

Coastal Communities 2150

Adaptation Plan

For the Community of Southampton Itchen

January 2014



Photos Peter Taylor and Mr Pope



Part One - Introduction

1.1 Scope of the Coastal Adaptation Plan

This Coastal Adaptation Plan outlines some proposed solutions to achieve the long term vision of the community. The actions will help the community adapt to future change, thereby reducing negative consequences and enhancing beneficial consequences of climate or coastal change.

A public meeting was held in Southampton Itchen, after which the community formed a Community Group during the project which met three times. Typically the community enjoy living by the riverside and accept that they need look after themselves during potential future flood events.

One community member stated:

“Great sense of planning for activity and not just talking”

Another stated:

“Good discussion with committed and involved residents. Useful plan of action”

Benefits of a Coastal Adaptation Plan for the Community
It establishes meaning and gives hope for the future
Motivation for individuals to consider their activities and actions
It brings unity to community
It raises commitment level/ownership
It brings positive change
Potential to capitalize on new opportunities
Benefits of planning rather and reacting

The format of this plan is as follows:

- Introduction
- The Stakeholder Engagement Process
- The Vision
- The Adaptation plan (including the Action plan)

1.2 Background to the project

CC2150

Coastal Communities 2150 (CC2150) Project started in January 2011. The project partners put together a successful bid to the INTERREG 2 Seas Programme and we were awarded European Regional Development Funds to cover 50 per cent of the €2.9 million costs. The partners involved are: Environment Agency, Kent County Council, Hampshire County Council, Alterra (Stichting DLO), Province West-Vlaanderen and Agency for Maritime and Coastal Services – Coastal Division.

The aim of the partnership was to work together, sharing experiences and learning to enhance knowledge on how to best communicate the long-term issues of changing coastlines. This is something that will be greatly impacted by future climate change; especially rising sea levels, accelerating erosion rates, higher storm surges and rainfall. Increased air and sea temperatures will bring additional challenges, as will pressures to build new developments and homes.

Partners have worked with selected pilot areas to develop innovative tools and ideas to help communicate these issues to communities at risk. The over-arching aim was to involve those impacted by change in the decision-making processes as engaged people will be much better placed to deal with future risks and changes.

CCATCH The Solent

Hampshire County Council (HCC's) chose 6 sites for Community Engagement after a short-listing process conducted with members of the HCC's Project Overview Group.

The sites selected include the following:

1. Beaulieu to Calshot - an area with a small number of large private landowners and includes Calshot Activities Centre and Lepe Country Park (Engagement occurred here within the HCC pathfinder project).
2. Southampton, Upper West Itchen - an area of mixed urban community with social housing, private landlords and owner occupiers. There are also numerous commercial waterside properties.
3. Netley and Royal Victoria Country Park - a small urban coastal community and a Country park which draws numerous recreational visitors.
4. Solent Breezes Holiday Park - an area with a holiday park with some permanent residents, holidaymakers and numerous recreational uses, also includes farmland and utilities infrastructure.
5. Langstone – a small rural communities with tourist and recreational assets at risk.
6. Yarmouth - small affluent town with a working harbour

A detailed Project Initiation Document was produced for each site and checked with the Project Overview Group. This document detailed the background to the project, the reason the site was selected and the issues due to coastal change.



Southampton Itchen

Aim

Increase awareness and the ability of the community of St Denys and other nearby areas (upper west bank of the River Itchen) to manage the risk from tidal flooding.

Objectives

- To raise awareness of the current risks to different sectors of the community.
- To provide educational and interpretational opportunities that can communicate coastal change and build a high level of understanding within the local community.
- To explore how the community can further plan for a long term flood risk management scheme to reduce the risk to their properties.
- To explore a whole range of interim measures to reduce the impact of potential flooding to properties including flood gates, airbrick covers and other resistance and resilience measures.
- To engage the community in preparing an interim community emergency plan.

Deliverables

- A process for the community to have an input into the development of an emergency plan.
- Development of a community emergency plan.
- Identify solutions to short-term flood risk issues with resistance and resilience measures.
- Establishment of a local community flood group.
- Co-ordinate an application for national funding to implement resistance measures to those properties in the highest risk areas.

1.3 Our understanding of the current situation

The project area included the left bank of the upper River Itchen in Southampton between Horseshoe Bridge in St Denys and Oliver Road in Woodmill . The area predominantly comprises of residential properties with gardens backing on to the river that are at risk of flooding. The overall area includes the following communities:

- 296 residential properties potentially affected up to 2060 (approximately 20% social housing)
- 9 commercial properties potentially affected up to 2060
- Sewage treatment works
- Rowing Club
- Network Rail
- Highways
- Houseboats
- Boatyards (Dyer Brothers)

The majority of the existing defences are ad-hoc and privately owned/maintained. Prior to commencement of the project, the last memorable flood event was in 2008 and since then the area has not had much recent flooding so awareness at the beginning of the project was quite low, despite recent efforts of Southampton City Council to engage the community on long term flood risk management.

The North Solent SMP (2010) sets a policy of Hold the Line over the next 100 years. Southampton Coastal Flood and Erosion Risk Management Strategy (2012) makes a number of recommendations that are shown in figure 2.

1. The strategy recommended adaptation measures until 2060 for those properties within highest risk areas (risk of 2% (1 in 50) annual chance of flooding), these are shown as red hatching on the map. In the present day highest risk areas, there are 69 properties which may be eligible for a grant to make their properties more resistant to flooding. These are prioritised for consideration within the CCATCH project. Adaptation measures for the areas at moderate risk, 1 in 200 annual chance of flooding, (i.e. those shaded orange on the map) will be able to learn from work undertaken in the red areas.
2. The strategy recommends raising awareness of the flood risk and potential increase in risk due to sea level rise, particularly to those residing in properties within moderate risk areas (risk of 0.5% (1 in 200) annual chance of flooding). This will be carried out within the CCATCH project.
3. It is proposed that all properties along the frontage will be protected by a flood defence scheme after 2060 (this is only economically viable after 2060). Support of all landowners would need to be sought as the scheme would require a continuous defence along the frontline to be effective. The nature of the national funding availability is unknown but it is likely that some private funding will be required. This will be discussed within the CCATCH project.
4. Establishment of a community flood group to assist the co-ordination of the community response to future flood events. It is hoped that this will be an outcome of the CCATCH project.

