

Fairbourne: Moving Forward

Frequently Asked Questions

Version	Status	Author	Signed-off	Date signed	Date issued
1	Draft version	Lisa Marshall	Cefin Edwards	06.06.14	06.06.14
2	Draft version	Lisa Marshall	Cefin Edwards	09.06.14	09.06.14
3	Final version	Lisa Marshall	Cefin Edwards	10.06.14	10.06.14
4	Amended Final Version	Lisa Marshall	Cefin Edwards	11.06.14	12.06.14
5	Amended version	Phil Parker	Peter Cole	09.10.14	15.10.14
6	Draft version	Lisa Marshall	Cefin Edwards	14.01.15	14.01.15
7	Final version	Lisa Marshall	Huw Williams	28.01.15	02.02.15
8	Final version	Lisa Marshall	Huw Williams	09.07.15	01.09.15
9	Final version	Lisa Marshall	Huw Williams	11.05.16	01.06.16

As part of the Fairbourne: Moving Forward project and in response to a list of questions raised by Fairbourne Facing Change (dated 17.04.14), a list of *Frequently Asked Questions* has been produced to provide further insight into the project's aims and objectives.

The initial set of questions have come from the community and develop the original information that was made available before the public meeting on the 25th April 2014. This current document, which will be updated on a regular basis and distributed to all stakeholders, aims to address matters of concern or interest raised by any stakeholder. However, please bear in mind that some responses may change as the project moves forward due to the level of information available at the time of publication of this document.

The most up-to-date version of the *Frequently Asked Questions* will be published on the Fairbourne Facing Change website and distributed to all homeowners and residents of Fairbourne. A *Glossary of Terms* will also be produced and distributed accordingly.

All questions have been colour-coded to assist you with the progress of each question:

Questions in Red: Have now been updated where possible. At the time of submission, were not considered by the community as being fully-answered or required a more specific answer.

Questions in Yellow: The community required an update or further detail.

Questions in Green: Accepted – no further action required

If you have any queries relating to this document (or require a copy in larger print), please raise them with a member of your community or alternatively, please contact the undersigned, who will log your query and respond to you in a timely manner.

Lisa Marshall – Project Manager

YGC, Gwynedd Council, Shirehall Street, Caernarfon, Gwynedd, LL55 1SH

Tel: 01286 679591 – email: lisamarshall@gwynedd.gov.uk

1. What is the status of SMP2 as far as Gwynedd Council is concerned? It seems to have been adopted as policy when it is a 'live' document. Can you clarify this please.

SMP2 is the Councils policy document for managing the coast and will only be revised if there is a major issue which materially affects the policy decisions. The Plan would be revised, for example, if there was a significant change in projected sea level.

2. Now SMP2 is A Gwynedd Council policy how is it informing planning policy decisions? Are there plans to include it in the LDP? (Local Development Plan)

The SMP is a material planning consideration for development management purposes, which means that it is reasonable to consider it in assessing relevant planning applications for development. It will also inform the development of relevant policies within the emerging Joint LDP.

3. It appears that as far as the Welsh government is concerned SMP2 has not yet been adopted, nor does it seem to be underpinned by an identified budget. Can you clarify this please?

The Minister for Natural Resources agreed the West of Wales Shoreline Management Plan (SMP2) on the 20th of October 2014. It included a caveat that the situation at Fairbourne should be constantly monitored. He has agreed to send a letter to Natural Resources Wales and the Chair of the Coastal Group, accepting the plan.

The SMP2 is a non-statutory policy document for coastal flood and erosion risk management planning. It takes account of other existing planning initiatives and legislative requirements, and is intended to inform wider strategic planning. The SMP does not set policy for anything other than coastal flood and erosion risk management.

The SMP2 promotes management policies for the coastline into the 22nd Century to achieve long term objectives, while being technically sustainable, environmentally acceptable and economically viable. Taking into account the forecasts of increasing risks due to climate change impacts, the SMP2 provides an approach for meeting objectives through appropriate management change, i.e. a 'route map' for decision makers to move from the present situation towards the future.

The objectives of the SMP2 must be set out in accordance with the Government's strategy for managing risks from floods and coastal erosion, and will help to ensure that the SMP2 promotes sustainable development, with respect to people, the human and natural environment.

4. With unequivocal clarity can you please explain what is meant by Managed Realignment for Rowen Spit in the first epoch? What is your estimate of cost for this managed realignment? Who pays for it?

The generic policies headlines, such as 'Managed Realignment', have to be interpreted pragmatically depending on the local conditions and change anticipated over the epoch short term, medium term and long term (nominally from now for 20 years, from 20 to 50 years and 50 to 100 years). This has to be seen as a continuous process. The length of each epoch and the transition from each one will depend on how quickly sea level rise actually occurs.

Therefore, what we have in this instance is the recognition that Rowen Spit does prevent waves entering the estuary (it does not protect Fairbourne directly – see 8 below) and is, therefore, of some benefit and warrants more than ‘No Active Intervention’ for the first two epochs. It should, however, be noted that, at present the spit is not fixed in its position; the dunes are allowed to develop naturally. It also recognises that the spit will come under increasing pressure in the future as sea levels rise and, therefore, ‘Hold the Line’ is not appropriate given the limited benefits it provides and, as importantly, rigidly fixing the spit could give rise to problems in managing the whole estuary entrance. Given the above the default is therefore ‘Managed Realignment’ which gives landowners and operating authorities the option of adapting the existing frontage to provide a sustainable defence in the short to medium term. This is the approach that has been taken to date and no one is currently promoting significant change in the way in which this location is currently being managed.

5. *With unequivocal clarity can you please explain what MR means for the other epochs as they come into play and the estimated costs associated with them. Will it link with the Minister’s Investment Plan referred to on the ‘Week In Week Out’ programme? With 40 – 50 communities up for managed retreat why was Fairbourne singled out?*

The SMP is limited to selection from four generic policy headlines (Hold the Line, Managed Realignment, No Active Intervention and Advance the Line) as set out in the Guidance for developing SMPs. These have to be explained in relation to the individual areas and circumstances relevant to specific locations. The SMP attempts to do this. In this, it is recognised within the SMP that management, particularly in the Fairbourne area, goes beyond just management of defences and involves raising awareness and planning for change within communities.

As stated earlier (with ref to original FAQs) the updated SMP, based on existing evidence, has emphasised that at present and over the next 40 years we can defend and that we should defend. This will be reviewed as further evidence is gained on sea level rise. However, this means that over epoch 2 (typically over the 20 to 50 years’ time period) we have to prepare for and start managing the change in risk and preparing for the longer term when defences would no longer be sustained. We need to address and investigate now all the important issues this raises but with a present policy of ‘Hold the Line’. As change becomes necessary, we have to manage this and hence the policy is ‘Managed Realignment’ in epoch 2. In the longer term (epoch 3) defences would no longer be managed and hence a policy of ‘No Active Intervention’.

The specific details of how this change is managed needs to be defined and is the reason for ongoing discussion with the community and other partners in the project.

6. In terms of the railway can you explain unequivocally what Hold The Line means? How defences will be developed? What will this cost? Who will pay? Can you tell us where the cost benefit analysis for each of the epochs has been undertaken?

The management of coastal rail assets by Network Rail Wales Route incorporates risks from sea level rise to account for potential climate change impacts. Network Rail will continue to invest in and maintain its coastal assets for the foreseeable future, our coastal asset management plans for our next Control Period (2019-2024) are already being developed to understand the scale of interventions needed and the funding required to begin the Periodic Review process with our Regulator, the Office of Rail and Road. For areas of the rail network where significant external policy decisions may influence our long term asset management, such as Fairbourne and Shoreline Management Plans, Network Rail does not make asset management decisions in isolation. To this end, we see our participation on the Fairbourne Project Board as a critical step in a process to develop a long term rail strategy and intervention plan for Fairbourne, and the Cambrian route, that will align with local flood and coastal management policies and future National Transport Plans.

7. Are you convinced that Rowen Spit will not continue to provide protection from sea level rise as per SMP1? What is your scientific basis for this change? How much investment was done in drawing up these plans on the accretion increasing the height and therefore the natural defence properties of the whole length of the Spit?

Rowen Spit (PU11.4) is the length of spit which is to the north of the newly refurbished estuary defences and as such does not provide a direct defence to Fairbourne village. We know that the shingle bank is suffering from starvation because of the depletion experienced at Friog and that there is no net accretion in the system. We know that on 3 January 2014 the sea overtopped the shingle bank and the overtopping wall - this will occur more frequently as sea levels rise as a result of climate change.

The strategic monitoring which has been recording measurement along Fairbourne frontage since 1992 does show that some accretion is occurring along the Rowan Spit frontage. The accretion however is localised and as no new shingle material is being fed into the overall system the level of protection is diminishing over time.

8. Can you identify which agency is responsible for what, eg, the sea wall, the shingle, the bank and so on. Subsequently which agency funds what?

All the sea and tidal defences in Fairbourne are maintained by Natural Resources Wales, although all are privately owned. The exception to this are the structures associated with the defences (the concrete sea wall and the tidal doors/flaps) which, although on private land are deemed to Natural Resources Wales structures.

The funding for maintenance rests with Natural Resources Wales and any improvements seeking Flood Defence Grant in Aid would be channelled through Natural Resources Wales.

9. **How do you see the future of the protected national monuments being catered for?**

Historic monuments are managed by Cadw, which is Welsh Government's historic environment service, and they have recently been on site in Fairbourne to view the displacement and damage to the Second World War tank traps and pill box. Cadw realise the difficulty associated with maintaining the historic defences at their present location but where possible they would like to see them reinstated to their present line and level. It is unclear at present whether this is possible.

The Coastal Defence Options Study for the Friog area will take on board the wishes of Cadw so that any future designs will be able to accommodate the tank traps.

10. **Whose responsibility is it to maintain and clear ditches? Ditches on Glan y Mor and in other areas have been overgrown for years.**

Fairbourne lies within the Mawddach and Wnion Internal Drainage District (I.D.D) with Natural Resources Wales acting as the Internal Drainage Board. Natural Resources Wales has permissive powers to undertake maintenance works on watercourses that are designated as 'main rivers', such as the Afon Henddol. They also carry out works on adopted ditches which attract a levy paid annually by landowners and Cyngor Gwynedd. The levy covers the cost of maintenance of these adopted ditches, but the majority of ditches are not adopted and deemed maintainable privately. Natural Resources Wales have the powers to maintain all the ditches in the I.D.D, but the funding would need to be met through the local levy, which currently is only able to support the adopted system.

The ditch at Glan Y Mor historically has not been considered a flood risk to the area and did not cause any flooding in 2000, unlike Ffordd Corsen. We take a risk based approach to determine our maintenance programme with people and property being the priority. The more critical ditches might be opened annually while other ditches which do not reduce flood risk might not be maintained at all. The annual maintenance programme is reviewed annually and this can change due to flood events or visual conditional assessments for example.

11. **The recent expenditure on protecting Fairbourne from the estuary costing £7,000,000 approximately was funded from where? How were the cost benefits of this scheme determined, was a formula used? The European route? Is there a risk of potential clawback within the adoption of SMP2 by Gwynedd Council? How was this very recent expenditure taken into account for SMP2?**

The recent scheme was funded by Welsh Government and the European Regional Development Fund, (because of Fairbourne's location), via Environment Agency Wales/Natural Resources Wales Flood Risk Management Capital Expenditure Budget.

Inspections of the existing tidal flood defences (Fairbourne, Fegla Fawr, Mawddach and Arthog) had identified sections of defence that had deteriorated over time to be in poor condition and at real risk of breaching. In addition, the existing embankments were difficult to maintain due to the steepness of the side slopes, narrow crests and lack of access.

Failure of the tidal embankments would lead to tidal flooding of approximately 420 properties (predominantly residential) during a 1 in 200 (0.5%) Annual Exceedance Probability flood event resulting in significant risk to life. This meant that Fairbourne was ranked high in Environment Agency Wales Communities at Risk Register and resulted in it being put forward as a project.

The premise for the scheme was to minimise, as far as possible, the construction work costs. Embankments were strengthened along their existing alignment (apart from two short set back areas) and the defence heights were kept as existing and not raised.

At the time of finalising the business case for the Fairbourne Flood Risk Management Scheme (FRMS) the West of Wales Shoreline Management Plan (SMP) 2 policy for tidal flood defences along the estuary was being reviewed and had not been finalised.

The Health and Safety factors referenced above were the key drivers in Environment Agency Wales promoting the Fairbourne FRMS. However the economic justification for undertaking works was also considered in line with Treasury Rules in order to ensure that the financial benefits of undertaking works would outweigh the costs.

In order to judge the economic viability of a project we appraise it across a timespan of 100years.

The recommended draft policy within the SMP2 at the time of preparing the Business Case for the scheme was Policy 3: Continue with existing or alternative actions to manage flood risk at the current level. The draft SMP2 was promoting hold the line in Epoch 1 (over the next 20 years), managed retreat in Epoch 2 (20-50 years) and then no active intervention during Epoch 3 (50-100 years).

