

Taking a Strategic Approach to Investment in FCERM

Interim Report

June 2012

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1. Introduction and Background

“Risk management authorities should be encouraged to consider all future investment needs, for all sources of flood risk (and coastal erosion if appropriate), as part of the local flood risk management strategy required under the Flood and Water Management Act. Some investments within a Local Strategy will score more highly than others against the new funding criteria, with some projects qualifying for 100% funding, and others less.”

Defra (2011) Flood and Coastal Resilience Partnership Funding policy statement, May 2011.

Deciding on which flood risk management options are suitable for investment will need to include testing the local appetite for reducing the risk against the ability or willingness to fill any funding gap. But the desired policy change is set against a backdrop of limited resources and low economic activity. This reinforces the need for a Local Strategy to include a strategic Investment Plan - to explore the benefits of potential funding opportunities, to set achievable targets over the plan period but also to explore “what if” scenarios related to funding availability.

Who should read this?

This work should be of interest to all those involved in strategic planning and funding of flood and coastal erosion risk management (FCERM or FRM).

Lead Local Flood Authorities (LLFAs) need to understand the full programme of FCERM measures required in their area, and lead the strategic assessment, planning and funding prioritisation of these. Otherwise funding opportunities will be missed, holistic flood risk management approaches not realised and an inconsistent and purely opportunistic approach becomes the default.

This interim report, and the final project dissemination, should be of interest to all those with a role to play in funding FRM.

Research aims

The aims of this research are to establish case study examples and lessons that arise from helping LLFAs to take a strategic, long-term approach to investment planning in their areas. Local Investment Plans are being developed taking into account Defra’s [Flood and Coastal Resilience Partnership Funding](#) policy and the responsibilities Lead Local Flood Authorities (LLFAs) have under the Floods and Water Management Act (FWMA). The Investment Plans should consider all sources of flood risk, including coastal erosion if appropriate, and look for funding from a range of sources to meet the identified investment priorities.

Ten LLFAs were recruited by Defra to initially take part in the study, and the research study is now supporting eight of these LLFAs in developing a local Investment Plan. From the process of developing each Investment Plan, case studies of the work with LLFAs will

be drawn together, along with a synthesis and lessons learned report for the overall study, to share with other LLFAs.

Related information and research

This research compliments other activity and guidance reports issued by Defra, LGA and the Environment Agency, as described below.

Table 1: Related R&D and Sources of Information

<p>The Local Government Association Knowledge Hub website is a useful source of information and knowledge sharing for local authorities and others working with them in the field of flood risk management</p>	
<p>The LGA document Framework to assist the development of the Local Strategy for Flood Risk Management provides practical advice.</p>	<p>Considering funding and developing an FRM Investment Plan should both inform and result from a Local Strategy. Funding availability should be kept in mind when developing the scope for a Local Strategy and the scale of potential interventions. Clearly a detailed Investment Plan will be a key output from a Local Strategy.</p>
<p>Defra and Environment Agency LLFA capacity building. Email for information on forthcoming capacity building events.</p>	<p>The tools developed in this research need to support existing capacity building efforts. Relevant strands of capacity building include Local Strategy development, FRM project appraisal and FDGiA funding applications.</p>
<p>Defra R&D FD2643 - Partnership funding and collaborative delivery of FRM: a practical resource for LLFAs. Also, LGA document "Securing Alternative Funding Sources for FCERM"</p>	<p>FD2643 provides a useful guide to LLFAs on partnership funding sources and how to achieve it. Knowledge on funding sources is a direct input in the design of an Investment Plan. An Investment Plan marries knowledge on what schemes are desirable with the available funding. The work in FD2643 has been integrated within FD2656 by the development of a "funding screening" tool that can be applied to each FRM scheme being considered. This draws heavily on the decision support tool within FD2643.</p>
<p>Surface Water Management Technical Guidance</p>	<p>Local strategies will have consideration of surface water and small watercourse management problems at their core. This guidance steers local authorities the cycle of identifying and managing such problems. However, many surface water flooding problems are linked to other sources, typically tidal and fluvial. Combined technical and funding strategies are needed to tackle such problems. This R&D provides tools which establish the value of collaborative approaches.</p>
<p>Defra R&D FD2635 Schemes with multiple objectives and funders – guidance and lessons learned And Understanding the business case for surface water management schemes in comparison to other flood and coastal schemes</p>	<p>The research presents a range of coastal case studies examining the funding of schemes with multiple objectives. A separate study was also completed within the project examining the economics of typical surface water schemes, concluding that they often do not compare favourably with fluvial or coastal led schemes. Strong partnerships and strategies considering multiple sources in an integrated way were the best means of tackling this issue. These themes are strongly linked with FD2656.</p>

<p>Local Government Group Local Flood Risk Management Partnership case studies</p>	<p>Forming partnerships is an essential element of developing and delivering improved local flood risk management. These case studies provide information on successful existing partnerships. This includes Cambridgeshire Flood Risk Management Partnership, one of the case study partners for FD2656.</p>
<p>Environment Agency guidance on FRM project funding and project appraisal. The funding web page provides a range of useful guidance on partnership funding, applying for FDGiA and the FDGiA calculator tool (recently updated).</p>	<p>FDGiA remains at the core of FRM project funding. An understanding of this funding route and the required project appraisal that is required as a part of it is essential for LLFAs and developing a successful Investment Plan. The tools developed in this R&D assist LLFAs in developing knowledge in both areas.</p>
<p>Environment Agency's Long Term Investment Strategy .</p>	<p>This strategy sets out the Environment Agency's evidence and views on the choices faced concerning the investment needed to manage flooding and coastal erosion up to 2035. It includes information and case studies on raising support and funding locally, ideas for ways to manage flood and coastal erosion risk more efficiently and an analysis of the scale of investment needed and the benefits that would result.</p>

Case study partners

The following case study partners are working with the JBA team in delivering the R&D:

Cambridgeshire County Council	Cornwall Council
East Sussex County Council	Kent County Council
Newcastle City Council	Northamptonshire County Council
North Yorkshire County Council	Slough Borough Council

Further information on the characteristics of each case study is included in Appendix A.

Project oversight

This project is governed by a Project Board that includes Defra, Environment Agency and the Local Government Association and is part of the joint Defra and Environment Agency FCERM R&D programme.

Programme, outputs and further information

The project started last October. Since then the case study partners have collated the information needed to develop pilot Investment Plans (schemes, benefits, costs, Outcome Measure score, potential alternative funding etc.). The R&D contractor team has shadowed and guided the case studies and developed tools to assist.

The project is now moving into a phase of matching LLFA FRM aims with potential available funding. A range of scenarios is being examined within each case study and tools developed are being tested and refined.

The project team expect to disseminate the findings of the R&D later this summer, including through a workshop with an open invitation to LLFAs. Contact [Daniel Johns](#) or [Kevin Keating](#) to express an interest in attending.