When Southampton City Council consulted with the community on the Southampton Coastal Strategy, a number of issues of concern for property owners were highlighted, including:

1. Risk of flood damage to homes, property and belongings.
2. Implications for future insurance of properties, value of houses, mortgages etc.
3. How to protect homes, how effective will it be, what are the costs and how will it be paid for?

Figure 1 below shows the potential extent of a present day 0.5% (1 in 200) annual chance of tidal flood event. Figure 2 shows the recommended policy for the various zones of risk within this area. In particular, there are three distinct subareas that are at a higher level of risk i.e. 2% (1 in 50) annual chance flood risk. It is these communities that were targeted as a priority within this project and they are as follows:

- Adjacent to Priory Hard (southern most section of Priory Road on both sides and Adelaide Road).
- North/Northeast of Priory Avenue (directly adjacent to river frontage).
- South of Sewage Treatment Works (northern most section of Kent Road & Saltmead).
- Other residents etc. will also be engaged in the project but to a lesser extent due to their lower risk.

Figure 1. Extent of Present Day 0.5% (1 in 200) Annual Chance of Tidal Flooding in Upper Itchen/St Denys

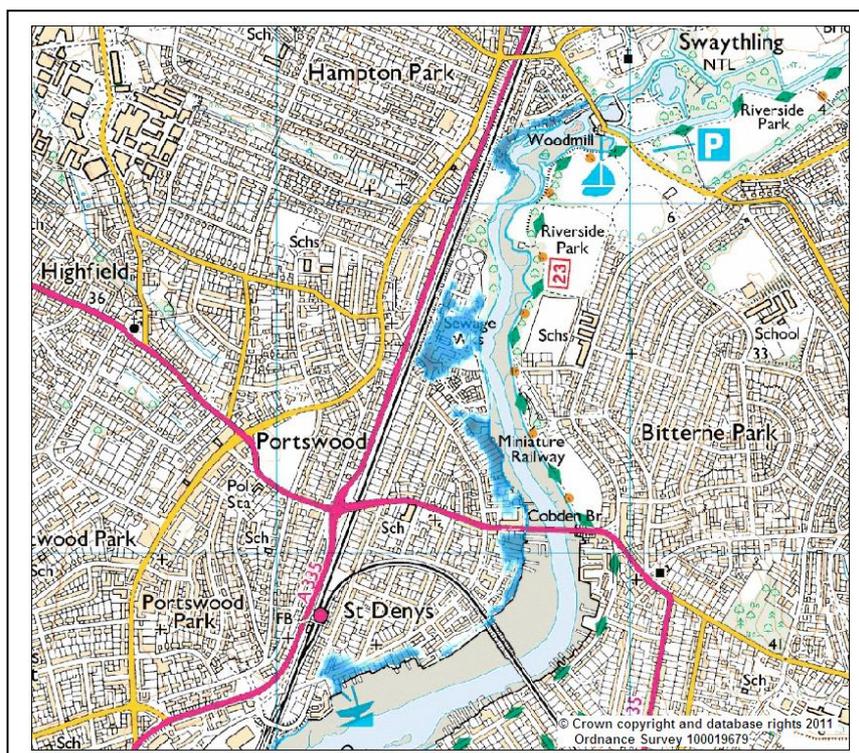
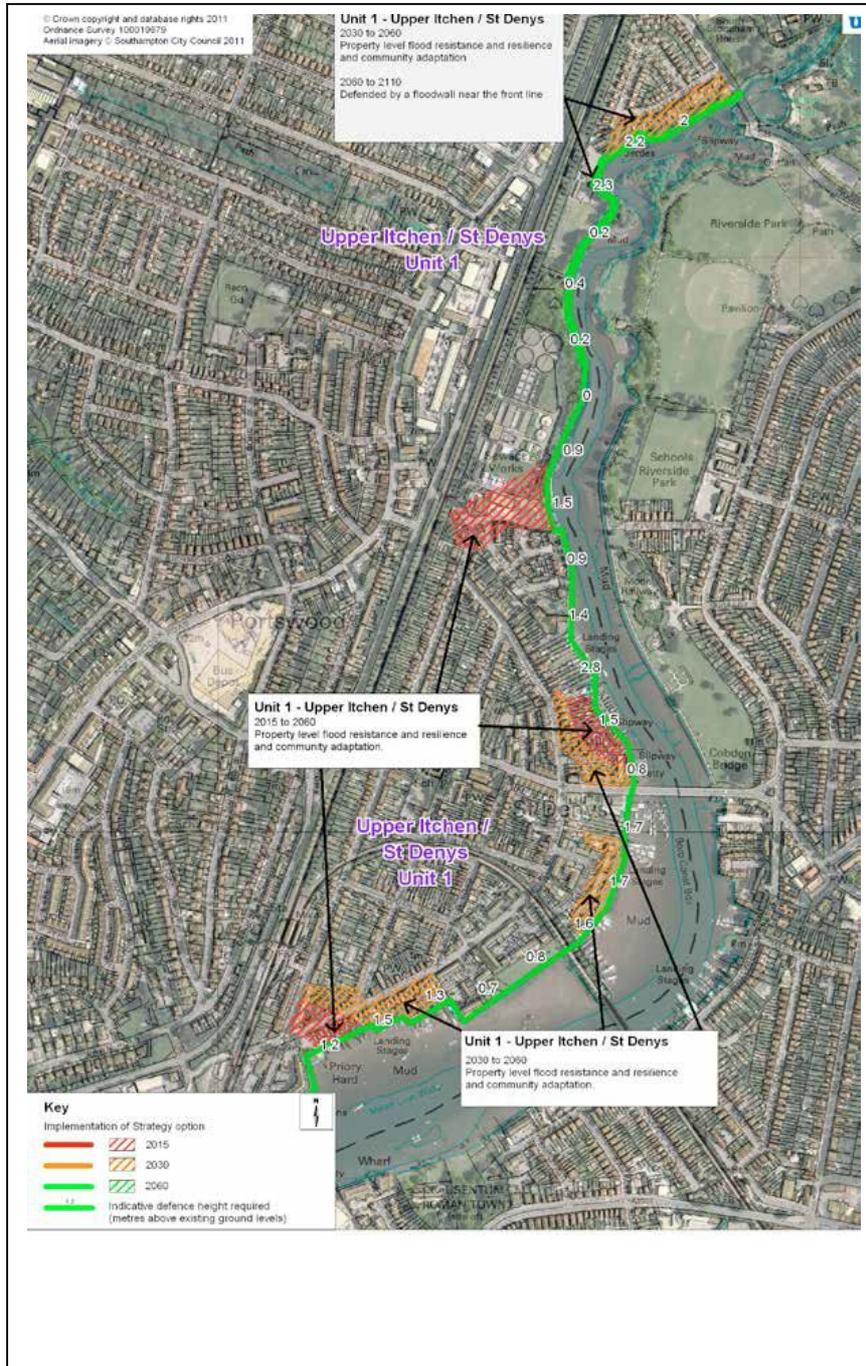


