mean that badger populations move and therefore create disease risks on previously uninfected cattle. There would likely be legal liability issues if a herd were to be infected.

When it comes to any habitat creation it is essential that the knowledge and experience of landowners is taken into account. They will need to manage the land in a way that is sustainable.

4. Impact on the local economy and farm businesses

Economic viability is essential for land-based businesses, especially farming businesses, to play their positive role in managing the countryside. Unnecessary and unplanned flooding of agricultural land – and roads and other property - benefits neither business nor environment, and if land is prematurely flooded at times when further heavy rainfall is expected it may not be able to absorb excess water just when its capacity to do so may be most needed. Rural communities, as well as towns and cities, have social needs and entitlements, and it should not be assumed that the loss of quality or value of their property – which may include significant investments in agricultural buildings and equipment - arising from reduced flood defences, is an acceptable price for them or the economy of these areas to be required to pay.

Although the SEFRMS takes into account the economy and the costs to society of flood protection as a driver it would seem that this approach misses the costs to certain sectors. In our view there needs to be an increased understanding of the value of agriculture to the local economy and the particular issues

the sector faces. A case is made that businesses should be able to insure against the costs of insurance and in many cases this is likely true. However, in the agricultural situation this is not possible for insurance for standing crops. We are concerned that the cumulative impact of employment, economy and contribution to GDP may be higher than the EA have estimated. There needs to be independent scrutiny of the rationale.

Many farmers in the area are looking to develop their farming enterprises and this is at a time when farmers are leaving the sector through financial and regulatory pressures. We would hope that the Environment Agency welcomes such moves to develop businesses and should encourage the approach taken by them. In addition many of these farmers would be willing to contribute to the cost of the repairing and maintaining flood defences where they can be located so as to allow their businesses to grow. Given the need for taking a local approach and reducing the cost burden to the tax payer of any works undertaken by statutory agencies, this is surely a good idea that must be supported.

The SEFRMS process to date seems to ignore the potential impact on land based enterprises, particularly farm businesses. These are businesses like any other, except that their primary production asset is the land itself. Whilst no-one would argue that urban residents and businesses should not be properly defended from coastal flooding, it should not be at the same time acceptable for rural residents and businesses to not be defended from the same flood risk – particularly those businesses such as farms whose essential production asset is the land itself. If future coastal flooding is to be diverted to farmland to protect other areas then a system needs to be put in place to adequately compensate the farm businesses affected for the losses in productive capacity incurred.

Farmers rely on these lands for their livelihoods and generations of the same families have farmed here. Their businesses would be either destroyed or significantly affected by these proposals. In addition the farms have other contractors who make a living from these areas.

For those that are directly affected they will lose their homes, land, businesses and livelihoods. To say that farmers will be able to access funds from the Rural Development Programme England (RDPE) shows a lack of understanding for how the system works and the fickle nature of funding. The recent cuts in funding as a result of the coalition governments spending review have led to increased competition for the limited funds available through the RDPE and in particular agricultural environmental stewardship (AES). AES agreements are only for 10 years and it would be a gamble as to whether a farm will be able to get back into the scheme at the end of the agreement. Were they to be unable to get into a scheme they would be left with the prospect of a changed environment, which cannot support a viable agricultural business and would not be able to have support for the provision of public benefits such as flooding and biodiversity provision.

The most crucial thing to note is that unlike small businesses, farms cannot relocate. They are where they are and their success rests on the input of generations of work. We do not have the ability to quantitatively ease the land situation by adding on a little extra. Therefore what we have we must care for and protect.

5. Cost and transparency

Without having site of the full cost benefit analysis it is very difficult to know whether the strategy is value for money. Our concern is that on the face of it the SEFRMS will not reduce costs in the long run and that it is a short-term solution to a long-term issue. Investment will still be required to provide new sea defences to protect those outside of the 'realigned' areas and given the ephemeral nature of funding we are not convinced that funds will be available to construct new defences leading to cumulative issues with regard to flood risk management. Adequate data to show why each section of the existing defence should and should not be maintained is essential to ensure understanding of the proposals and to get "buy in" from those that are affected by the SEFRMS.

We appreciate that it is difficult to produce a document that is both short enough to be manageable to the lay reader yet detailed enough to allow an interested party to take a view on what the strategy will mean to them. The provision of clear workings on costs for each section is imperative to allow full comment. Could we be advised of the cost/ benefit of this study?

6. Consultation and compensation

The consultation as a whole could have been more consultative and inclusive rather than what appears to be a *fait accompli*. It would have been far preferable if the views of the landowners could have been built into the plan and used as part of the evidence base. This would not have been costly and would have resulted in a plan that is more likely to get "buy in". In addition there are facilitation techniques such as "planning for real" which would have enabled the EA to have garnered a clear picture of the feelings of the whole community. The point here is that these processes must be used before a strategy is presented.

Many of the landowners only heard about the potential loss of their land and impact on their asset values via newsletters and in some cases a "postcard." This does not constitute being informed or consulted. At the very least they should have been visited and informed one to one of the implications. Lack of funds is not an excuse for not properly consulting those that are likely to have a "lack of livelihood" as a result of the SEFRMS

At the heart of the “consultation” should be the objective of utilising local knowledge of past and current land management. The experience of local people is a valuable source of information that should be encouraged and strategies developed from. In addition to consultation their needs to be a clear process for compensation. We understand that there is much uncertainty within the plans and that developing compensation processes is difficult. However, given the certainty that the SEFRMS is having an affect now on asset values their should be guidance and advice on compensation. We are adamant that affected landowners should receive adequate financial recompense for the loss of their assets and livelihoods.