Therefore in order to ensure that the works provided value for money Natural Resources Wales reduced the appraisal period to 50 years and assumed that costs for a Managed Realignment of the tidal embankment would occur in yr 20 (to align with Epoch 2 policy and assume a worst case scenario). The overall effect was an increase in costs and a slight reduction in benefits. However there was still economic justification for the scheme.

Natural Resources Wales are comfortable that the decision making process was robust and that the scheme complies within the SMP2 strategy for the area.

The current final project costs are estimated to be £6 million, based on savings and not expending the risk allowance.

Natural Resources Wales are not expecting 'clawback' to be an issue on this project, but Welsh Government would be better placed to answer this question in more detail.

We feel that the information provided, fully answers the question.

12. What does relocation of Fairbourne - and its (30) businesses and (approximately 60) employees - mean? How can you ensure that businesses continue to thrive? Are Gwynedd Council planning for this now?

The Joint LDP covers the period between 2011 – 2026. During this period the SMP advocates 'Hold the Line' and a 'Managed Retreat' generic policy option for PU zones that affect Fairbourne during the time frames. The SMP emphasises that the time frames are not rigidly fixed. The length of each time frame and the transition from each one will depend on how quickly sea level rise actually occurs.

The Joint Planning Policy Unit is recommending that a Coastal Change Management Area (CCMA) be included in the LDP. The extent of this Area will be informed by the SMP. The Unit has formulated draft policies that will prevent new residential development within this Area, - an approach which will align with national planning policy. Other policies facilitate a limited range of types of development linked to the coastal area, such as cafes/ tea rooms and sites used for holiday or sites used for holiday or touring caravans and camping – subject to compliance with criteria, which could mean that planning mechanisms will be used to manage the life of a development, i.e. time-limited planning permissions. In all cases, and particularly in relation to development that involves people staying in caravans or tents or other holiday structures, regard will have to be had to policies on development and flood risk. If there are existing static, touring or camping sites in the area, policy in the emerging draft LDP facilitates the relocation of these sites to suitable sites outside the Area. The LDP will not identify alternative sites. Such proposals will be subject to the relevant policies in the Plan, e.g. those that deal with impact on the landscape, sensitive sites, highway network, etc.

Where extensions or alterations to existing businesses or residential properties are proposed that are likely to increase the scale of the property and the number of occupants at risk, particularly in houses, consideration would need to be given to the impact on the area at risk and whether the degree of harm is acceptable. Some extensions or alterations to residential properties are permitted development, i.e. they do not require planning permission. The Council will be considering whether to remove the permitted development rights, thus ensuring that it is aware of all proposed extensions and alterations and are able to manage change. The detailed policies that will apply to the CCMA will be set out in the Deposit LDP. It is anticipated that the Joint Planning Policy Committee will approve the Deposit LDP for public consultation on the 18th December 2014. It is currently anticipated that the statutory public consultation period will take place during February and March 2015. Details of the consultation period and how to get involved will be published nearer the date. In the meantime interested parties can view the draft Deposit LDP on the Joint Planning Policy Committee pages at:

[https://www.gwynedd.gov.uk/en/Council/Councillors-and-committees/Meetings,-minutes-and-agendas/Meetings,-minutes-and-agendas.aspx?pwyllogor=/2014-15/Pwyllogor Polisi Cynllunio ar y Cyd_Joint Planning Policy Committee/2014-12-18](https://www.gwynedd.gov.uk/en/Council/Councillors-and-committees/Meetings,-minutes-and-agendas/Meetings,-minutes-and-agendas.aspx?pwyllogor=/2014-15/Pwyllogor%20Polisi%20Cynllunio%20ar%20y%20Cyd_Joint%20Planning%20Policy%20Committee/2014-12-18)

13. There is a housing shortage so how will Gwynedd Council ensure there is adequate housing for the relocation? Will people have to be relocated within Gwynedd? How much flexibility will they be allowed?

At present in terms of the LDP's Housing Strategy, the Joint Planning Policy Unit is aware of two possible scenarios, namely (a) that households (existing and new) will continue to want to live in existing properties Fairbourne during the Plan period (2011 – 2026), and (b) phased relocation of existing households during the Plan period.

In terms of the first scenario, a housing growth level was agreed to by the Council in 2013 for public consultation. Comments about the proposed growth level have been considered as well as up to date evidence about the need/ demand for housing in the Plan area. The Joint Planning Policy Committee will be considering the results of this work on the 18th December 2014 when it considers the Deposit LDP. The Council currently aims to proportionately distribute the new housing units required in the Plan area according to the role of settlements as set out in the emerging Joint LDP. Therefore, a specific 'target' is set for each defined settlement. The draft Deposit LDP does not propose to facilitate any new housing units in Fairbourne. Nonetheless there are existing historic planning consents for new housing in Fairbourne, which fall outside the remit of the emerging Plan. .

The question, however, suggests that the second scenario would need to be planned for, i.e. that existing households would need to be relocated. This scenario would mean that existing housing units would be left unoccupied and therefore, there would be a demand for new housing units in excess of the number that would be usually directed to a settlement of Fairbourne's size/ role. At present the Joint Planning Policy Unit isn't aware of any firm evidence that confirms that there is a need to identify specific sites in alternative settlements to accommodate the relocation of some or all the existing households in Fairbourne during the Plan period. The draft Deposit LDP includes a rural exceptions sites policy that facilitates the development of additional housing units in or adjoining settlements where general market housing would normally be refused. This policy would apply to settlements such as Tywyn and Barmouth. Once adopted (anticipated December 2016) the LDP will be formally monitored on annual basis and a full review will be undertaken every four years. Should firm evidence about the requirement for a significant relocation of residential properties from Fairbourne be presented the Joint Planning Policy Unit together with the National Park Planning Authority would seek to formulate a policy that could facilitate a solution.

14. **How will Gwynedd Council support those members of the community whose care package either now, or in the future, is dependent upon an assessment which includes the saleable value of their property?**

If you cannot sell your house: For Residential/Nursing care only. If a service user owns a property, the value of the property is taken into consideration. The value of the property is added to any other capital that the service user may possess. If the service user's total capital is in excess of the capital limit the service user will be assessed to pay the full cost for their care. The value of a property is initially determined by a professional valuation. This may or may not change dependent on the final sale value of the property. If the final sale value of the property is less than originally estimated, then this will reduce the capital figure used in the financial assessment. Consequently this may reduce the amount that the service user may have to pay towards the cost of their care. If a property has no value, it will be disregarded in the financial means assessment.

What if the amount of debt (or bill) you'd 'accrued' whilst being in care, couldn't be realised from your estate upon your death? Does the debt pass onto your children? As above. If there is an outstanding debt for care and this has accrued in relation to the value of a property, the total

figure of the debt may have to be revised dependent on the final sale value of the property. A deceased person's debt is payable from their estate **not by their children**.

How will the bill for your care be paid upon your death? By the executor of the estate, from the funds held in the estate.

What if you die in probate? The executor would apply for probate after a service user has died

15. How is Gwynedd Council going to support the vulnerable within our community who are distressed and worried now as a result of the adoption of this policy by Gwynedd Council? And as the process moves forward?

The updated SMP, based on existing evidence, has emphasised that at present and over the next 40 years we can defend and that we should defend. This will need to be reviewed as more information about sea level rise is obtained. The community is currently working with Natural Resources Wales to review and re-establish the Community Flood Warden role and this will be effective from January 2015. In addition to this, Community Council are working with other agencies in developing an emergency plan should very exceptional storm conditions be predicted. This will be co-ordinated with flood warnings, as at present. The plan will be discussed and the community will be involved and kept aware.

The project recognises, however, that different individuals, depending on their circumstance, will be vulnerable in different ways to longer term change. To ensure we are addressing any areas of concern, the Project Board and Working Group will work closely with Fairbourne Facing Change and the community council to ensure that any worries or concerns from the community are raised in good time, in order for the project to address these issues and find suitable solutions.

The Socio/Economic Consequences of Climate Change Task/Finish group has already completed a piece of work to identify any rise in anxiety or depression-related illnesses across Fairbourne and has found that there has been no increase to-date.

16. The SMP situation was known for some years yet people have still been able to purchase properties in Fairbourne. Why, when ultimately the property is worthless? Likewise why have Gwynedd Council allowed more properties to be built and invested in through development?

The Local Planning Authority has no control over the sale of properties. There is no question about the status of land or properties in the SMP on the Land Charges.

A number of sites in and around Fairbourne have the benefit of extant historic planning consents, ie, planning permission was granted some time ago but the permission remains extant as a 'material start' has occurred. Apart from consent given in 2012 for the conversion of a first floor property to residential use, all extant planning consent and implemented planning consents pre-date the adopted Unitary Development Plan, TAN15 and the baseline date for SMP2. Planning applications are now assessed against the requirements of Policy B29 in the adopted Unitary Development Plan as well as national planning policy and guidance.

17. When you did extensive consultation for the embankment on the estuary flooding it was made very clear by the then Environment Agency that Fairbourne was not at risk from flooding from the sea. What has changed?

Throughout the consultation for the recent scheme Natural Resources Wales stressed that the potential for greatest risk to Fairbourne was from the sea. There was an initial perception within the community that the main risk to the village was fluvial flooding from the watercourses. Whilst there is a fluvial risk, the consultation stressed the tidal risk implications to the village and hence the justification for the scheme, with the potential to impact approximately 420 properties tidally with 28 at risk fluvially.

Since the Sea wall and tidal embankments were built at Fairbourne back in 1976 the village has benefitted from a 1:200 standard of protection to flooding from the sea. The recent flood scheme has not increased the level of protection from the Sea but refurbished to maintain the level of performance by reducing the likelihood of breach which is the main threat to Fairbourne rather than overtopping. It was the condition of the sea defences that instigated the coastal improvements rather than the level of protection.

18. In your Frequently Asked Questions it says SMP2 emphasises that over the next 40 years you 'can and should defend' Fairbourne. Can you clarify the use of the word 'should' as opposed to the word 'will'? If severe weather causes a flooding event will the policy of defend continue?

Welsh Government has an annual budget for flood and coastal erosion risk management in Wales, this is supplemented on occasions by European money and other funds. Each of the 22 Unitary Authorities in Wales have to bid for grant aid for any plan or project which they wish to promote. The SMP sets the recommended approach to risk management now and into the future, importantly setting the high level approach and intent of management. This will be taken into account by Welsh Government and is essential technical support when operating authorities (the Councils and NRW) submit projects for funding. In defining the intent to defend Fairbourne over the next 40 years, this will support Gwynedd Council's application for grant aid to fund works that may be required.

During the 40 years, the intent would be to repair defences and address flood risk issues arising from extreme events. As we move towards the end of this period there would be the need to review what specific actions might be required. This will critically depend upon sea level rise and upon associated actions developed through the project.

19. When Gwynedd Council adopted the SMP2 plan, why was this not communicated to the community? The Council has a duty of care to its residents. Surely further effort should have been made to consult with the wider community?

The SMP sets out a recommended approach to management in terms of policy. It also sets out an action plan necessary to address the issues raised by the recommended policy. In adopting the findings of the SMP, the Council also accepted the need for the action plan. One could not be

adopted without the other. The SMP Action Plan for Fairbourne made recommendations for establishing a project to further investigate the issues and to develop further the consultation with the community. Setting up the project board and developing how this would be taken forward with the community has been a priority for the Council. As discussed at the meeting on the 25th April, this has not been a straightforward process. Many lessons have been learnt, particularly in understanding how best to communicate with the whole community. It is important that the project group takes this forward positively.

20. **Why when we need more affordable housing should we allow 400 decent houses to be swallowed by the sea? Wouldn't extra sea defences be cheaper?**

As explained earlier, in the longer term, it will be harder technically to maintain an acceptable standard of defence. While it is possible to build defences higher, install pumps and manage the erosion, this would incur very significant cost, with on-going increase in costs. Furthermore, in attempting to defend people in the future, this risk is such that should defences be overtopped or, worse still, breached then the consequences would be immense and put people's lives at risk.

At present, Fairbourne does provide an important and valuable housing stock. In the future there would be greater and greater reliance on defences. We need to plan how we adapt to a future where Gwynedd's housing stock is maintained in a sustainable manner.

21. **How will the Welsh Government determine their support, or otherwise, for decisions on abandoning partially or totally established communities? Will decisions be based upon competitive bidding for limited resources?**

With reference to Q3 local authorities have to make a bid for grant for any plan or project they wish to promote. The mechanism for Welsh Government support will be through the operating authorities, NRW and/or Gwynedd Council.

22. **Has the impact of silting up of the estuary and the benefits of dredging been explored?**

Dredging can have limited benefits when dealing with rivers by providing extra capacity regarding flow and storage because of the finite volume of water being considered. The sea has, in effect, an infinite volume and therefore, dredging would have no benefit with regard to flood risk to Fairbourne.