Figure 2. Preferred options to manage flood risk in upper west bank of the River Itchen



1.4 Coastal Change and Adaptation

1.4.1 Coastal Change (Sea Level Rise)

Sea level rise is considered to be one of the most significant effects associated with climate change to threaten the UK. Sea levels have been rising for thousands of years since the last ice age and will continue to do so in the future due to the thermal expansion of sea water and melting of the polar ice caps. Scientists predict that by 2100 sea levels will rise by up to 1m in the English Channel, and that they will continue to rise for the next several hundred years. It is plausible that we will get 3.5 m rise in 300 - 400 years and even a 10m rise in the next 1000 years. With a predicted rise in the number of storms, the risk of flooding and erosion of land along the coast will increase.

According to the Southampton Coastal Strategy, sea levels are predicted to rise in the Southampton Itchen area by up to 1 metre over the next 100 years as a result of projected sea level rise. There are three main factors contributing to sea level rise. The first is the melting of the glacial ice sheets as a result of the climate warming on a global scale, causing the release of water that would otherwise be stored. Oceans trap heat and in doing so the water warms and expands in a process called thermal expansion. Surface waters are quick to release heat; however heat absorbed into the deeper ocean takes longer to be released and is generally stored. With temperatures rising, more heat is trapped and the oceans continue to expand. The third contributing factor is a process called isostatic rebound. This is the readjustment of the land masses in response to pressure exerted on the land by ice during the last glacial period. In the past much of Britain was covered by glacial ice which caused land masses to sink. As a result of the ice melt the North of the UK is slowly rising, whilst the South-East is sinking to compensate, making it appear that sea level rise is happening faster in the South. In the future sea level rise could mean land becoming flooded permanently but will also put pressure on local drainage systems, as tidal entry to culverts and drainage networks will reduce the drainage efficiency, which could in turn lead to flooding in areas away from the immediate coast.

As well as the tide, weather conditions can influence the height of water. Offshore winds can decrease the height of water by moving it away from the coast, whilst onshore winds exert drag on the surface bringing it up towards the coast, increasing the height. The greatest effect from weather comes from atmospheric pressure. A change in pressure by 1 millibar can cause a 1cm change in water level, with the sea falling under high pressure and rising under low pressure. A storm surge results from these adverse conditions and has the potential to cause a flood event, especially when they coincide with high tide. A drop in pressure combined with high tide can create a powerful driving force that can cause large waves to break through any existing defences (breach) and/or cause the water level to reach above the defence (or land) level, allowing water to reach the land behind.

In Southampton the risk of flooding is already apparent. The most recent historical flood events occurred on 26th December 1999 and 10th March 2008. Although these were both relatively minor flood events with only shallow flood water experienced, a few homes did suffer damage. If a more extreme flood were to occur the water depths could cause more damage to more properties. If a flood were to occur in the area it would last less than 2½ hours (as the water would recede when the tide recedes). However, this does raise a number of concerns for property owners including:

- Potential flood damage to homes, property and belongings.
- Potential implications for future insurance of properties, value of houses, mortgages etc.
- How to protect homes, how effective it will be, what are the costs and how will it be paid for?



1.4.2 Planning for future change

As a response to climate change the primary mechanism over the last 20 years has been that of mitigation and in particular a reduction in greenhouse gas emissions has been and is at the forefront of the environmental and political agenda. Whether mitigation can be effective or not, it is imperative that communities and Government respond to the threats of climate change through the alternative process of adaptation.

Numerous definitions may be cited with regard to the nature and meaning of *adaptation*. The United Nations Development Programme (UNDP) report on Adaptation Policy Frameworks, Lim *et al.*, (2004) state “adaptation is a process by which strategies to moderate, cope with and take advantage of the consequences of climate events are enhanced, developed and implemented”

Adaptation in the context of this report can be seen as a process of becoming adjusted to new conditions, in a way that makes individuals, communities or systems better suited to their environment.

An adaptation strategy must look beyond the short term and be based on a long term vision. It needs to take into account the dynamic nature of coastal processes, particularly in the light of climate change. Adaptation presents many challenges as to how to continue to deliver services and maintain infrastructure, and at the same time there will be considerable opportunities, such as potential improvements and the enhancement of landscape and nature conservation.

In the long term it is unlikely that we will be able to maintain all areas of the coast as they are today; so it is important to think realistically about what the coastline could look like in future, consider more sustainable solutions and plan for these changes and adapt.

Part Two - The Stakeholder Engagement Process

2.1 Local Engagement Group

The Southampton (LEG) included key representatives of the local community at risk of coastal change. The LEG helped guide the local programme of activities and provide local expertise, knowledge and advice.

Members of the Southampton Engagement Group included the following

- Karen McHugh (Solent Forum)
- Bernadine Maguire (Southampton City Council)
- Helen Cutler (Resident)
- Geraldine Parker (Resident)
- Peter Taylor (representing properties in at risk area around the Junction Pub)
- Ian Thomas (Resident)
- Councillor Maureen Turner
- Christine Wheeler-Osman
- Dave Bone (Southern Water)

2.2 The Stakeholder Engagement Strategy

A Stakeholder Engagement Strategy was produced in July 2012, and agreed by the Southampton LEG.