2. Key Benefits – Understanding an Investment Plan

Investment Plan in outline

Defra introduced Resilience Partnership Funding for FCERM in May 2011. The new partnership policy will mean Government money is potentially available to meet the costs, partially or in full, of any economically worthwhile scheme, instead of meeting the full costs of just a limited number of schemes. The level of funding is now based on the outcomes and benefits being delivered.

LLFAs now have a leadership role to oversee the delivery of FRM measures by all Risk Management Authorities in their area, and to support this, they are required under the FWMA to produce a local flood risk management strategy. Ideally, local strategies should take the opportunity to align stakeholders, particularly those with available funding, with those who would benefit from further investment in flood risk management. This should include a test of the local appetite for reducing the risk against willingness to meet any additional costs. This could either be completed on a scheme by scheme basis (as is the current situation) or moving toward a more strategic approach. The latter requires the LLFA and its funding partners to work towards tackling FRM issues on a holistic and consistent basis across the LLFA area. This is challenging, and may not be viable in all cases, but it does offer potential to lever in more FRM funding and deliver more from the FDGiA system.

The discussion above is the core of the analysis required in order to form an Investment Plan.

It is recognised that the desired policy change is set against a backdrop of limited resources and low economic activity. This reinforces the need for a Local Strategy to include a strategic Investment Plan. This will identify funding shortfalls and will explore the benefits of potential funding opportunities. Achievable targets can then be set over the Local Strategy plan period. But the Investment Plan can also to explore “what if” scenarios related to funding availability, allowing the LLFA to be ready to make decisions if the funding picture changes.

In trading-off appetite for risk against investment costs and affordability in a transparent setting, it is hoped that the resulting local Investment Plan will create:

- Legitimacy and support through good engagement amongst key decision makers, partners, communities and other stakeholders. It should provide a means of engaging with local communities on their FRM aspirations and issues of affordability.
- Enhanced recognition of the benefits of FRM within LLFAs and district councils.

- A compelling business case for external contributions and other local investment, by showing that relatively small amounts of local investment over time may have a big impact in terms of long-term residual risk for each sector and area, with implications for property and land values, and insurability.
- More effective and transparent prioritisation between different sources of risk and investment options in the area.
- Realism regarding what is likely to be viable and therefore a more robust recommended package of FRM measures.
- Robust and transparent programming based on multiple funding scenarios. An Investment Plan should include assessment and documentation of the LLFAs proposed response to changes in the funding outlook.

When should it be used?

Given the criticality of funding availability in the current climate it is recommended that the analysis of investment opportunities is considered in parallel with the development of a Local Strategy.

First iteration: A “first iteration” of an Investment Plan at the start of a Local Strategy will help. It would identify key funding partners and their investment programmes. It would also help scope the range of flood risk management issues and measures being considered, tailoring the Local Strategy to suit the funding outlook.

Change in circumstances: Important events will happen during the evolution of a Local Strategy. This may be a flood event mobilising community and local political support for action, or a change in the technical evidence base (e.g. in the predicted level of flood risk at key locations), a change in availability of government FRM funding or some other funding source. As funding opportunities will influence Local Strategy then such changes need to be reviewed as they occur.

Strategy implementation: An Investment Plan is a key planning document that will be needed in order to help enable the delivery of the Local Strategy recommendations. Again, circumstances can still change and an Investment Plan will need to cater for this.

Tailoring to suit different types of Local Strategy

Local strategies will take various forms to suit local circumstances and needs. The broadest will include a review of all sources of flood risk and helping the LLFA take on the lead role in tackling flood risk within their communities. Whereas others will focus on developing an approach to tackling only “local” sources of flood risk, leaving the strategies of other RMAs (e.g. the Environment Agency) to deal with other issues separately.

The more holistic strategy is encouraged by Defra's partnership funding approach. However, the Investment Plan and tools developed to assist LLFAs need to be flexible. It should be possible to complete a relatively narrow Local Strategy and then consider the recommendations of this together with other RMA strategies within a single Investment Plan framework. It would be useful to re-visit this research project after completion of a range of local strategies to test this.

More information on tailoring an Investment Plan approach to different situations will be included in the final project reporting, benefitting from evaluation of the R&D case studies.

Who should be involved in developing an Investment Plan?

The Investment Plan should be owned by the local flood risk management partnership, including support from the RFCC and any other key funding partners. The LLFA and the Environment Agency's Partnership and Strategic Overview Team will be at the core of delivering an Investment Plan, but any organisations or groups with a works programme that presents opportunities or constraints for FRM should be engaged in the process. The most notable examples of this are water companies, the EA and regeneration and financing teams (e.g. CIL) within local authorities.

How much work is it?

Developing an Investment Plan should require very little additional work beyond what all LLFAs will need to do in order to deliver their Local Strategy. It may, however, have an impact on the order in which tasks required for a Local Strategy are completed particularly if, as suggested, a first iteration is produced very early in the development of a Local Strategy. But as a result, the approach could result in efficiencies by focussing the Local Strategy on improvements that can be delivered.

The tools developed (refer to [section 3](#)) should make producing an Investment Plan efficient, but it does rely on the existence of a coherent set of proposed FRM improvements. To date, it is this area that has been most time consuming for the LLFA undertaking the case studies associated with this research. The project team is now embarking on analysing the sets of schemes and developing pilot Investment Plans for each LLFA. Once this process is completed then further feedback can be offered regarding the time and cost implications of completing an Investment Plan.

3. Project Outputs (to date)

Summary of outputs

The research has included developing and road testing ideas and tools designed to help those involved in FRM and investment planning. Key outputs from the research to date include:

1. The development of **flow charts** exploring the formation of an Investment Plan, including important links to the Local Strategy, national or local data, and the new work required to form the Investment Plan.
2. Trialling development of **FDGiA “opportunity maps”** and associated flood risk mapping based on readily available national datasets. These maps can be used by LLFAs to provide an initial search for potential future FRM activity or, more likely, to “top up” or cross check any existing assessment of FRM needs. The maps are based on re-working existing national data and presenting it in the form of potential Outcome Measure scores within grid-squares. This emphasises that the Environment Agency has a wealth of data and skills and access to this (e.g. via [Geostore](#)) is important in order to prime the development of a Local Strategy.
3. Development of a spreadsheet based **Investment Plan “funding share” tool** that takes the preferred package of schemes, local priorities, potential GiA and local funding contributions and allows alternative investment scenarios to be tested. The output from this tool is a list of FRM actions that can be supported based on postulated available funds and the prioritised FRM activities.
4. Supporting tools:
 - a. A spreadsheet tool that captures the information needed to for LLFAs to fulfil their role in coordinating local FRM: documenting all short, medium and long term FRM activity across the full range of sources of flooding: a **FRM “schemes list”**. **
 - b. Supporting spreadsheet based tools to enable quick **“first cut” cost and benefits** estimation for FRM schemes / actions (scheme costs and benefits “pick-lists”). The tools provide initial estimates of Present Value costs and benefits in line with FCERM-AG (appraisal guidance) and Multi-Coloured Manual high level approaches. This is particularly useful when such information is not already available within related strategic plans (SWMPs, CFMPs, SMPs etc) or detailed project appraisal.
5. A draft template for the Investment Plan document, including suggested content for each section. This will be informed by working through the case studies.