23. **What is saved by allowing Fairbourne to flood in terms of ongoing maintenance costs? Does it protect Barmouth and Dolgellau?**

Further details of current maintenance will be provided in due course. The sustainability of defences at Fairbourne are not however determined by the on-going maintenance requirement

but rather by the need, in the future, for major capital improvements to maintain standards of defence in face of sea level rise and climate change. Certainly there is no suggestion that a decision not to defend Fairbourne would be to allow better defence at Barmouth or Dolgellau.

There is no consideration of direct flood risk benefit to either Barmouth or Dolgellau in considering Fairbourne's future. Any decisions made as to flood risk either from the sea or fluvially in Fairbourne will be based on the conditions and the sustainability of the existing defences. There is no long term significant maintenance savings by not carrying out annual maintenance. As far as Natural Resources Wales are concerned there is currently no intention to curtail the maintenance programme. In fact we are currently working with landowners to improve localised drainage at a known problem area behind Penrhyn Drive South.

24. **Where does the money from fuel tax go? Supposedly climate change!?**

Significant investment is being made at a national level in addressing and researching issues of climate change. However, research strongly indicates that even if the causes of climate change were addressed sea level rise will continue in the future.

25. **We understand that improvements to defences at Friog are being explored. Could you tell us precisely what these improvements are and what budget has been identified to support them? Are you looking for solutions that have proven successful in other parts of the world?**

The recent storms led to undermining and subsequent damage to a section of the sea wall at Friog corner. This resulted in emergency works being carried out and the importation of 900 tonnes of rock armour to make good the damage. The action stabilised the damaged area and monitoring confirms this to still be the case.

Natural Resources Wales has secured initial funding to investigate the potential for any betterment in stabilising the damaged section through investigating the coastal processes, and the potential to maximise natural processes as part of the defence for example, a groyne trap may maximise gravel/shingle retention at this corner. As part of the process, enquiries will be made to identify any similar issues elsewhere and options that have been considered previously.

The initial works to maintain the integrity of the defences at Friog are now complete.

We have now secured a budget and engaged a consultant to carry out a study at Friog and the remaining foreshore which includes a comprehensive brief based on the assessment of the current defences, beach processes and options for the future to secure the frontage.

26. There are concerns regarding the actual flood plan. What is it? Should there be a mechanical alarm in place? Who is responsible for raising the alarm if the sea wall is breached? What happens to residents who are 'bed ridden', have mobility problems or are ill? What about the children? What is the plan for rescue and evacuation? Do flood wardens get training? Are flood wardens covered by the Council's insurance?

Although major flooding might be rare, we need to plan for such an event to ensure that people are safe. An emergency plan is being developed through the Community Council. This will form an important element considered by the Project. This is being discussed by the Task and Finish Group – Emergency Response Plans.

Fairbourne Community Flood Plan - We have now reviewed the position of the existing Community Flood Plan and have decided jointly with Arthog Community Council to revisit the plan and recruit further flood wardens.

A meeting took place on the 18 November whereby Eirian Redmayne from Natural Resources Wales was invited to go along to Fairbourne to give a presentation to those interested to become wardens to explain further about the Plan and the role of the flood warden. Mike Scott of Arthog Community Council led the meeting.

Following this meeting, further numbers of wardens have signed up and the next step will be to arrange a further meeting in Fairbourne to provide the new wardens with further training and to populate the plan further.

What is a Community Flood Plan – A Flood Plan is a document that provides good communication link between Natural Resources Wales, Local Authority, Emergency Services and flood wardens prior, during, and after warnings are issued.

The Plan provides information on all 421 properties at risk and explains the procedure of each organisation when warnings are issued. It also provides information on setting up a Forward Command Post which is usually set up when a flood warning is issued, and is attended by Natural Resources Wales/Local Authority, Emergency Services and a representative of the Flood Warden Group. This group will coordinate the response to a flood event which will include discussions and planning of the evacuation process which is lead by North Wales Police. In some Communities, flood wardens will gather information from their allocated areas of vulnerable residents which can be shared during this meeting.

What is a Flood Warden – the flood warden acts as the link between Natural Resources Wales, Local Authority and the residents and they will encourage residents to take action to prepare for a flood by ensuring that they are registered to receive flood warnings, and better understand what the warnings mean so that appropriate action can be taken.

Each warden will have their allocated area within the Community and will visit each property in their area to promote the flood warning service.

They will gather, if in agreement, a record on vulnerable residents which will be shared and coordinated with the Senior flood warden or his/her deputy with the Police and Local Authority at times of evacuation.

The Flood Warden role is a volunteering role, and it's purely a communication role between the community and other wardens. There will be a Senior Flood Warden and assistant appointed who will lead on the plan and communicate as necessary with organisations when warnings are issued as set up in the plan.

They will meet up as agreed with the Senior Flood Warden and arrange way forward with the community. They will also instruct Natural Resources Wales when changes are made to the Community Flood Plan.

It is important to note that Flood Wardens must not:-

Take any actions that could endanger their personal safety, or the safety of the general public

Carry out the job of the emergency services - they are trained professionals with the correct equipment and understanding of their role e.g. getting involved in rescues

Enter floodwater – remember just 15cm (6 inches) of fast flowing water can sweep you off your feet. Floodwater displaces manhole covers and hides other dangerous obstructions.

Attempt to use vehicles in areas of flood water

Rest Centres – they are set up by the local authority who have their own plans. All relevant organisations will be informed of the set up of the rest centres.

27. Why have the Welsh Government and Gwynedd Council not clarified and promoted an accurate view of the situation in Fairbourne? Is there a hidden agenda?

The SMP has been produced using the best available data to look into the future and determine how best to manage the coastline knowing that sea levels are rising. There is uncertainty regarding how quickly and by how much sea level is going to rise but it is clear that change will occur. There is no hidden agenda, the whole process has been open and transparent.

28. How will Gwynedd Council support the community in dealing with the detrimental effects on the village including developing health and well-being issues?

The Working Group (formerly Socio/Economic Effects of Climate Change Task/Finish Group) will address any matters relating to health and well-being issues caused by the Shoreline Management Plan. Members of Fairbourne Facing Change hold a seat on this working group and will be the link between the community and the Working Group/Project in order to communicate any issues which need to be addressed. Should any member of the community not want to liaise with Fairbourne Facing Change members, they can contact a member of the Working Group via: www.fairbourne.info where telephone numbers, email addresses and a 'contact me' form, can be found.

29. If managed retreat takes place will the village be relocated together? Will a new village community be built for the residents? Where will it be? What will happen if anyone refuses to sell up? With 50 communities facing managed retreat will there be enough land for relocation to take place and who will fund it? Who will make the final decision – Gwynedd Council, the Welsh Government or the UK Government?

What does make Fairbourne different to many other areas is that the whole area of the village is built at this low level. There are no significant areas of high ground, major flooding would affect the whole village. The implications of this are being considered by the project. There will be impacts on other communities and the Council are working with these communities in considering their needs as well. This larger picture will be addressed through this process. At this time no fixed plans are in place. It is essential that the community are involved in this task, alongside other agencies.

At the last Project Board Meeting, it was decided that work needs to start to help us understand what the village may look like in the future. In order to do this, it was decided that a small workgroup be formed to undertake an 'Options Appraisal' exercise. Throughout this Options Appraisal, questions such as this can be addressed. This workgroup has not met up as yet, however, once it has been established and work is 'in progress' updates will be available.

30. Is there a possibility of the village bulk buying specific home protection?

At this stage it is considered impractical to address the long term risk through local, specific home protection to individual buildings. This is a task that should be undertaken by the community itself.

31. What plans will be implemented to prevent the village from becoming a ghost town?

At the last Project Board Meeting, it was decided that work needs to start to help us understand what the village may look like in the future. In order to do this, it was decided that a small workgroup be formed to undertake an 'Options Appraisal' exercise. Throughout this Options Appraisal, questions such as this can be addressed. This workgroup has not met up as yet, however, once it has been established and work is 'in progress' updates will be available.

32. How will the village be policed to prevent vandalism and property crime?

At the last Project Board Meeting, it was decided that work needs to start to help us understand what the village may look like in the future. In order to do this, it was decided that a small workgroup be formed to undertake an 'Options Appraisal' exercise. Throughout this Options Appraisal, questions such as this can be addressed. This workgroup has not met up as yet, however, once it has been established and work is 'in progress' updates will be available.

33. Do any elected representatives live in any of the areas identified for managed realignment?

Yes, we have identified at least eight Gwynedd Council members who live in a Ward which is subject to managed realignment.

34. Do Gwynedd Council think that the SMP2 has the wellbeing of the villagers at heart? In its implementation of the SMP2 does the Council intend to have the wellbeing of the community at its heart? If 'yes' how? If 'no' what next?

Yes, in part by making residents aware of possible future scenarios and the risk they face. However, possibly as importantly, in engaging the community as to how we address the concerns being expressed. The SMP highlights the longer term risk to the community and to individuals and aims to explain the difficulty in keeping people safe in the longer term due to sea level rise. Change has to happen, it is essential that the project draws upon the knowledge of the community and works with the community in developing long term solutions that reduce the risks associated with very difficult situation being faced.

As part of the Workgroup (mentioned in Q28) and the Options Appraisal project (Q31) any issues relating to the wellbeing of the community in conjunction with the Shoreline Management Plan, will be addressed, as and when appropriate.

35. What is Gwynedd Council going to do now that they have put people who need to move unable to realise their investments? How are they going to remedy this situation to the satisfaction of residents?

This issue was discussed at the meeting on the 25th April 2014. It was identified that there has been some research looking at house prices and how these are affected. This, however, has to be examined further through the project. As requested by the community, the Council have prepared a note setting out the findings of the SMP. It is important that all involved are able to base their decisions upon a clear understanding of the policy. This will continue to be discussed as part of the Project Workgroup, referred to previously.

36. The Council is prepared to pay 'housing benefit' – which, if all residents from Fairbourne were re-housed in private accommodation, could equate to somewhere in the region of £3,000,000 per annum, would this substantial amount of public money be better used to compensate people who need to move house each year – in all a better, and more humane outcome? Wouldn't the Council be better looking for more innovative ways of dealing with the problem they have created, rather than expecting us to walk away from our investments?

The problem being faced is as a result of the threat of future sea level rise. The Project will consider and investigate this question more fully and will raise this issue with Welsh Government.

After discussion at the Project Board and the Property Values, Insurance and Planning Policy Task/Finish Group, it was decided to apply for funding from the Welsh Government to undertake a Feasibility Study into a Buy to Let Scheme for Fairbourne. We are currently awaiting funding for this project, however, if successful, it will be run as a separate project to the Workgroup and Task/Finish Group. Further information relating to this will be released as and when available.

37. As Gwynedd Council points out there are measures in place to enable flood risk properties to get insurance but insurance premiums will increase probably beyond the pockets of local people and in turn become unaffordable. The Council and SMP2 has exacerbated the insurance position. What does the Council intend to do about this?

The insurance industry has, for over a decade, been using information published by the Environment Agency regarding flood risk. Many people have reported having difficulty obtaining insurance before SMP2 as a result of the 2004 Flood Maps. This will be monitored through the project. The Water Act 2014 will address availability and affordability of insurance.

Further to the Task and Finish Group – Property Values, Insurance and Planning Policy, Natural Resources Wales have stated that if any homeowner requires a statement to produce to their insurance company to demonstrate that their home is not currently affected by flooding, then please get in touch with them via the Project Workgroup.

38. It appears that Gwynedd Council have failed in its 'Duty of Care' to residents of Fairbourne. How does the Council feel about the potential claims for 'Personal Injury' due to ill health and trauma caused by their negligent way of dealing with the situation?

The SMP has been developed in line with the SMP Guidance. The findings of the SMP and its recommendations in terms of the SMP Action Plan had been considered and approved by the Technical Steering Group and the Client Steering Group. Following approval by the operating authorities the SMP was signed off by the national Quality Review Group (QRG).

The Council's decision to accept the findings of the SMP and approve taking forward implementation of the plan (as set out in the Action Plan) was timely and necessary to start addressing the issues raised by the SMP. It was based on the information provided in the SMP document. The Action Plan which highlights the need to develop an adaption strategy has been agreed by Gwynedd Council and its development, involving the Fairbourne Community, is ongoing. This is being discussed by the Working Group (formerly the Task and Finish Group – Socio/Economic Consequences of Climate Change).

39. Have the other 49 areas been better advised than we have about their predicament or will it be left to the media?

There will have been an opportunity for all coastal areas to comment on the draft SMP2 during the consultation process. Gwynedd Council have embarked on long term programme of raising awareness and generating capacity in communities to understand and discuss their future. Gwynedd Council are believed to be the only local authority in Wales to have proactively visited every coastal City, Town and Community Council to explain the impacts of SMP2 policy.

40. As an alternative to the untenable situation Fairbourne is at present placed in, would it not be better for the Council to adopt a 'wait and see' approach – with the promise of compensation, if and when, this event ever happens? This would then release residents to sell their homes with the guarantee of compensation in the future – and if we can still acquire insurance then we could claim on our insurance policies. This would be of no initial cost to the Council but if the Council wants to implement the SMP2 and remove residents from Fairbourne then the only humanitarian thing to do is buy their homes at current market values (pre SMP2 market values) – not devalued market values. How does the Council feel about this suggestion?