The engagement strategy set the scene and described how the engagement was to take place. More specifically it provided an outline of the engagement, a timetable, of the activities, tools to be used and the key messages. It also listed who should be involved and provided a stakeholder analysis. The strategy was a living document and was used throughout the engagement to steer and evaluate the engagement process, providing sections on logging activities and monitoring and review.

2.3 Tools

CCATCH Project website

The website was developed at the very beginning of the project and maintained throughout. It details everything about the project as well as all report outputs. The link is provided below and information regarding the project can be sourced from this website.

http://www.solentforum.org/current/CCATCH/Southampton_Itchen/

Initial Information Leaflet

The aim of this was to raise awareness of the project, outline the process and encourage people to get involved. It explained some of the issues in relation to coastal change and identified which properties were within the risk areas that are to be targeted in the project. The leaflet was also designed to gather peoples contact details by providing a return slip so that people could express an interest in the project and could then be invited to future workshops/events. The leaflet was distributed by hand, along with an introductory letter, to all properties in the flood zone. The letter was tailored to those in the highest risk area and those in the lower risk area. Those in the higher risk area were eligible for property level protection grants.

Public and Community Group Meetings

One public meeting was held and following that three Community Group meetings were held. The aim was to provide further information about the project and discuss the issues, and then to develop the project according to the wishes of the Community Group, and develop an Adaptation Plan.



As well as the above meetings, the Community group set up a number of Task and Finish groups. These groups were tasked to actually take forward priority actions.

Community Website

The community built their own community website to show all of the information put together throughout the project.

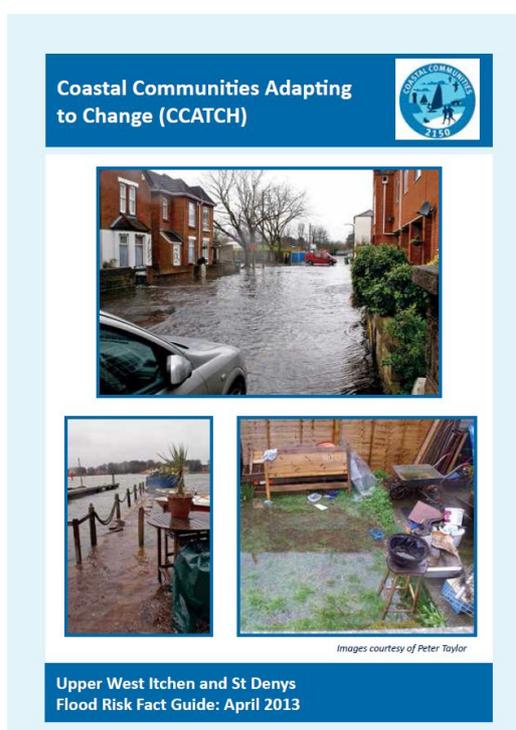
<http://itchentides.org.uk/>

Historical Flood Markers

Three flood markers will be placed within the Southampton Itchen area alongside interpretation boards.

Technical Factguide

With the help of the Local Engagement Group and the Community Group a Technical Factguide was published to give the community an overview of flood risk in the area.



Maps

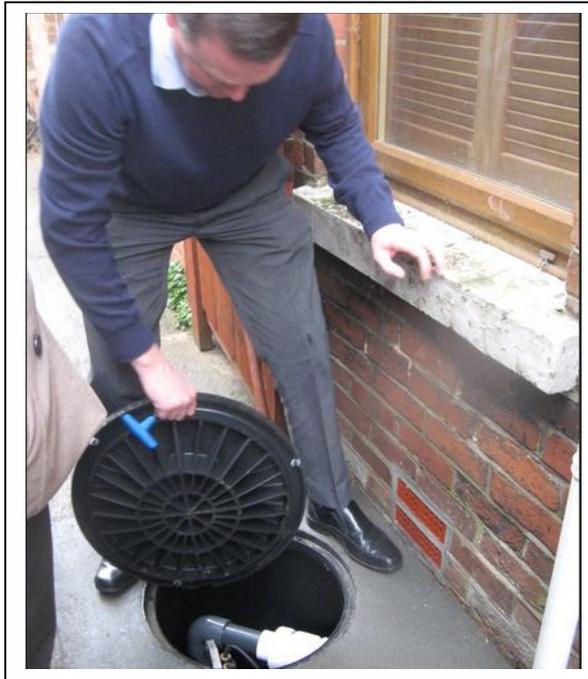
Flood risk maps from the Southampton Coastal Strategy were used to help raise awareness within the community.

Survey Properties for Property Level Protection

An assessment of what Property Level Protection (PLP) measures would be applicable for a demonstration house was undertaken. Two residential properties (semi-detached) were surveyed and subsequently the appropriate PLP measures were recommended for installation.

Demonstration of PLP measures

Two surveyed properties had the recommended (or similar) PLP products installed to reduce the potential impact from future flood events in the area. One of these properties was used to demonstrate the products to the wider community.



Other meetings

One meeting was held to discuss implementation of a wider PLP scheme for the higher risk areas and the associated activities which would need to be implemented in relation to this activity. This was not progressed directly within the project but will be taken forward by the Belsize Flood Resilience Project.

Final Event 19th October – Celebrating Waterside Living

A community 'Living by the waterside' event was held in the heart of the community. The aim of this event was to provide an opportunity for the wider community and other interested members of the public to drop in and view all the project outputs.

Newsletters

Two newsletters were produced, one after the first Public Meeting and a final Newsletter in February 2014. The aim of the newsletters was to keep the community informed and finally disseminate the outputs of the project.

2.4 Methodology

The following table provides a broad timetable showing the project methodology.

26/04/2012	LEG Meeting 1
29/05/2012	LEG Meeting 2
09/08/2012	Door knock houses to drop leaflet and letter
08/12/2012	Public Meeting
11/12/2012	Zone A meeting to discuss PLP
24/01/2013	Community Group Meeting 1
07/02/2013	Newsletter sent to Community
22/02/2013	Marker task and finish group
22/02/2013	Walls task and finish group
22/02/2013	Levels task and finish group
19/03/2013	Property Level Protection Survey of 82 and 84 Priory Road
13/05/2013	Website task and finish group
23/5/13	Community Group Meeting 2
5/7/13	Final Events task and finish group
6/8/13	Final Events task and finish group
29/8/13	Final Events task and finish group
30/8/13	Invitation leaflet to Autumn Event
19/10/13	Autumn Event – Celebrating Waterside Living
4/12/13	Community Group Meeting 3
February 14	Newsletter 2 sent to Community

The budget for the work, excluding the Project Officer time, was approximately £23,000.