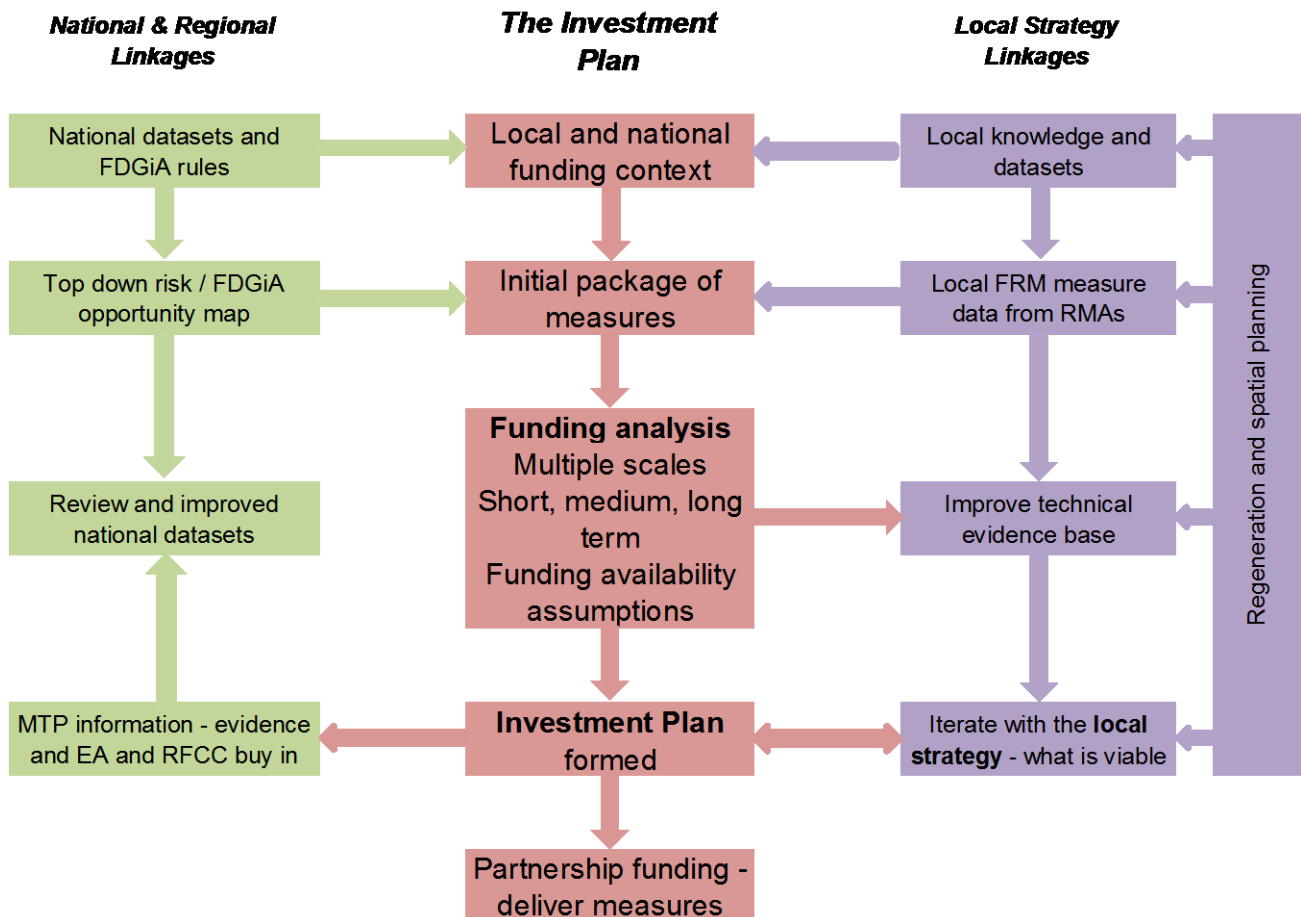
- A **log of observations** is being kept by the research team and case study partners highlighting roadblocks and inefficiencies, great ideas, lessons, project successes etc.

***NB: Short, medium and long terms are defined differently than is normally the case when considering project funding. The short term may reflect the pressures of the current financial year or, at longest, the content of the Medium Term Plan required by the EA.*

Key Output 1: Describing the links between a Local Strategy and an Investment Plan

Technical guidance has been produced to assist the project team and case study partners in establishing the linkages between a successful Local Strategy and an Investment Plan. The flow chart below captures key aspects of the guidance and further information will be provided in the final reporting.

Linkages and formation of an FRM Investment Plan



Once a list or “package” of FRM schemes is formed, with the associated necessary economic and financial data, testing viability (i.e. fundability) can be explored. Fundamentally, the length and content of such a list depends on the funds available and LLFA priorities in terms of reducing flood risk.

Spreadsheet tools have been developed to assist in working through the framework set out. The iterative nature of this work should be recognised and LLFAs will need to work closely with other RMAs and various council teams in order to develop a Plan that is well founded.

Key Output 2: FDGiA “opportunity maps” and associated flood risk mapping

As a part of this R&D, the team wanted to explore whether national datasets (NaFRA, flood maps of fluvial, coastal and surface water), could be used to confirm or enhance LLFAs understanding the scale of flood risk and the FDGiA opportunities that may be present. This is a scene setting exercise where all sources of flood risk are presented and their scale understood.

Outcome Measures are designed to direct FDGiA funding of FRM measures which are:

- Located in more deprived areas (OM2 / OM3).
- Move more people to a lower flood risk band (OM2 / OM3).
- Result in the greatest economic benefit (OM1).
- Supported by partnership funding (OM1).
- Benefit the environment (OM4).

National datasets were used to identify which areas are most likely to achieve FDGiA based on the first two of these for fluvial and tidal flood risk. If thought useful, the approach could be extended to encompass other metrics for the remaining Outcome Measures.

The existing Medium Term Plan information was also captured within the maps. The location of established MTP entries provides a focus for assessing where schemes to tackle other sources of risk might be integrated into the MTP scheme option appraisal, or where seeking further contributions would be appropriate.

Various visualisation options were reviewed and it was decided that a [Geospatial PDF format](#) offered the best combination of accessibility and functionality to supplement providing the raw GIS data. Geospatial PDFs are based on a software platform that is highly accessible and yet allows typical GIS software functionality including interactive features (e.g. turning layers on/off, zooming and mapping scale adjustment, ability to query associated tabular data).