At present there are no measures in place for this. Council support for 'relocation' would probably be limited to help with finding a private sector property to rent and with applying for housing benefit. There is a national debate over this. The Project will consider and investigate this more fully and will raise this issue with Welsh Government. In other areas of the country, in particular on the east coast of England, the ideas of purchase and lease back have been looked at. This along with other ideas will be considered through the Project via the Working Group (formerly Task and Finish Group – Property Values, Insurance and Planning Policy).

41. Can you explain precisely what you intend to monitor over the next 5 years? Will we be kept informed of the progress and monitoring? Will you also be undertaking an in-depth study in light of the recent real storm event and its impact on the affected communities? Shouldn't this trigger a review of the SMP2?

A monitoring programme will be established to monitor 3 main elements, they are:

- *Ground water*
- *Shingle bank volume*
- *Intertidal beach level*

The programme will be established and refined, depending on results, during the first 5 years with a view to continue monitoring for the next 30 to 40 years. This information will build on the monitoring data gathered over the last 22 years. Monitoring results and analysis will be published annually.

The Wales Coastal Flooding Review Phase 2 was published by Natural Resources Wales on 1 May 2014. Recommendation 41 refers to SMP2 and is inserted in full below.

Welsh Government should endorse the strategic framework established by the Shoreline Management Plans (SMP2). This should be accompanied by more national and local support to communities and community involvement in the development of local adaptation options and plans.

Develop a 'local adaptation toolkit' to better support communities. This may include technical guidance, templates, and engagement and communication tools and policy positions. Local discussions in all coastal communities need to begin now, involving professional partners and the community. These discussions should consider communities on a risk basis. These discussions need to explore and develop local plans to adapt and increase resilience over time.

Support and draw upon the experience of the Fairbourne multi-agency group to help inform adaptation and community resilience discussions at other locations.

Monitoring is the process of measuring physical change in such a way that it can be repeated an infinite number of times over a prolonged period. When a number of measurements have been collected it will be possible to carry out analysis of the data to quantify the change and extrapolate the rate of change into the future.

The three elements being measured are:

Ground water – *this will entail installing boreholes to measure and record the level of the water table underground.*

Shingle bank – *is the measurement by laser scanning of the change in volume of the shingle bank. This is done by comparing the latest survey with previous surveys to identify and quantify change. The first laser scan survey was carried out in October.*

Intertidal beach – *is the measurement by topographic surveying of the amount of sand on the beach when the tide is out. Again we will be able to identify and quantify change. The first topographic survey was carried in October so that data regarding the sand and shingle were captured the same time.*

An in-depth study of the impact of recent storms on the affected communities will not be undertaken as part of the monitoring programme. The impact of recent storms will not trigger a review of the SMP2.

42. Anecdotal evidence indicates significant silting up of the Mawddach Estuary. Is this being monitored? Has the impact of the new Barmouth seawall been assessed?

The Mawddach Estuary is referred to as a sink because material is accumulating in the estuary and has been doing so since the last ice age 14,000 years ago. This accumulation of material also created the land Fairbourne is founded on today. This process will continue until an equilibrium state is achieved and the process is reversed and material is lost from the estuary. It

is impossible to say when or indeed if an equilibrium state will ever be achieved because of the effects of climate change.

Gwynedd Council do not monitor the siltation in the Mawddach Estuary. However there is a data set of aerial photographs which can indicate the changes which have occurred over the years. Aerial surveying using LiDAR is being used more frequently these days and the latest was undertaken by The Wales Coastal Monitoring Centre in April 2014.

I assume that the new sea wall referred to is the causeway constructed between the mainland and Ynys y Brawd in the early 1970's to close the north channel into the estuary. One of the main reasons for closing the channel was public safety because of numerous drowning incidents but there is also evidence to suggest that the channel was closing naturally and the causeway just accelerated the process.

The silting of the estuary is a natural process with each tide carrying a load of suspended sediment into the estuary of which a small percentage settles out and is deposited on the sea/river bed. which has accumulated to a depth over 50m by today, a rate of less than 5mm per annum. There is no evidence to indicate that the causeway has had a detrimental effect on the siltation of the estuary. The causeway is only the latest episode in a catalogue of anthropogenic interventions which have changed the characteristics of the estuary. The catalogue includes:

- *Fixing the estuary mouth by Trwyn y Gwaith.*
- *Constructing the railway viaduct in the 1860's.*
- *Land reclamation along the length of the estuary including where Fairbourne is now.*
- *Constructing the causeway in early 1970's.*
- *The placing of reno mattresses under the railway viaduct in the 1980's.*

There is no evidence to link the current flood risk facing Fairbourne with estuary siltation and the construction of the causeway.

43. **What is the Council's intention regarding the potential to charge second home owners double rates? If the Council do decide to take this action will they look at the possibility of making an exemption for Fairbourne in light of the recognised current difficulties of selling property within the community?**

This will be raised with the appropriate departments within Gwynedd Council and the Project Board will provide a response as and when one is communicated to them.

44. **What program of Storm Drain Maintenance is intended for the village? Will NRW publish a map of adopted and non-adopted drainage ditches and water courses and how will any lack of maintenance on non-adopted drainage ditches impact on the risk of flooding?**

Fairbourne is within the Internal Drainage District (IDD), so we have permissive power on all watercourses, not just those which have been nominally "adopted" so a map of adopted watercourses is not totally relevant.

We will carry out channel maintenance on the Main River system leading down to the tidal doors in December/January together with the non-main river ditches that we normally clear.

We will monitor the system for blockages and ensure that the grids are kept clear on a regular basis.

There is no scaling down of maintenance planned, in fact with the new scheme there will probably be an increase in maintenance. This is the first year, so we don't have experience of what is required yet.

There is certainly no cut back which might increase flood risk to the village.

A project to review IDD's may change the way adopted ditch maintenance is handled, but Main River works are unlikely to change.

45. **Will pebbles and stones displaced in the storms be returned to the appropriate areas on the beach and shingle bank?**

The shingle bank referred to does not belong to Natural Resources Wales (NRW) it is Crown Estate Land mostly bordering land owned by Gwynedd Council on which sits the Concrete Sea Wall that NRW maintains. The rock armour at Friog Corner is to sustain the Concrete Sea Wall.

The question of shingle at Friog corner which we answered earlier under Q52 of the FAQs still stands as Gwynedd Council's beach monitoring and NRW's Friog Corner study will identify options which may include shingle nourishment which would be considered for further assessment. NRW would be involved in any shingle management essential to maintain the concrete sea wall and Flood risk in the community, but not clearing up of shingle washed over onto the path/road walking unless a direct flood risk management issue has been identified. NRW thinks that debris was cleared during a previous storm by Gwynedd Council; perhaps their maritime team?

46. **There is significant concern from the Community regarding 2 areas in the Rowan Embankment where the shingle has been washed out opposite Penhryn Drive South. This is leaving the Embankment in both areas vulnerable to over-topping during high tides and storms. Are the relevant agencies aware of this and what plans do they have to rectify the situation?**

Natural Resources Wales are aware of the concerns however the integrity of the sea wall is not compromised and the shingle bank has been profiled naturally by sea wave action. We will continue to monitor the situation together with Gwynedd Council, who have already undertaken beach profile studies and this is also covered within the contents of the brief for NRW's proposed Study of Friog Corner. There is no evidence as yet that this will exasperate the splashover.

The local action undertaken on the access has inevitably cut off the splashover flood route to the properties affected during the January storm. An improved flood warning service will also provide a more specific warning to residents along the frontage.

47. Have the relevant agencies given consideration to using movable interlocking concrete barriers, similar to temporary motorway interlocking central reservations, that can be placed at risk areas during winter and removed when not needed?

Is this referring to the provision of a secondary defence behind the existing sea defence? If so, then we would not currently consider this option as it may accumulate more water behind the defence rather than let it seep away. This is something that Natural Resources Wales could discuss further with the Fairbourne Facing Change Action Group.

48. What have the relevant agencies done about getting the media to retract/correct the erroneous statements made during the “Week In Week Out” television program and other coverage?

A further Week In, Week Out programme has since been broadcast and has portrayed Fairbourne in a much better light. However, work continues through the project Working Group, to challenge negative future negative press. It should be understood however, that the press does have freedom of speech and despite all stakeholders providing truthful and honest accounts of the current situation, the press are at liberty to print what they see fit.

49. There is ongoing concern about the precarious position of some of the Dragon's Teeth. What has been done by the relevant agencies regarding the risk assessment associated with this and the need for ongoing monitoring?

The shingle that had been thrown over the flood wall during the storm was cleared up and returned to the beach in April 2014. At the same time each of the dragons’ teeth which had been displaced was checked for stability and utilising the plant available any dragons tooth which could topple over was stabilised. It is not known if any further inspections have been carried out.

50. Could the relevant agencies tell us where the commitment to defend Fairbourne for the next 40 years is reflected in official policy decisions? How will this be reflected in order to satisfy solicitors' requests?

The estimated figure of 40 years is based upon current scientific information available to us and ongoing monitoring.

51. It is understood that spoil from weir clearing and from the bridge over Afon Wnion in Dollgellau has been used for a number of years to build up defences along Afon Mawddach on both sides at Bontddu and Penmaenpool. Has this work been authorised and is the impact of flows during high rainfall events monitored?

Gravel from Pont Fawr Dolgellau was taken to the Ynys floodbank at Penmaenpool some fifteen years ago and is not to be confused with material which went to many locations on the floodplain as part of the recent Gelligemlyn road improvement scheme. The gravels were utilised behind the embankment to strengthen identified weak sections maintainable by our then predecessors Environment Agency Wales which was fully assessed. No further gravels have been used for this purpose and have since been disposed of at various other locations to include Friog corner. The material recently imported from the road scheme has been assessed to have no detriment to Fairbourne.

52. Will the relevant agencies consider/commit to the replacement of pebbles and shingle at Friog corner and surround?

This decision will come as a result of both Gwynedd's monitoring process and the outputs from NRW's Friog study.

53. At what point will a decision be taken, and by whom, to maintain the Cambrian Coast Railway and remove the uncertainty about its long term future?

Network Rail Wales Route continues to develop maintenance and renewal plans for coastal rail assets beyond our current Control Period to ensure continued operations along the Cambrian route. Any long term strategic decisions would not be made in isolation, and would be managed through our Long Term Planning Process and engagement with a wide group of stakeholders including Welsh Government, Local Authorities, Office of Rail and Road, and Natural Resources Wales. We view our participation on the Fairbourne Project Board as a means of understanding and accruing important information to ascertain when a decision may need to be made for the long term future of the Cambrian route. We do not understand the reference to uncertainty about the future of the line, Network Rail is committed to improving the railway in Wales.

54. With regard to the Fluvial Defence Scheme, was the European Funding Body aware that NRW "reduced the appraisal period to 50 years and assumed that costs for a Managed Realignment of the tidal embankment would occur in year 20"?

No, the European Funding Body would not look into the detail of the appraisal completed and would not be aware of the various tests and sensitivity checks completed when establishing the preferred option for addressing flood risk.

This exercise was completed as a check to establish that the planned works to defend Fairbourne from the tide were cost beneficial and viable, even if future change occurred. The results were positive and thus gave re-assurance that progressing with works at Fairbourne was the correct thing to do economically.

The following questions were submitted by Fairbourne Facing Change in January 2015 and a response to these is now provided as an addendum to the Frequently Asked Questions issued in February 2015.

55. SMP2 states that it is in line with the Government's 'sustainable development principles'. One of these principles is "achieving a sustainable economy", which says the following:

"Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall onto those who impose them (polluter pays), and efficient resource use is incentivised."

Considering SMP2 states for Mawddach Entrance South that 'despite significant potential benefits, long term defence is not considered to be sustainable', and the prime reason for this is sea level rise, then it appears that the home owners and residents of Fairbourne are paying the price of the pollutant industries that have resulted in the predicted sea level rise.

As the above clearly demonstrates that SMP2 has not followed the principles by which it states it has, when will SMP2, in its current state, be withdrawn and re-written?

The question raises two important and complex issues: whether the SMP has been developed in line with the Government's principles of "sustainable development" and, the second, the degree to which the home owners and residents of Fairbourne are paying the price of actions by others. These issues are recognised as being interrelated. However, in providing a response each is considered separately as one refers to the validity of the SMP, while the other relates more to how the challenges are being taken forward.

In the response to the first issue on the principles of sustainable development, the question quite correctly quotes one of the core five principles set out by Government in 2005. However, this has to be considered in relation to all the principles as a whole. From this view point the principles set out to achieve "a strong, healthy and just society" recognising the need to "live within environmental limits". The aim is to create a strong society with a view to the future; one where we are not reliant on greater and greater investment in things such as flood defence and where we are not just passing on problems that society will have to pick up in the future. These two principles are underpinned by the aim to "achieve a sustainable economy" (the principle quoted in the question), based on "sound science" and promoted by "sound governance". The concept of sustainability, therefore, recognises the need to balance all these principles. This is the approach that has been taken in developing the SMP.