7. Planning and nuisance

You will be aware that much of this land any land classified under the Agricultural Land Classification (ALC) system as grade 1, 2 or 3a is our best and most versatile land. The ALC gives a high grading to land which allows more flexibility in the range of crops that can be grown (its 'versatility') and which requires lower inputs, but also takes into account ability to produce consistently high yields of a narrower range of crops. This means that this is an important natural resource and is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate “development”. Development is defined in section 55 Town and Country Planning Act 1990 (TCPA) as:

“[Development] means the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land.”

We would be concerned that allowing many areas of land to flood will have a material change on the land and will lead to the loss of important land and therefore require planning permission if it is not to be in contravention of the TCPA. Where the intention is to deliberately flood a piece of land over prolonged periods there would be a good case to argue there has been a change of use from agriculture to dual use of agriculture/flood water storage, depending on the actual facts of each section. Where this is occasional flooding on a few days of the year it is unlikely to represent a change of use to the land. Where the flooding is more prolonged and prevents agricultural activity then it might be found to be a change of use of land.

A further concern is that if planning permission is granted that then causes flooding elsewhere this may amount to a nuisance. This is an issue where the EA lead on any action or inaction in a given area and also where the landowners take active management steps to protect their land. Localism is an excellent approach but requires consideration of ones neighbour. Given that localism is a key plank of government policy the EA will need to develop detailed guidance as to how landowners can protect their land without pushing problems onto their neighbours and incurring the law.

8. Localism

Localism is a central plank of the coalition's policies and is likely to be very relevant to how farmers, businesses and local communities will be able to protect their heritage and assets. Given that the landowners have ownership of the flood defence assets on their land and given that many of them will want to maintain them to protect their land the EA should be more proactive in developing a process to enable this. This should involve putting together information that can be used by them including, *inter alia*, flooding and water details, maintenance standards and access to additional government funding.

Conclusion

The NFU supports the maintenance and improvement of the existing sea defences in their current location so the people directly affected by flood risk, in the Severn Estuary flood area, can grow their businesses and maintain a way of life developed over generations. The NFU understands the need for being proactive and planning for the future with regard to issues such as climate change, environmental protection and cost. However, the SEFRMS has no regard for food security and the development of thriving local economies. Without this regard the SEFRMS cannot have our backing.

Our key concern is that the main driver behind the EA's proposals is habitat creation and not flood risk. We understand the need to meet regulatory requirements but cannot understand the rationale used in this strategy. Food security is one of the 3 top priorities for Defra as well as climate change and biodiversity. This strategy appears to have focused on the latter and has ignored food security.

We need to see more, and improved, consultation with local landowners and farmers. Many of our members have commented on the fact that they have not had personal visits from anyone drawing up the SEFRMS and that their views do not seem to be either accounted for in any of the current plans. It must be noted that the impact of the plans on their assets and lives is both considerable and detrimental to their lives and the lives of associated businesses and families. These landowners have the knowledge and skills to help realise any potential benefits that might accrue from a robust and well worked flood strategy. Without their support the SEFRMS will fail.

In the context of the comments above, we propose that the following objective is added to ensure that the future development of the strategy adequately deals with agriculture:

- ***To maintain the productive and environmental capacity of farmland and the wider countryside***

In addition to the points listed above there are a number of principles and objectives that should be followed including:

- The SEFRMS must be sufficiently flexible to allow individual land managers to manage their land and assets irrespective of broad-brush policies.
- There must be a streamlined and efficient authorisation process to enable land managers to maintain their own sea defences when necessary.
- There must be a mechanism to facilitate long term co-operation among land managers to find local solutions to local issues
- Managed retreat and habitat creation projects should only be approved when they are justified in terms of flood risk management as well as environmental enhancement.
- The full impact of not dredging in the upper reaches on the strategy area must be examined.
- Whenever possible coastal land should be managed by riparian owners, not institutions.
- The tax regime should be revised to aid the use of 'inert waste materials' in seawall construction and maintenance
- The UK interpretation of the EU Habitats Directive should be reviewed so that practical solutions can be delivered (where imposition of the regulations might thwart progress)
- Longer-term payments for habitat creation under Higher Level Environmental Stewardship (HLS) should be available in cases of permanent land use change. These should extend in perpetuity to pay for the public benefits provided and the loss of opportunity to return the land to viable agriculture.
- The cultural and historical importance of man's (farmers) management of the coast over many centuries should be recognised
- There should be a challenge mechanism in place to allow individuals, local authorities or organisations authorities to appeal against nationally driven EA decisions in exceptional cases where local circumstances dictate that another approach would achieve more effective FCERM (following consultation with and approval by the EA). This would prevent a nationally driven policy creating too rigid a framework for the locality to work within.

If managed realignment occurs along the coastline, we are adamant that affected landowners should receive adequate financial recompense for the loss of their assets and livelihoods.

We would be happy to be involved in the future development and implementation of the plan and would be able to find local farming members to sit on relevant groups to ensure that agriculture is fully represented.