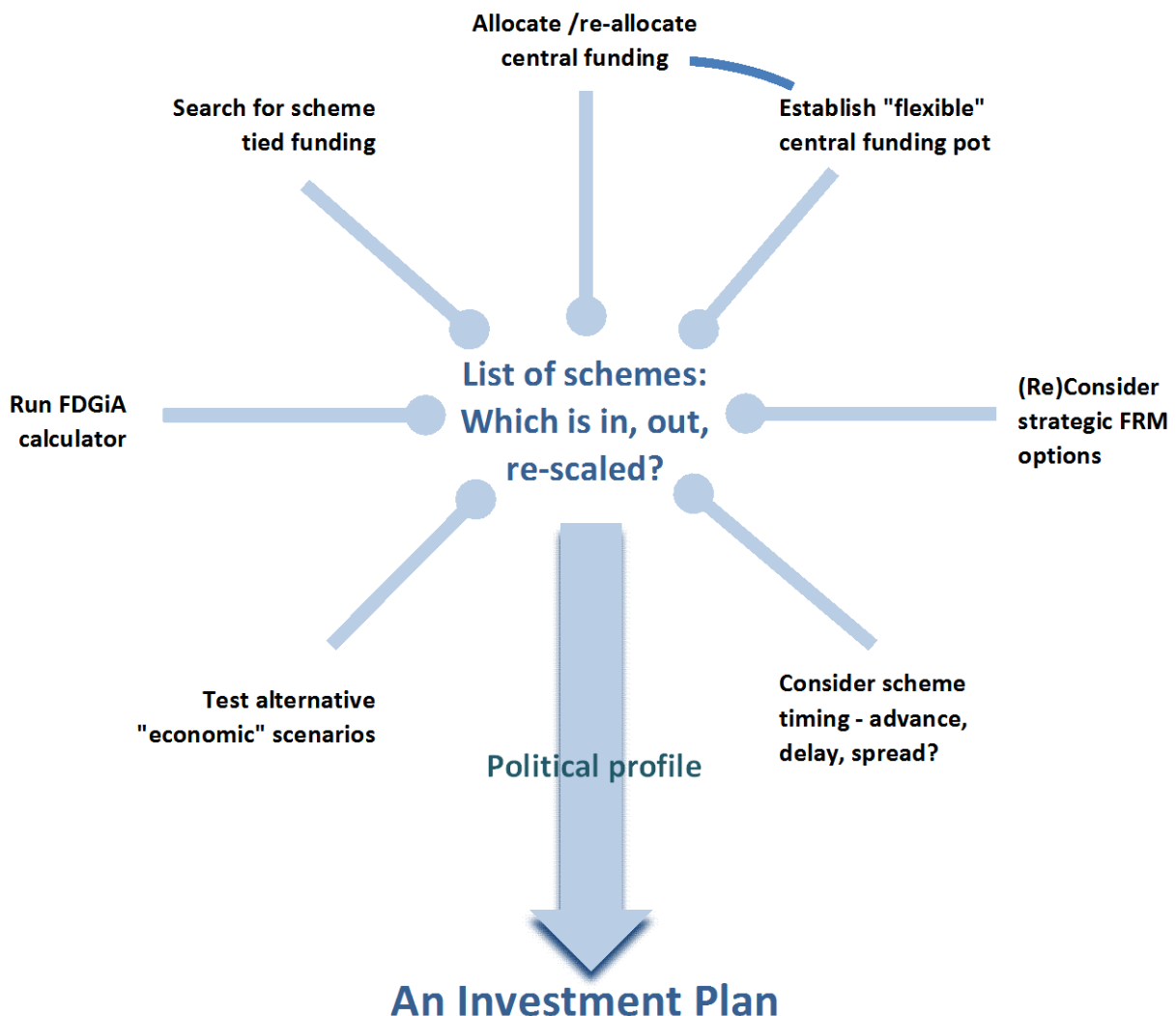
Further information and “screen shot” extracts are included in Appendix B to demonstrate the key features.

Key Output 3: Investment Plan “funding share” tool

The conclusion of an Investment Plan is sensitive to several factors, including:

- FDGiA availability – the adjusted OM score needed to attract government support (which changes over time).
- Local economy - the strength of local economic activity will drive development led funding.
- Local priorities - local community and political priorities will drive the level of support given to FRM within RMAs.
- Chance / opportunism – flood events, major beneficiaries, multiple beneficiary schemes, regeneration opportunities etc. can arise and affect the ability to fund FRM.

A tool is needed that can test the preferred list of FRM schemes against the above.



Scenario testing is needed (e.g. will FDGiA be easier or harder to obtain in 3 years time?) in order to develop a robust Investment Plan. Ranking schemes in terms of the strength of likely funding support and presenting funding gaps is needed and can be used to

demonstrate the value of support from potential new funding partners (e.g. would a small additional investment raise adjusted OM score and enable FDGiA support?).

The project team has developed a tool that provides a means of testing such scenarios. A “screen shot” of the tool is included in Appendix C. Using the tool and developing the content of an Investment Plan is an iterative process.

Key Output 4: FRM “schemes list” register and scheme costs and benefits tools

A template register was developed to assist in documenting measures for all sources and RMAs. The register draws on ideas provided by the LLFA case study partners and also ensures the necessary data is present to use the “funding share” tool and then generate the first iteration of an Investment Plan. This register includes the data likely to be required either for LLFA purposes in executing their lead role or needed in order to bid for funding.

When working with the case study partners it became apparent that LLFAs typically have reasonable awareness of the FRM measures they would like to introduce but often lack the more detailed information needed to prioritise or assess funding viability (e.g. outline scheme costs).