The SMP identified the serious challenges faced at Fairbourne. It states that at present there are significant benefits that need to be protected. This is why the SMP argues for the need to maintain and improve defence in the short to medium term. However, the SMP has also identified that in the future, to continue to defend the village will become increasingly difficult. At some point in the future, even with defences in place, the community is at greater and greater risk and is increasingly vulnerable. At some point there will need to be a change; the approach to risk management becomes unsustainable. Based on existing projections of sea level rise and

increased rainfall due to climate change, this critical point would be reached when sea level rises by around 0.5m.

One of the underlying principles of sustainability and, indeed of the SMP, is that we acknowledge the need for change and that we plan for such change now; that we do not walk blindly in to the future, leaving future generations to face these challenges when there is much less time to plan.

In relation to the second part of the question, the Defra Guidance on the development of SMPs states "Operating authorities, local government and national government do not have a duty to provide protection against flooding or erosion. Nor is there any reason to assume that this will change in the future or that individual losses would be compensated for from public funds. However, operating authorities should work with other relevant authorities and the Government to assess the effects and promote community confidence where new (or improved defences) cannot be provided in the future."

In taking forward the SMP, the Fairbourne project has engaged with Welsh Government in examining these important issues. It is only through identifying the problem through the SMP that this has been possible, dealing with the difficult but very real issues that are presented by climate change and sea level rise.

56. SMP2 states that it will cost an estimated £25m (£90.7m PVd (discounted present value)) to abandon Fairbourne over the next 100 years, where the majority of the £25m, £23.5m, is to pay for the relocation of the Fairbourne community in Epoch 3. The "achieving a sustainable economy" government principle implies that costs should not fall upon community of Fairbourne. The cost of Fairbourne's properties at today's values (not PVd) is approximately £60m, which is significantly greater than £25m.

This shows that the recommendation that the protection of Fairbourne is not sustainable has been made using inaccurate economic data. If accurate economic data is used then it may be the case that sustaining Fairbourne in the longer term is the best way forward both economically, environmentally and for the good of the community. Considering this, when will SMP2, in its current state, be withdrawn and re-written?

Unfortunately the values quoted in the above, apparently taken from the SMP, Appendix F – Economic appraisal, have been misinterpreted and, therefore incorrectly reported in the question.

The values reported in the SMP refer to potential flood damages, determined using standard damage values as discussed in section F3 of the Appendix. No reference is made in the SMP to the cost of relocation. Therefore, while the total estimated value of properties is useful, it does not relate directly to the values stated in the SMP.

It is, however, recognised that the economic assessment in the SMP is undertaken at a high level, and this is acknowledged in the SMP. The values do, however, provide a realistic estimate of the scale of damages that might occur as a result of flooding.

For clarity:

- *Taking, first, the £25M quoted in the question derived presumably by the summation of the annual average damages over the three epochs. The annual average damage is the damage that might, on average, be expected to occur (summed for all properties affected) in any one year, in any epoch.*

This is discounted over each year of epoch 1 (a period of 20 years) to give a present value damage of £2.8M. This compares to the present value damages that would occur if all defences were allowed to fail during epoch 1 of £28.7M.

This highlights two important points that have been considered in the SMP:

- *That at present the defences play an important role in defending the village (economically equivalent to some £25M over the next 20 years).*
- *That even with defences in place, providing a high standard of defence, The area remains at risk under a very significant storm event.*

Overtime the annual average damage increases. Even maintaining the existing standard of defences would result in a present day value of residual damage of some £4M during epoch 2, rising to £10M in epoch 3. This reflects the increased level of flooding that would occur due to sea level rise. It should also be noted that these figures do not include the residual damages that might occur due to ground water, surface water flooding and flooding due to overspill of the water courses.

- *Second, the £90.7M. This is the summed damages that might be anticipated, on average over the next 100 years, due to flooding from the sea. In fact, the question correctly identifies that this is a simplification of a full economic appraisal but not in the way suggested by the question. Under normal economic rules in assessing the benefits of a scheme (as opposed to the high level assessment provided by the SMP), this value would be capped at the value of the property. It would be assumed that at some point in time, rather than properties being flooded on a regular basis they would be abandoned. (E.g. it is assumed from an economic perspective that if a property were flooded to the extent that the damage to the property exceeded the value of the property then the owner of the property would not consider it sensible to continue to live in that property.)*

Taking for example the total value of properties quoted in the question as being £60M, then if, overall, damages exceeded that value then property values would be written off. Again strictly speaking, if the properties were abandoned, rather than having continuing risk of flooding in year 40, then the present day (discounted) value of that £60M would be around £16M.

The SMP considered the broad economic situation so as to examine the change in flood impacts over time in a consistent manner. As discussed in answer to question 55 above, the Defra Guidance highlights the need to examine the economic feasibility of the management plan, taking account of other factors, such as the longer term sustainability issues.

57. SMP2 states the following:

"4.5.12 Throughout the SMP area properties and local access is protected through HTL and MR policies. In some locations such as at Clarach Bay, Borth, Fairbourne, and Llanfairfechan the policy of MR is anticipated to impact on properties through loss due to erosion or flooding in the long-term. In certain cases these impacts can to some degree be mitigated fro through the provision of early warning systems for flooding and the relocation of properties. Where it is not sustainable to maintain properties the intent of the SMP policy is to allow time for frontages to be adapted and properties relocated if required."

Can you explain where the circa 400 properties in Fairbourne will be relocated to, how this will happen, what the estimated cost of this relocation will be, and is any of this cost expected to be born directly by the Fairbourne property owners?

These are questions which we do not yet have the answers to. We are in the process of undertaking a Project Appraisal Report which will explore more fully the options available to us over time, in order that we can make more informed decisions about the future of Fairbourne.

58. SMP2 provides the following definition:

"Sustainability

Is a concept, which deals with mankind's impact, through development, on the environment. Sustainable development is 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland, 1987). It should also take account, for example, of the long-term demands for non-renewable materials."

Can you explain how preserving Fairbourne for the next 100 years will compromise the ability of future generations to meet their own needs?

In answer to question 55 we have hopefully addressed the issue raised by this question in setting out the thinking behind the conclusions of the SMP in relation to sustainability.

It is acknowledged that, as stated in the Defra Guidance that "sustainability' can mean different things depending upon the individual viewpoint; it is not necessarily the same for conservation bodies, the national treasury, or local residents within a coastal settlement. What is required is consideration of the conflicting pressures on the coast and constraints upon its management, to seek to provide an optimised plan, one which provides 'balanced sustainability' i.e. it needs to consider people, nature, historic and socio-economic realities."

If, however, we do not address the issue raised by the SMP now and understand and examine how we address the issues, then we consider that we are merely handing on the problem to future generations, with far less time and opportunity to deal with the important issues that have been raised.

59. It is understood that a 'Buy and Lease Back' option is being investigated. Considering that the environment could change significantly over the next 40 to 50 years (for example oil is expected to run out), the only sensible option to be pursued is where home owners of Fairbourne are guaranteed the market value (as if Fairbourne was not at risk of flooding) at the point at which their homes need to be abandoned, which may well be in 50 to 100 years time or, indeed, never.

The 'Buy and Lease Back' option will result in a premature degradation of the Fairbourne community as many will feel they have no alternative but to take the option and leave Fairbourne as soon as the government has purchased their property.

Considering the above, why don't you adopt a policy which encourages Fairbourne to survive as long as possible?

Buy and Lease Back is one option that has been considered elsewhere and the project is investigating this alongside other approaches being considered in other parts of the UK. As discussed in the answer to question 55, earlier, under current policy "Operating authorities, local government and national government do not have a duty to provide protection against flooding or erosion. Nor is there any reason to assume that this will change in the future or that individual losses would be compensated for from public funds."

The project has engaged with Welsh Government in examining these important issues. It is only through identifying the problem through the SMP that this has been possible, dealing with the difficult but very real issues that are presented by climate change and sea level rise.

In terms of "keeping Fairbourne going as long as possible", this is the challenge that is being taken up by the project. However, it is necessary to plan for the eventuality of abandoning defences and the need for relocation. At present the project has set in place actions that aim to clarify the trigger point or threshold at which such action would be necessary and to identify possible actions that need to be taken now and over the intervening years to mitigate the problems being faced.

60. It is clear that SMP2 has not considered accurately the economics of sustaining Fairbourne over the next 100 years. It is also, without doubt, the case that the Fairbourne area can be sustained beyond 40 to 50 years if the correct level of funding is available, i.e. the sustainability of Fairbourne is an economic issue over and above an environmental issue. With this in mind, please can you communicate publicly and, especially, to estate agents that there is currently no

accurate evidence to suggest that the future sustainability of Fairbourne is under threat? If you do not want to do this then please explain why?

As outlined in the response to question 56, only a high level assessment of economics have been undertaken in the SMP. This has been undertaken accurately in line with standard procedure for appraisal at this level of investigation. However, despite the high level approach that has been undertaken, this still clearly demonstrates that with sea level rise the residual damages (those that would occur in the event of failure of the defence system or would occur should the defences be overtopped by an event of a severity tht exceeds the standard of defence) increases sharply with sea level rise. Even in maintaining defences at their current standard in the future the investment required will also increase.

In effect, in the future there would need to be increased investment with a reducing benefit and increasing fragility or vulnerability over time, imposing an unacceptable reliance on defence and a significant burden on future generations. Taking the long term perspective (in line with the principles of sustainable development as discussed in answer to question 55) a balance has to be struck between the aim to sustain the community and the ever increasing reliance this places on maintaining defences.

While the position put forward by the SMP is not one based on environmental considerations, over and above those of sustainability and economics, the project will consider environmental gains that can be achieved through change and, where possible, this will be taken into account in supporting the process of change.

Action has been taken through the present project to address the issue, in the short term, of property valuation. In developing the project further this will be reviewed and further information provided as required to support the community.

The following questions were raised at the public event in Fairbourne on 22nd January 2016.

61. In low-lying towns and villages such as Jaywick in Essex that are defended by a high sea wall, pumps have been successful in clearing the water and preventing it from coming back. Could we not have water-powered pumps from a waterfall and tidal movement to push water back out to sea when there is heavy rainfall. Uplands can also be better managed.

There are obviously many areas around the coast where there is land and villages at risk from flooding. In each of the SMPs this risk has been considered and in some cases recommendations have been made for a need for change. As identified in the question Essex is an area where there is substantial risk and this has been considered in the respective SMP. In some areas in Essex managed realignment has already been carried out and further cases are still under consideration in the longer term.

Much of Jaywick, itself, tends to be built over slightly higher ground, although vulnerable both to erosion and flooding on extreme water levels. In 1953 the main village was not inundated. It was, however, cut off for several days due to flooding around the back of the village severing the main road to the village. There was also a major failure of the sea wall, although this did not result in direct flooding but the sea wall was overtopped by wave action.

During the 1970s and 80s, the main concern was that beach scour was undermining the main sea defences. The shore had been reduced to its underlying clay. Major works were undertaken to restore the beach and significant investment followed in maintain these beach levels. Notwithstanding this, serious consideration is being given to the long term sustainability of management in the area. It is understood that over the longer term there may be need for further adaptation.

We are unsure of where precisely pumps have been installed as suggested by the question. However, possibly this is in relation to areas to the back of the village rather than to the village itself as, as previously mentioned the village is generally on slightly higher ground. It is possible that pumps have been used to remove water after a severe flood event.

In the case of Fairbourne the concern is that ground water levels will cause a problem rather than just flows from the rivers or flooding due to overtopping. To address this overall problem would require a different level of management which would need to be increased progressively as sea level rises further. Pumping would need to be in effect continuous to reduce ground water to an acceptable level. This issue of ground water is one of the areas being monitored and from the information collected how this might be managed will form part of the overall management.

Pumping would obviously need a reliable source of power and certainly with developing technology, it seems unlikely that this could be won from tidal generation. Similarly, obtaining such a power source from water falls is unlikely to be sufficient. This whole issue could be reviewed but seems unlikely to provide a solution. This is being realistic, rather than negative, as the project has to maintain an open approach to all ideas.

On the final point, upland management tends to be most beneficial where there is an opportunity to provide storage, either as some form of reservoir or through land management. The project will review what investigations have been undertaken already as part of the study looking at management of flows through the area.

62. According to SMP2, you are going to abandon from the estuary defence forward at 2025. Explain this to everyone.

This issue was in part raised in question 5 above. However, we recognise that it is very important for people to have a good understanding of what the SMP policies refer to and how they apply. It needs to be made absolutely clear that there is no intention to abandon the estuary defence (the embankment) or other defences in 2025.

So where has the date 2025 come from? This requires an understanding of the SMP process.