2.5 Results

First contact with the Community and the Public Meeting

We first contacted the community in August 2012 and delivered a letter and leaflet to 271 properties identified by Southampton City Council as being at risk of tidal flooding (all properties at risk of flooding in any one in 200 year event). A total of 45 people responded, and subsequently these respondents were invited to a public meeting at the Riverside Club on Priory Avenue on 8th November 2012.

This meeting was attended by 29 people. The Project team introduced themselves, Heather Shepherd from the National Flood Forum gave a presentation on the need to develop local resilience, and then the community worked in groups to share information on local flood risk and list the key components that may be needed if the community were interested in developing 'a community flood plan'. A report on the meeting was produced but in summary the community identified the following actions:

Public Meeting – November 2012 – actions requested by community

- Become part of a community group to discuss further action -16 people
- Help produce Emergency Plan -9 people
- Be involved in long-term design of coastal defence scheme for area – 11 people
- Receive newsletter – 19 people

Activity after the first public meeting

A number of people at the meeting were interested in visiting the Portswood Wastewater Treatment Plant on Kent Road. As a result Southern Water organised a site visit to which 5 people attended..



Photo courtesy of
Clare Diaper

A smaller meeting was held on 11th December 2012 for those properties at higher risk of flooding (one in 50 year probability of flooding). This meeting established interest in installing property level protection in a demonstration house, as well as to talk specifically about a small community flood plan for the area close to lower Priory Road near Horseshoe Bridge). It was hoped that two houses in the highest risk area will have property level protection installed as part of this project and this can be used to demonstrate the products to others; this work was subsequently installed. Southampton City Council made an application for funding as part of a Defra Community Flood Resilience Pathfinder scheme to help install Property Level Protection within the houses in the area at greatest risk from flooding (Lower Priory Road/Adelaide Road); SCC subsequently were successful with their funding bid.

At an early stage we have identified a number of technical questions about flood risk and the Southampton area. As a result we developed a Technical Fact Guide.

A small group of residents at Oliver Road began to scope out the need for a technical webpage which could serve the community; this was the precursor to the Community Website (Community Tide News: St Denys West Itchen). Essentially the community webpages shows the Southampton tidal data, the land and water heights around the local area and links it to the BBC weather forecasting system, so that the community can at a glance see when high spring tides may occur and whether storm conditions may also be forecast. It also gives an opportunity for the community to upload data to the system.

A number of residents have produced reports on their flood experience (Lower Priory Road and Pettinger Gardens), and a photo library of flood information has been collated, both are held by the Solent Forum.

The community are sensitive about doing anything that might devalue their property or make it expensive to get insurance. Insurance companies and property purchase searches are all based on existing Environment Agency data. The data used for this project has been taken from the Southampton Coastal Strategy (2012). This shows less risk than the Environment Agency data, and therefore there is little likelihood that Insurance premiums would rise and for this reason, in fact with the right flood protection in place premiums may fall. Despite this, it is recommended that any sensitive data from this project are kept for the local group. The website was designed to celebrate life on the Itchen rather than being alarmist.

Community Group Meetings.

The Southampton Itchen Community Group was launched at an evening meeting on Thursday 24th January 2013. This meeting, attended by 15 people, explored how the community could work together in the future and work specifically on some of the most important issues raised. The Environment Agency attended to provide a presentation on how to produce a Community Flood Plan.

The table below lists the practical actions discussed showing their prioritisation score. The items in the table that are coloured grey, were then discussed in more depth.

Action	Prioritisation score
Build up a database of reports and images and fine tuning local maps	8 people thought this was a priority
Providing clear information on flood risk such as height and chart datum information for properties	6 people
Working together on a consistent height flood wall along the bottom of properties	5 people
Installation of local Tide Gauges	6 people
Routine drain clearance	1 person
- creating visible benchmarks on local buildings to show what level the flooding reached	3 people
Information for house buyers/ sellers	0 people

At the end of the meeting, three task and finish groups were set-up to take forward the actions and were asked to progress them over the coming months and report progress at the next Community Group meeting. The groups set-up were as follows:

Group 1: The Levels Group

Group 2: Flood Marker

Group 3: The Wall Group

It is notable that the group did not take forward the action to produce a Community Flood Plan, although this was raised at the first public meeting. This work will be taken on by the Southampton Community Flood Resilience Pathfinder Project (now known as the Belsize Flood Resilience Project).

The Community Group then met again on 23rd May 2013. Mike King (Resources for Change) welcomed people to the meeting and set the scene in the following way:

- To hear from Southern Water, to respond to many queries raised in the last two meetings
- To update progress on the short-term actions agreed at the last meeting
- To start to think about long- term actions

These actions were then to be fed into the adaptation plan and form the basis of the next section.

The work of the task and finish groups was found to be extensive, and the community raised the need to document this on a community website. A 4th task and finish group was therefore established as follows:

Group 4: The Website Group

The meeting, attended by 16 people, established a need for a Community Event to be held in the Autumn 2013 to demonstrate progress on the project and unveil any of the work of the task and finish groups as well as any other project progress. An Event Planning Group was established to plan for this event, scheduled for Saturday 19th October 2013.

A final Community Group, attended by 20 people, was held on 4th December 2013, and the purpose of this group was to:

- Review what had been achieved over the last 12 months
- Discussion about a 'vision' for waterside living
- Action Planning – to help make that vision a reality
- Information about the Belsize Flood Resilience project
- Marking the end of the CCATCH project

Southampton City Council Pathfinder Project – The Belsize Flood Resilience Project

This project will focus on reducing the risk of flooding through property level protection and preparedness of the community to respond to future flood events in the area at highest risk of flooding at the lower end of Priory Road/Adelaide Road; Southampton City Council bid for the funding to take forward this project over the winter 2012/13 and won it, using the CCATCH Southampton Itchen project as a basis for the bid.