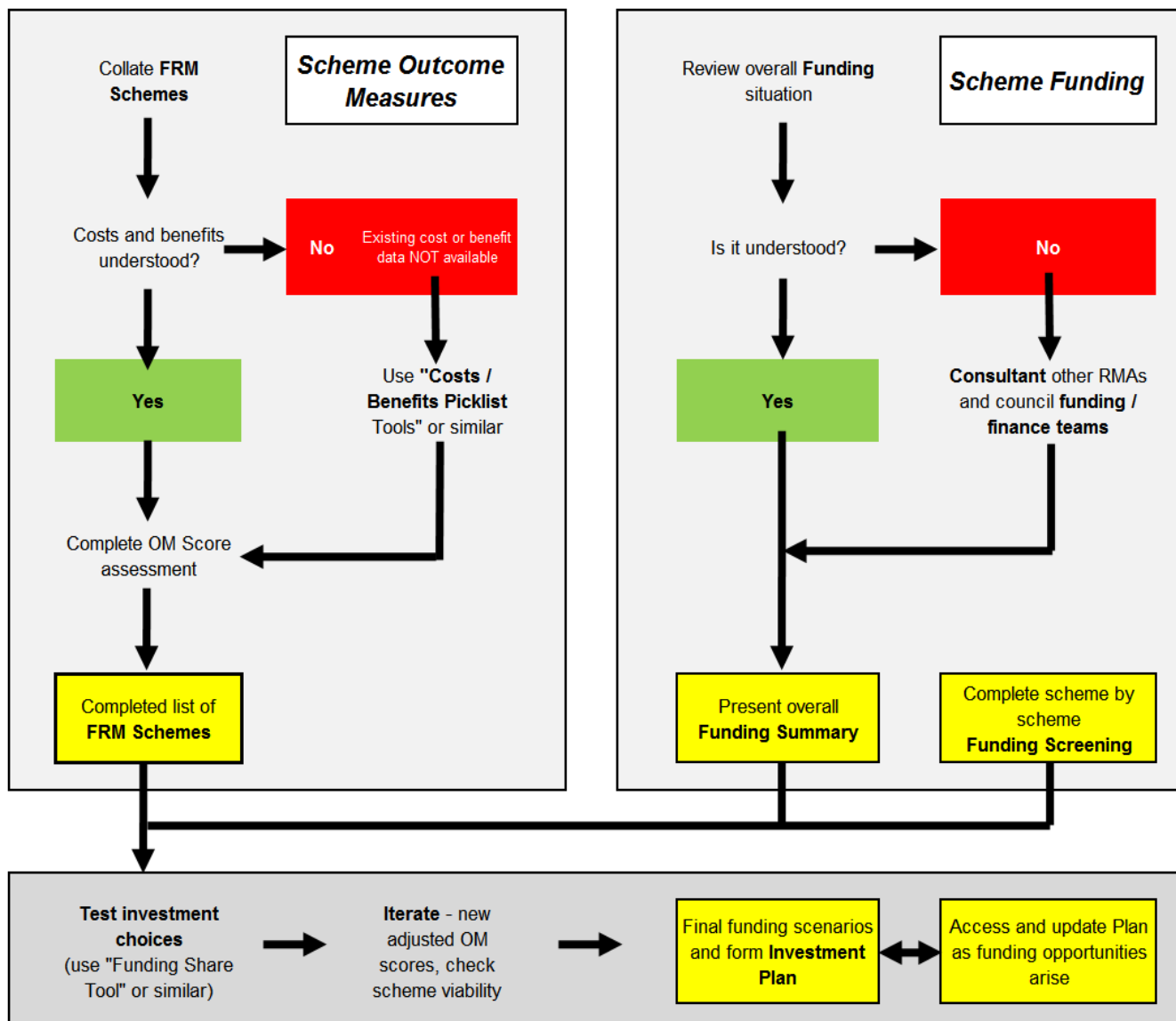
In response, tools were developed to assist LLFAs in generating “first pass” type data on scheme costs and benefits. These are referred to as the scheme costs and benefits picklist tools and scheme funding screening tool. The FRM measure cost tool is based on parallel EA R&D compiling existing data on FRM scheme costs in order to form a database and tools to aid in scheme costing in strategic settings (the “Long Term Costing” strand of work on MDSF2 – project no. SC080039). The benefits tool is based on data and methods presented in the Flood Hazard Research Centre’s [Multi-Coloured Manual](#) and the Environment Agency’s [FCERM-AG](#).

The scheme funding screening tool builds on the output from parallel research on funding sources (refer to [Section 1](#)).

More detailed information on the methods used will be provided in the final R&D reporting.

The flow chart presented below shows the general approach to collating information needed to run the “funding share” and prepare an Investment Plan.

Collating scheme data and using supporting tools



Key Output 5: Investment Plan template

The next phase of the project will involve using the tools developed to develop an Investment Plan, including consideration of the scenarios discussed above. A template Investment Plan document has been drafted (see Appendix D) and will be tested using the case studies and then an updated version will be made available in the project final reporting.

4. Interim conclusions

The following interim conclusions have been drawn from the work to date:

- On the basis of the case studies, there is variation in the readiness of LLFAs to complete a Local Strategy. Varying levels of support is needed – in the form of data analysis, mentoring or tools. Hopefully this project will provide the latter and such tools need to be designed to engage both experienced and fledgling audiences.
- There is a significant increase in the scale of the challenge faced by two tier authorities. Accommodating the various district political priorities and funding sources (e.g. varying take up of CIL by each district) is not an easy task.
- The Environment Agency's new Partnership and Strategic Overview Team is a positive step. It should ensure that LLFAs get consistently good support.
- Linked to the above, the project team has demonstrated that the Environment Agency national datasets can readily be re-worked and presented in a way that is easily absorbed and most relevant to LLFAs.
- It is still uncertain whether surface water schemes, which typically have more modest economic justification, will benefit from the new arrangements. It seems likely that this will depend on how ambitious a LLFA wants to be in terms of producing a wide ranging Local Strategy, maximising the opportunity to fund surface water schemes.
- Finding alternative sources of funding and mapping these against FRM issues to secure scheme funding requires creative thinking, persistence and is time consuming – in many case a full time role.
- Internal Drainage Board settings need specific consideration, especially where FRM systems benefit both rural and urban areas. IDBs have the advantage of established routes to partnership funding, but also have reducing access to FDGiA. Alongside the focus on risk reduction (specifically urban) by Defra, there is a need to ensure transparency regarding the impact of IDB system on urban flood risk, and vice versa. This is important when determining the appropriate contributing towards FRM asset renewals or new investments. This is particularly pressing in coastal lowland systems and where climate change means FRM systems need to be much more robust (and expensive) in the future.
- RFCCs are developing their own policies on using local levy to support the delivery of regional priorities. Improved transparency and strategy in the use of local levy is being aim for. A clear theme is that those LLFAs that are more proactive in strategic investment planning can expect to see greater value from RFCC.
- Much has been gained from developing new tools within the case study setting. It will be vitally important that any added burden on LLFAs is clearly outweighed by the benefits offered by the tools.
- Activity that enables LLFAs and others involved to share ideas, case studies or accepted best practice is highly valuable. Good examples include the Defra - Environment Agency LLFA capacity building programme, the Local Government Association Knowledge Hub website, LGA FCERM Bulletin and locally arranged / regional meetings of LLFAs. The project team is very grateful for the observations and ideas contributed by the case study partners to date.