The SMP should be seen as a plan, addressing present day issues but also setting out, in terms of overall policy, the needs for future management. In the first SMP (SMP1), over ten years ago, we looked forward just 50 years and typically we defined one policy over that time period. For Fairbourne, the plan said the aim was to hold the line but also highlighted that overtime there would be increased difficulty in managing defences.

In developing the SMP2, it was recognised that this SMP1 approach failed to provide the guidance needed to face up to future challenges and the need for change. To tackle this problem, it was agreed that the SMP would consider how management would develop over different periods of time, starting with how management would be undertaken over the short term (epoch 1), considering how this would develop over the medium term (epoch 2) and finally considering how management would develop over the long term (epoch 3). As a guide, short term was considered to be typically over the next 20 years (hence the date of 2025), medium term was typically over the period from 20 to 50 years and the long term was beyond 50 years. The Guidance, however, emphasised that these time steps were only a guide and that, in reality, the way in which change would occur would be a continuous process.

In addition, particularly in the case of an area such as Fairbourne, it was recognised that change goes beyond just management of defences and involves raising awareness and planning for change within communities. The SMP2, therefore, set out a series of actions that needed to be taken forward. (This is covered in question 67 below).

Where the SMP, therefore, identifies a change in policy from Holding the Line to one of Managed Realignment, between epoch 1 and epoch 2, this identifies the need to plan for change. How that can be achieved, what the full implications of this are and when defences would no longer be maintained are all wrapped up in the process of change that is being looked at within the project.

63. If the village does start to flood, we need to evacuate quickly. There should be an emergency route across the Cambrian railway as well as the level crossing to remove the bottleneck.

Many thanks for this - we can look at this as part of the Masterplan.

64. What does 'decommissioning' mean in practice? How will it affect me as an individual?

The Masterplan, which will deal with the decommissioning of the village, is in exceptionally early stages and at this moment, we are unsure what the Masterplan will look like, exactly what it entails and how it will affect people, individually. Currently, the project group is looking at what aspects of the community are going to be affected and how, at various points of sea level and ground water rises. A facilitated session to start this process will be taking place on 17th March 2016 and the outcomes from this session will form the basis of the Masterplan. By the next

public meeting – estimated to be around June 2016 - the project should be in a position to communicate to residents, the issues identified along with possible solutions. It is at that point that members of the community will be given the opportunity to come up with solutions too and raise further matters that could be affected by the rise in sea and ground water levels. It is hoped that the Masterplan will be a collaborative process and that the project can work alongside the community to find solutions we can all live with. It is worth noting that the Masterplan will have to be a flexible document, tailored to allow – and respond - for both the early-onset or delay in the rise of sea or ground water levels and furthermore, that a great deal of the matters raised as potential problems (eg, some have asked ‘where will I be moved to?’) will take many years to plan for.

65. We need measures to encourage buyers for properties in Fairbourne and second home owners are the most likely group. Can Gwynedd Council suspend their policy of a second house owner premium on Council Tax in places to be abandoned to flooding?

This is a great idea and we will be looking into this as part of the Working Group.

66. Nine years ago there was a wagon carrying shale away from Fairbourne – what was this?

There is no record of this specific event in Fairbourne but we have had issues elsewhere with regard to the removal of shingle from the beach. It is believed that during this period a number of gardening programmes were using rounded stones and cobbles (shingle) as garden features. Some decided that the beach was a free source of these stones without realising that it was in fact theft. This problem has not been an issue recently.

67. PZD11 Policy Unit 7, Policy 3. This policy identifies multiple actions including several investigations and surveys. When and where will these actions/results be published and what impact (or when will the impact) be applied to the current response to this policy?

For clarity in responding to this question, The SMP2 identifies in relation to this whole area (not just policy unit 7) that:

There are uncertainties in terms of timing of the proposed changes and impacts. There is also a need for a detailed planned response to change. It will be important to relate this to national monitoring of sea level rise and more general climate change and to monitoring at the shoreline.

At present there are no specific funding measures for relocation of large communities beyond the responsibilities for re-housing. This is an issue that would need to be considered further at a national level. Furthermore, the SMP sets out the following actions:

- *Shoreline Monitoring - this has continued building on the monitoring that Gwynedd have been undertaking. This information is available and has been used in the NRW study into Friog and will continue to be used in looking at and confirming how the shoreline continues to develop.*
- *Short term strategy for defence – This, again is an action that continues to develop. The first part of this led to the improvements to the embankment. Subsequently, NRW investigated what work might be needed at Friog corner. As this work has been undertaken, it has broadened to consider other aspects of risk and this is now part of developing the Master Plan.*

- *Relocation and adaption planning – This is being taken forward through the project working with various organisations and the community.*
- *Assess in detail potential impact on historic environment – As the project is being taken forward these issues will be addressed.*
- *Assess opportunities for habitat creation and adaptation. – This is being considered as part of the project.*

In addition, other issues have been identified, in part linked to the above. These have included the monitoring of ground water and considering this in relation to national advice on climate change. Further studies include looking at impacts on the community, property values, the legal issues and emergency planning. In developing the Master Plan, the aim has been to draw these various strands together and to report the results back to the community.

68. *What the Council believes is what matters – can we engage a legal environmental champion to take our concerns forward?*

We can certainly investigate the cost of doing this, however, we need to be mindful of our limited budget and ensure that what we spend our money on returns a fair investment for the project and community alike.

69. *As a property owner that has suffered with zero property valuation, is there flexibility to revise the programme and SMP2 to see changes?*

At this moment, there are no plans to revise the programme and SMP2. As time passes, however, and as more accurate data becomes available, the timescales in the SMP2 will have to be revised in order to keep residents, homeowners, business owners and stakeholders informed (and allow them to plan accordingly) and also to allow the project to manage risk, more appropriately.

70. *How will you compensate us if we become evicted and relocated from our homes?*

Currently, there is no legislation to ‘evict’ you from your home and there is no compensation scheme. Relocation of homeowners, when and if necessary, will be dealt with as part of the Fairbourne Masterplan project group; as this project group is at a very early stage, this issue has not been dealt with as yet, however, when we are addressing this matter, we will collaborate with homeowners to find a sensible solution.

71. *Whose responsibility is it to rehouse us and what is the mechanism? Without a mechanism, would we be forced?*

Currently, the responsibility of rehousing homeowners does not rest with any statutory body and there is no legislation to ‘force’ anyone to move out of their home. Both of these issues will be addressed as part of the Fairbourne Masterplan.

72. *Why is the emphasis so much on abandonment, rather than better defences? Emotive language will limit hopes of investment in the village.*

The term ‘abandonment’ is not one that the project has used, nor would endorse. The term ‘decommissioning’ is currently being used as its definition is ‘...a long, planned process of taking something from being active to inactive..’.

As explained at the recent public event, the defences are currently of a very good standard (able to withstand a one in a two hundred year storm), however, the threat is not simply from the sea level rises (again, as explained at the event). Money spent on improving defences beyond what is necessary, therefore, is not going to reduce the risk to the village.

It is also worth adding that the project has worked very hard to ensure that Fairbourne remains out of the press and where it does engage with the press, it is in a positive light. This has served the recovery of the community well as life in general has started to settle a little and the continued work by the project would – we are confident – have been able to gradually reverse some of the damage to house values and sales. However, recent press coverage of the village in relation to the legal action being considered, has reinforced the issues facing Fairbourne. A great deal of good work has now been damaged and further work will need to be done to restore the equilibrium reached, prior to this secondary media storm. This recent media storm has, effectively limited further hopes of investment in the village.

73. A lot of people have invested in properties in the village, we have experienced a decline in property prices and this has caused a great deal of anxiety and stress for the residents of Fairbourne. One estate agent has previously stated that properties of Fairbourne are worthless. If we want to try and sell now, we can't and it isn't fair. What are you doing to help?

See response to question below. It is worth mentioning that no drop in house valuations were observed upon publication and adoption of the SMP2. House values were only observed to have dropped since erroneous reporting in the media occurred.

74. To what degree were estate agents challenged when quoting properties as worthless?

This question was actually posed to the audience – what did you do as a community when you were informed by an estate agent that your property was worthless?

*From a project prospective, a great deal of work has been carried out in relation to house prices and valuations and it would seem that local **estate agents** are not valuing houses much lower than prior to the visit by Week in, Week out. Certainly there is no observed effect on house prices subsequent to the adoption of the SMP2 (this is also the case in the other SMP2 coastal towns/villages across Gwynedd). Upon meeting estate agents, the feedback was that homeowners are still expecting their houses to be worth the same value as they were prior to the national housing market slump. House prices had dropped generally and across the UK and at that time, this was symptomatic of house prices in Fairbourne. Furthermore, estate agents reported that prospective buyers had often visited the village and upon questioning residents, had been told about the blight on the community, caused by (the SMP2) and these same prospective buyers had gone on to 'google' Fairbourne and subsequently found the erroneous information on the internet. Decisions not to proceed had often been made on this basis.*

Upon asking estate agents what barriers did they perceive prospective buyers would face when buying a property in Fairbourne, a number of issues were raised, including not being able to obtain house insurance. As a consequence, the project produced a short form of Frequently Asked Questions for estate agents to put on their website when considering purchasing a property in Fairbourne. These questions and answers provide an honest and accurate response in the hope of eradicating the erroneous information on the internet currently.

One area of work that is yet to be completed is that of challenging surveyors who value for the purpose of equity release. This is a difficult piece of work as surveyors have to-date, been difficult to engage with. Please bear with us as we conduct this element of work.

During 2015, the project received enquiries on four separate occasions in relation to the future of Fairbourne. Three of these enquiries were from prospective buyers and one from a local surveyor acting on behalf of a prospective buyer. On each occasion we have: clarified the decision to defend for 40 years (from 2014 and based upon current scientific evidence); dealt with the erroneous reporting in the media (with particular reference to Week in, Week out); outlined the Fairbourne: Moving Forward project and associated funding to support the community, and; provided FFC's contact details as a point of reference, should the enquirer want any further information from a community perspective.

House prices and the reporting of such is clearly an ongoing issue and we would ask for your support in challenging estate agents if you feel they are under-valuing your property, whilst reporting this to use so we can monitor the situation and also by presenting a positive and honest response to visitors to the village if they enquire about purchasing a house.

75. **Can we question the tone of inevitability to this issue? Central and Welsh Government should be here.**

Of course it is right to question this. The Masterplan is a document that will be flexible enough to be tailored to the timescales we are working with now and scientific evidence we are presented with as time goes by. This means that timescales could be stretched and what is forecast as defending the village for 40 years now (from 2014) could end up being 50 or 60 years, should climate change not occur at the speed at which it's currently being predicted. Conversely, we could end up with a timescale of 20-30 years if science and monitoring conclude climate change is happening a lot quicker than we are currently predicting. It is because of this risk that climate change could be happening a lot quicker than currently predicted, that we are having to build resilience socially and economically now. It would be foolish to not plan for something we could possibly foresee and anyone would take this approach with any other matter; it is just that in this case, the consequences of not doing anything – not planning – could be extreme and possibly result in loss of livelihood and life.

The matter of SMP2 has been devolved to the Welsh Government. Both the Flooding & Coastal Erosion Risk Management team and Lesley Griffiths AM – Minister for Communities, were invited to this event, however neither were available.

76. **As someone flooded in 2000, thanks for the recent defence investment. SMP2 isn't set in stone; it's subject to best scientific estimates and real-time observations.**

Our commitment has always been to defend Fairbourne for 40 years (from 2014) based on the scientific information available at that time the SMP2 was written. As time goes by, more (accurate) scientific information will become available and our own monitoring regimes will allow us to predict, more precisely, the impact of sea and groundwater levels on the village. At this moment, it is unlikely that the SMP2 will be revised, however, the Fairbourne Masterplan will be written with built-in flexibility to take account of more accurately predicted changes in levels.

77. **We've had a commitment to defend Fairbourne for the next 40 years, what does that mean in reality?**

This question does relate also to the answer above (question 76) in relation to the 40 years. The response below refers more specifically to the commitment to defend.

In terms of the context, any investment in defence, of any area, by a public body has to be tested against the guidance set out in Government policy and against guidance from the Treasury. This also has to recognise that the ability for an Operating Authority to undertake works is a permissive power, not a duty to defend. Therefore, as in any area, when the need arises for works to be undertaken an appraisal is undertaken to assess what specific action would be taken. An example of this is at the Friog corner following the damage that occurred in 2014.

However, these individual assessments are not taken in isolation from the longer term management intent for an area. The SMP provides the overall guidance from which a strategy is developed. This was the case when the improvement works to the embankment were undertaken. The appraisal of that project took account of the fact that the SMP had identified the need to continue to defend and the project appraisal then looked at how that need could be addressed in detail.

During the 40 years, the intent would be to repair defences and address flood risk issues arising from extreme events. As we move towards the end of this period there would be the need to review what specific actions might be required. The development of the Master Plan will set in place a plan of what actions might be required in the future but each action will need to be reassessed in detail as investment is required. This will critically depend upon sea level rise and upon associated actions developed through the project.