Task and Finish Groups

As previously mentioned the Southampton Itchen Community Group set-up a number of task and finish groups to progress actions. These actions form part of the adaptation plan set out in the following section of the report. Each group comprised members of the community and one or two project officers to help coordination and reporting.

Website Group This group was set-up to create a website, as distinct from the CCATCH Project webpages. The group felt that it was important that they had ownership of this website so it was set up using word press and is administrated by a community member. All information generated by the following task and finish groups have been put on the website. The website serves to show the Southampton tidal data, the land and water heights around the local area and link it to the BBC weather forecasting system, so that the community can at a glance see when high spring tides may occur and whether storm conditions may also be forecast. It also gives an opportunity for the community to upload data to the system. The site is called Community Tide News: St Denys West Itchen. The link to the site is <http://itchentides.org.uk/>

The Levels Group This group was set up to establish, relative to Dock Head at ABP Southampton, what levels the height of land was around the neighbourhood and people's properties, compared with the water levels around the river. The information this group generated was extremely informative and is available on the community website.

- Flood Marker group This group was tasked to scope out where a set of markers could be sites to show historical flooding and what information might be shown at these locations. As a result of this work, three flood markers will be installed at The Hard Priory Road, Cobden Bridge and Woodmill Bridge.
- The Walls Group A group of approximately 24 residents in the upper end of Priory Road, were interested in improving walls running through the backs of their gardens. These walls are of varying heights and conditions and there was an aspiration for the community to improve the standard of protection.

Autumn Community Event – Celebrating Living by the Waterside



This event was held on Saturday 19th October 2013 at the Hard, Priory Road and between 60 and 80 people attended. The event achieved the following:

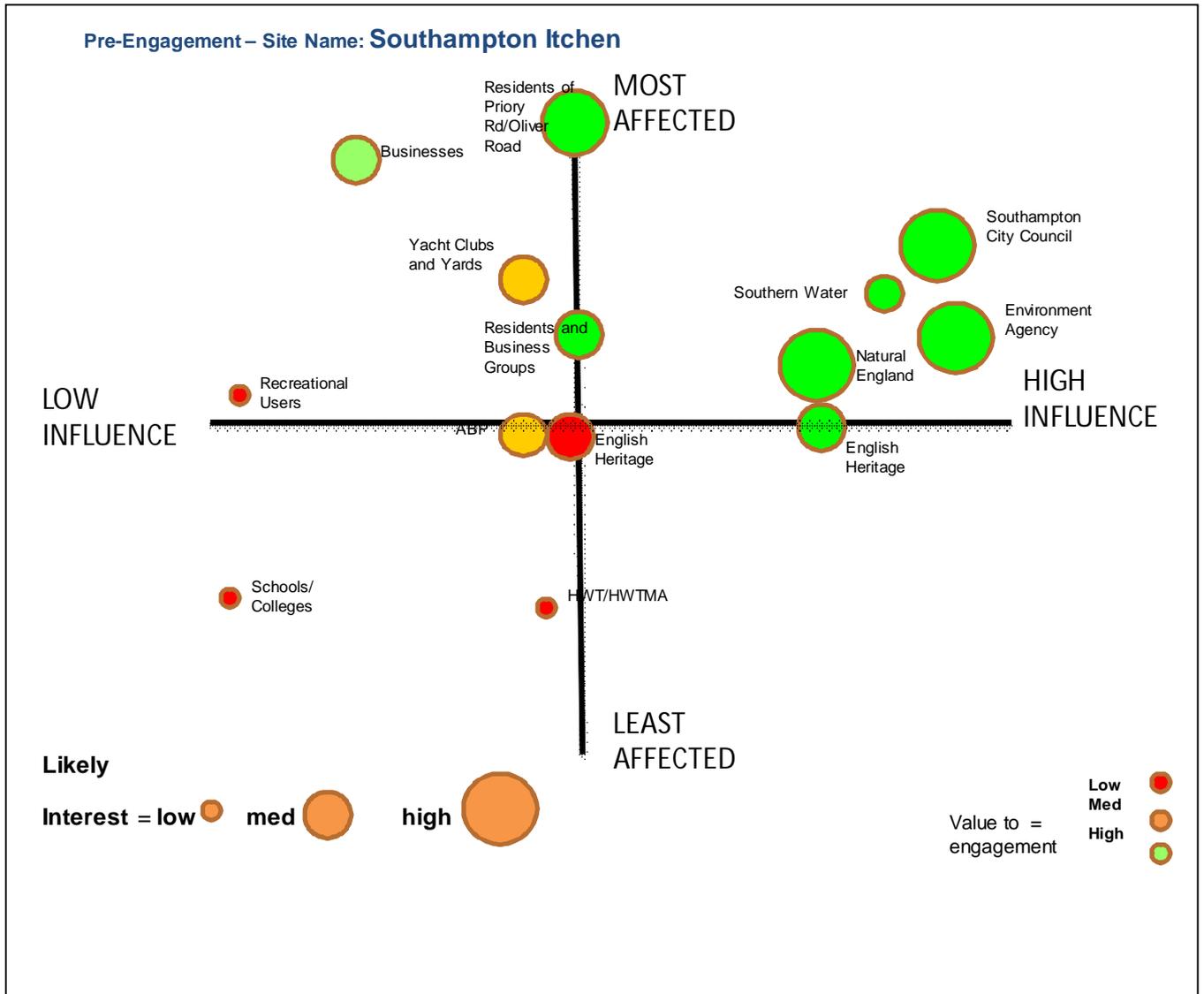
- To inform the wider community of St Deny's of the work the CCATCH project in partnership with local people had been doing over the past year to help the community respond to the risk of flooding.
- To share information with the wider community about flood risk and flood prevention measures
- To consult with the wider community on the elements of a local Adaptation Plan.