Appendices

Appendix A – Case Study Characteristics

Case study	Characteristics of funding challenges
Cambridgeshire	<p>Major existing EA assets.</p> <p>Potential for multiple source flood problems.</p> <p>“Local” FRM improvements scoped and prioritised.</p> <p>Two tier LLFA, plus Internal Drainage Boards.</p> <p>Strong existing partnership arrangements with other RMAs.</p>
Cornwall	<p>Single tier LLFA.</p> <p>Areas of deprivation and urban regeneration.</p> <p>Strong focus on isolated coastal issues.</p> <p>Developing partnership with other RMAs.</p>
East Sussex	<p>Major coastal FRM assets with mixed beneficiaries.</p> <p>Two tier LLFA, plus Internal Drainage Boards.</p> <p>Surface water management improvements identified / planned.</p> <p>Potential for multiple source flood problems.</p>
Kent	<p>Major coastal FRM assets with mixed beneficiaries.</p> <p>Two tier LLFA, plus Internal Drainage Boards.</p> <p>Local flood risk / surface water management improvements developed.</p> <p>Potential for multiple source flood problems.</p> <p>Strong existing partnership arrangements with other RMAs.</p>
Newcastle	<p>Single tier LLFA in urban setting.</p> <p>Focus is on surface water problems.</p> <p>LLFA is developing ideas for FRM improvements.</p> <p>Tackling areas of deprivation and urban regeneration a priority.</p> <p>Main focus probably public sector led funding of FRM.</p> <p>Partnership with other RMAs in its early stages.</p>
Northants	<p>Two tier LLFA - collaboration with districts important for partnership funding.</p> <p>Good progress in identifying FRM opportunities.</p> <p>Major growth and regeneration areas.</p> <p>Existing partnership arrangements with other RMAs.</p>

Case study	Characteristics of funding challenges
North Yorkshire	<p>Major EA assets.</p> <p>Surface water management improvements identified / planned.</p> <p>Potential for multiple source flood problems.</p> <p>Major coastal FRM assets protecting urban communities.</p>
Slough	<p>Single tier LLFA in urban setting.</p> <p>Early stages of identifying FRM opportunities.</p> <p>Tackling areas of deprivation and urban regeneration a priority.</p> <p>Main focus probably public sector led funding of FRM.</p> <p>Partnership with other RMAs in its early stages.</p>

Appendix B – Geospatial PDF

Geospatial PDF

A description of Geospatial PDF can be found on the web, e.g. http://en.wikipedia.org/wiki/Geospatial_PDF

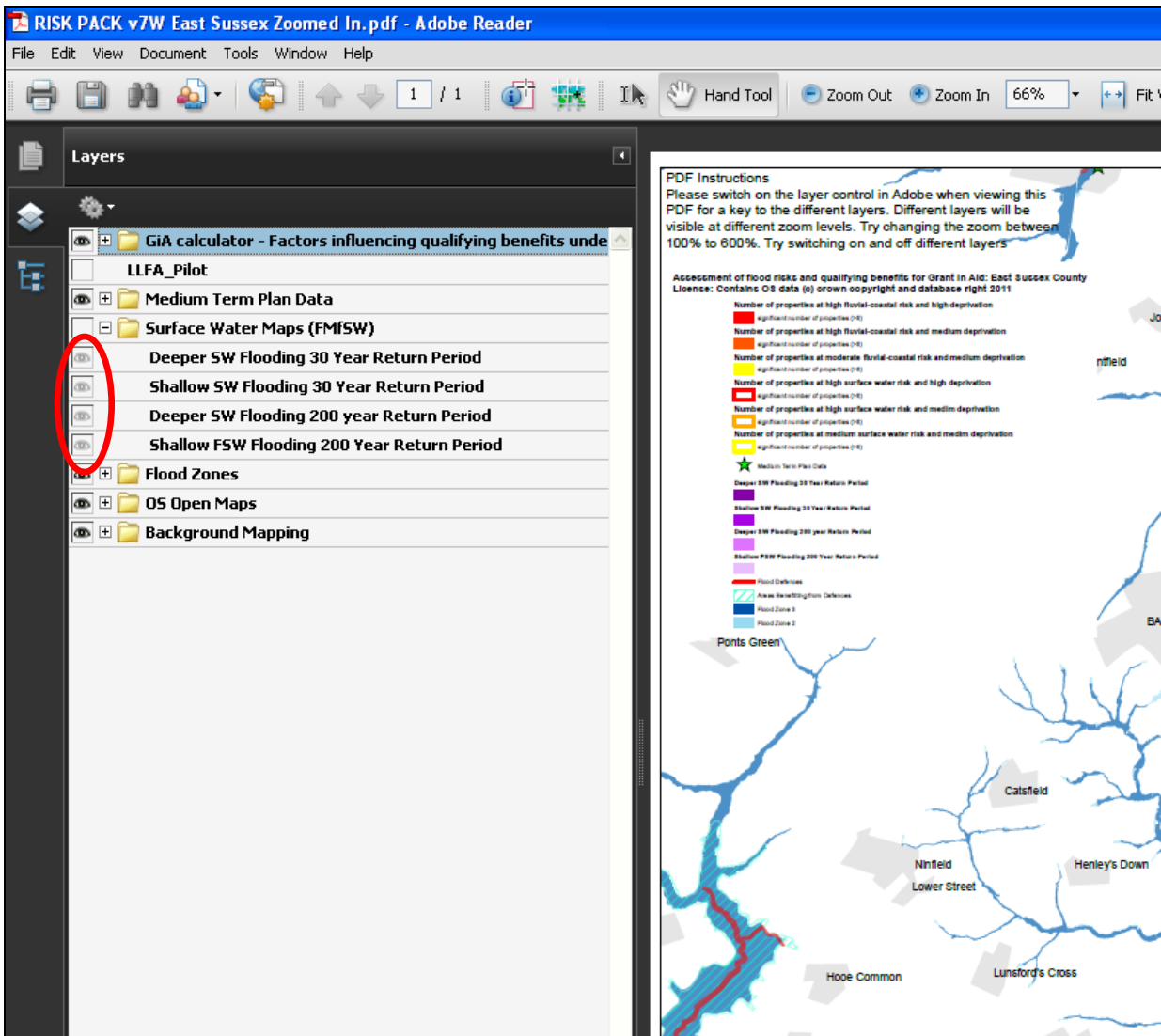
FD2656 Outputs

The following “screen shots” from a Geospatial PDF developed for this R&D are presented in order to provide an indication of the potential utility and content of a FRM Geospatial PDF aimed at identifying flood risk and potential investment opportunities. The latter is based on ranking flood risk areas in accordance with potential Outcome Measure scoring. Further information will be provided in the final R&D reporting.