78. Will the defence investment measures be proactive rather than reactive?

It's reactive in the sense that we carried out emergency repairs following the damage that occurred as a result of the December 2013 and January 2014 storms. We have been proactive in recruiting a consultant to look into the problem at Friog corner and that we are investing in a defence that is a dynamic option to the commitment of holding the line at Fairbourne. We continue with our maintenance and inspection regime within the community, ensuring critical assets such as ditches, tidal gates and sluices are in good working order in preparation for flooding and we provide those at risk with a flood warning service and continue to work closely with the flood wardens during flood events.

79. We want to hear positive news; either of protection or compensation and we've heard neither today.

*The aim of the public event was to communicate the actual situation as it is, to the community and to be **honest** with you. NRW informed you that the current defences would withstand a 1 in a 200 year storm, which, combined with their proactive planned inspection and maintenance regime, is an excellent level of protection. To inform you that compensation was a real prospect would have been wrong.*

80. Decommissioning the village is ludicrous; other coastal communities have suffered worse than Fairbourne. Where is Welsh Government today? Has there been a feasibility study for improving the defences rather than current talk of blight?

The process of decommissioning is a long one and is explained in greater detail in Q64, above. Welsh Government were invited here today, however they had prior commitments.

In terms of a feasibility study for improving defences, Natural Resources Wales have recently commissioned the Friog Cliffs Study and the outcome of this was discussed at the recent public event. A study has also been conducted for Morfa Friog (or Ro Wen Spit) and the contents of this were published some time ago. There is currently no study for the middle part of the defence and we will raise this with Natural Resources Wales. It should be noted, however, that it is not simply a case of improving sea defences at Fairbourne. There is a significant risk from groundwater flooding, flooding from water running off the mountains and also the river (although the latter is managed currently by tidal flood gates). Simply raising the sea defences would not provide adequate protection for Fairbourne as initial groundwater monitoring has demonstrated that even without over-topping on the sea defence, the groundwater levels rise and drop with the tide, due to the village being built on ground reclaimed from the sea.

81. **Where else in Western Europe is being abandoned? Look at Holland for example.**

The situation along much of the Dutch coast is very different to that of the UK, generally, and the specific case of Fairbourne. However, even within the Netherlands, different approaches to management are being considered, which include looking at allowing areas to flood and realigning defences. While focussing principally on areas for habitat restoration a recent report by Luciana Esteves (<http://eprints.bournemouth.ac.uk/21139/1/2014%20Esteves%20-%20Managed%20Realignment%20book.pdf>) does provide a list of sites where realignment has been undertaken or is being planned around Europe.

Each situation has to be considered on its own merits but the project does attempt to draw lessons from other areas.

82. **There is a contradiction regarding decommissioning in 5/10 years versus defending for 40 years?**

There is no contradiction. The Fairbourne Masterplan (decommissioning) and SMP2 (defending for 40 years from 2014) are two separate issues. The Masterplan will deal with planning for the effects on the village caused by climate change, eg, increased flooding and this work needs to start now as some aspects of it, such as relocation of the village (if this becomes necessary) is a matter that can take a very long time to resolve, maybe 5-10 years. The SMP2 is a policy document to support planning and funding processes.

83. **Does this mean we will stop building on the floodplain?**

Yes. This was a matter that was addressed early in the project and a Planning Guidance Document has been produced specifically to deal with the issues of planning permission and alterations to buildings, within Fairbourne. It should be noted, however, that planning permission that was granted many years ago, can still apply, however any buildings would be subject to the rigorous scrutiny of Gwynedd Council's planning team and Building Control, to ensure that risk from flooding is minimised. A copy of this document has been available at all our public events since 2014 and is available on www.fairbourne.info.

84. Rainfall recently hasn't been a lot heavier than other years based on 20 years of historic local data, so what does the future hold? What is different?

The work reported by UK Climate change programme (UK CP09) makes projections of change in rainfall intensity. UK Climate projections indicate that winter high intensity rainfall could typically increase by:

0 to 10% over the period 2010 to 2039

10% to 20% over the period 2040 to 2069

30% to 40% over the period 2070 to 2089

85. The sluice gates aren't big enough to handle the amount of water off the mountains in December. Is there a negligence issue? Recent observations of higher retained water levels by railway, backing-up of water behind gates and older, earlier gates working better.

If it's regarding the penstock control structure upstream of the railway at the point where flows are diverted into the new channel then this performed well during the December flooding by all accounts but there are a few issues here that will need to be directly observed during any repeat of higher rainfall events. This is a new flood scheme and we will be monitoring its performance and this will involve operatives visiting this site on the higher scale events.

We've had positive comments from some residents that despite the significant rainfall of December there hasn't been a major fluvial flooding issue in the village.

86. Although it's early days and no certainty of rehousing yet, will we have a choice and how will we be involved in decision making?

*Rehousing will be dealt with under the Fairbourne Masterplan and as communicated at the public event, we hope that the community will collaborate with us in producing this Masterplan. By commencing this task early, we hope that more options will be available to us as a project board and to you as the community. We cannot, therefore, emphasise enough how important it is for the community to work **with us in a positive manner**, to produce this Masterplan.*

87. If money was no object, would all our problems be easily solved?

Not easily, because the issue would still be the increasing vulnerability of the village into the future.

88. Why can't we simply raise the height of our existing sea defences? How would Holland deal with this problem? If they can manage the problem, why can't we?

The SMP poses this exact challenge. It is always of course possible to build higher defences, restore beach levels, deal with the flooding due to the rivers and pump to reduce ground water. There remains the problem that whatever is done, there remains the risk that defence measures fail or are exceeded. This is a problem that will become worse with the effects of climate change.

At present Fairbourne is protected to a good standard of defence and emergency planning has been put in place to address the risk that defences are overwhelmed. By moving down the course of action suggested in the question there is ever increasing dependence of defences. In the Netherlands this is the situation that they are in. They are, however, looking in some places at alternative solutions.

89. Has Fairbourne had a T100 level in recent records? What about in 1998? If we had had a T100 level and not had a breach, then why the current concerns?

No there has not been a recorded T100 event because are records do not go back that far. The 1998 event was estimated to be around a 1:2 year event based solely on water levels. The event in 2014 was, based solely on water levels, around a T20 extreme. The waves associated with this event possibly raise this to a higher return period.

With sea level rise the typical event that might be considered now as a T100 event is likely to occur on a far more frequent basis. Typically with 0.5m sea level rise, the extreme water level that might on average occur every 100 year now, might occur every couple of years.

90. Why wasn't the defence raised during January 2014 repairs? Would it currently do a proper job in defending the community?

We presume this question relates to repairs at Friog Corner in January 2014. The concrete wall at Friog Corner is given as meeting the 1 in 200 year return period event standard and meets the standard of protection design criteria for present day coastal schemes as agreed by Welsh Government. The repairs at the Corner in January 2014 reinstated the crest to its design level. The repair works were undertaken in accordance with the SMP2. It is very unlikely that higher defences would have got planning approval.

91. Re: Holland, there are plans for building on stilts with deep foundations. The water table is likely to rise in Fairbourne; if water levels rise slower than expected, will the 40 year cut-off period be revised?

Yes, this is being kept under review. There is due to be a further overall assessment of climate change in 2019. This will further inform the project.

As set out in the response to question 76, the Fairbourne Masterplan will be written with built-in flexibility to take account of more accurately predicted changes in levels.

92. The Masterplan is based on sea inundation of the village at a future date. Current properties valued at circa £60million. Could we establish a £60million fund for future use at a time when needed? The buy-to-let scheme rounds the values down, but a security fund would be better. Need to apply political pressure.

As communicated at the public meeting, no compensation is available either directly to homeowners or as a security fund. The Buy to Let scheme is not yet established and it is therefore impossible to estimate potential values of houses.

93. Do you accept responsibility for impacts on the community via approval and adoption of the SMP2? LM

The Welsh Government and Gwynedd Council accept responsibility for the adoption of the SMP2. We do not accept responsibility for the impact on the community as we believe the responsibility for this lies with the BBC. Gwynedd alone has 35 coastal communities subject to the SMP2 and no other community has been affected to the same degree as Fairbourne, from where the Week in, Week out programme was broadcast. The outlook for some of these communities is far worse in terms of level of protection than Fairbourne.

94. We knew nothing about the SMP2 before the Week In, Week Out programme. We should seek their formal, televised apology for the implications of their comments. However, the Council can't blame the BBC, lessons need to be learnt. Nothing came up in the property purchase search re: SMP2.

We have tried to seek redress through the BBC and been unsuccessful. We are aware that we made the assumption that the Arthog Community Council would communicate the SMP2 to their residents and clearly this did not happen; both ourselves and Arthog Community Council have learned lessons from this. We are very open and honest about this and have never tried to 'cover this up' – indeed, it is an issue that we talk about when we speak at industry events, to try and raise awareness of these assumptions in the hope that other local authorities do not make the same assumptions.

We are aware that the SMP2 is not coming up in property searches. Gwynedd Council's Planning Service is part of the project board and they are addressing this issue. It is worth noting however, that the responsibility for checking for policies such as the SMP2 also rest with the prospective buyers' solicitors.

95. Honesty is the best policy; the community want facts, the truth, and no waffle.

We understand this completely and this is why we are holding events such as this on a regular basis. There is also a website – www.fairbourne.info where information can be found along with contact details if anyone would like to speak with someone in person.

96. How much public money has the SMP2 cost to date to produce?

£669,176.

97. The worst thing about the SMP2 is the lack of a compensation package. Residents do not have the option to move. We need to lobby Government further.

As mentioned previously, there is no compensation package available. With the financial cuts being placed upon Welsh Government and Gwynedd Council, any change in this situation is unlikely.

98. Why aren't Welsh Government present today?

Both the Flooding & Coastal Erosion Risk Management team and Lesley Griffiths AM – Minister for Communities were invited today, however they were unable to attend due to prior commitments.

99. With an elderly relative and potential need for care, what will happen here if we can't realise funds from a house sale to fund the care?

This is an issue we addressed some time ago as part of the Working Group. If homeowners have a care requirement and are unable to pay for this, Gwynedd Council Social Services will assess their needs and pay for the care they need. If it is possible to sell the house in the meantime, then funds from this will contribute towards the cost of care, however, if it is not possible to sell the property then Gwynedd Council will settle the bill. It is also worth noting that the 'debt' will remain with the estate and not be passed to other family members to pay. We have developed a Care Factsheet, which has been available at all public meetings since 2014 and copies can be found on www.fairbourne.info.

100. Why has Fairbourne: Moving Forward not adequately answered any questions we've asked?

FMF have adequately answered a great deal of questions, as indicated by the colour indexing to this document (explained on the front sheet). Where questions are not deemed as being adequately answered, this is due to information not being available at the time of responding or we have not been able to obtain a sufficient response from the relevant stakeholders. This may be due to a particular issue not having been addressed as yet, or legislation relating to that issue, not being in place. It is our aim to review all questions prior to publication of this document it is quite likely that many of the questions contained herein change their 'status/colour' as time progresses and more information/solutions become available. It is worth stating that it is not due to 'wanting to hide information' or poor communication.

101. Would a rock island like in Tywyn help to take the force of the sea at Friog Corner? If so, when will it be provided?

There has been consideration of this at the Friog corner. It is recognised that waves do reflect off the cliff along the cliff line to the south. This tends to concentrate wave energy in the corner and also tends to move sediment away from the corner. However, while improving the situation and reducing wave energy as suggested, this might have to be quite a long structure built out into deeper water. The appraisal that has been undertaken showed that it was more effective to use rock to reinforce the actual defence line.

When you use breakwaters in coast protection you have to recognise that you are managing the coast in a different way compared to just reinforcing a linear defence. Fundamentally, by building a breakwater, the intent is to reduce the wave energy in the lee of the structure. However, by doing this you also influence the way in which the waves work on the coastline and this affects how sediment moves.

The breakwater at Tywyn is in an area where there is still sediment moving along the shoreline. This breakwater effectively slows that drift and acts to retain sediment in its lee.

At Friog, if a free standing breakwater was used (as opposed to one that built out from the cliff) there is the real danger that sediment would be drawn in to the lee of the structure, removing sediment from sections of the beach to either side. When looking at these structures one has to take account of specific and local conditions. It is sometimes not possible just to copy one solution from elsewhere, purely because the way in which the coast works is very different.

The option was considered at Friog but for various reasons outlined above, this option was not considered to be sensible.

102. Why have you breached the dyke down at the Point?

This work was completed as part of the Fairbourne Flood Risk Management Scheme [2014]; the habitat creation project being completed in 2015. The habitat has been created as part of the National Habitat Creation Programme – offsetting the impacts of SMP2 policy on the Natura 2000 Series. The land impacted is owned by NRW and planning permission for breach works was received in 2013. Following consultation no formal objections were received. The land is now managed by NRW’s Reserves team. The site is monitored in terms of its development as habitat and amenity.