The components of the event included:

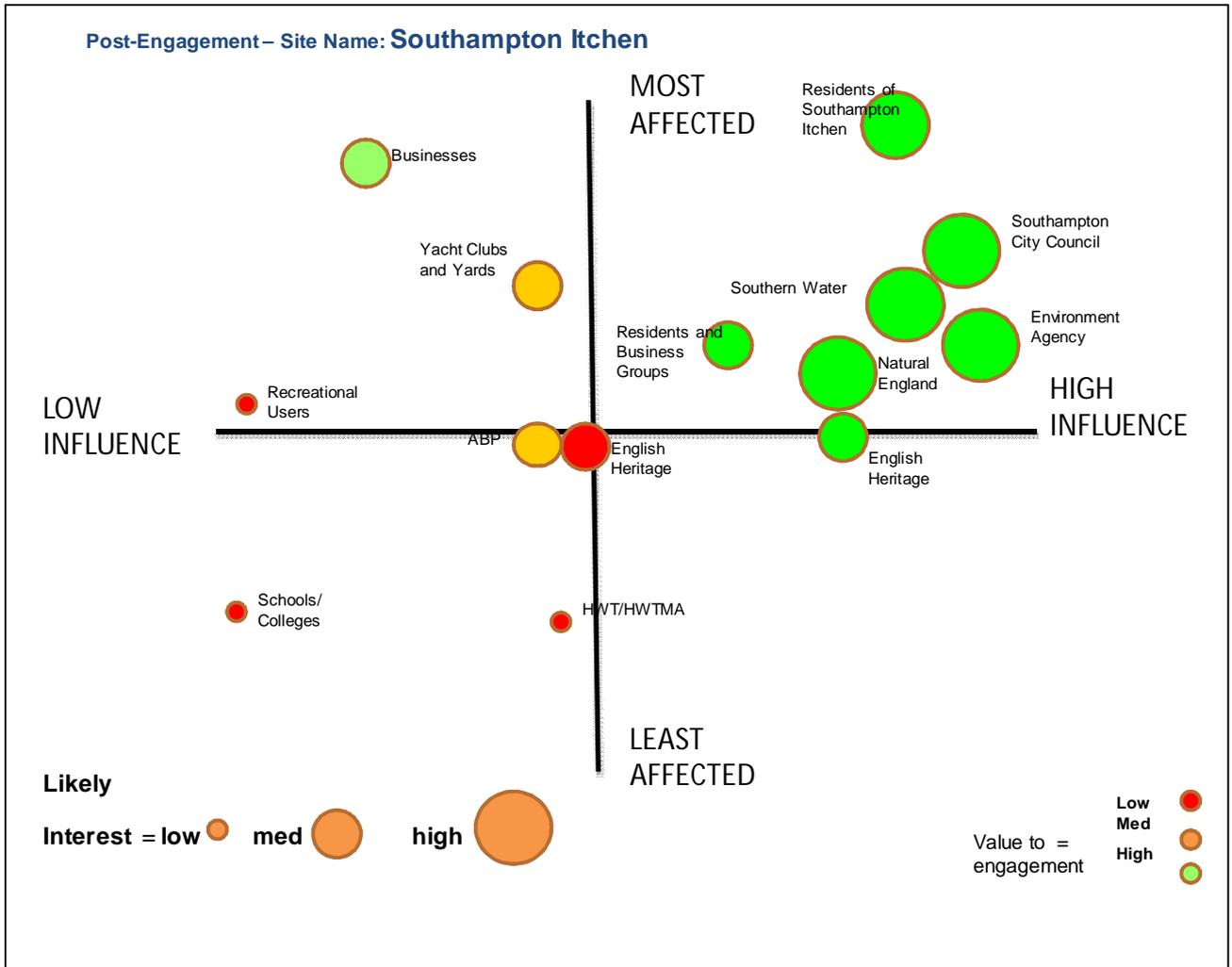
- The National Flood Forum Flood Information Trailer, providing people with help and advice about property level protection.
- A demonstration house, where the CCATCH project had installed property level protection.
- A photographic exhibition illustrating waterside living both past and present.
- A children's drawing area where children were encouraged to draw pictures of waterside living in the future.
- A computer showing the newly developed Community website.
- Information on the new flood markers and information boards.
- A pop-up consultation stall where people were asked to share their views on the good and not so good aspects of waterside living.

2.6 Pre and Post Stakeholder Analysis

2.6.1 Pre Engagement Analysis



2.6.2 Post Engagement Analysis



Part Three - The Vision

3.1 What is a Vision

A Vision describes the preferred future scenario or gives an image of the future the community seek to create. Definitions of a vision could include the following:



3.2 How was the Vision Defined

The CCATCH Southampton Itchen Community Group began working on the vision and adaption plan at the first Community Group meeting in January 2013. The Community were asked to prioritise the actions they had raised and to discuss the top ones in depth, creating an action plan. Task and Finish Groups were then set-up for key actions in order to progress them amongst the community. This work was presented to the community at the June Community group meeting. At this meeting, the group began to shape the vision for their area. This work was then used to draft the Vision and Adaptation Plan and this was shown to the Community at the December 2013 Community Group meeting for agreement.

3.3 The Vision for Southampton Itchen.

At the December 2013 Community Meeting, the following vision emerged using material from the project. This vision is as follows:

A community that values its waterside location and is continually learning to live with the river. Where those at risk take personal responsibility for their own flood defences and where the community works collaboratively to manage any increase in the risk of flooding that may occur in the future.

Part Four – Adaptation Plan

4.1 Introduction

This section summarises the key pressures, issues and opportunities for the community. These are discussed and the range of possible actions for the short, medium and long term that have been suggested are outlined. A table summarises the options for action. The section also considers legacy issues.

4.2 Key Pressures / Issues /Opportunities

4.2.1 Scenarios/options

Future climate change and the impacts this may have get more and more uncertain further in time. This has to be taken into account in decision making in order to develop a system that will remain functioning under a range of conditions and is therefore flexible. A sustainable adaptation plan therefore needs to be robust and able to adapt over time to (unforeseen) future conditions. As such the adaptation plan should include the following:

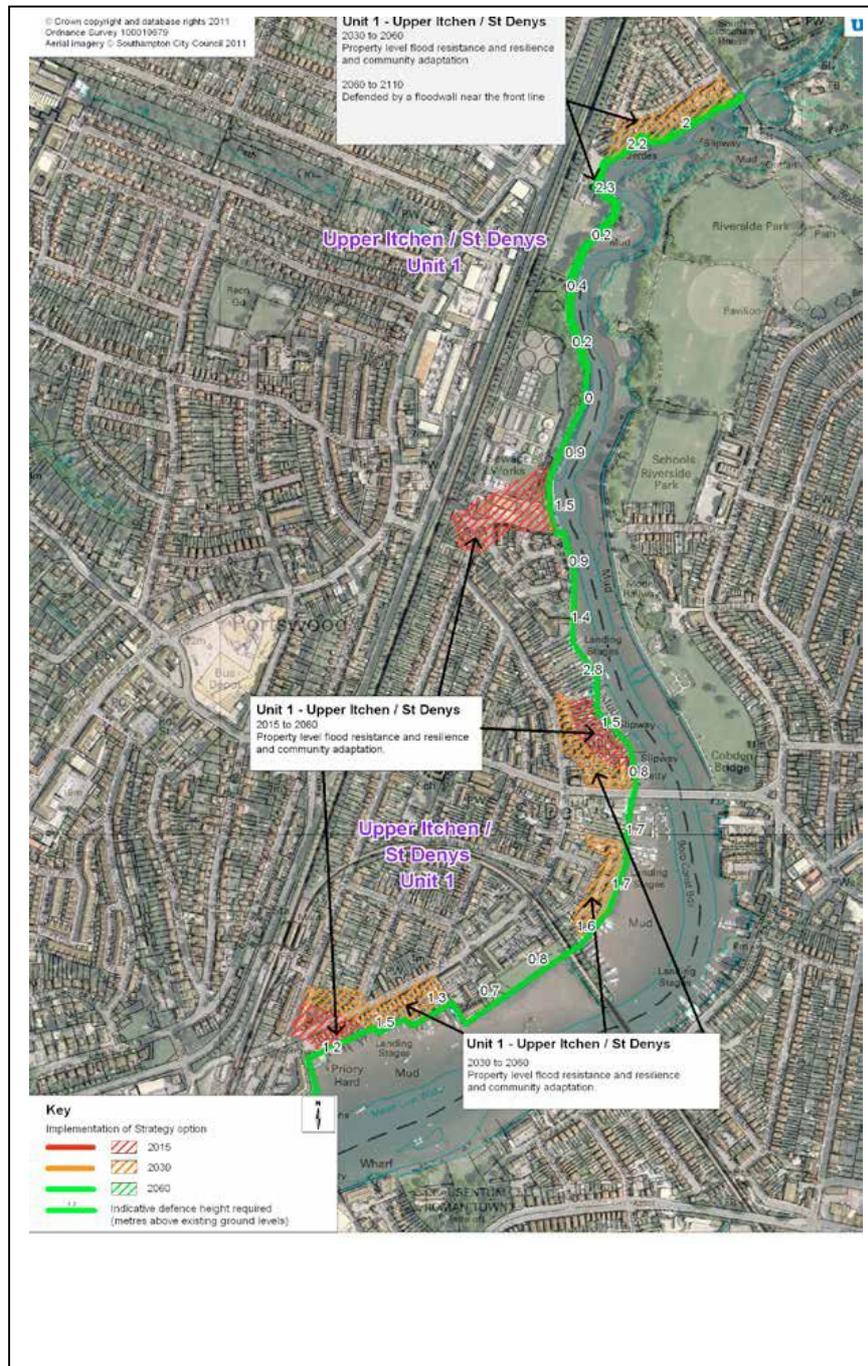
- several options that can be kept open that explore a range of scenarios and options that could occur due to a variety of uncertainties
- connect short-term targets to long-term goals over time
- commit to short-term actions while keeping options open to take account of uncertainties
- continuously assess and take actions if necessary
- Set indicators/triggers for change e.g. actual rate of sea level rise, peak surge tide level, condition of flood defences

As mentioned previously in this report, The North Solent SMP 2010 sets a policy of Hold the Line over the next 100 years. The Southampton Coastal Flood and Erosion Risk Management Strategy 2012 makes a number of recommendations.

- The strategy recommended adaptation measures until 2060 for those properties within highest risk areas (2% (1 in 50) annual chance of flooding), which are shown as red hatching on the map. In the present day highest risk areas, there are 69 properties which may be eligible for a grant to make their properties more resistant to flooding. These were prioritised for consideration within the CCATCH project. Adaptation measures for the areas at moderate risk, 0.5% (1 in 200) annual chance of flooding, (i.e. those shaded orange on the map) will be able to learn from work undertaken in the red areas.
- The strategy recommends raising awareness of the flood risk and potential increase in risk due to sea level rise, particularly to those residing in properties within moderate risk areas (risk of 0.5% (1 in 200) annual chance of flooding). This was carried out within the CCATCH project.
- It is proposed that all properties along the frontage will be protected by a flood defence scheme after 2060 (this is only economically viable until after 2060). Support of all landowners would need to be sought as the scheme would require a continuous defence along the frontline to be effective. The nature of the national funding availability is unknown but it is likely that some private funding will be required. This was discussed within the CCATCH project.

- Establishment of a community flood group to assist the co-ordination of the community response to future flood events. This was an outcome of the CCATCH project.

Figure 2. Preferred options to manage flood risk in upper west bank of the River Itchen



4.2.2 Key Areas for Adaptation

Activity	Short – term	Medium – term	Long-term	Who leads
Website	X	X	X	Peter Taylor and the Friends of Riverside Park
Installation of Tide Marker	X			Southampton City Council
Local Flood Wall Construction	X			Andy Varley and the local residents
Flood Wall maintenance	X	X	X	Andy Varley the local residents
Installation of Property Level Protection in properties at risk	X			Belsize Flood Resilience Project
Develop and implement an Emergency Flood Plan	X	X	X	Belsize Flood Resilience Project
Produce an Adaptation Plan for the community	X			CCATCH

4.3 Legacy Ongoing communication

Parts of the community have long been aware of the nature of tidal cycles and the potential risk of flooding and enjoy living by the waterside. It is hoped that the Community will continue to work together after the project finishes in March 2014.

The CCATCH Southampton Itchen Project wished to leave a lasting legacy for the area, and aside from the Adaption Plan itself it leaves a Community website, tide markers, property level protection in Priory Road, the Southampton Pathfinder Project (The Belsize Flood Resilience Project) and the Technical Factguide.

All of the information contained in this report can be found on the overall project website.

http://www.solentforum.org/current/CCATCH/Southampton_Itchen/

The Solent Forum will continue to be available to help the community communicate through each other and can send out mailings on the communities behalf if requested.