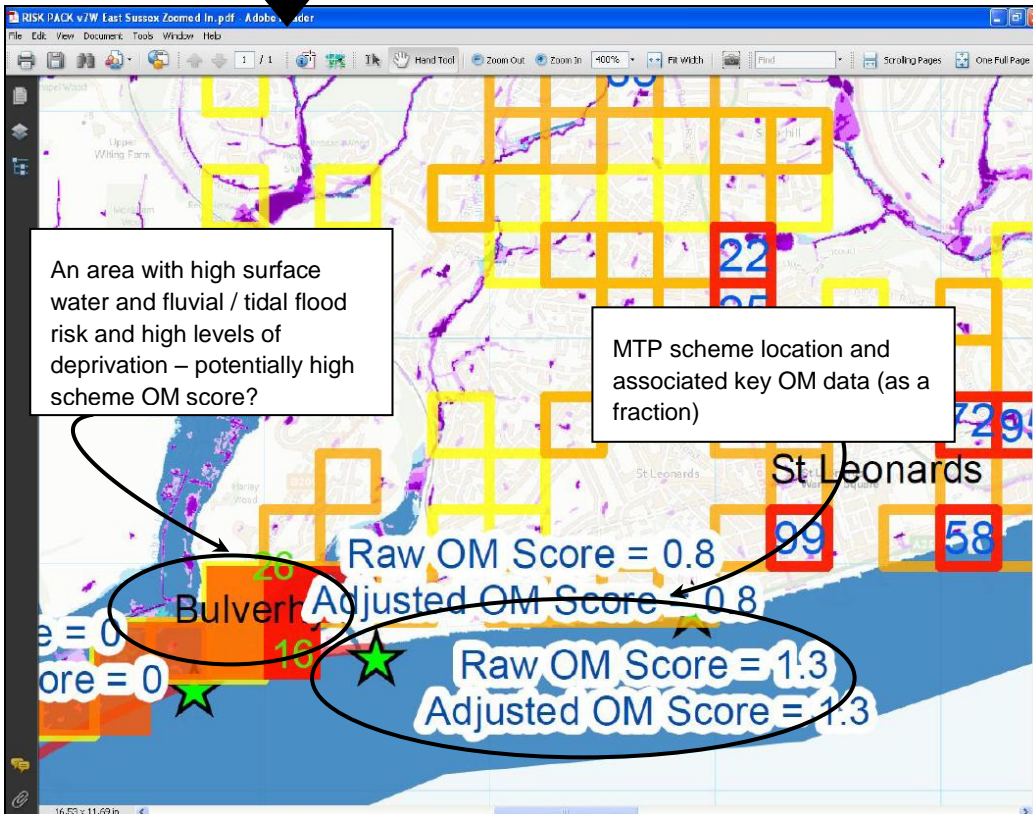
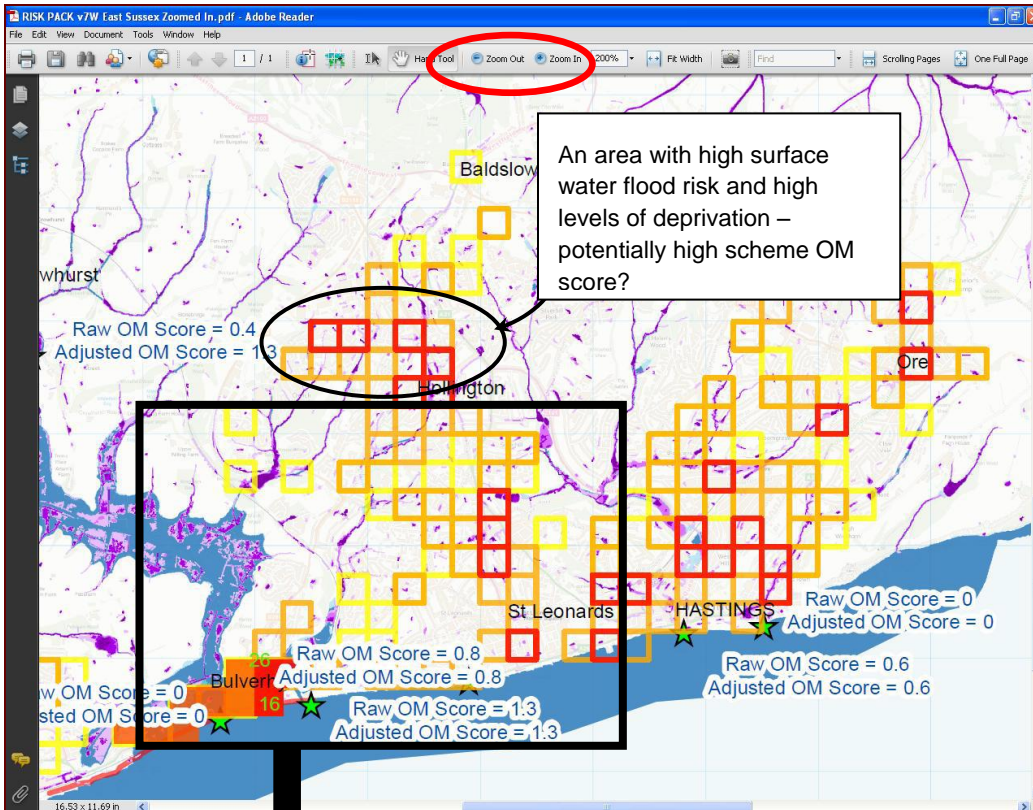
The layers included in the Geospatial PDF developed for this project:



The ability to select and view chosen layers is available:



More detailed data is visualised as the user zooms in, including automatic variation of the scale of the background mapping presented. In the case over page, a grid square based ranking of where FDGiA opportunity may be stronger is presented and also the MTP schemes OM scores (as a proportion rather than percentage) and numbers of properties at risk within grid squares.



MTP scheme location and associated key OM data (as a fraction)

The ability to interrogate the background data is available:

The screenshot shows the Adobe Reader interface for a PDF document titled "RISK PACK v7W East Sussex Zoomed In.pdf". The toolbar at the top includes a red circle around the "Interrogate" icon. The left sidebar contains a "Model Tree" with a list of property counts for different risk and deprivation levels. The main content area displays a 3D model of a coastal area with various data labels and a table of property details.