103. When can we enjoy our retirement and not have this over our heads?

The response to this question is very much in your hands. Implementation of the SMP2 is a long process and production of the Masterplan is now underway, but as communicated previously at the public event, it is likely to be a long process too. The more co-operation we get from stakeholders, the government and the community, the quicker the Masterplan can be produced and the sooner everyone will know what the plans are for managing the community over this difficult period. Constant reminders in the press, such as the recent significant coverage, do not support the community in its recovery from the initial blight caused by erroneous reporting in the media.

104. According to the SMP2 now signed-off, 2025 embankment to the point will be abandoned. This will finish the railway, ferry, etc, devastating the village. Are people aware of this?

The Preferred Policy for Policy Unit 11.5 (Ro Wen Spit [Fairbourne Point]) is Managed Realignment in the first epoch. Firstly the length of an epoch will be determined by actual sea level rise, if the rate of sea level rise is found to be faster or slower than that used to develop the SMP then the length of Epoch 1 will be adjusted accordingly, this may or may not have a knock on effect on Epoch 2.

The SMP only gives a high level preferred policy, if a land/asset owner wishes to build a defence then the preferred policy will be taken into consideration during the consenting process. There would be a general presumption against allowing a defence to be built but if the land/asset owner chooses the most sustainable low impact intervention option (managed realignment can still be a defence) which does not have an adverse effect elsewhere then consent is unlikely to be withheld. No defence can guarantee safety from erosion and flooding but the SMP policies allow land/asset owners to make an informed decision regarding trying to maintain the status quo, all defences will become increasingly costly to maintain in the future as sea levels rise and storms become more frequent and intense.

105. Will people be forcibly evicted from their homes?

No. Residents are entitled to remain in their home for a long as they wish. If, however, it is felt that, after an inspection by Gwynedd’s Environmental Health Team, the home is too dangerous to remain in, a statutory notice of 56 days to leave the home will be issued to the occupant. During this period, the owner has to ‘make-good’ their home to satisfy the requirements of the Environmental Health Team. If the remedial work fails to comply with their requirements, then they are able to ‘evict’ the resident, but they will be re-homed by Gwynedd.

106. So far there has been no consultation with the businesses. When the village is decommissioned and households are relocated, will businesses be relocated as well?

It is fair to say there has been no specific consultation with businesses, however, business owners have come to see us at public events and Working Group Meetings. We will address this matter shortly.

107. Will the construction industry be compensated?

As mentioned previously, there are currently no plans for compensation.

108. How will you compensate us for decommissioning our property and forcibly evicting us?

As mentioned previously, there are currently no plans for compensation. Also, there has been no mention of us asking people to 'decommission' their property, nor forcibly evicting anyone.

109. How will you move us out of the village?

This will be addressed as part of the Masterplan, but has not been discussed as yet.

110. Where will we be re-housed and what choice will we have? Will we be involved in the decisions to re-house us?

This will be addressed as part of the Masterplan. It is hoped that the Masterplan will be produced in collaboration with the community and as such, your opinions will guide us to relevant solutions. As yet, we have not reached this issue within the Masterplan as it is still very early days for this project.

111. How secure do you feel your predictions on sea level rise, that underpin this whole process, are?

It is precisely because of the uncertainty associated with the rates of climate change and sea level rise that the SMP has taken the approach that it has done. There is now very clear evidence for climate change, including evidence of sea level rise. The way in which the SMP has dealt with uncertainty is to consider what response might be needed under different sea level rise scenarios. This has been based around the Government guidance on sea level rise but looks at a range of different scenarios around this guidance. Government guidance say that, for planning long term, one should look at sea level rise over the next 100 years of around 1m, but that one should also consider what the consequences would be if the rate were lower than this or higher. As we hoped to explain in the recent public meeting, this gives a range of time when continuing defence of Fairbourne is considered to be unsustainable. The project has based our planning horizon (of forty years) as a realistic estimate of when issues become critical. Planning for a shorter term does not provide the opportunity for change and might reasonably be considered overly pessimistic. Planning for much longer than this period runs the risk that plans would have to be accelerated as more information becomes available. The aim of the project, however, is to continue monitoring this, incorporating and any new information. The aim is to build in sufficient flexibility within the masterplan so that we are able to respond accordingly. Ultimately, the plan has to be able to respond to further information becomes available, while still providing a clear management approach that allows people to plan for their future.

Notwithstanding the uncertainty over rates of sea level rise, the approach to the project is built on realistic estimates in line with national guidance.

112. Is flexibility built into the process and if so, how does this work? Would you be proposing to revise your programme and the SMP2?

Flexibility in terms of timescales will be built into the process as we are planning to write the Masterplan based on sea and ground water level rise, as opposed to the epochs outlined in the SMP2. This means that within the Masterplan, the relevant actions will only take place in line with the levels rising, eg, if sea and/or ground water levels rise to x, then we'll have to start doing y.

Whilst the Masterplan will be continually revised, depending upon the results we obtain from our monitoring regimes (and forecasts, accordingly), we are unable to commit to revising the SMP2 at this moment in time. This may change if there is a significant change in scientific information that's made available to us through an official and approved channel.

113. You said that you had approached various bodies with a view to them adopting the Buy and Lease Back scheme, who had understandably, not shown any interest. Why is Gwynedd Council not adopting the scheme themselves?

This option was discussed at a very early stage of the project, however, due to cynicism from some areas of the community (believing that Gwynedd had only adopted the SMP2 in order to make money from the misfortune of the Fairbourne community), we ruled-out Gwynedd Council as an option.

In light of the lack of interest from any commercial organisation, we will now re-visit this option and communicate the outcome through the usual channels.

114. Following the question raised regarding payment of residential care for the elderly, you said that if the property was unsellable the Council would pay for care. However, if a property is unoccupied and unsellable what would happen to it? Would it be left to go into disrepair?

We would hope that the Buy to Let scheme would be able to support this issue. Clearly (as outlined in Q113, above) there are some issues we need to resolve first, however, we are meeting with Gwynedd's housing team in late March as well as three other organisations within North Wales, after which we should be able to provide a clearer response to this question.

115. What legislation currently exists to support the implementation of the SMP2?

We are currently conducting research into this. Our aim is to provide a breakdown of all relevant legislation currently in place and then identify gaps which could cause problems for the project. This research will be made available to the community, once it has been completed.

116. Why were the problems now being faced by the community, not foreseen or considered prior to signing-off the SMP2?

This is an issue we are investigating and working on, with Welsh Government, the Welsh Audit Office and Central Government. I'm afraid we are not able to provide any further

response currently.

117. What legal powers are required to implement the SMP2?

We are currently researching this as part of the Masterplan. As soon as we have identified the activities required as part of the Masterplan, we'll look at what legislation is available currently, to implement the SMP2. Where no legislation exists, we'll raise this with the appropriate statutory body.

118. Will some of the work that's already been done by the project, contribute to the Masterplan?

All of the work that's been done to-date, will contribute to the Masterplan.

119. Your answer to question 55 includes reference to the Defra guidance as follows:

"Operating authorities, local government and national government do not have a duty to provide protection against flooding or erosion. Nor is there any reason to assume that this will change in the future or that individual losses would be compensated for from public funds. However, operating authorities should work with other relevant authorities and the Government to assess the effects and promote community confidence where new (or improved defences) cannot be provided in the future."

The response to the reply to question 55 already makes the point that the above is guidance and is contradictory to the principle "achieving a sustainable economy".

In addition, the following has been taken from the "National Strategy for Flood and Coastal Erosion Risk Management in Wales":

"14. This is the first National Strategy for Flood and Coastal Erosion Risk Management in Wales. Prepared under the terms of the Flood and Water Management Act 2010 the National Strategy sets four overarching objectives for the management of flood and coastal erosion risk in Wales:

- reducing the consequences for individuals, communities, businesses and the environment from flooding and coastal erosion;*
- raising awareness of and engaging people in the response to flood and coastal erosion risk;*
- providing an effective and sustained response to flood and coastal erosion events; and prioritising investment in the most at risk communities"*

Focusing on the point "reducing the consequences for individuals, communities, businesses and the environment from flooding and coastal erosion", SMP2 has had the complete opposite effect on Fairbourne primarily due to the circa £60m cost imposed directly on Fairbourne.

And the following has also been taken from the same National Strategy:

134. These objectives will be delivered through the following measures.

Development of a national funding policy and prioritisation methodology for the assessment of applications for funding for all flood and coastal erosion risk management activities funded from the Welsh Government.

Development of a sustainable methodology for funding individual property level resilience measures.

Development of a national funding policy and prioritisation methodology for the assessment of applications for funding for all flood and coastal erosion risk management activities funded from the Welsh Government.

Development of a business case for the establishment of a single capital funding programme for Wales.

Development of a national policy on the use of contributions towards flood and

coastal erosion risk management schemes, including the National Habitat Creation Programme.

Focusing on “funding individual property level resilience measures”, we must assume there is a method of securing the property prices of Fairbourne, but if there is not then why not?

And the following has also been taken from the same National Strategy:

15. Implementing these objectives will be the responsibility of everyone involved in or affected by flood and coastal erosion risk management, from the Welsh Government to the Welsh Risk Management Authorities and the people of Wales themselves. By working together we can reduce the risks we face and improve the quality of life for communities across Wales.

The quality of life of the community of Fairbourne has been degraded by SMP2. The Welsh Government (supported by the UK Government and European Union) has the ability to improve the quality of life (or at least not ruin it) by providing a fund of circa £60m to secure the property values of Fairbourne, as described in question 59. Currently, this fund is being provided by the home owners of Fairbourne, which is a minority subset of the "people of Wales", and people from outside of Wales.

Considering all the above points, can you explain how SMP2 has been correctly and professionally prepared?

The issues in relation to funding of flood and coastal erosion risk management are something that is being discussed with Welsh Government. The SMP has identified the risk and the issues that need to be addressed.

120. The following has been taken from the “National Strategy for Flood and Coastal Erosion Risk Management in Wales”:

The key findings 11 for Wales from the UK Climate Projections 2009 suggest that by 2050:

- average annual temperatures are projected to increase by 2.3°C;
- summer daily maximum temperatures are projected to increase by 3.4°C;
- winter daily minimum temperatures are projected to increase by 2.5°C;
- rainfall is projected to increase in winter on average by 14 per cent and decrease in summer by 16 per cent;
- sea levels around Wales are predicted to rise by approximately 20cm; and
- storm intensity in summer and winter will increase, leading to more severe storms and larger waves attacking our shores.

Focusing on the point “sea levels around Wales are predicted to rise by approximately 20cm”. This is contradictory to SMP2 which predicts sea levels will rise by 50cm. Can this be explained please?

In addition, the Paris Climate Change Conference, in November 2015, set a global goal to hold temperature rise this century to "well below" 2C and aim for 1.5C. Presumably the above projections will be adjusted to this into account? The above also highlights how the world can collectively come together to reduce global temperature rises, but SMP2 identifies that the home owners of Fairbourne have almost single handedly caused sea levels to rise around the UK, on the basis that they are paying for the majority of the cost of it.

The SMP has worked with best evidence on sea level rise taking into account both the values quoted in the question but also recognising the uncertainty and range of predictions set out in the UK Climate Projections 2009.

121. In the Public Meeting held on 22nd January 2016, the following question was raised: “If money was no object then could Fairbourne be saved?” The answer provided was no, on the basis that no matter what defences were built the sea level rise would result in a rise in the water table below Fairbourne, effectively meaning the water would come up through the ground. However, the person who provided the answer appeared not to explore all possibilities, primarily the solution of raising the height of Fairbourne. This would probably mean knocking down the current village, raising the height of the land and then rebuilding the village. Although the prospect of this may sound drastic for the Fairbourne community, it is a far better solution than abandoning their homes.

Considering the above, please can you publicly change the answer to the above “if money was no object...” question from a ‘No’ to a ‘Yes’? Also, please can this option be considered, along with the economic assessment of having a thriving village, in a fabulous location, for hundreds of years into the future?

Of course the suggestion of raising all ground levels throughout the village would be physically possible. As set out in the question, this would require removal of all properties and rebuilding the village, together with all infrastructure on higher ground. Effectively, this would be creating a new Fairbourne. The response given at the meeting was given with respect to the existing village. The project does and must remain open to new ideas, however, while all options should be considered, solutions have to remain practical.

122. In the Public Meeting held on 22nd January 2016, the following question was raised: “How much has SMP2 cost?” Can it be ensured that the answer to this question includes the cost to the Fairbourne community of the abandonment of their properties, estimated at between £60m and £80m, and this is clearly shown in the breakdown of the costs of SMP2, along with the cost of other properties that will be abandoned due to the predictions of SMP2, the costs of coastal protection up to the point of abandonment and the expenses of producing SMP2. All of the above are a direct cost of SMP2.

If we were to calculate the above, our response would undoubtedly be inaccurate and open to ongoing challenge. The response would also differ between the various statutory bodies and stakeholders. We will therefore only provide the cost to produce the SMP2 and leave interpretation of costs open for discussion amongst relevant and interested parties.