Model Tree

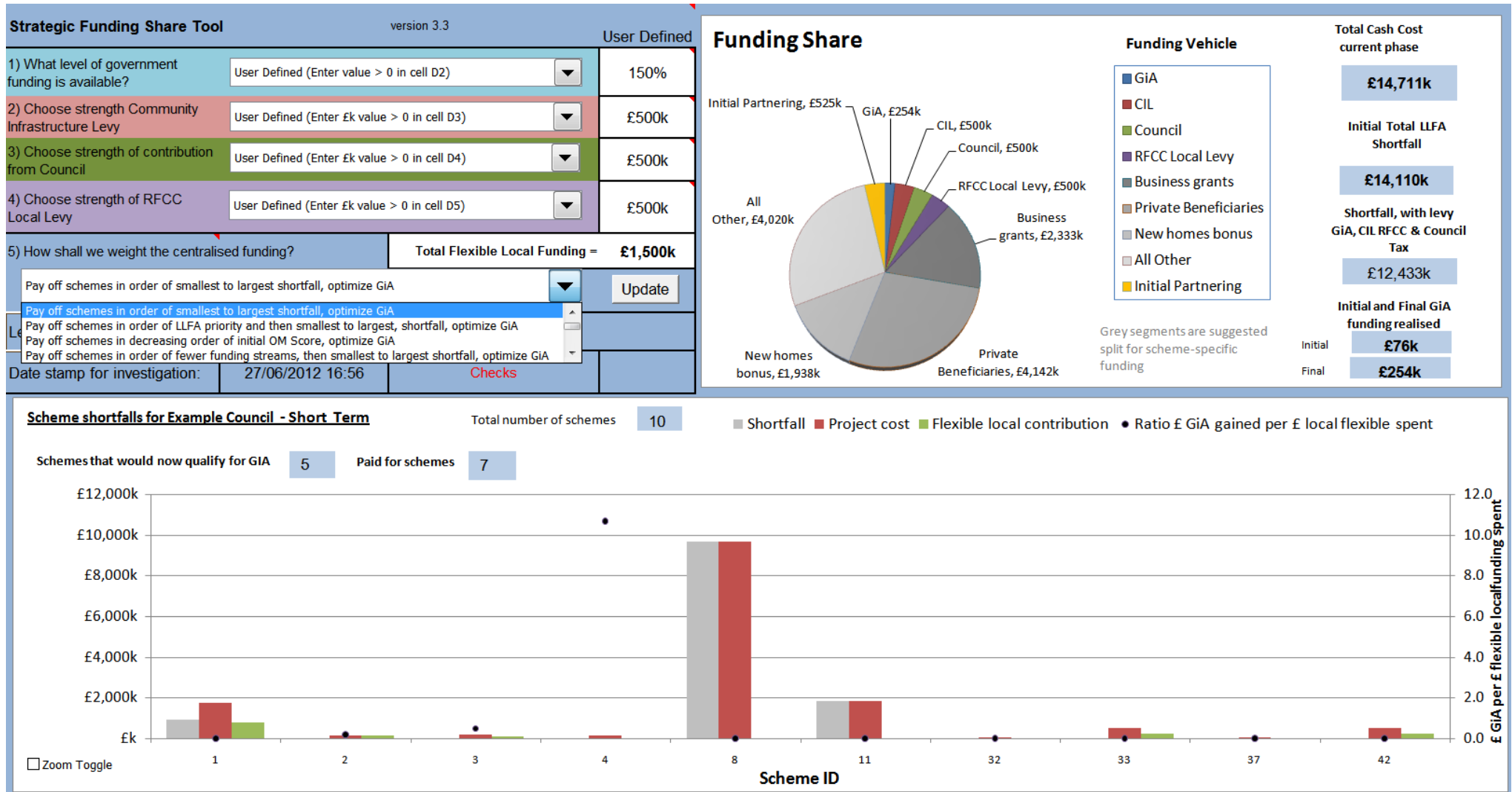
- Number of properties at high fluvial-coastal risk and medium deprivation : 54--339
- Number of properties at high fluvial-coastal risk and medium deprivation : 54--340
- Number of properties at high fluvial-coastal risk and medium deprivation : 55--339
- Number of properties at high fluvial-coastal risk and medium deprivation : 55--340
- Number of properties at high fluvial-coastal risk and medium deprivation : 87--394
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- Number of properties at high fluvial-coastal risk and medium deprivation : 89--391
- Number of properties at high fluvial-coastal risk and medium deprivation : 89--392
- Number of properties at high fluvial-coastal risk and medium deprivation : 89--393
- Number of properties at high fluvial-coastal risk and medium deprivation : 89--394
- Number of properties at high fluvial-coastal risk and medium deprivation : 89--395
- Number of properties at high fluvial-coastal risk and medium deprivation : 102--396
- Number of properties at high fluvial-coastal risk and medium deprivation : 102--398
- Number of properties at high fluvial-coastal risk and medium deprivation : 103--396
- Number of properties at high fluvial-coastal risk and medium deprivation : 103--397
- Number of properties at high fluvial-coastal risk and medium deprivation : 103--398
- Number of properties at high fluvial-coastal risk and high deprivation : 54--340**

Property Value Table

Property	Value
OBJECTID	299937
Join_Count	65
TARGET_FID	299937
Id	0
ET_ID	32362
ET_Index	54--340
Easting	578125
Northing	108625
GRIDSQ	K57800Y10850
NLow_DLow	0
NLow_DMed	0
NLow_DH	0
NMod_DLow	0
NMod_DMed	16
NMod_DH	0
NSig_DLow	0
NSig_DMed	33
NSig_DH	16
Deep_DLow	0
Deep_DMed	0
Deep_DH	0
Shal_DLow	0
Shal_DMed	2
Shal_DH	2
Shape_Length	1000
Shape_Area	62500
N_SW_Int	33
SW_Int	2

Appendix C – Extract from the “Funding Share” Tool

A "screen shot" from the spreadsheet based funding share tool. Note that "central funding" here refers to funding that the LLFA or local FRM partnership should be able to access locally and direct to schemes as they think appropriate (i.e. not FDGiA, which is scheme tied).



Appendix D – Potential Template for an FCERM Investment Plan (working draft)

The following template is the current working draft that is being trialled on the case studies. It is expected that this will develop and the final reporting will include an updated suggested template, plus example content extracted from the case studies.

Suggested structure:

1. Summary of Key Findings

A summary of the Investment Plan, including commentary on key decisions on which schemes are being promoted, which are not and why.

2. Context

- a. Aim of an Investment Plan, its iteration / specific purpose.
- b. Scale of FRM problem – summary statistics.
- c. Key links to the policies and priorities of others where they influence funding and funding choices.
- d. General sources of funding – local, regional and national – the present situation and general outlook.
- e. Timetable - for bidding for certain funds and decision points.

Some of the above just include a pointer to sections of text in the Local Strategy

3. FRM Opportunities (schemes to be assessed)

- a. FRM priorities of RMAs – *cross reference a section in local strategy?*
- b. Quick wins and piggybacks – *cross reference section in local strategy?*
- c. Short, medium or long term aspirations – a list of potential FRM schemes.
- d. Initial FDGiA projections for identified FRM schemes for all RMAs.

4. Funding Assessment

- a. Value gained from Local Strategy / other work (how this version of the Plan has been informed by other work).
- b. Partnership funding screening for each scheme and in aggregate – a summary of key points with an appendix for the detail. Routes to access main local funds and quantum.
- c. Present funding scenarios and key output from running “Funding Share” tool. Sensitivity to key parameters explored.
- d. Key decisions required and by who, funding gaps, certainties / uncertainties.

5. The Investment Plan - Package of FRM Schemes

- a. Key assumptions for this Investment Plan

- b. Preferred list of schemes by timeframe (short, medium, long term). Key decisions made – what is included and what is not and why. Main sources of funding, quantum and risks.
- c. Statement of benefits (using local and nationally recognised metrics) vs. costs per scheme / district / LLFA. Present benefit of work done – leveraging in funds etc.
- d. SWOT type analysis. Key pointers for the local FRM partnership to work with.

6. Action Plan – To do list

- a. Annual programme of key dates / action needed. Links to MTP and other FRM works programmes.
- b. Scheme level actions. Key points on main schemes and appendix holding the detail for each scheme. Two aspects:
 - i. Actions needed to deliver scheme funding in short term.
 - ii. Developing sufficient data to bid /secure funding for schemes in the future. Actions needed to secure scheme longer term actions (e.g. CIL, TIF).
- c. Management
 - i. Roles and responsibilities – scheme level and overall programme.
 - ii. Change management - Triggers for changing the Investment Plan (e.g. likely variations in funding picture) and how to manage change.

7. Verification

Document the buy in to the current version of the Investment Plan